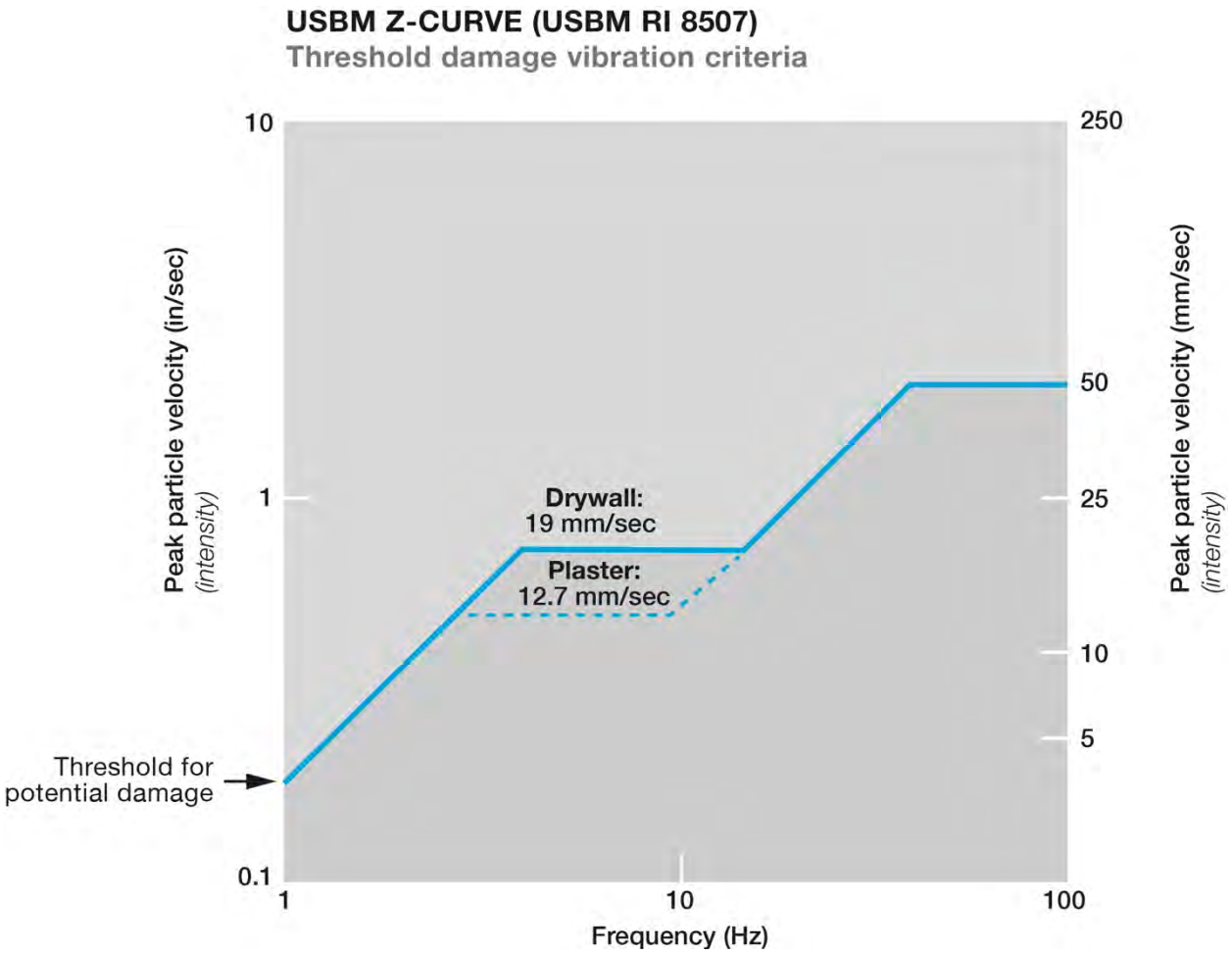
Understanding the Z-Curve

The Z-Curve line establishes a limit above which damage becomes possible, but it is crucial to note that damage does not automatically occur once this limit is breached. Damage would not actually occur in the average residence until ground vibrations reached significantly higher intensities than those outlined by the USBM Z-Curve. If the Z-Curve criteria is exceeded, the probability of damage is merely introduced and will incrementally increase with higher and higher vibration amplitudes.



Vibrations are occurring around us every day and are highly subjective. Each individual's perception and tolerance will influence the degree to which vibrations are a nuisance or objectionable. Humans and animals are far more sensitive to vibrations than a two-storey timber framed house, bridge or other structures.

Permanent Monitoring Units

			92 Cougarstone Manor SW,		9555 2 Avenue SW,		97 Cougar Ridge Close SW,		130 Cougarstone Close SW,		77 Cougar Ridge Close SW,		128 Cougarstone Manor		120 Cougarstone Common		152 Cougarstone Common		135 Cougarstone Common	
Blast Date:	**Blast no.**	**Blast time:**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**
6-Nov-19	**WCRR-01**	16:05	0.25mm/s	108.80dB(L)	1.02mm/s	112.00dB(L)	0.25mm/s	110.60dB(L)	0.25mm/s	109.20dB(L)	0.38mm/s	103.50dB(L)	**Not Applicable** Due to the distance between the blasts and adjacent structures, monitors were not required before January 2020.							
7-Nov-19	**WCRR-02**	16:05	0.25mm/s	110.2dB(L)	1.90mm/s	118.2dB(L)	0.51mm/s	103.5dB(L)	0.25mm/s	115.7dB(L)	0.51mm/s	108.0dB(L)								
8-Nov-19	**WCRR-03**	16:09	0.25mm/s	97.5dB(L)	1.52mm/s	115.6dB(L)	0.38mm/s	101.0dB(L)	0.25mm/s	111.2dB(L)	0.38mm/s	102.8dB(L)								
12-Nov-19	**WCRR-04**	16:00	0.25mm/s	109.5dB(L)	0.51mm/s	113.3dB(L)	0.38mm/s	104.9dB(L)	0.25mm/s	107.5dB(L)	0.38mm/s	109.2dB(L)								
13-Nov-19	**WCRR-05**	16:00	0.25mm/s	114.0dB(L)	1.40mm/s	121.0dB(L)	0.51mm/s	108.0dB(L)	0.25mm/s	118.1dB(L)	0.38mm/s	112.6dB(L)								
14-Nov-19	**WCRR-06**	16:00	0.38mm/s	102.8dB(L)	1.78mm/s	121.8dB(L)	0.76mm/s	105.5dB(L)	0.25mm/s	110.6dB(L)	0.63mm/s	104.9dB(L)								
15-Nov-19	**WCRR-07**	16:00	0.51mm/s	122.4dB(L)	2.54mm/s	121.5dB(L)	1.02mm/s	120.0dB(L)	0.76mm/s	136.0dB(L)	0.51mm/s	117.9dB(L)								
16-Nov-19	**WCRR-08**	16:00	0.25mm/s	119.0dB(L)	1.78mm/s	122.4dB(L)	0.38mm/s	107.5dB(L)	0.25mm/s	127.8dB(L)	0.51mm/s	110.9dB(L)								
16-Nov-19	**WCRR-08**	16:20	0.51mm/s	114.0dB(L)	2.29mm/s	124.0dB(L)	0.76mm/s	116.4dB(L)	0.25mm/s	111.2dB(L)	0.63mm/s	115.6dB(L)								
18-Nov-19	**WCRR-09**	16:00	0.51mm/s	109.5dB(L)	2.03mm/s	118.8dB(L)	1.14mm/s	112.8dB(L)	0.25mm/s	102.8dB(L)	0.76mm/s	110.6dB(L)								
19-Nov-19	**WCRR-10**	16:15	0.25mm/s	98.8dB(L)	0.89mm/s	110.9dB(L)	0.25mm/s	98.8dB(L)	0.25mm/s	91.5dB(L)	0.38mm/s	98.8dB(L)								
20-Nov-19	**WCRR-11**	16:04	0.89mm/s	119.0dB(L)	6.10mm/s	133.7dB(L)	1.78mm/s	121.8dB(L)	0.38mm/s	109.5dB(L)	1.40mm/s	120.1dB(L)								
21-Nov-19	**WCRR-12**	16:02	0.89mm/s	109.5dB(L)	3.68mm/s	123.5dB(L)	2.41mm/s	113.3dB(L)	0.38mm/s	104.9dB(L)	1.14mm/s	112.0dB(L)								
22-Nov-19	**WCRR-13**	16:02	0.89mm/s	115.0dB(L)	4.44mm/s	125.5dB(L)	1.78mm/s	115.2dB(L)	0.25mm/s	124.7dB(L)	1.27mm/s	116.7dB(L)								
23-Nov-19	**WCRR-14**	15:35	0.89mm/s	124.1dB(L)	2.79mm/s	121.7dB(L)	2.41mm/s	120.2dB(L)	0.51mm/s	129.0dB(L)	1.27mm/s	120.2dB(L)								
25-Nov-19	**WCRR-15**	16:17	0.51mm/s	105.5dB(L)	2.92mm/s	117.5dB(L)	1.40mm/s	109.2dB(L)	0.25mm/s	117.6dB(L)	0.89mm/s	108.4dB(L)								
26-Nov-19	**WCRR-16**	15:58	0.51mm/s	109.9dB(L)	2.29mm/s	115.2dB(L)	0.51mm/s	109.5dB(L)	0.25mm/s	101.9dB(L)	0.63mm/s	104.2dB(L)								
27-Nov-19	**WCRR-17**	15:58	0.51mm/s	118.3dB(L)	2.79mm/s	123.4dB(L)	0.89mm/s	112.3dB(L)	0.25mm/s	115.0dB(L)	0.63mm/s	112.0dB(L)								
28-Nov-19	**WCRR-18**	16:00	0.25mm/s	101.0dB(L)	1.14mm/s	116.7dB(L)	0.63mm/s	102.8dB(L)	0.25mm/s	94.0dB(L)	0.38mm/s	101.0dB(L)								
29-Nov-19	**WCRR-19**	16:00	0.51mm/s	110.0dB(L)	2.79mm/s	119.8dB(L)	0.89mm/s	112.0dB(L)	0.51mm/s	101.9dB(L)	0.76mm/s	111.2dB(L)								
30-Nov-19	**WCRR-20**	16:00	1.78mm/s	113.5dB(L)	3.94mm/s	128.6dB(L)	2.29mm/s	116.4dB(L)	0.63mm/s	104.2dB(L)	2.41mm/s	117.4dB(L)								
2-Dec-19	**WCRR-21**	16:00	1.14mm/s	118.3dB(L)	2.54mm/s	122.3dB(L)	2.03mm/s	118.0dB(L)	0.38mm/s	128.8dB(L)	1.40mm/s	120.9dB(L)								
3-Dec-19	**WCRR-22**	16:00	0.76mm/s	112.0dB(L)	2.29mm/s	122.8dB(L)	1.02mm/s	112.0dB(L)	0.25mm/s	113.3dB(L)	0.64mm/s	111.8dB(L)								
4-Dec-19	**WCRR-23**	16:03	0.51mm/s	109.5dB(L)	2.03mm/s	120.3dB(L)	1.27mm/s	108.8dB(L)	0.38mm/s	115.0dB(L)	0.89mm/s	109.9dB(L)								
5-Dec-19	**WCRR-24**	16:00	1.91mm/s	113.8dB(L)	3.30mm/s	123.6dB(L)	2.67mm/s	115.2dB(L)	0.64mm/s	108.0dB(L)	2.16mm/s	114.2dB(L)								
6-Dec-19	**WCRR-25**	15:58	0.76mm/s	111.5dB(L)	1.52mm/s	121.6dB(L)	1.02mm/s	113.5dB(L)	0.38mm/s	101.9dB(L)	1.27mm/s	113.1dB(L)								
7-Dec-19	**WCRR-26**	16:03	0.64mm/s	113.8dB(L)	2.03mm/s	116.3dB(L)	1.52mm/s	113.3dB(L)	0.38mm/s	102.8dB(L)	1.02mm/s	112.3dB(L)								
9-Dec-19	**WCRR-27**	16:02	1.02mm/s	110.6dB(L)	1.78mm/s	119.9dB(L)	2.03mm/s	113.8dB(L)	0.38mm/s	101.0dB(L)	1.40mm/s	111.8dB(L)								
10-Dec-19	**WCRR-28**	15:58	0.38mm/s	109.2dB(L)	1.14mm/s	117.1dB(L)	0.64mm/s	110.9dB(L)	0.25mm/s	101.0dB(L)	0.64mm/s	108.8dB(L)								
11-Dec-19	**WCRR-29**	16:12	0.51mm/s	109.9dB(L)	1.52mm/s	120.2dB(L)	0.64mm/s	111.8dB(L)	0.38mm/s	101.0dB(L)	0.64mm/s	111.8dB(L)								
12-Dec-19	**WCRR-30**	16:02	1.02mm/s	113.8dB(L)	2.03mm/s	118.3dB(L)	2.03mm/s	115.4dB(L)	0.38mm/s	104.9dB(L)	1.40mm/s	114.0dB(L)								
17-Dec-19	**WCRR-31**	10:07	6.73mm/s	125.0dB(L)	0.76mm/s	109.2dB(L)	11.81mm/s	126.8dB(L)	1.02mm/s	113.5dB(L)	13.46mm/s	125.3dB(L)								
18-Dec-19	**WCRR-32**	16:30	7.11mm/s	122.4dB(L)	0.64mm/s	111.2dB(L)	8.76mm/s	122.7dB(L)	1.14mm/s	110.9dB(L)	11.56mm/s	124.0dB(L)								

Click on a highlighted cell to view the seismograph report for the corresponding date and location.

EXPLOTECH

Date/Time	Tran At 15:58:01 November 20, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	9555 2 Avenue SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE7369 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	I369I7FO.CP0W

Post Event Notes

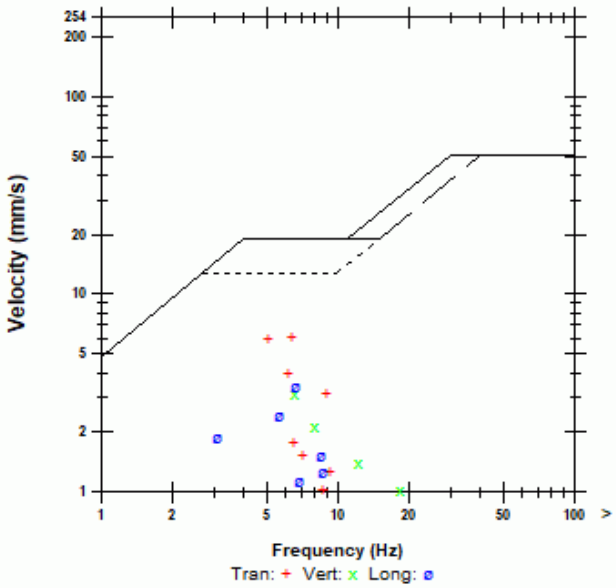
Extended Notes
Combo Mode November 20, 2019 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 9555 2 Avenue SW adjacent ongoing blasting operations.

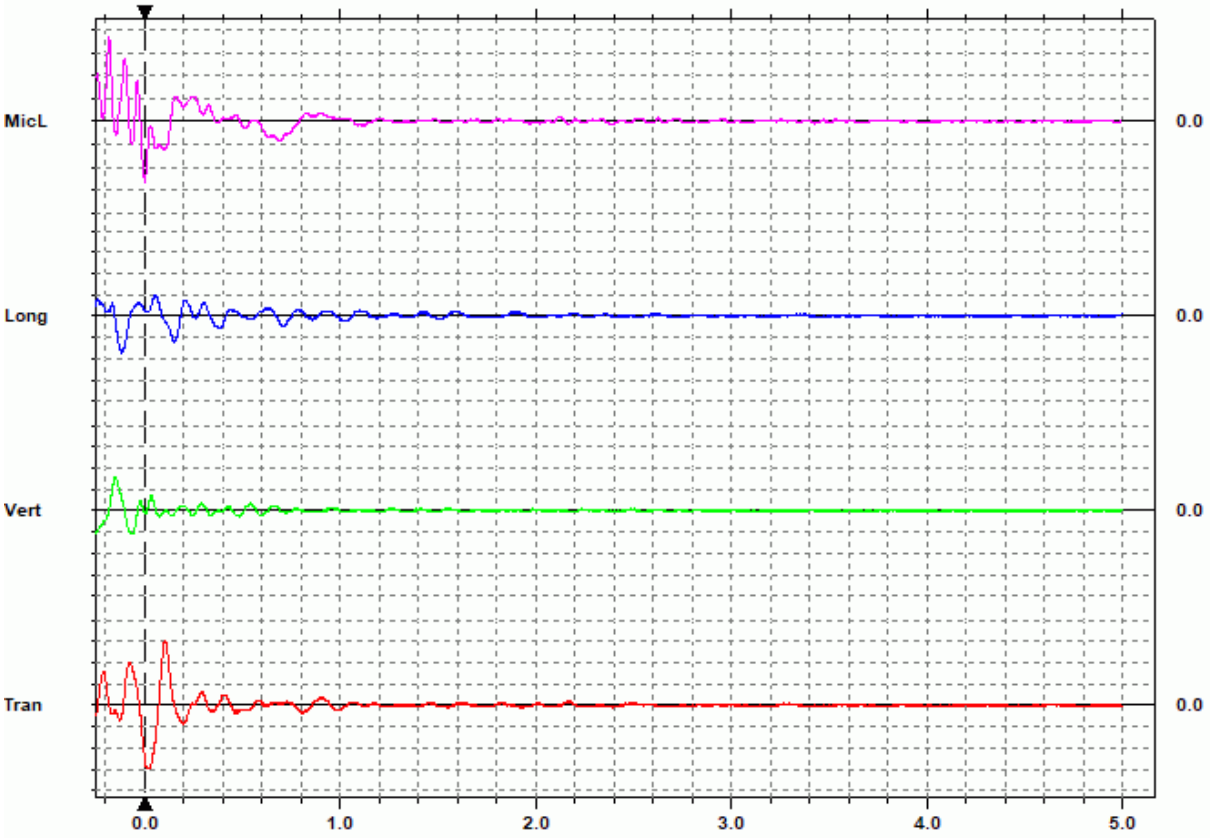
Microphone	Linear Weighting
PSPL	125.3 dB(L) at -0.184 sec.
ZC Freq	NA
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	3.17	3.43	mm/s
ZC Freq	6.4	6.5	6.6	Hz
Time (Rel. to Trig)	0.102	-0.155	-0.117	sec
Peak Acceleration	0.0398	0.0265	0.0265	g
Peak Displacement	0.193	0.0715	0.0809	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.12 mm/s At 0.102 sec.
NA: Not Applicable

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: November 20, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:01 November 20, 2019	**Serial Number**	BE7369 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	I369I7FO.CP0W
Job Number	8177		

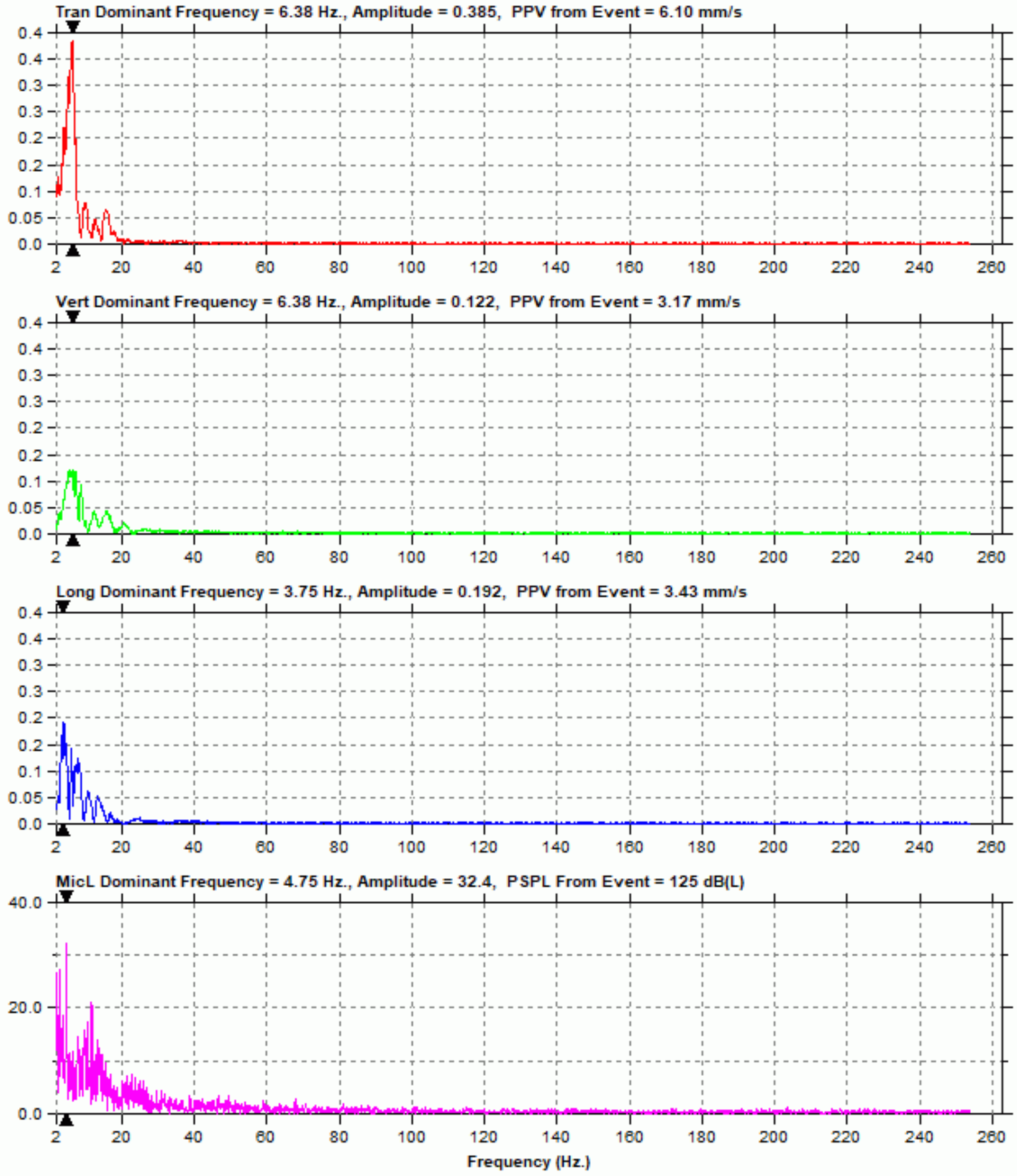
Notes

Location: 9555 2 Avenue SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode November 20, 2019 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 9555 2 Avenue SW adjacent ongoing blasting operations.

Post Event Notes



Created: November 20, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 10:06:44 December 17, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408I8T8.380W

Post Event Notes

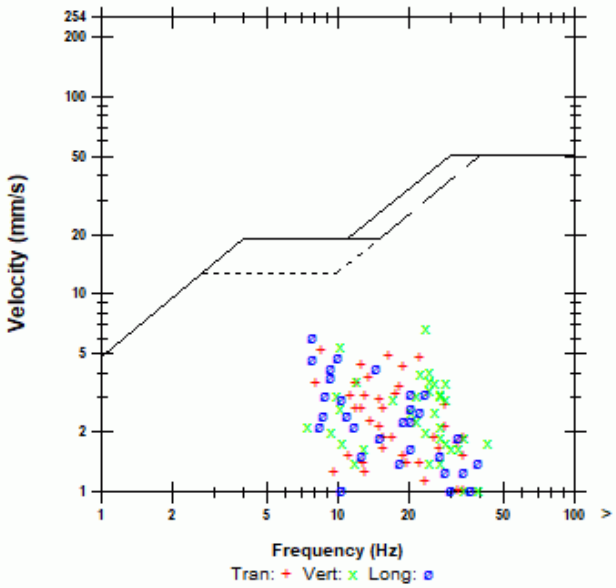
Extended Notes
Combo Mode December 17, 2019 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

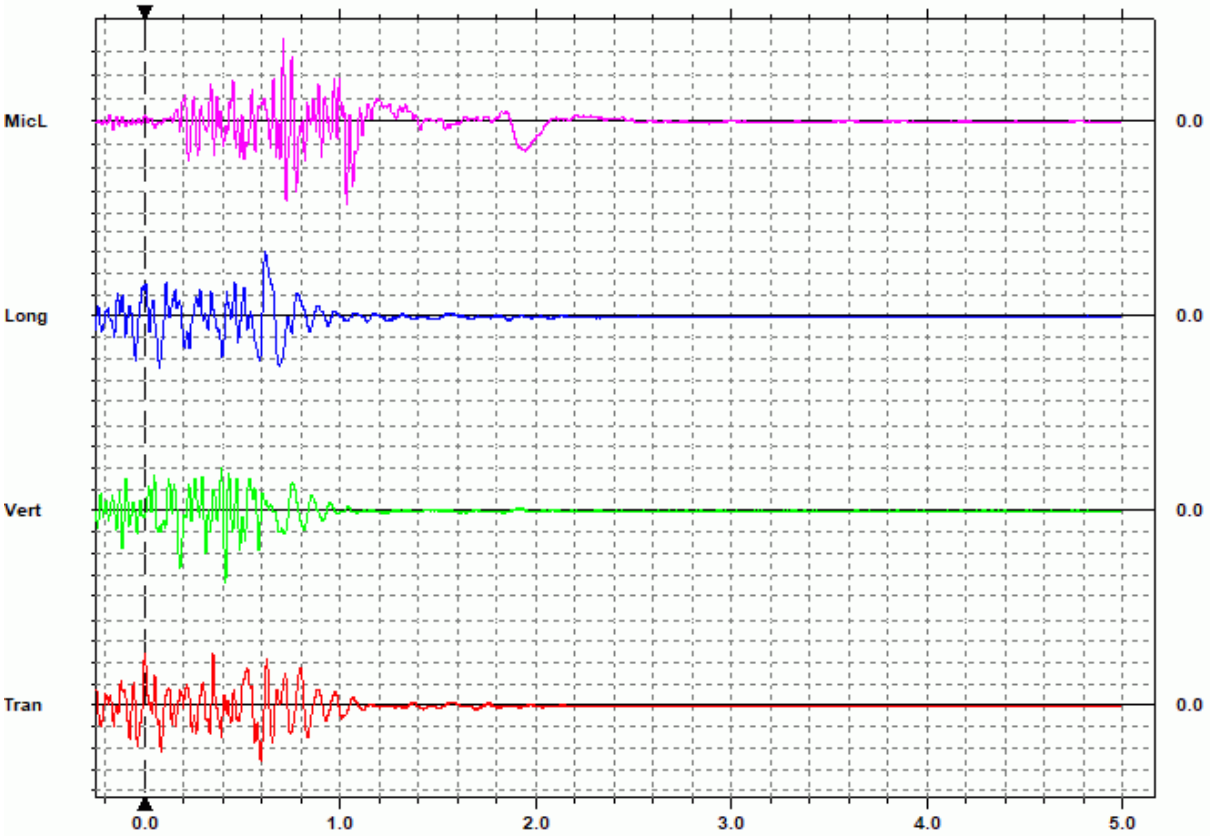
Microphone	Linear Weighting
PSPL	125.0 dB(L) at 1.033 sec.
ZC Freq	21 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	6.73	6.10	mm/s
ZC Freq	8.5	23	7.8	Hz
Time (Rel. to Trig)	0.593	0.413	0.615	sec
Peak Acceleration	0.0795	0.119	0.0663	g
Peak Displacement	0.0868	0.0606	0.117	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.97 mm/s At 0.622 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 17, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 10:06:44 December 17, 2019	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408I8T8.380W
Job Number	8177		

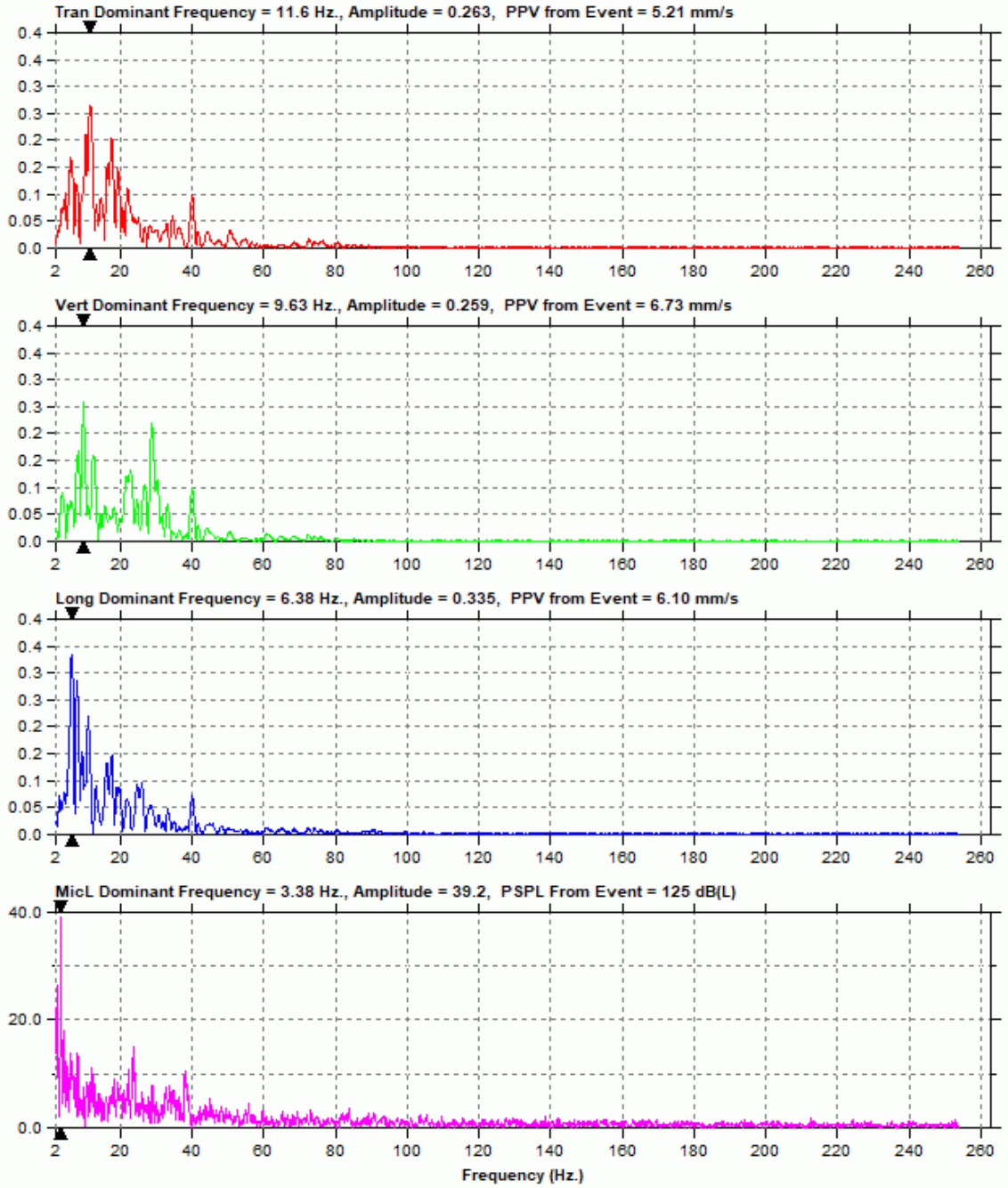
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 17, 2019 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 17, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 10:07:13 December 17, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263I8T8.410W

Post Event Notes

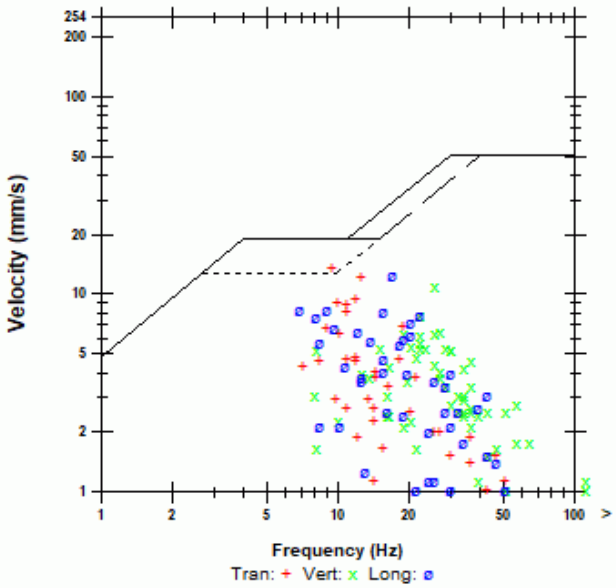
Extended Notes
Combo Mode December 17, 2019 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

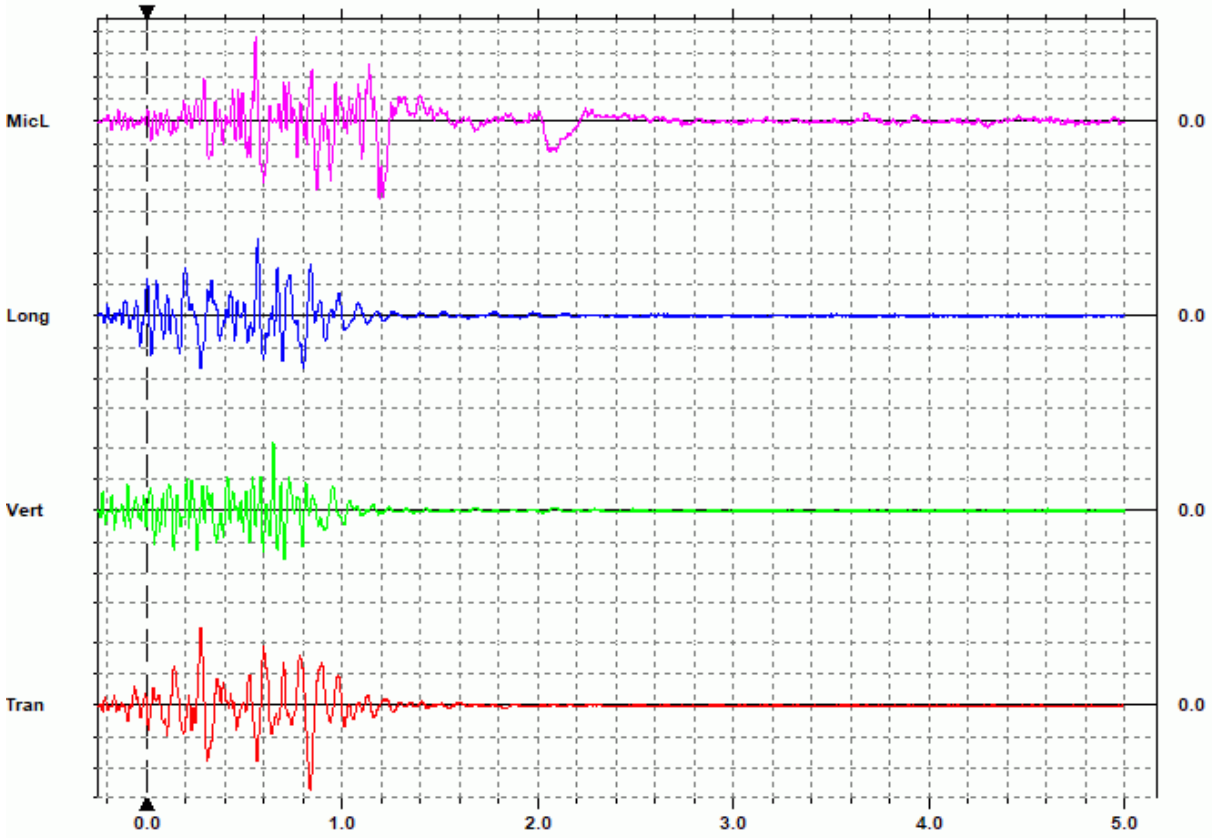
Microphone	Linear Weighting
PSPL	125.3 dB(L) at 0.560 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	13.5	11.0	12.4	mm/s
ZC Freq	9.5	26	17	Hz
Time (Rel. to Trig)	0.838	0.649	0.569	sec
Peak Acceleration	0.106	0.159	0.133	g
Peak Displacement	0.198	0.0863	0.136	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 15.7 mm/s At 0.838 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 17, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 10:07:13 December 17, 2019	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263I8T8.410W
Job Number	8177		

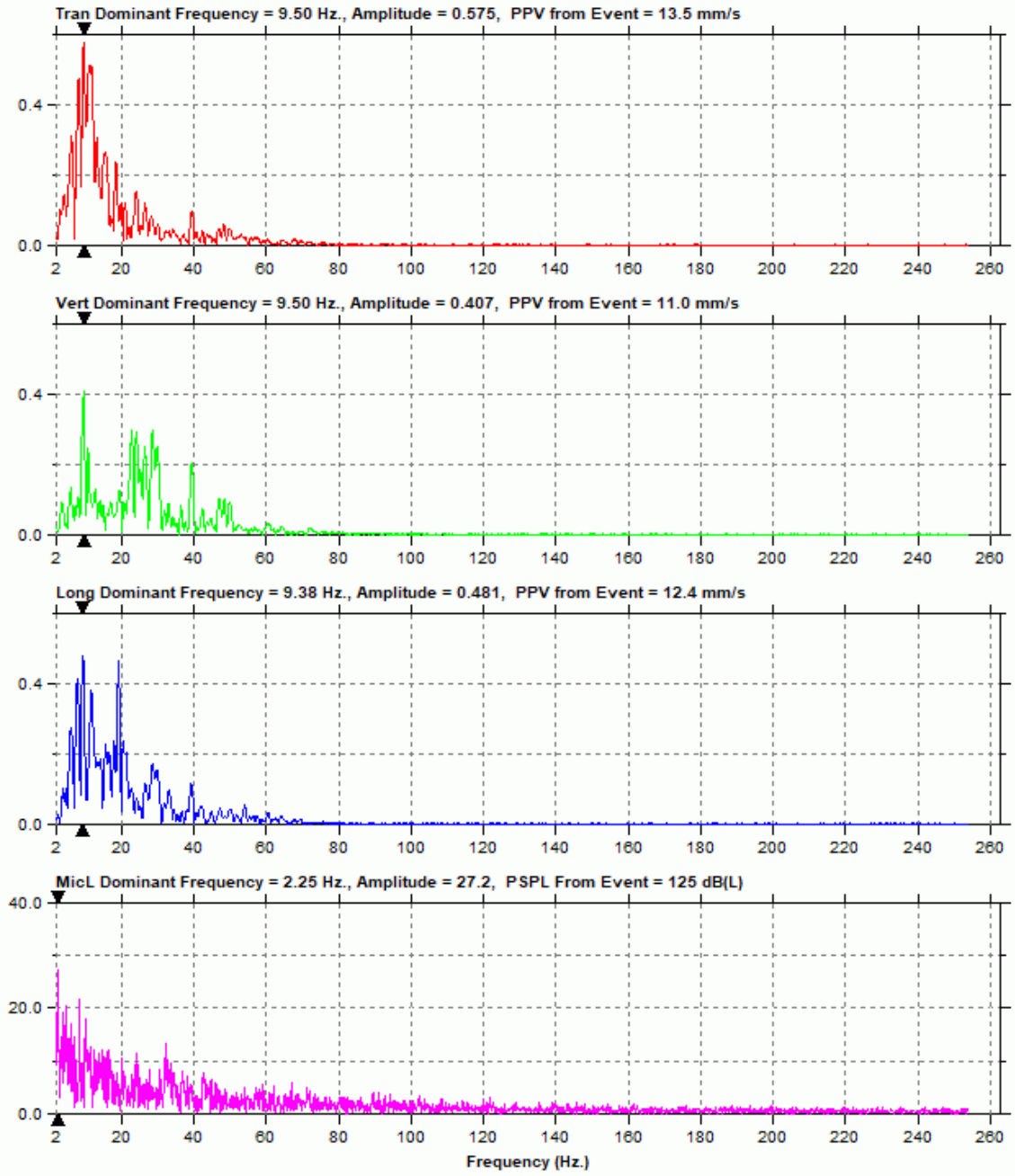
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 17, 2019 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 17, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 10:07:34 December 17, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251I8T8.4M0W

Post Event Notes

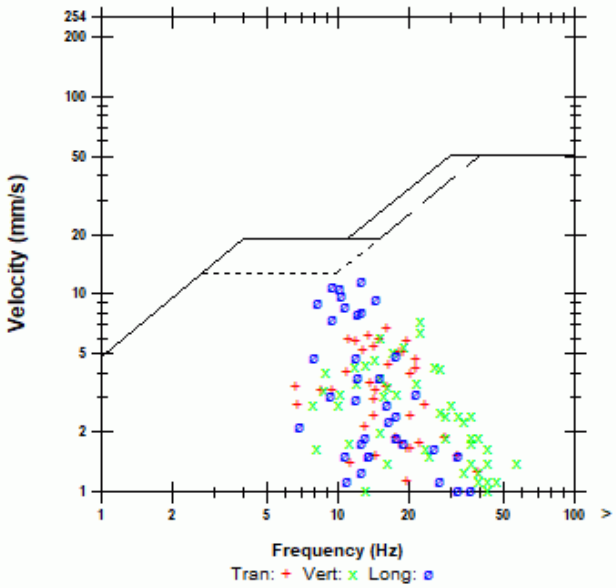
Extended Notes
Combo Mode December 17, 2019 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

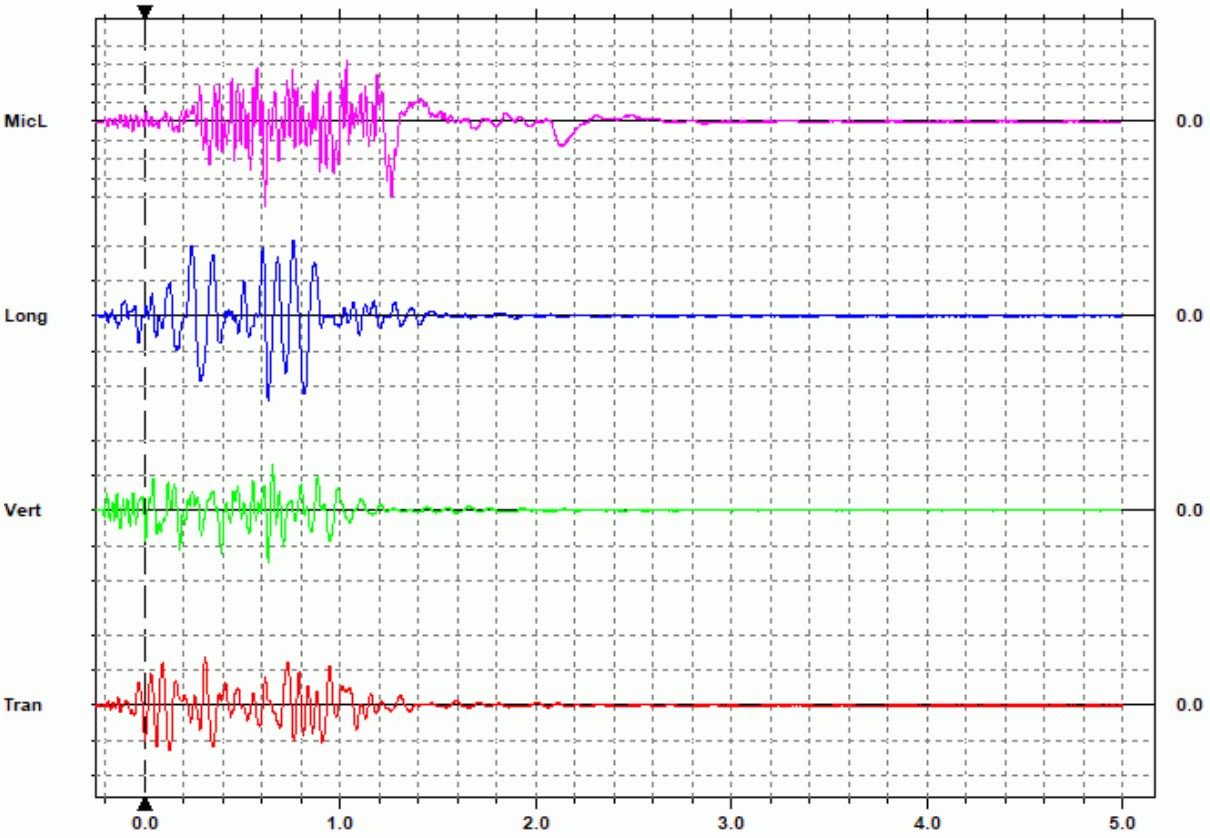
Microphone	Linear Weighting
PSPL	126.8 dB(L) at 0.615 sec.
ZC Freq	22 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.73	7.37	11.8	mm/s
ZC Freq	16	22	12	Hz
Time (Rel. to Trig)	0.309	0.632	0.631	sec
Peak Acceleration	0.0795	0.106	0.159	g
Peak Displacement	0.0873	0.0591	0.186	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.9 mm/s At 0.631 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 17, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 10:07:34 December 17, 2019	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251I8T8.4M0W
Job Number	8177		

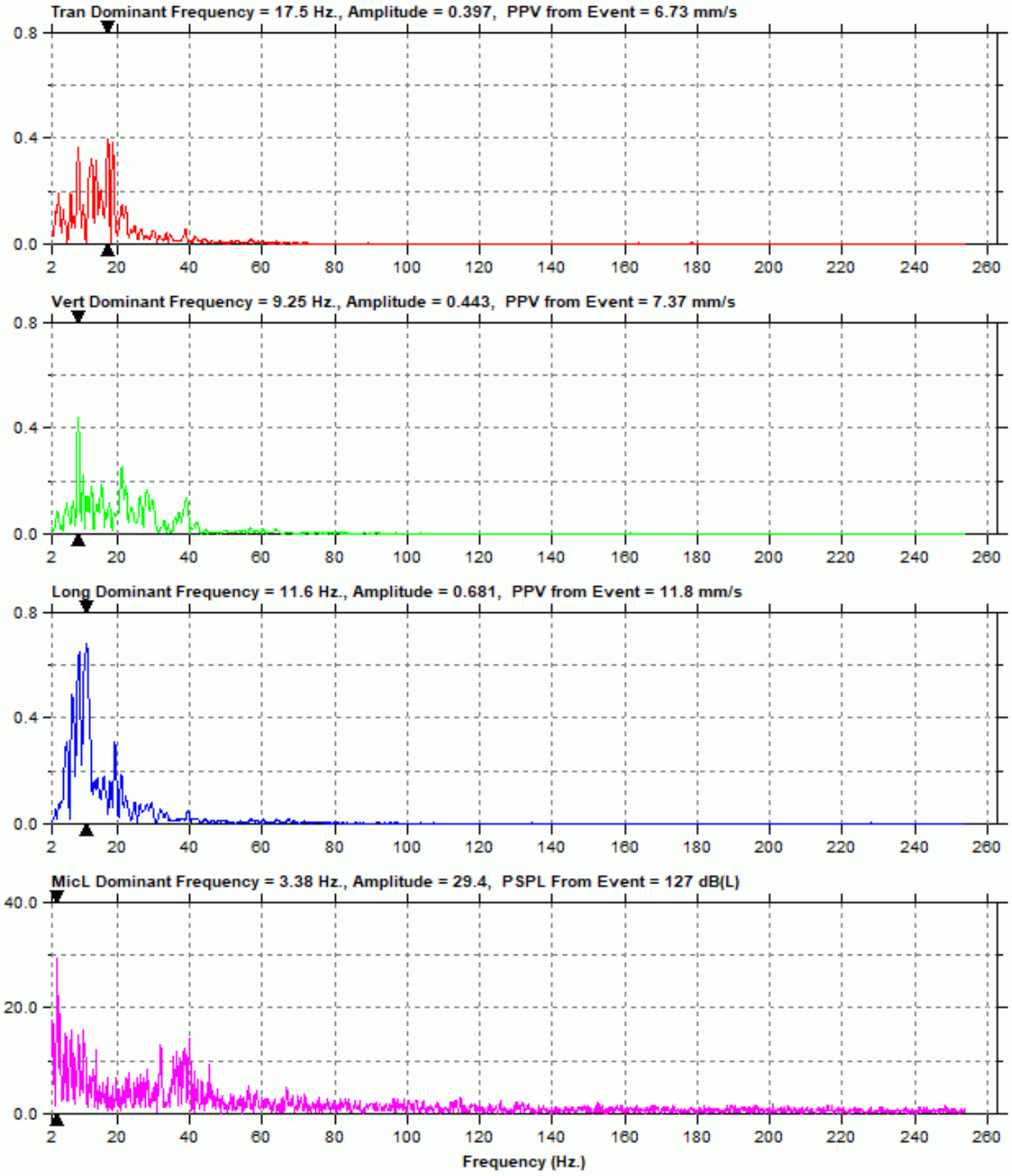
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 17, 2019 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 17, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:28:19 December 18, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408I8VK.F70W

Post Event Notes

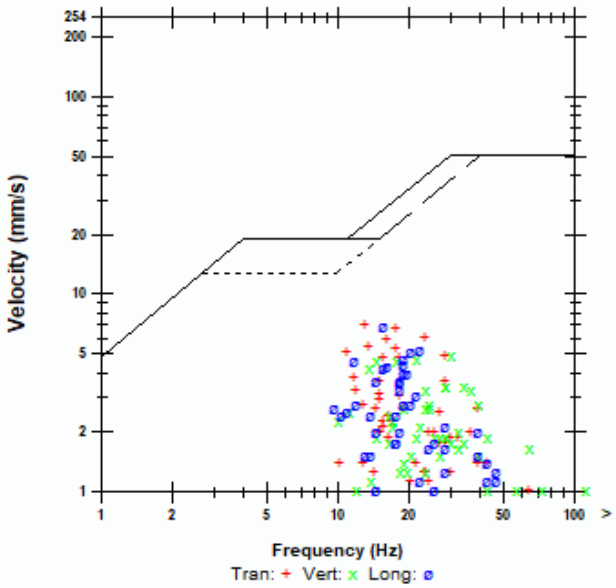
Extended Notes
Combo Mode December 18, 2019 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

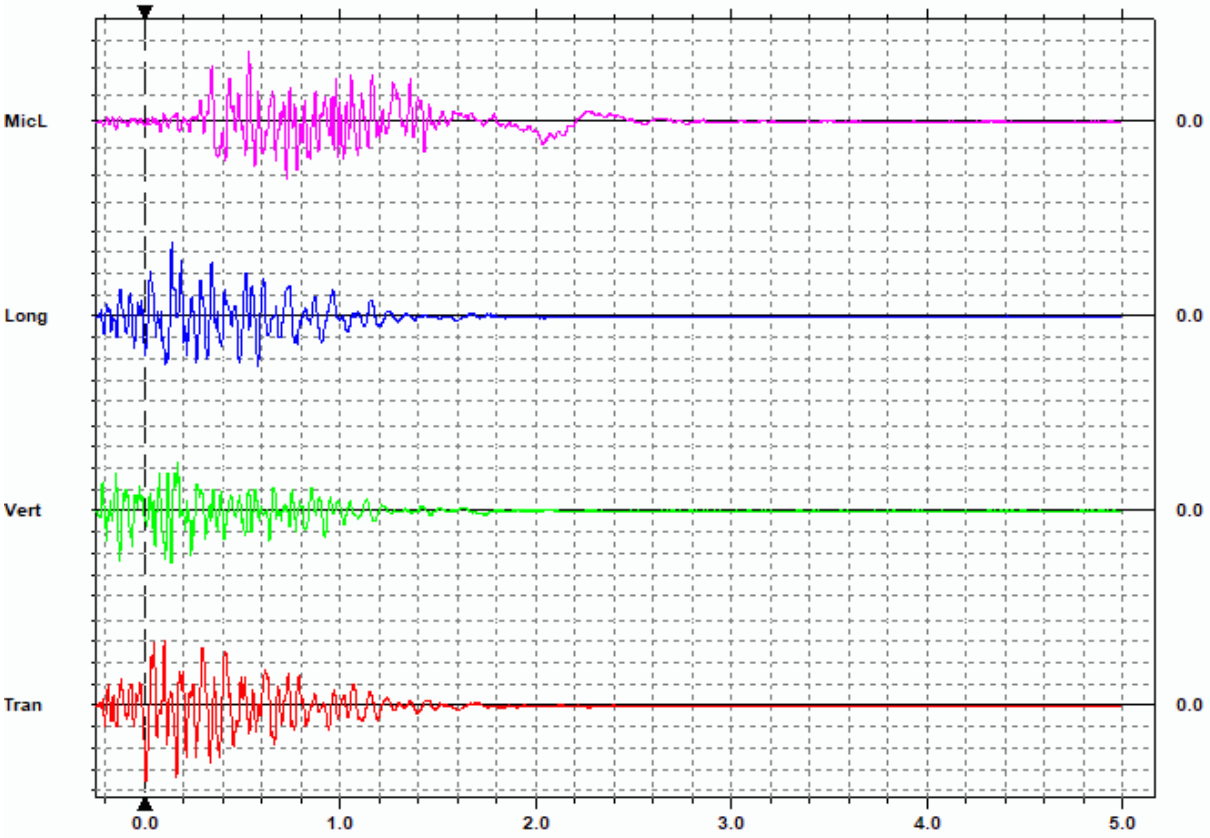
Microphone	Linear Weighting
PSPL	122.4 dB(L) at 0.531 sec.
ZC Freq	22 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.11	4.95	6.86	mm/s
ZC Freq	13	30	16	Hz
Time (Rel. to Trig)	0.005	0.136	0.138	sec
Peak Acceleration	0.133	0.119	0.106	g
Peak Displacement	0.0721	0.0499	0.0663	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.38 mm/s At 0.138 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 18, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:28:19 December 18, 2019	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408I8VK.F70W
Job Number	8177		

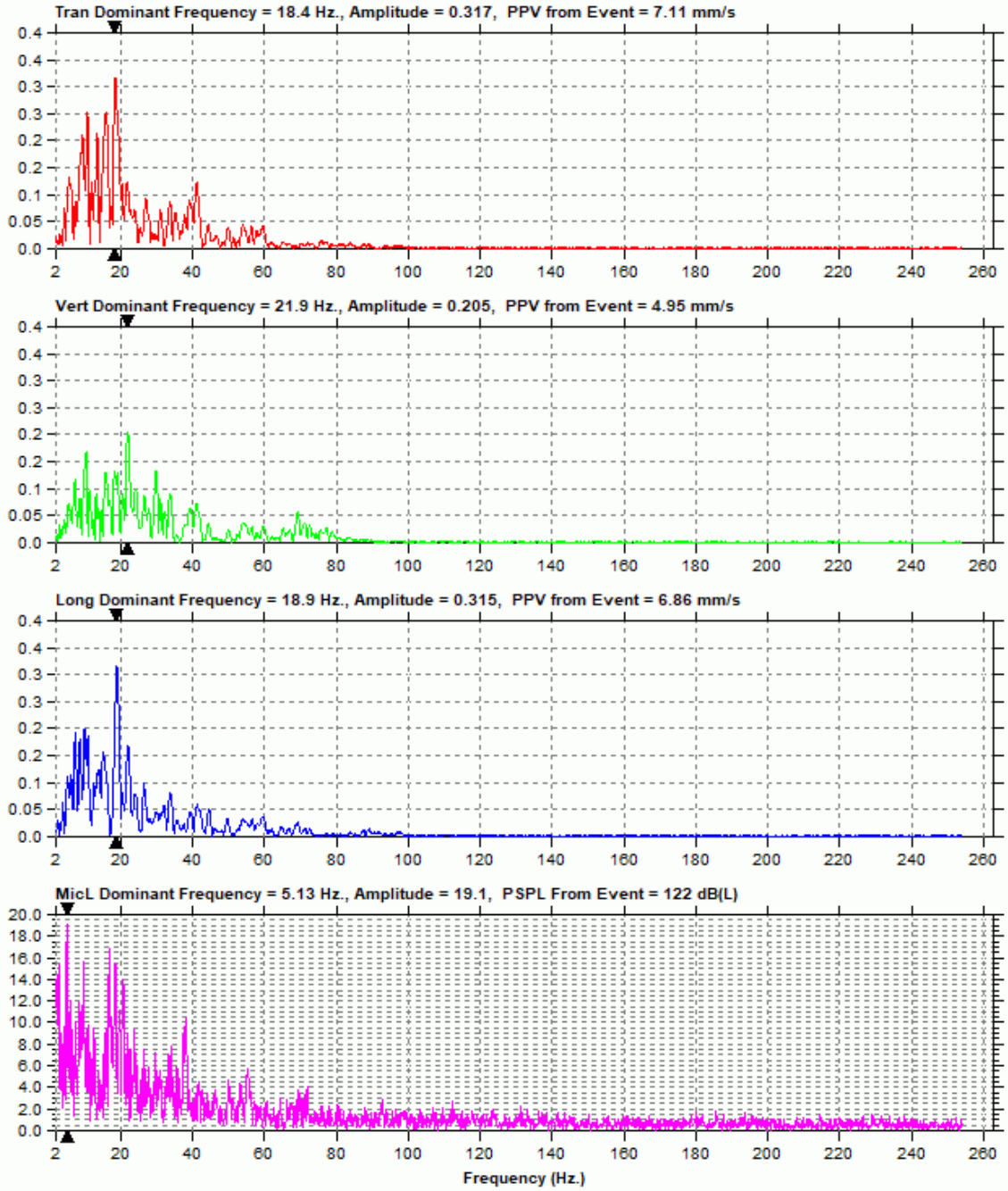
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 18, 2019 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 18, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:28:48 December 18, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263I8VK.G00W

Post Event Notes

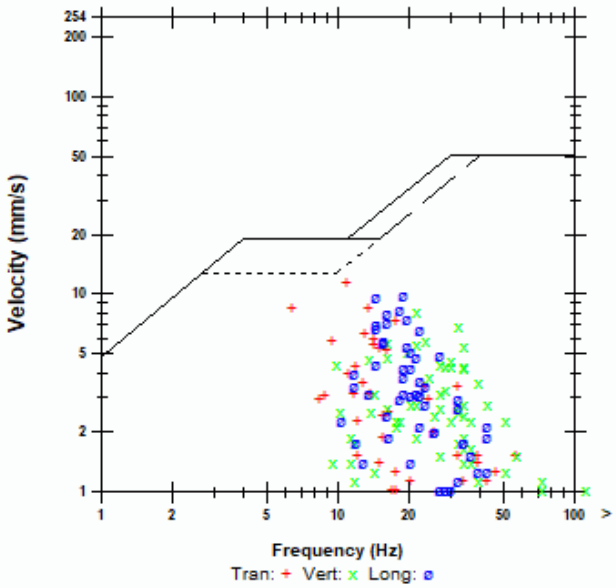
Extended Notes
Combo Mode December 18, 2019 05:16:51
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

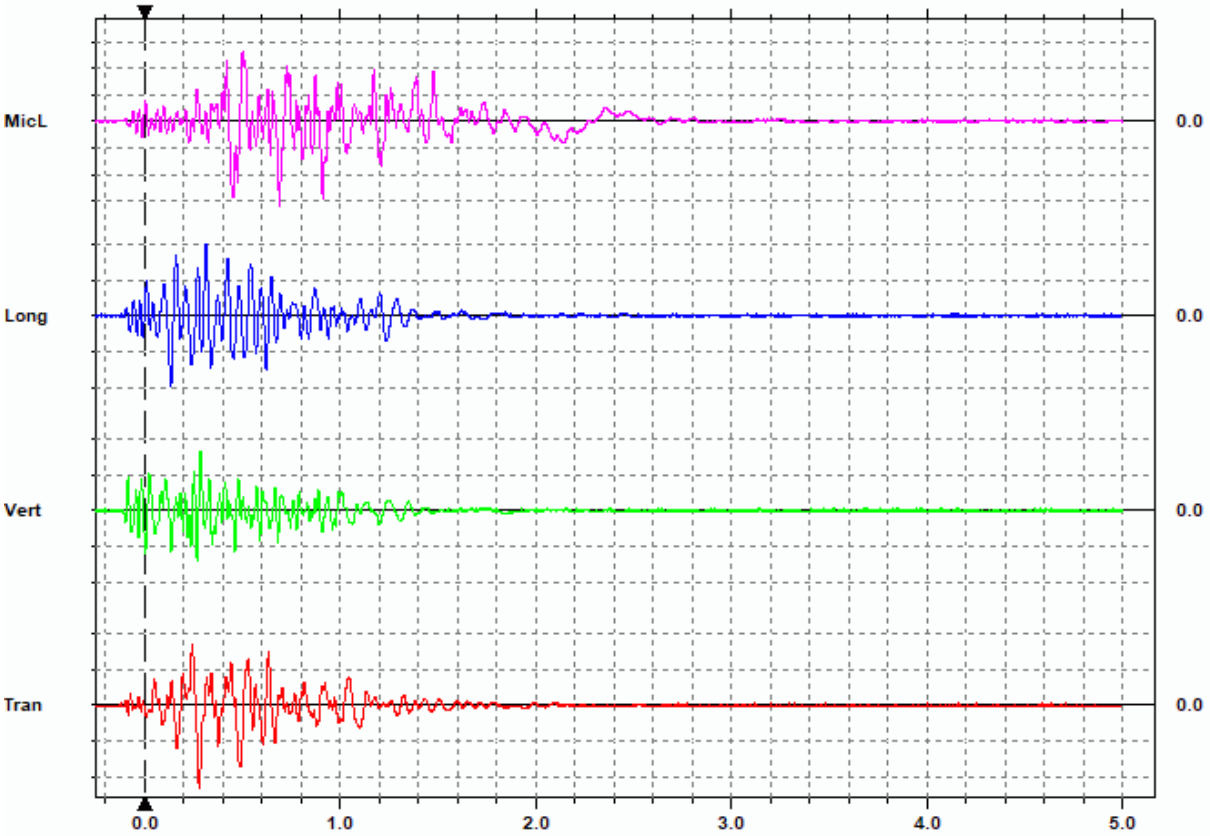
Microphone	Linear Weighting
PSPL	124.0 dB(L) at 0.689 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	11.6	8.25	9.91	mm/s
ZC Freq	11	21	19	Hz
Time (Rel. to Trig)	0.279	0.285	0.313	sec
Peak Acceleration	0.119	0.146	0.119	g
Peak Displacement	0.124	0.0560	0.0881	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.2 mm/s At 0.281 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 18, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:28:48 December 18, 2019	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263I8VK.G00W
Job Number	8177		

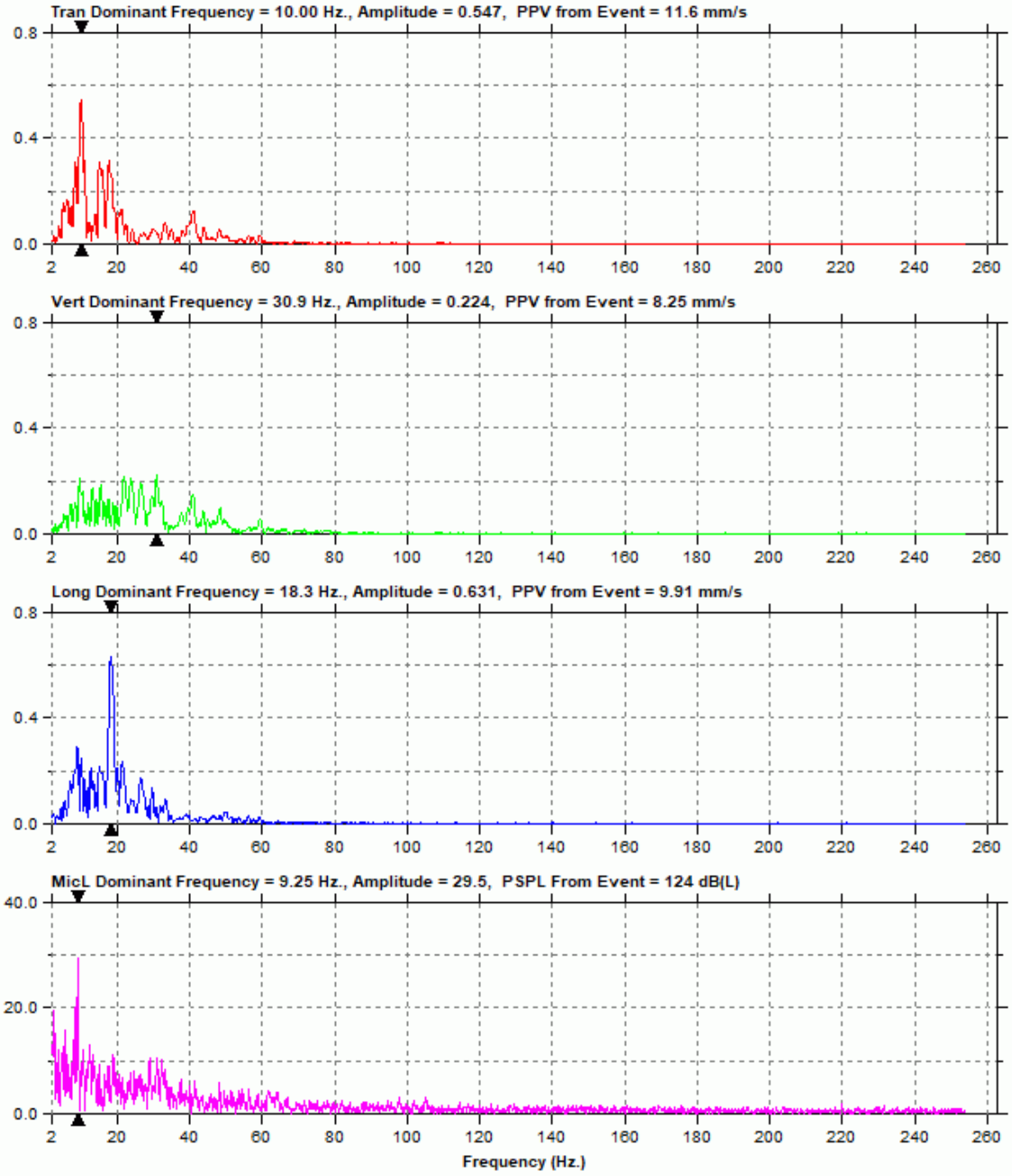
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 18, 2019 05:16:51
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 18, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:29:08 December 18, 2019
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251I8VK.GK0W

Post Event Notes

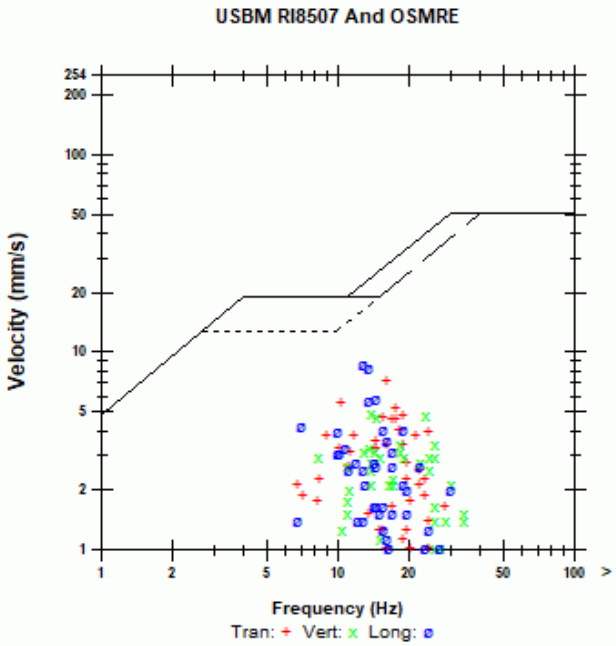
Extended Notes

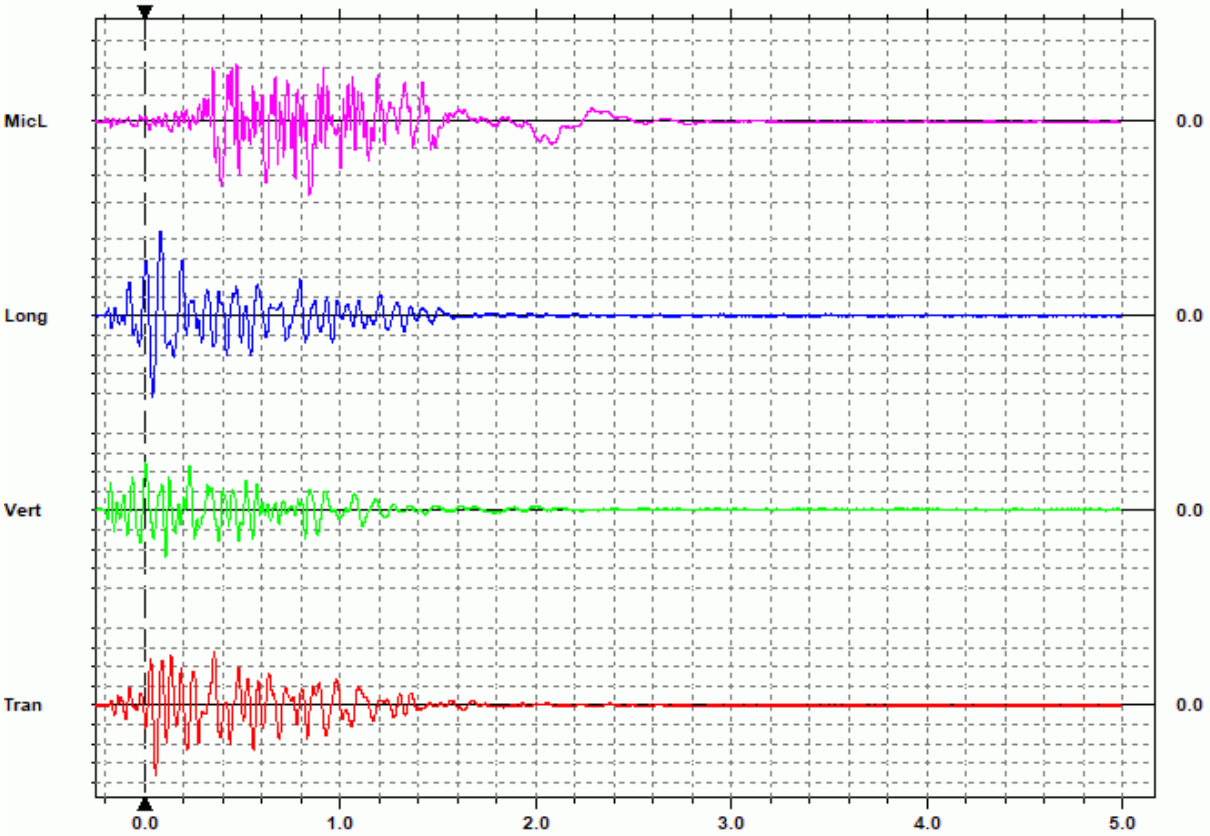
Combo Mode December 18, 2019 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	122.7 dB(L) at 0.842 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.24	4.95	8.76	mm/s
ZC Freq	16	14	13	Hz
Time (Rel. to Trig)	0.056	0.003	0.079	sec
Peak Acceleration	0.0795	0.0795	0.0795	g
Peak Displacement	0.0714	0.0541	0.105	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.84 mm/s At 0.083 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: December 18, 2019 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:29:08 December 18, 2019	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251I8VK.GK0W
Job Number	8177		

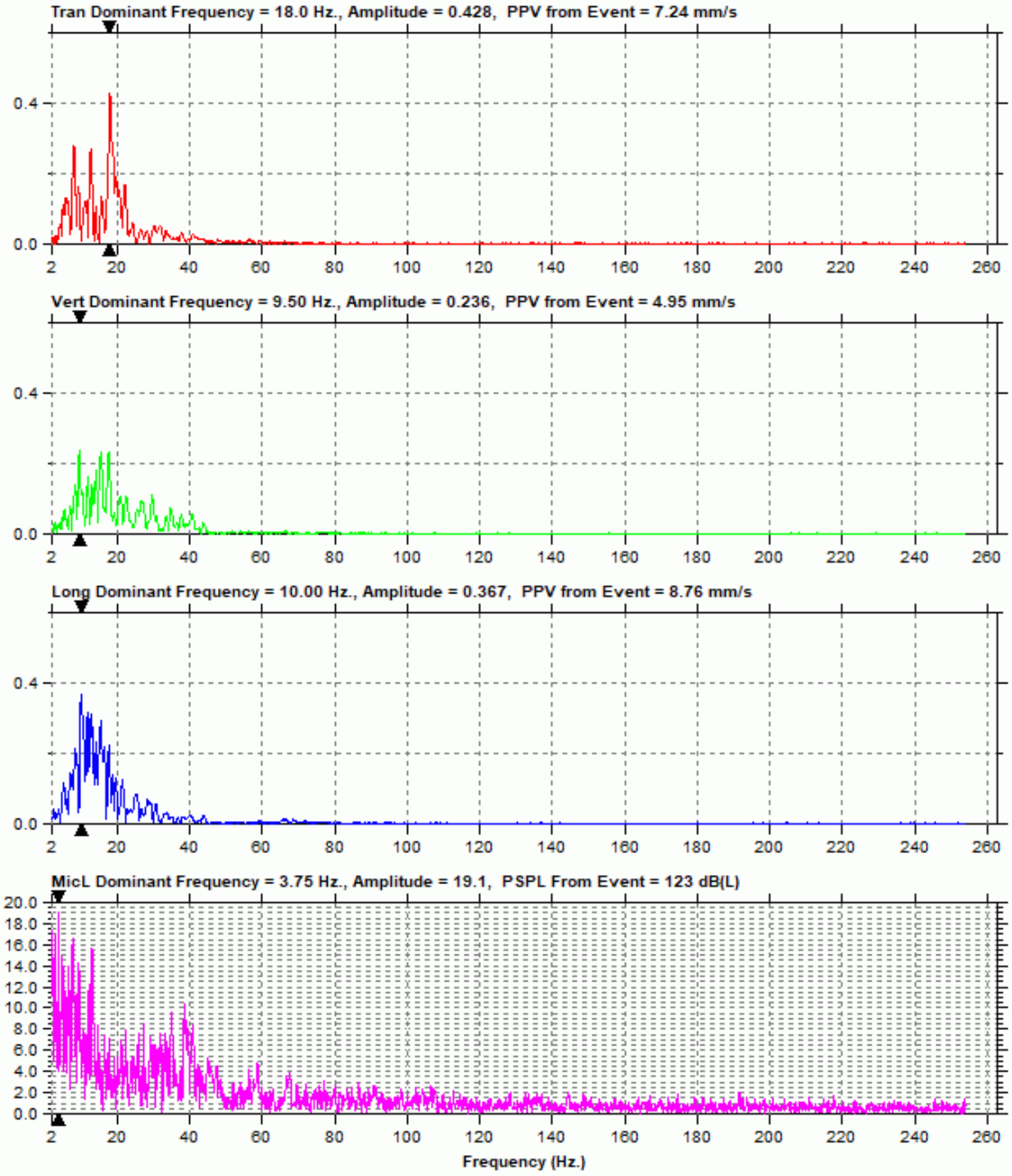
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode December 18, 2019 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: December 18, 2019 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units

			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	**Blast no.**	**Blast time:**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**
22-Jan-20	**WCRR-33**	16:02	0.89mm/s	117.2dB(L)	0.25mm/s	121.1dB(L)	1.52mm/s	120.2dB(L)	0.38mm/s	123.2dB(L)	1.27mm/s	121.2dB(L)	0.64mm/s	124.1dB(L)	0.51mm/s	111.5dB(L)	1.40mm/s	112.3dB(L)	0.38mm/s	115.6dB(L)
23-Jan-20	**WCRR-34**	16:00	8.64mm/s	127.0dB(L)	0.76mm/s	114.4dB(L)	7.62mm/s	125.1dB(L)	1.02mm/s	122.4dB(L)	10.70mm/s	127.6dB(L)	5.97mm/s	119.3dB(L)	0.25mm/s	104.2dB(L)	0.25mm/s	105.5dB(L)	0.25mm/s	109.5dB(L)
24-Jan-20	**WCRR-35**	16:00	7.11mm/s	123.2dB(L)	0.25mm/s	109.2dB(L)	6.35mm/s	119.1dB(L)	0.25mm/s	130.2dB(L)	7.75mm/s	122.5dB(L)	4.70mm/s	127.7dB(L)	2.29mm/s	116.3dB(L)	2.79mm/s	120.3dB(L)	1.52mm/s	117.9dB(L)
25-Jan-20	**WCRR-36**	15:56	6.10mm/s	124.7dB(L)	0.51mm/s	113.5dB(L)	4.57mm/s	120.2dB(L)	1.65mm/s	136.5dB(L)	6.48mm/s	121.5dB(L)	7.87mm/s	123.2dB(L)	2.16mm/s	118.3dB(L)	3.30mm/s	117.8dB(L)	1.40mm/s	117.4dB(L)
27-Jan-20	**WCRR-37**	16:00	0.51mm/s	118.5dB(L)	4.57mm/s	119.2dB(L)	0.76mm/s	119.0dB(L)	0.25mm/s	130.8dB(L)	0.64mm/s	118.5dB(L)	0.25mm/s	128.5dB(L)	0.25mm/s	117.8dB(L)	0.25mm/s	113.8dB(L)	0.25mm/s	112.6dB(L)
28-Jan-20	**WCRR-38**	16:01	5.59mm/s	124.2dB(L)	0.51mm/s	108.8dB(L)	3.81mm/s	121.1dB(L)	1.52mm/s	116.3dB(L)	5.71mm/s	122.8dB(L)	9.52mm/s	127.4dB(L)	2.67mm/s	119.3dB(L)	3.43mm/s	121.8dB(L)	1.91mm/s	118.1dB(L)
29-Jan-20	**WCRR-39**	16:01	0.51mm/s	112.0dB(L)	4.70mm/s	123.7dB(L)	1.65mm/s	114.2dB(L)	0.38mm/s	102.8dB(L)	1.52mm/s	110.6dB(L)	0.64mm/s	106.0dB(L)	0.25mm/s	104.9dB(L)	0.38mm/s	104.9dB(L)	0.38mm/s	102.8dB(L)
30-Jan-20	**WCRR-40**	16:02	3.43mm/s	119.4dB(L)	0.38mm/s	109.2dB(L)	2.19mm/s	120.1dB(L)	1.65mm/s	110.6dB(L)	3.56mm/s	121.5dB(L)	8.13mm/s	125.7dB(L)	3.05mm/s	120.4dB(L)	3.81mm/s	120.9dB(L)	2.29mm/s	114.6dB(L)
31-Jan-20	**WCRR-41**	16:01	0.76mm/s	124.7dB(L)	1.39mm/s	133.8dB(L)	1.78mm/s	128.9dB(L)	0.38mm/s	111.5dB(L)	1.65mm/s	126.4dB(L)	0.76mm/s	118.7dB(L)	0.38mm/s	116.6dB(L)	0.51mm/s	118.3dB(L)	0.64mm/s	114.8dB(L)

Click on a highighted cell to view the seismograph report for the corresponding date and location.

EXPLOTECH

Date/Time	Vert At 16:00:03 January 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IAQ7.430W

Post Event Notes

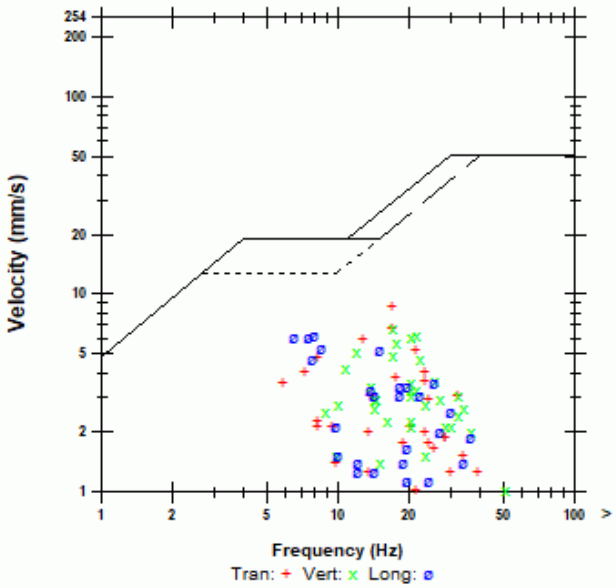
Extended Notes
Combo Mode January 23, 2020 05:16:51
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

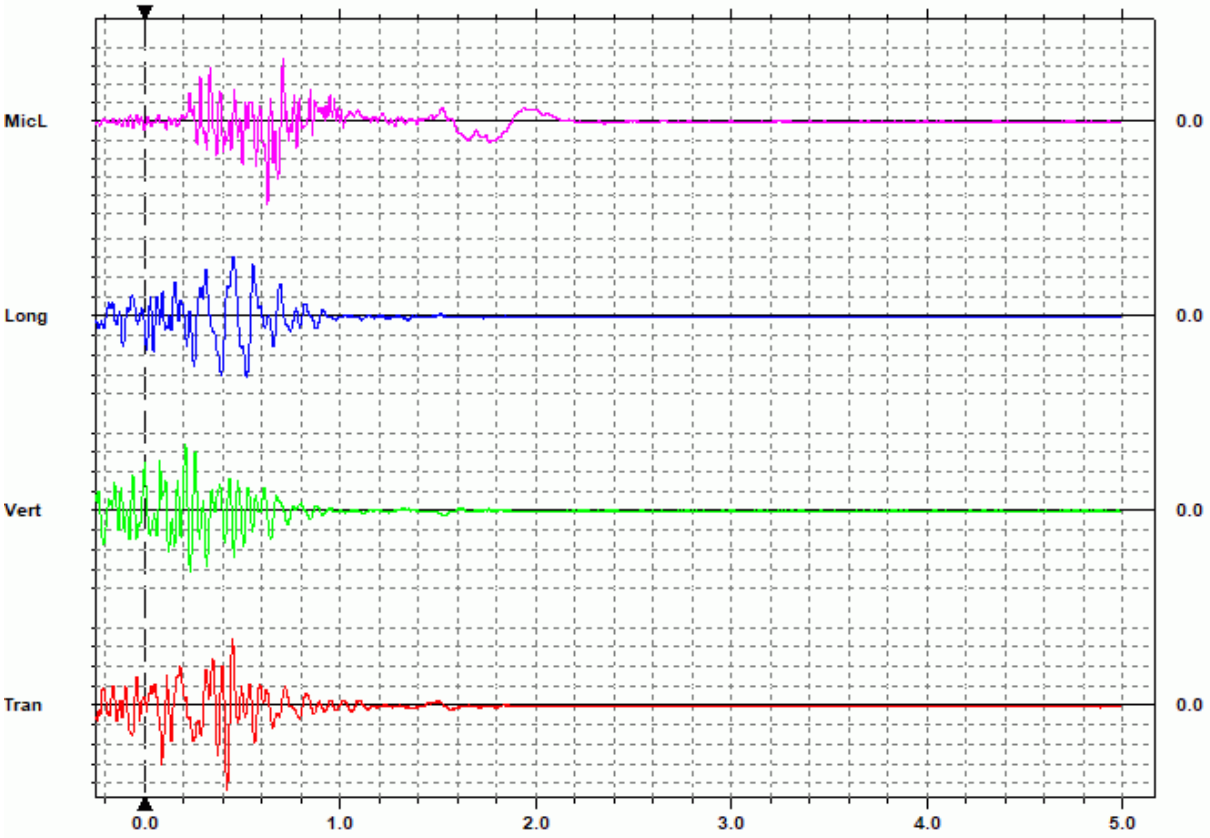
Microphone	Linear Weighting
PSPL	127.0 dB(L) at 0.628 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.64	6.73	6.22	mm/s
ZC Freq	17	17	7.9	Hz
Time (Rel. to Trig)	0.421	0.209	0.519	sec
Peak Acceleration	0.0928	0.106	0.0795	g
Peak Displacement	0.0910	0.0590	0.119	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.46 mm/s At 0.452 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:03 January 23, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IAQ7.430W
Job Number	8177		

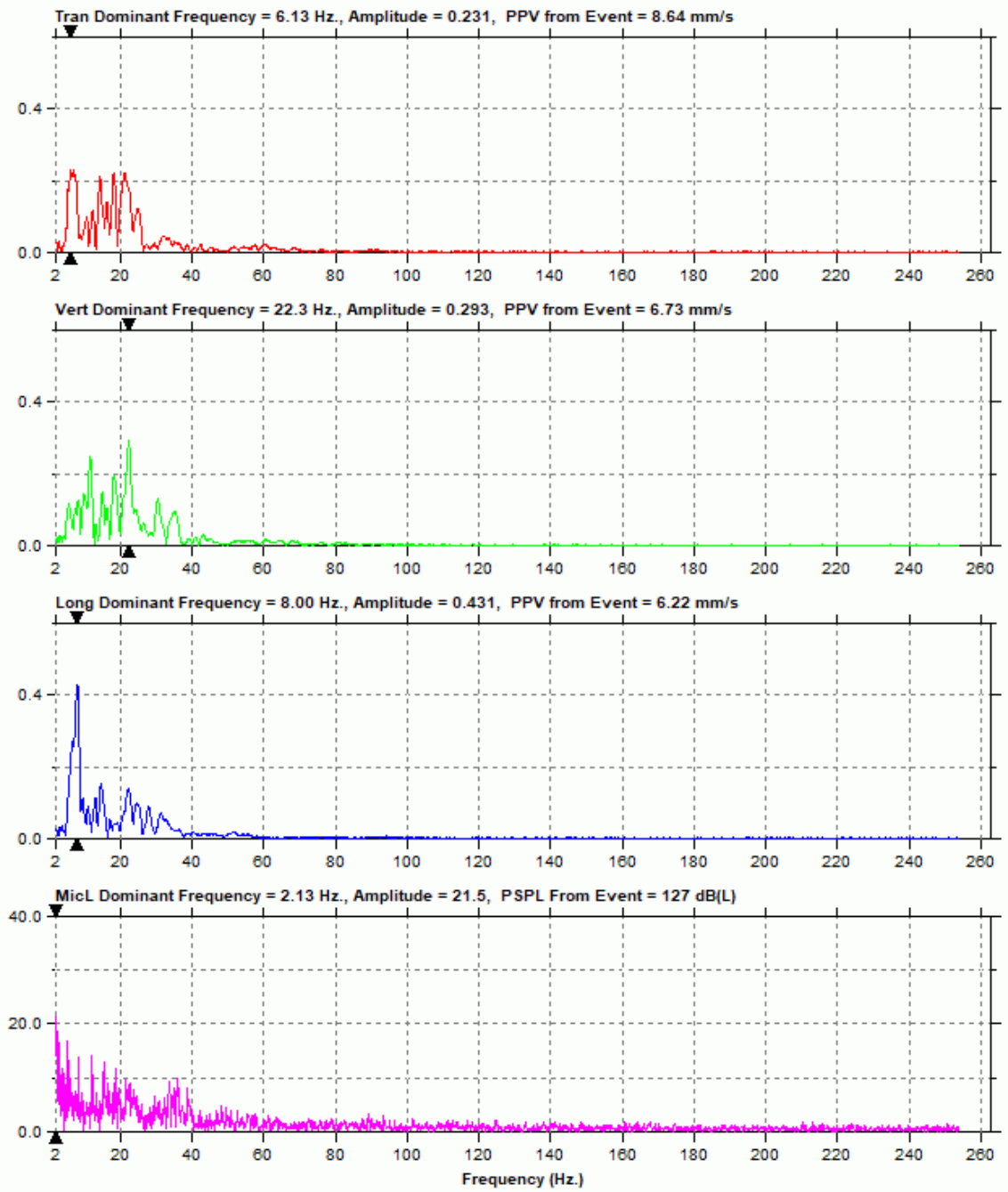
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 23, 2020 05:16:51
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:30 January 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IAS1.M60W

Post Event Notes

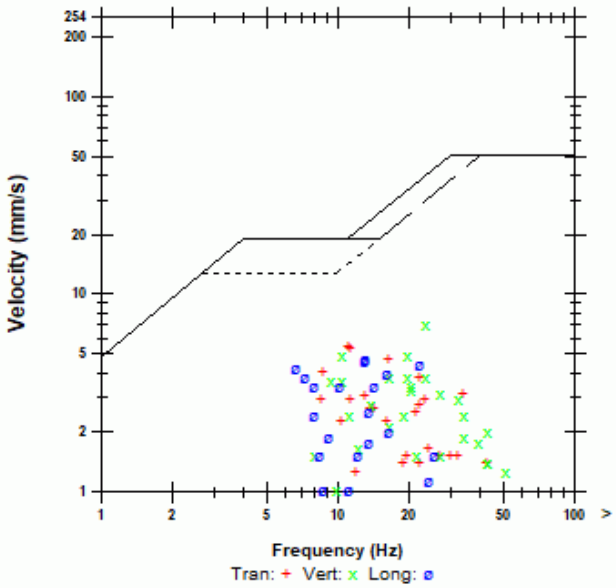
Extended Notes
Combo Mode January 24, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

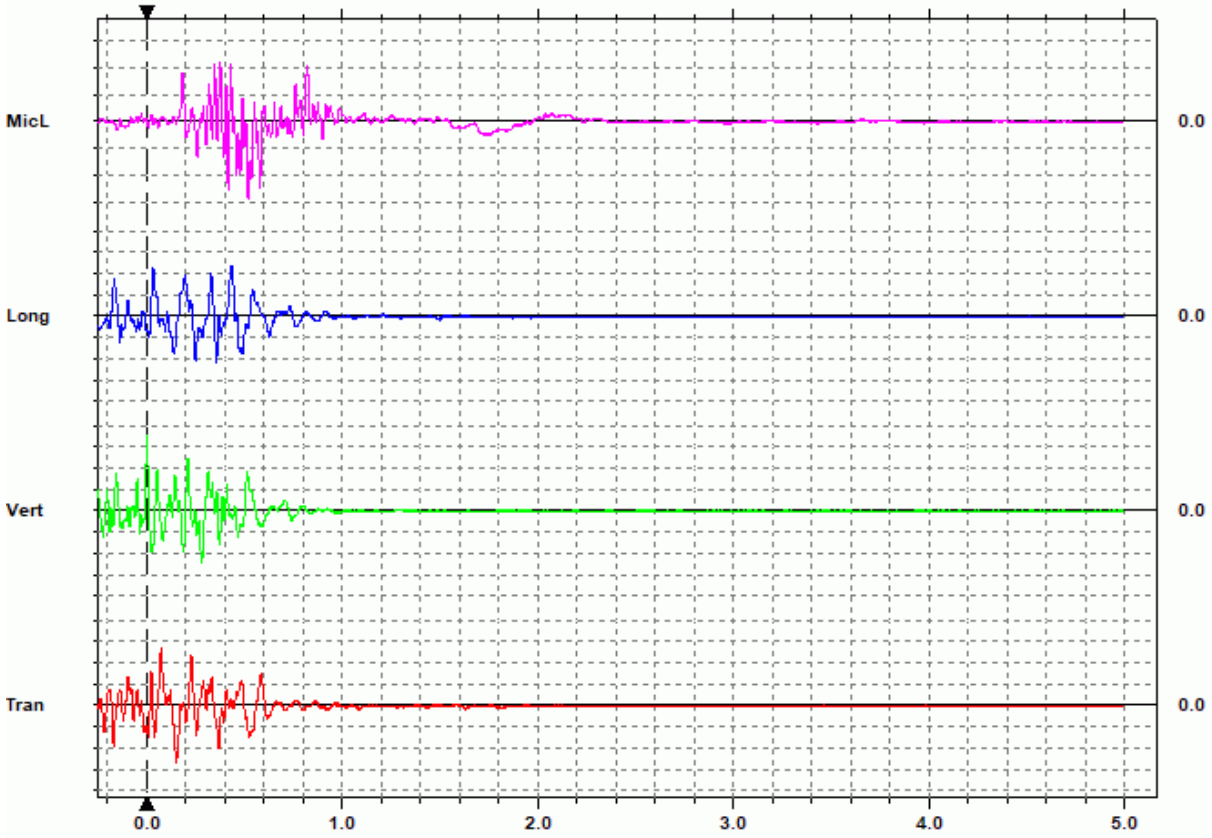
Microphone	Linear Weighting
PSPL	123.2 dB(L) at 0.521 sec.
ZC Freq	9.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.46	7.11	4.70	mm/s
ZC Freq	11	23	13	Hz
Time (Rel. to Trig)	0.152	0.004	0.435	sec
Peak Acceleration	0.0795	0.106	0.0663	g
Peak Displacement	0.0661	0.0582	0.0662	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.53 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:30 January 24, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IAS1.M60W
Job Number	8177		

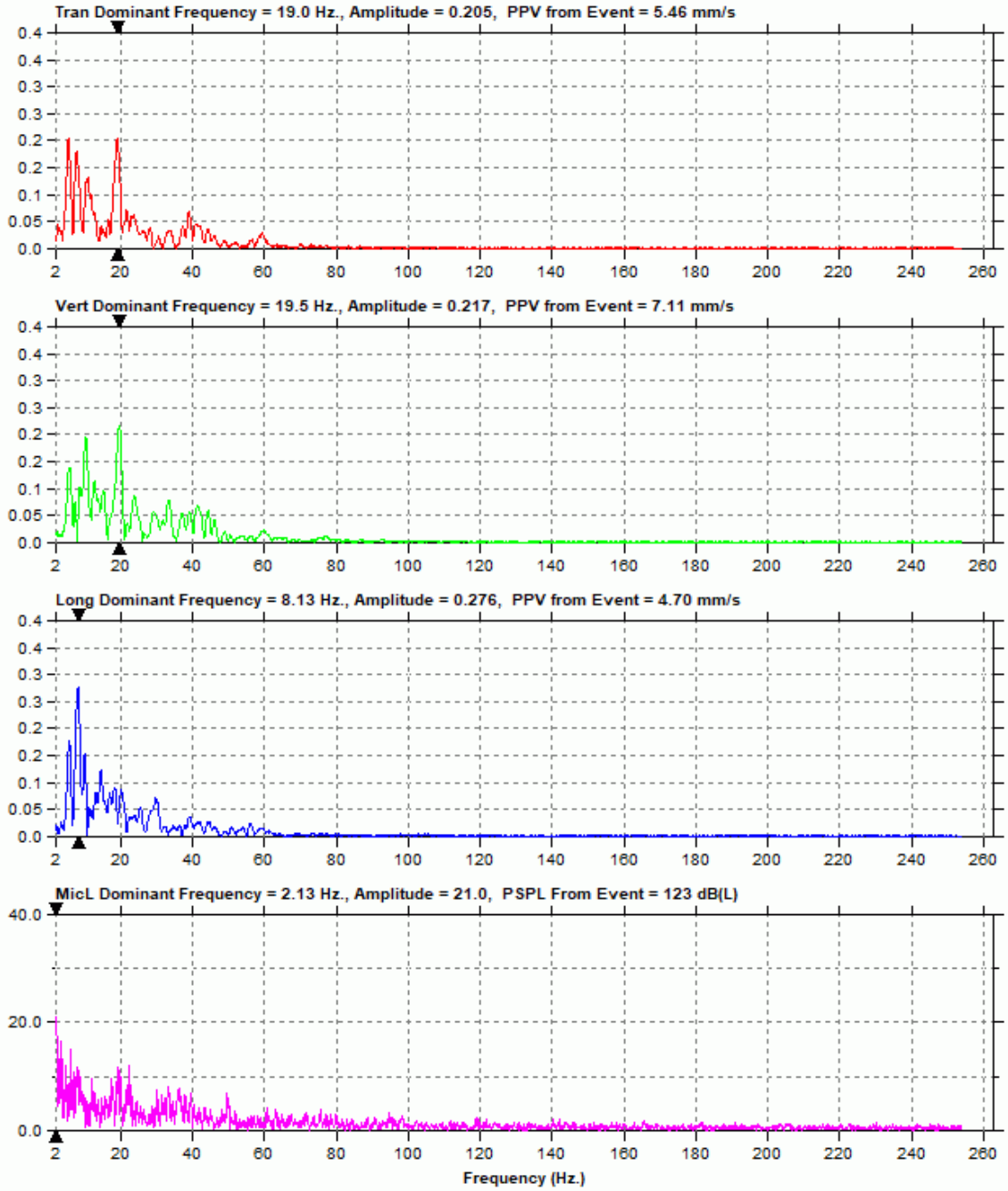
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 24, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:53:15 January 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IATW.4R0W

Post Event Notes

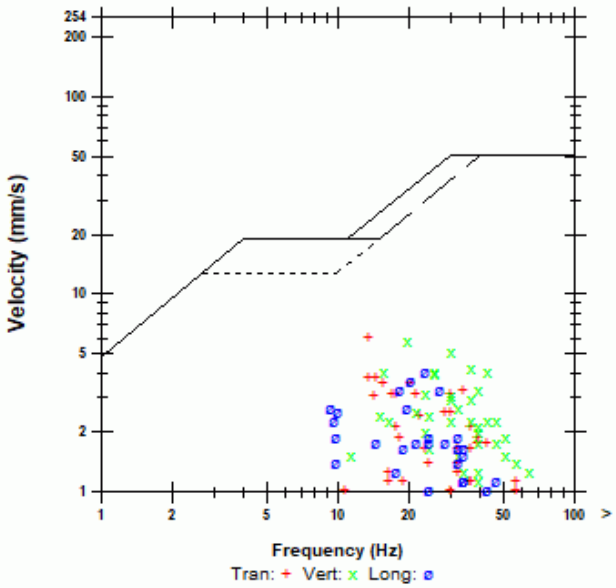
Extended Notes
Combo Mode January 25, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

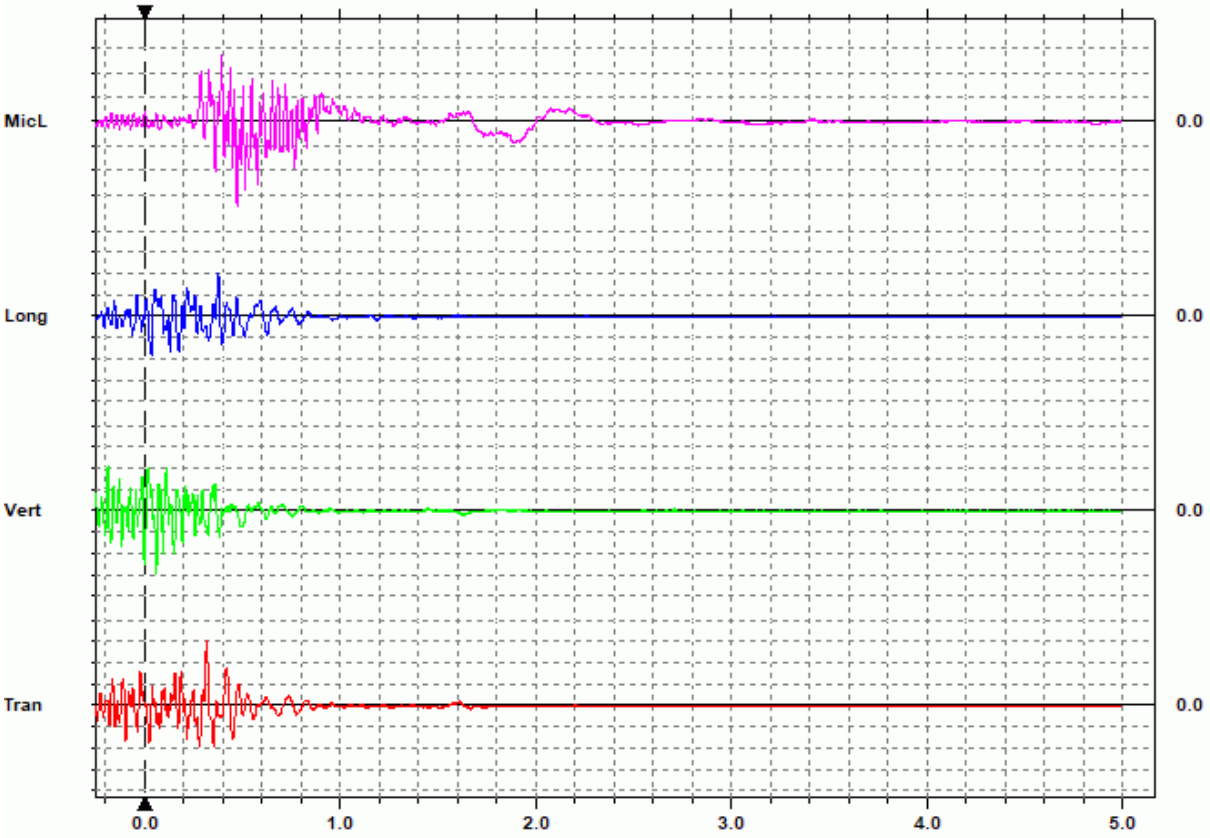
Microphone	Linear Weighting
PSPL	124.7 dB(L) at 0.474 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	5.84	4.06	mm/s
ZC Freq	13	20	23	Hz
Time (Rel. to Trig)	0.318	0.062	0.378	sec
Peak Acceleration	0.0928	0.133	0.0928	g
Peak Displacement	0.0473	0.0377	0.0394	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.41 mm/s At 0.319 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:53:15 January 25, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IATW.4R0W
Job Number	8177		

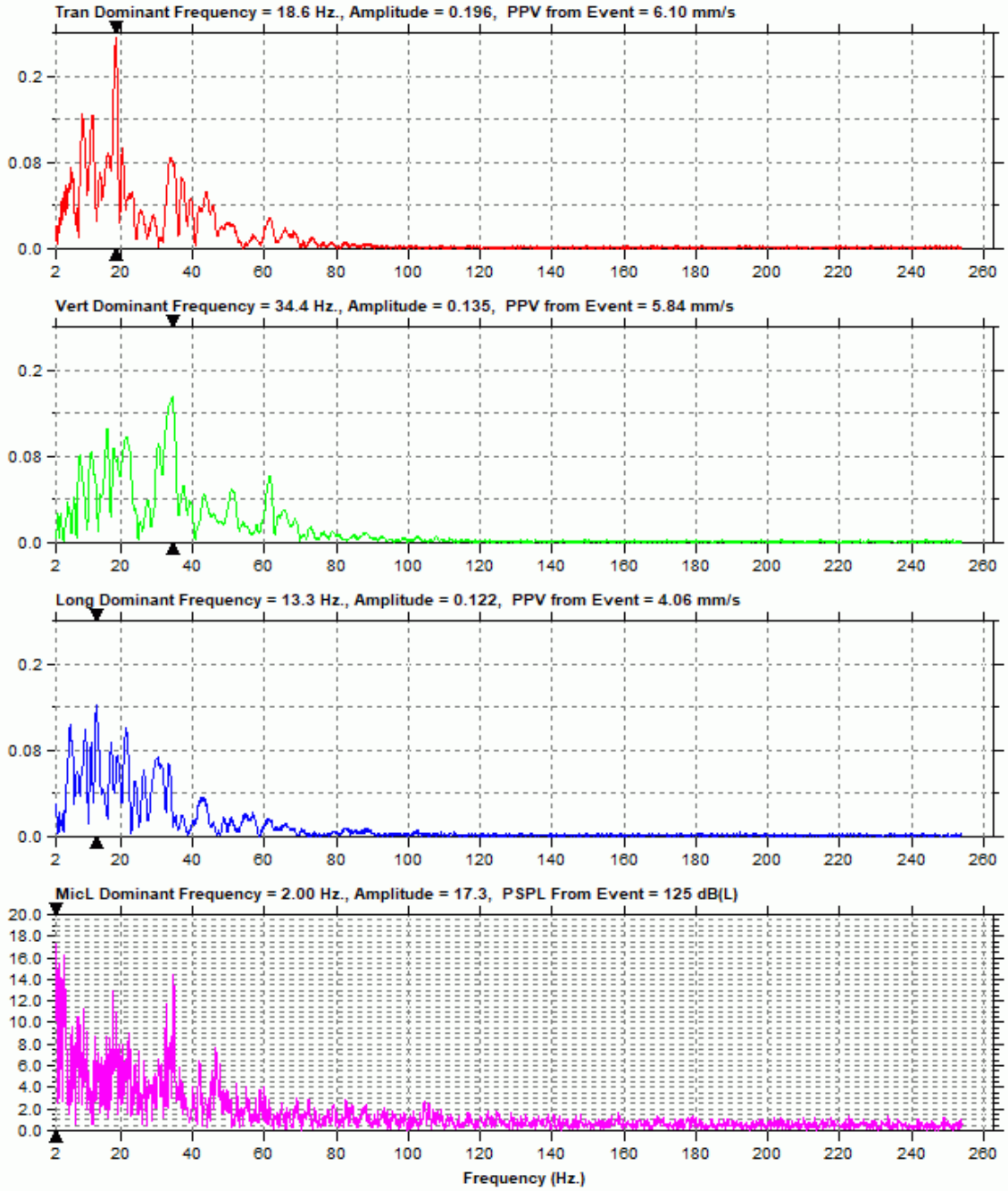
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 25, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:41 January 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IAZG.DT0W

Post Event Notes

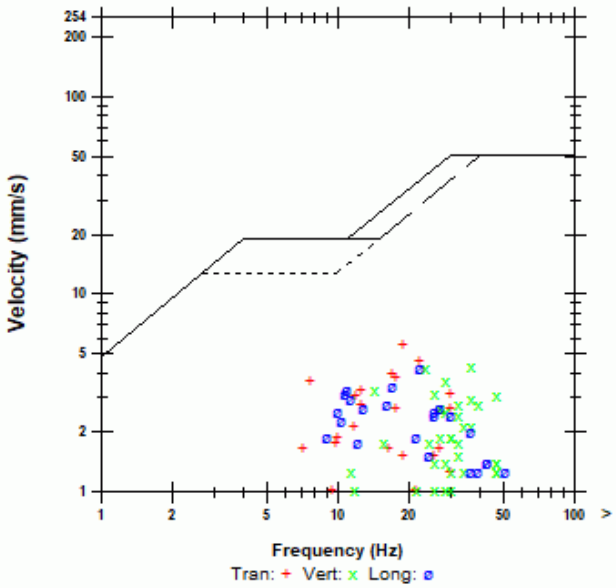
Extended Notes
Combo Mode January 28, 2020 05:17:52
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

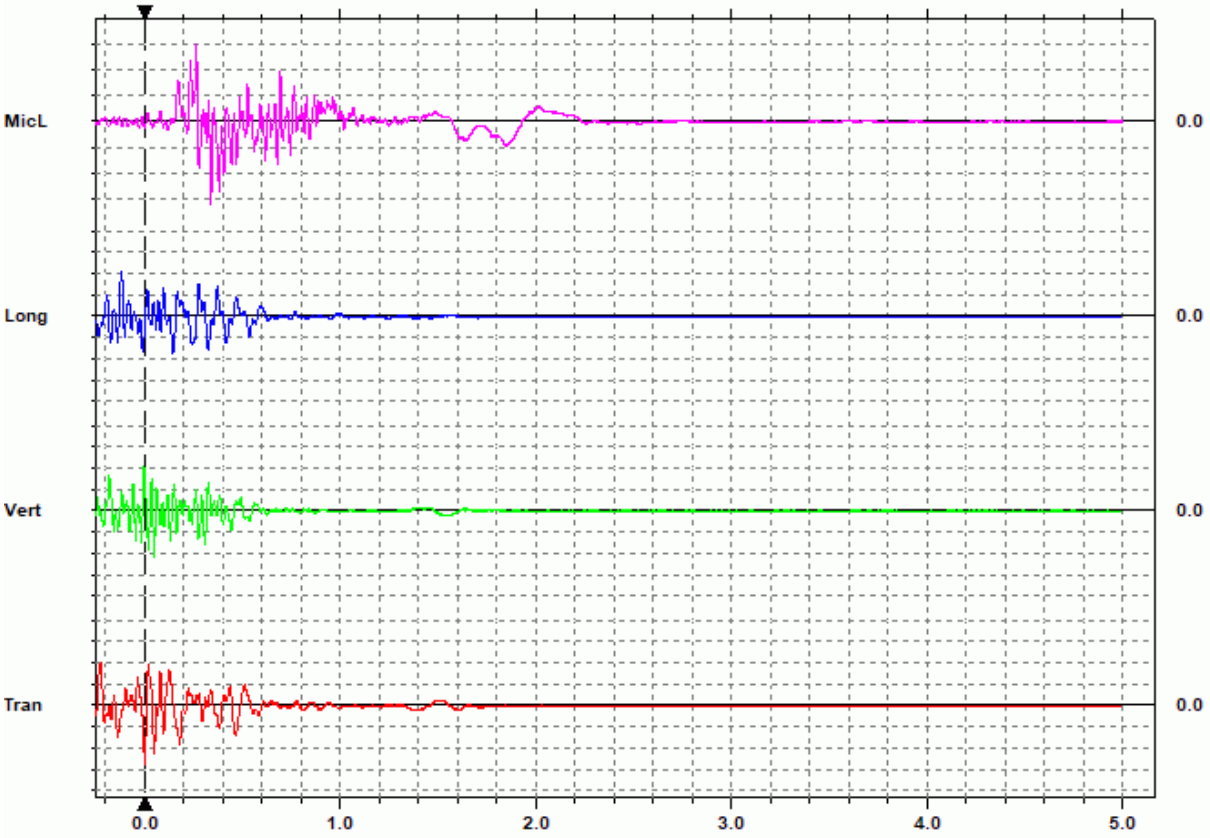
Microphone	Linear Weighting
PSPL	124.2 dB(L) at 0.340 sec.
ZC Freq	28 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.59	4.32	4.19	mm/s
ZC Freq	19	37	22	Hz
Time (Rel. to Trig)	0.003	0.050	-0.118	sec
Peak Acceleration	0.0928	0.106	0.0663	g
Peak Displacement	0.0507	0.0262	0.0372	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.49 mm/s At 0.000 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:41 January 28, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IAZG.DT0W
Job Number	8177		

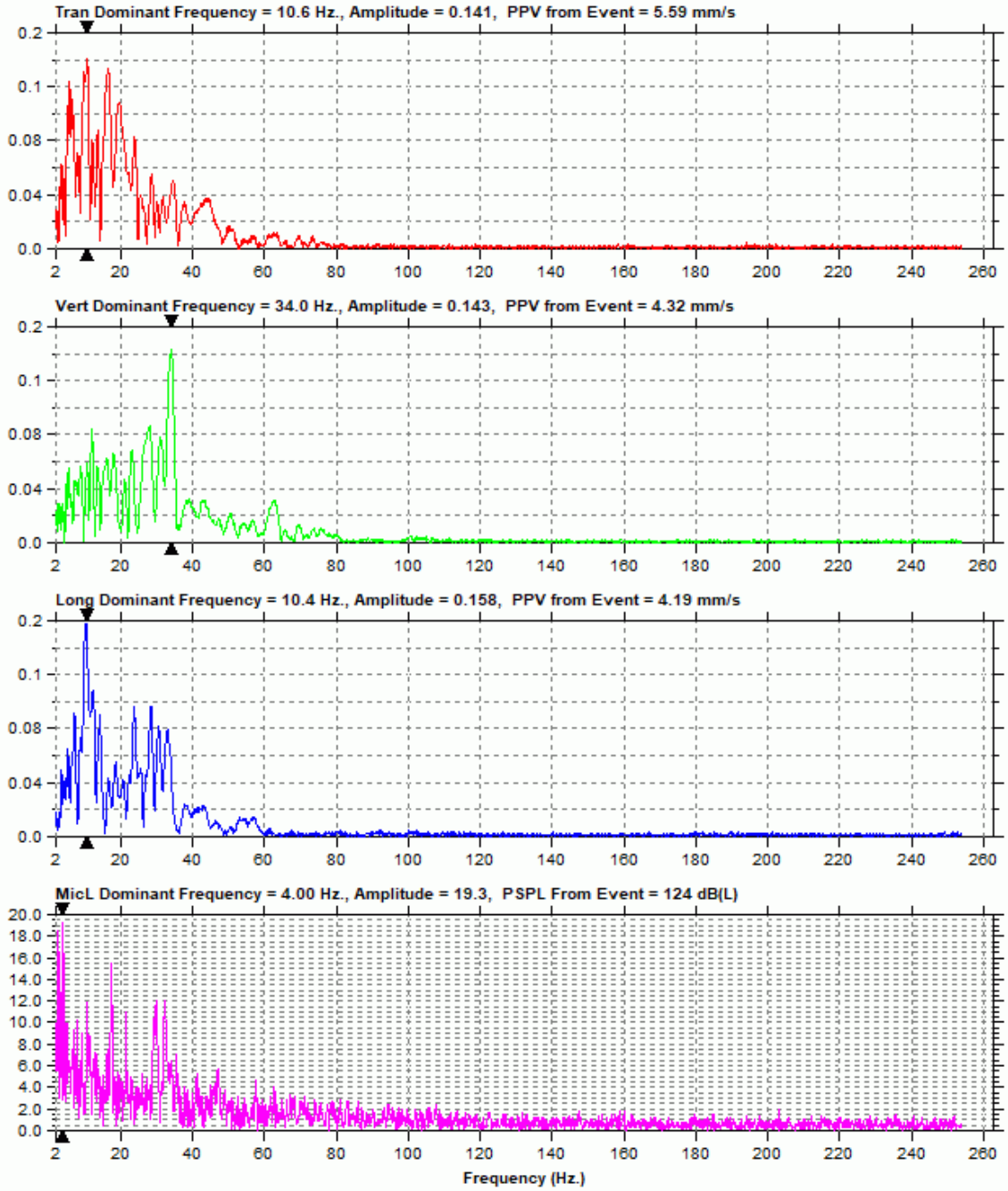
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 28, 2020 05:17:52
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:39 January 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IAQ7.3F0W

Post Event Notes

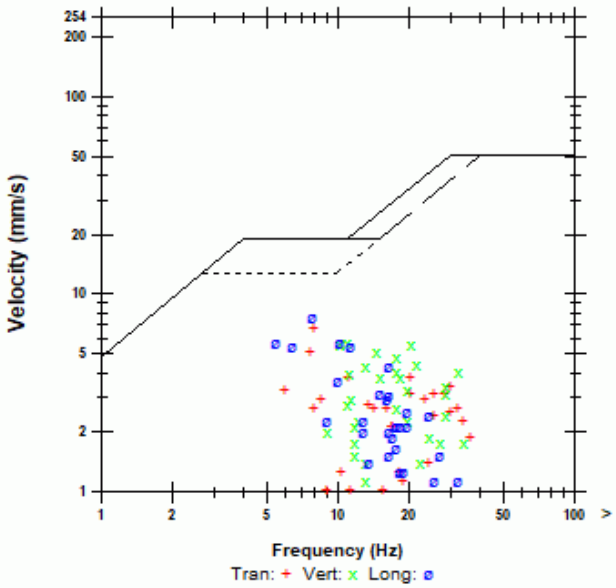
Extended Notes
Combo Mode January 23, 2020 05:17:35
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

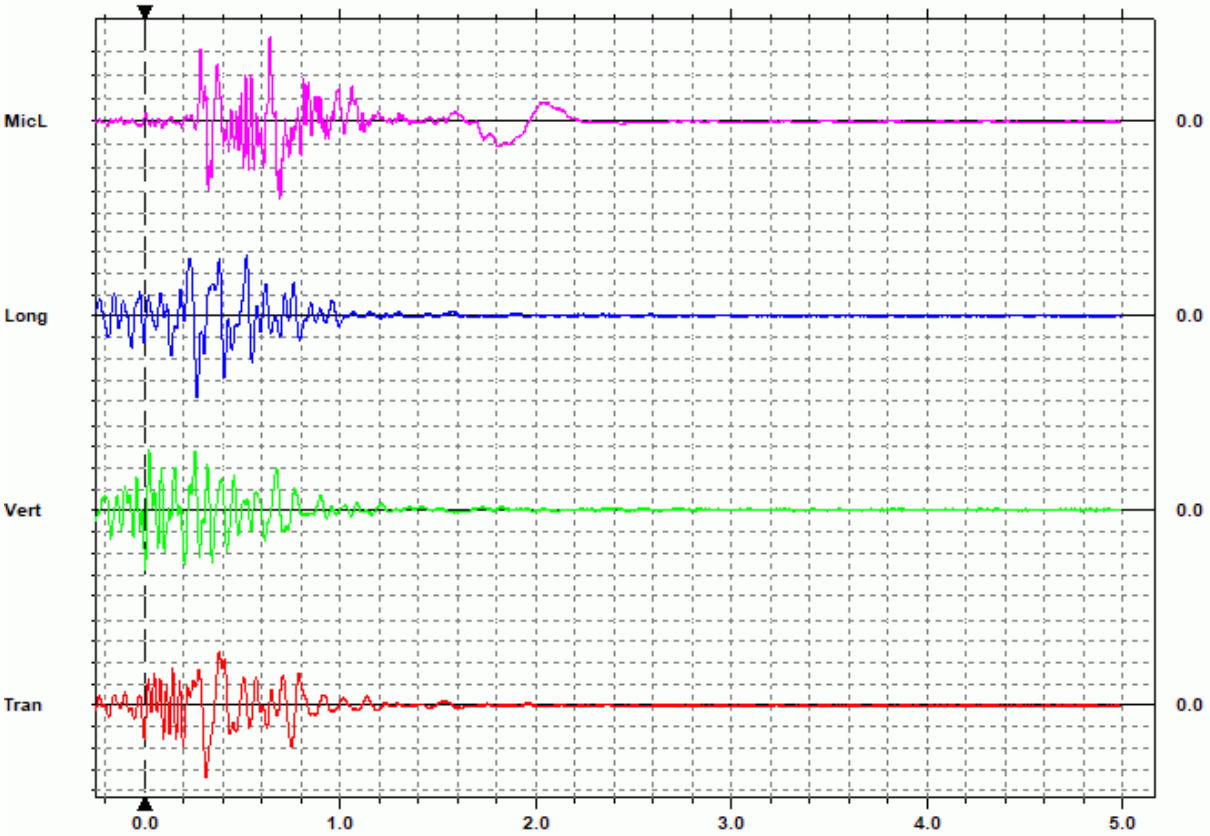
Microphone	Linear Weighting
PSPL	125.1 dB(L) at 0.640 sec.
ZC Freq	9.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.73	5.71	7.62	mm/s
ZC Freq	8.0	11	7.8	Hz
Time (Rel. to Trig)	0.312	0.022	0.266	sec
Peak Acceleration	0.0663	0.0928	0.0795	g
Peak Displacement	0.115	0.0690	0.115	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.26 mm/s At 0.264 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:39 January 23, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IAQ7.3F0W
Job Number	8177		

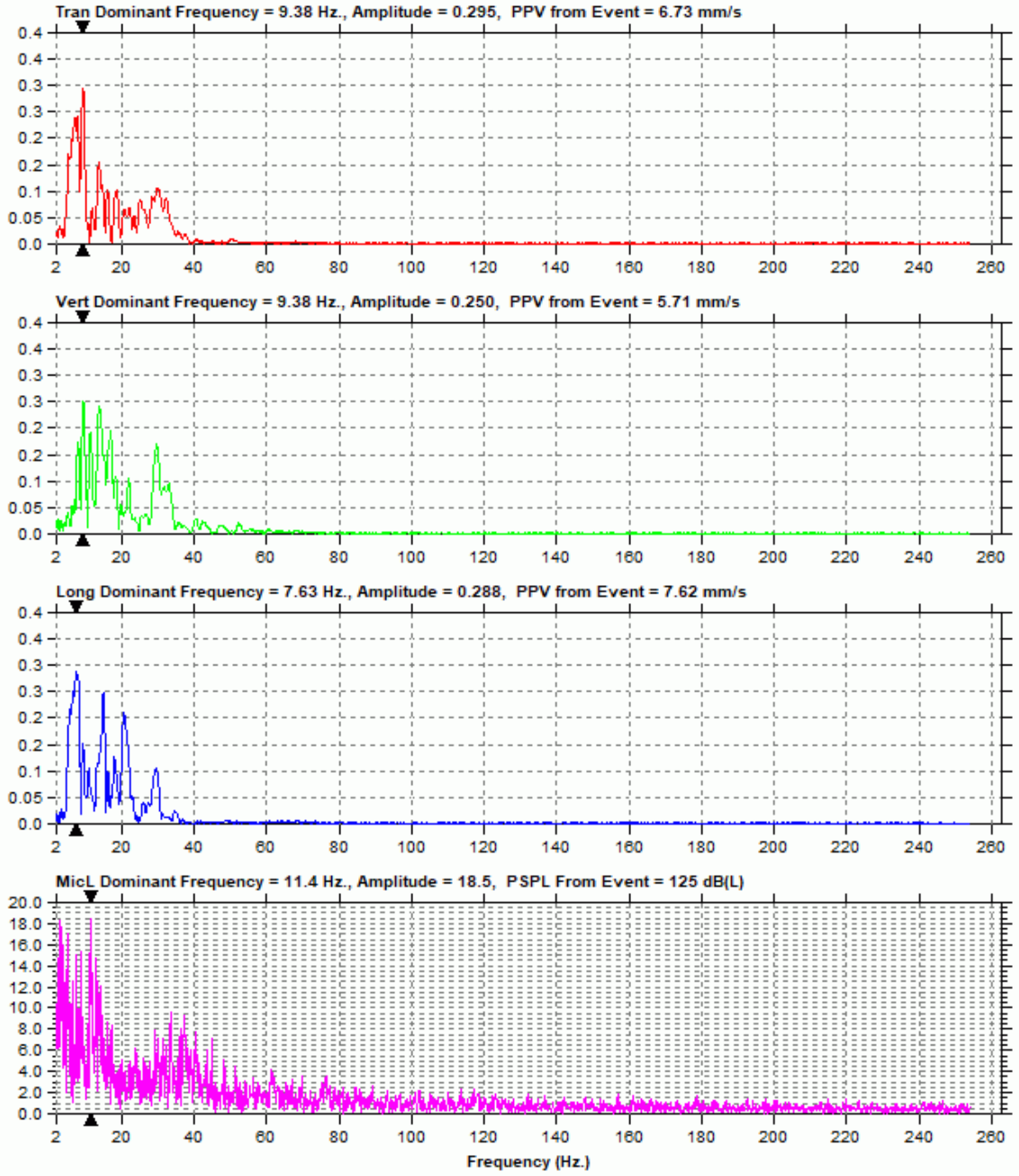
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 23, 2020 05:17:35
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:05 January 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IAS1.LH0W

Post Event Notes

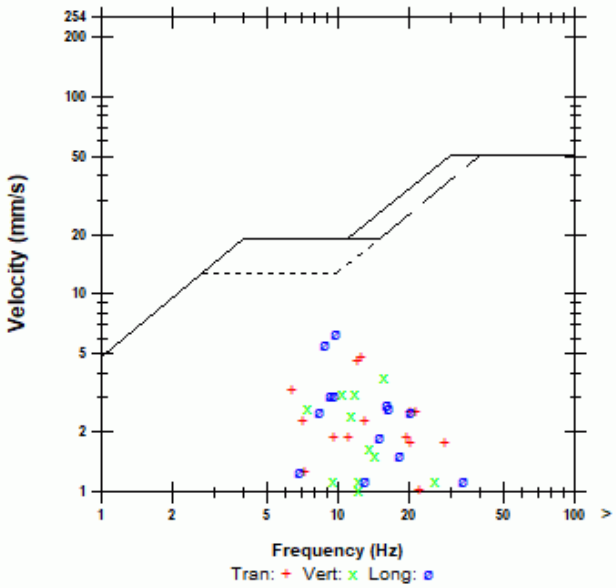
Extended Notes
Combo Mode January 24, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

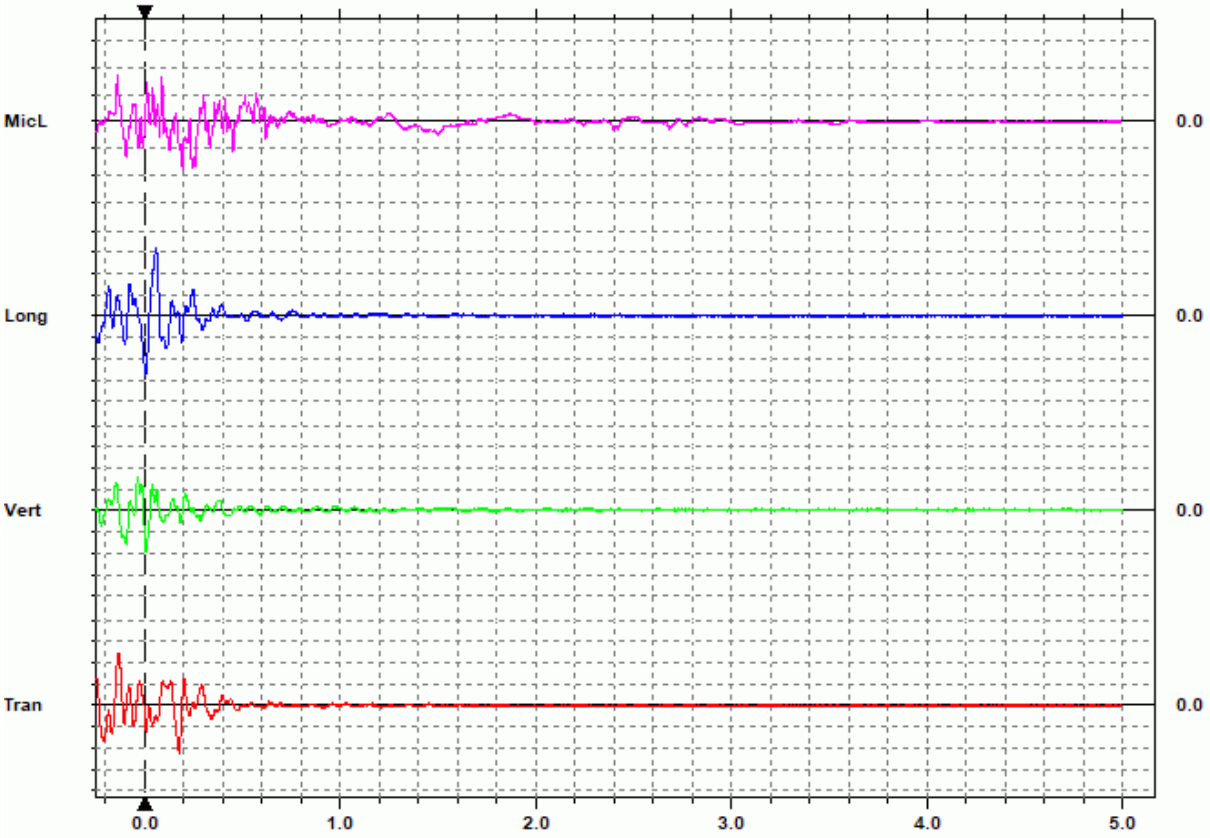
Microphone	Linear Weighting
PSPL	119.1 dB(L) at 0.194 sec.
ZC Freq	7.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.83	3.81	6.35	mm/s
ZC Freq	12	16	9.8	Hz
Time (Rel. to Trig)	-0.137	0.006	0.058	sec
Peak Acceleration	0.0530	0.0663	0.0530	g
Peak Displacement	0.0797	0.0497	0.0982	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.14 mm/s At 0.007 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 24, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:05 January 24, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IAS1.LH0W
Job Number	8177		

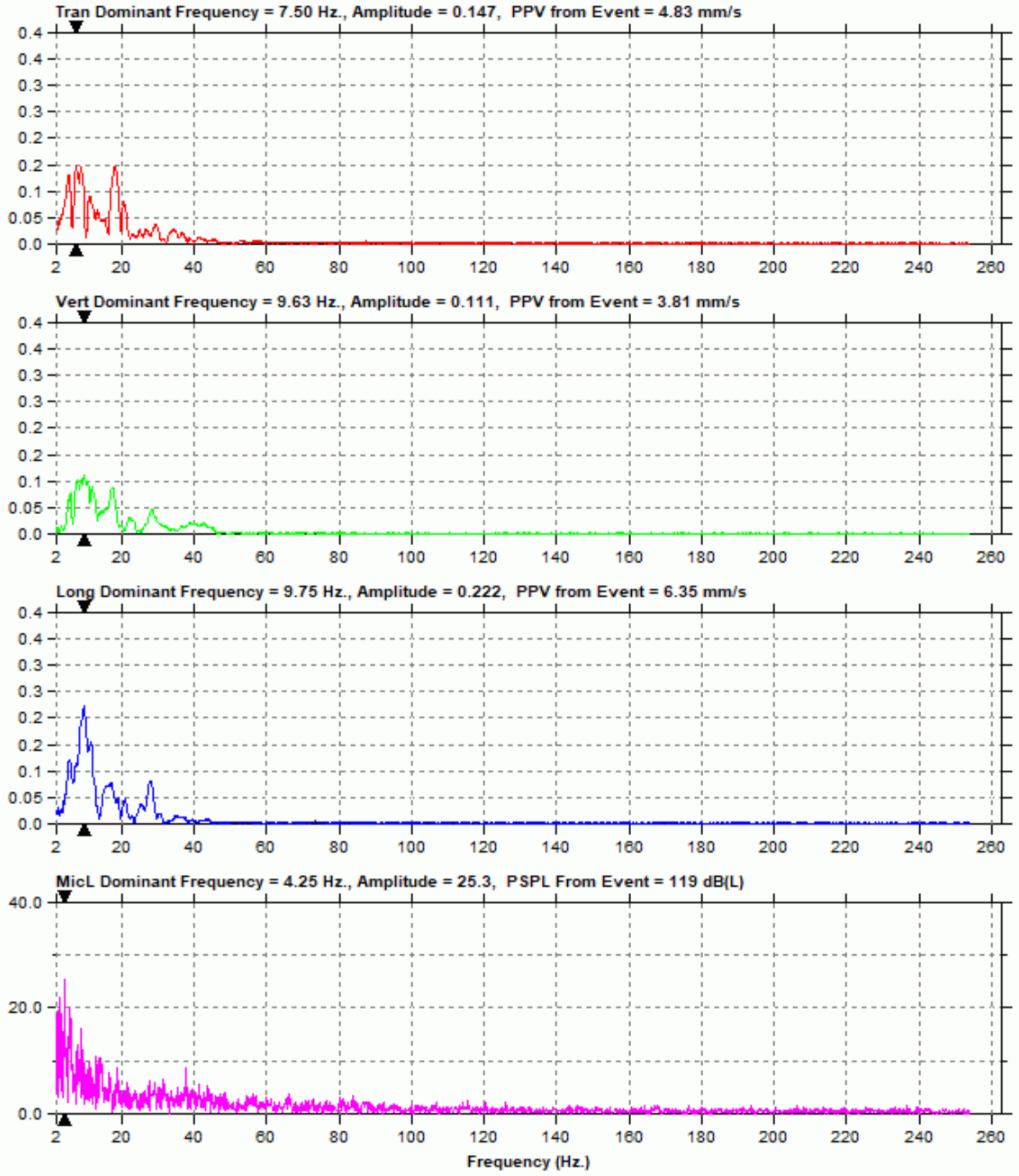
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 24, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:39 January 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IAQ7.3F0W

Post Event Notes

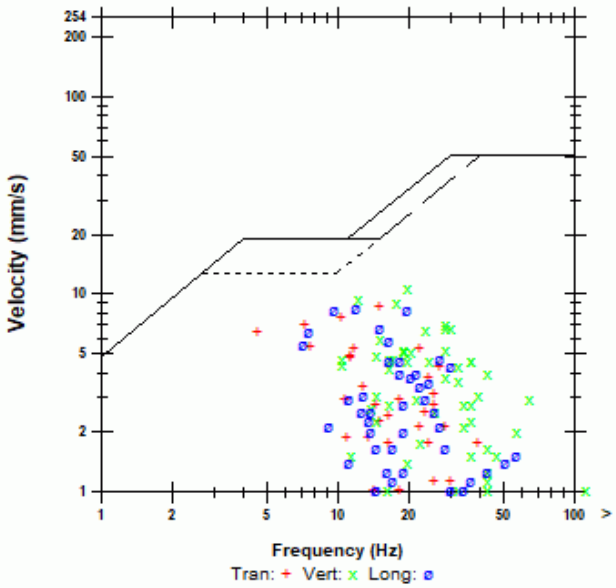
Extended Notes
Combo Mode January 23, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

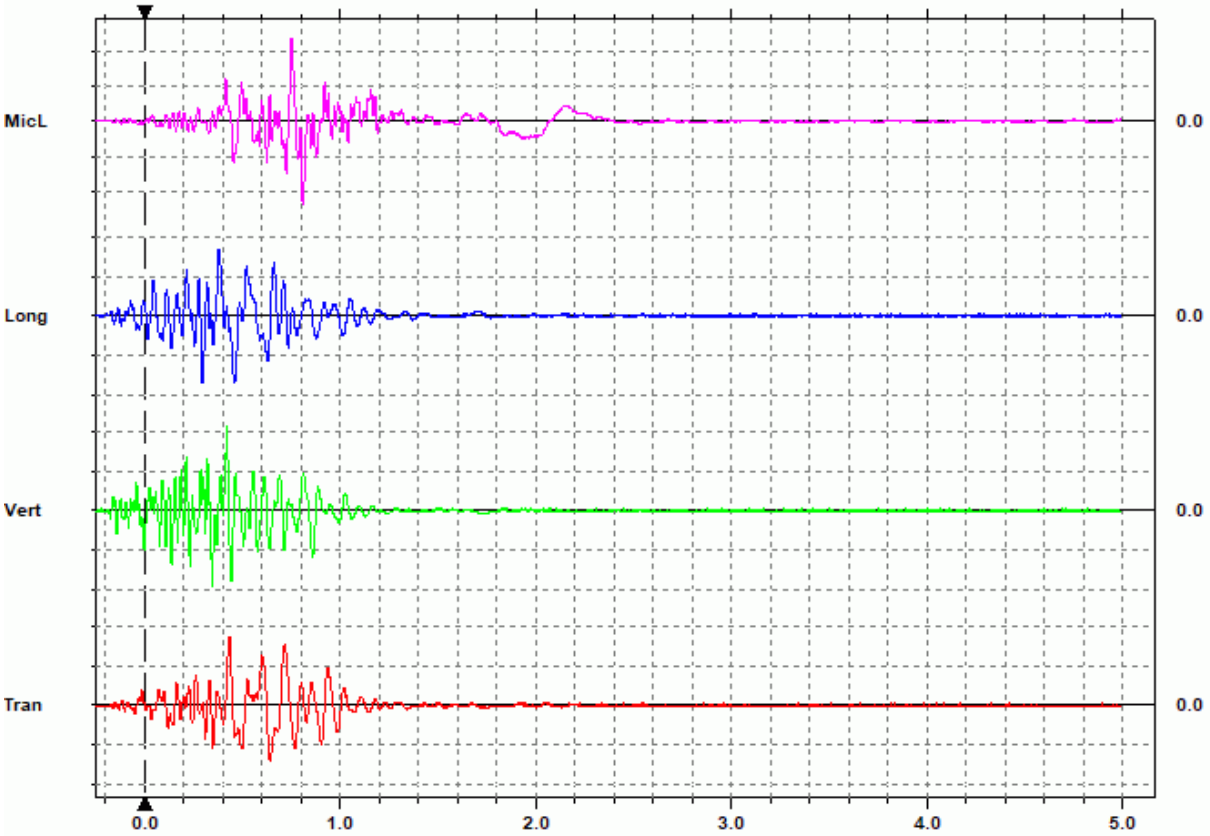
Microphone	Linear Weighting
PSPL	127.6 dB(L) at 0.753 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.64	10.7	8.51	mm/s
ZC Freq	15	20	12	Hz
Time (Rel. to Trig)	0.437	0.423	0.380	sec
Peak Acceleration	0.0928	0.172	0.119	g
Peak Displacement	0.137	0.0779	0.118	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.3 mm/s At 0.424 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: January 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:39 January 23, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IAQ7.3F0W
Job Number	8177		

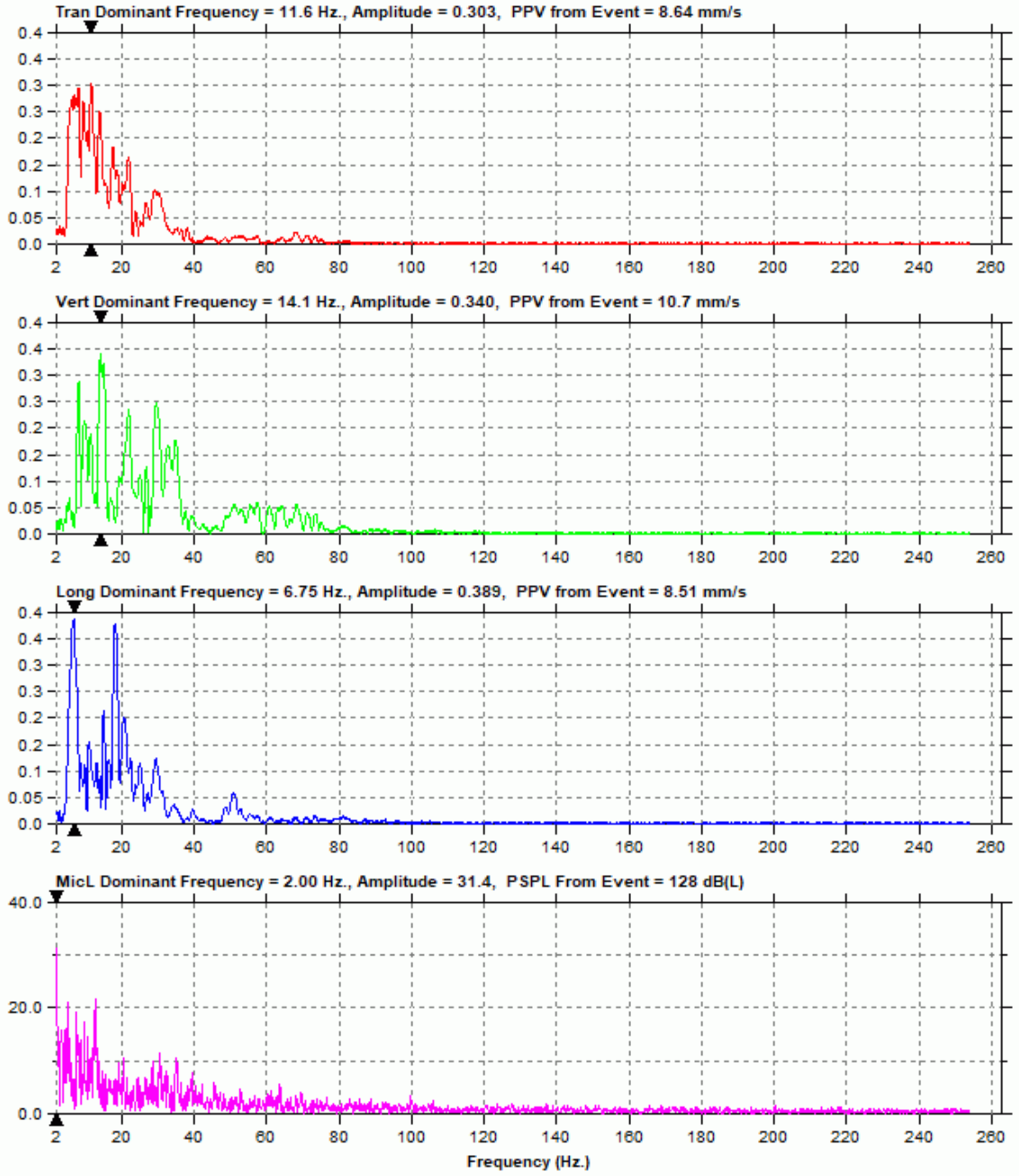
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 23, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:05 January 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IAS1.LH0W

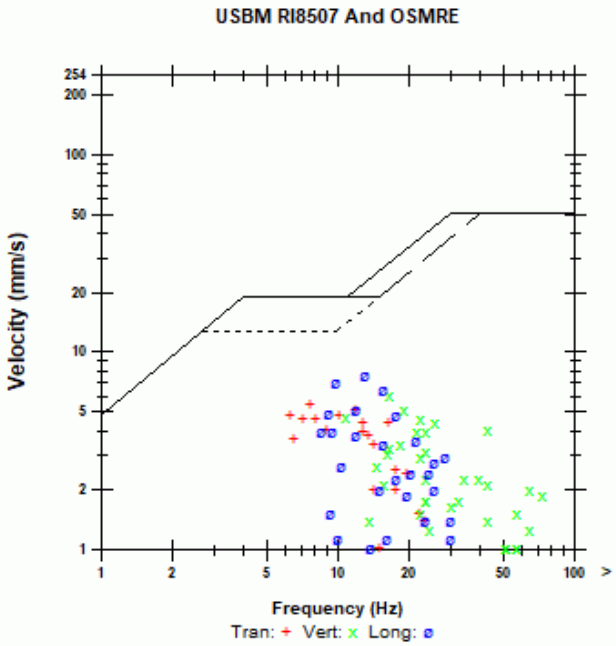
Post Event Notes

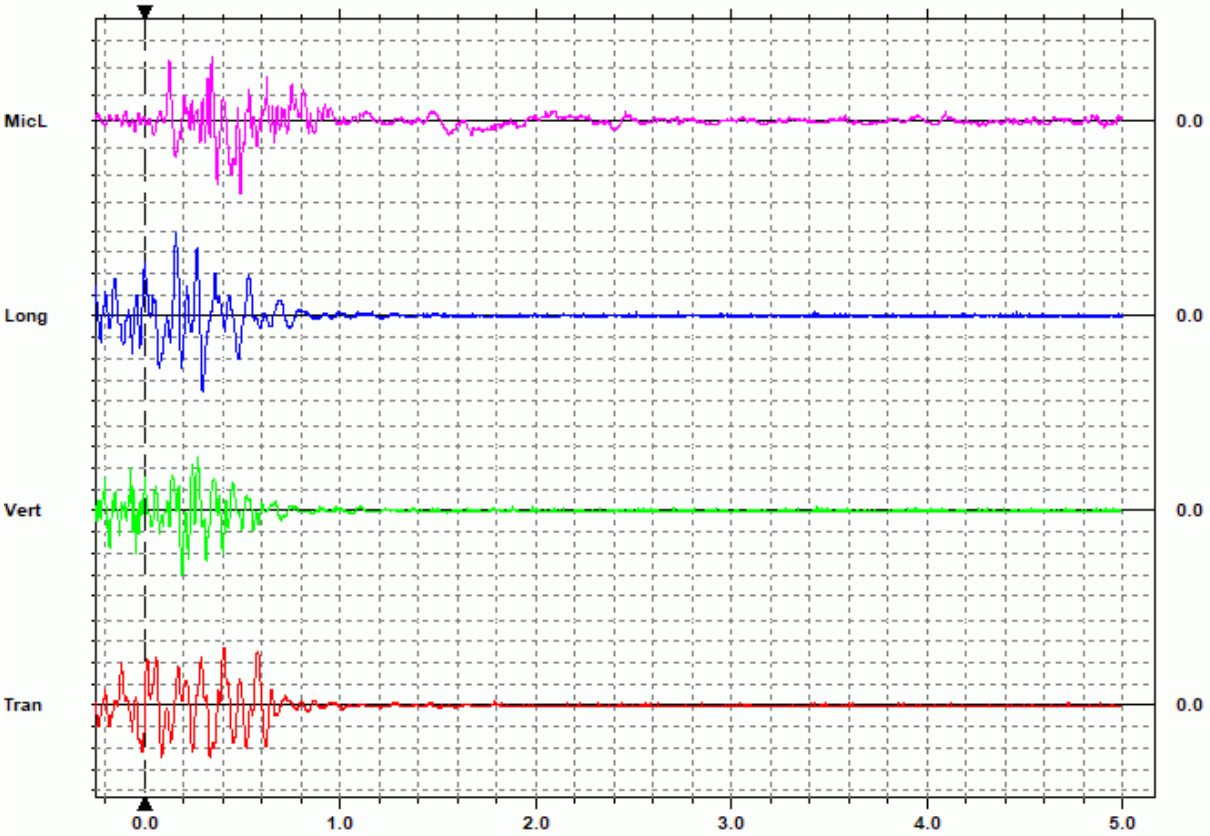
Extended Notes
Combo Mode January 24, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	122.5 dB(L) at 0.491 sec.
ZC Freq	15 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.46	6.10	7.75	mm/s
ZC Freq	7.6	17	13	Hz
Time (Rel. to Trig)	0.405	0.190	0.162	sec
Peak Acceleration	0.0795	0.119	0.0795	g
Peak Displacement	0.0915	0.0505	0.0870	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.13 mm/s At 0.271 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:05 January 24, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IAS1.LH0W
Job Number	8177		

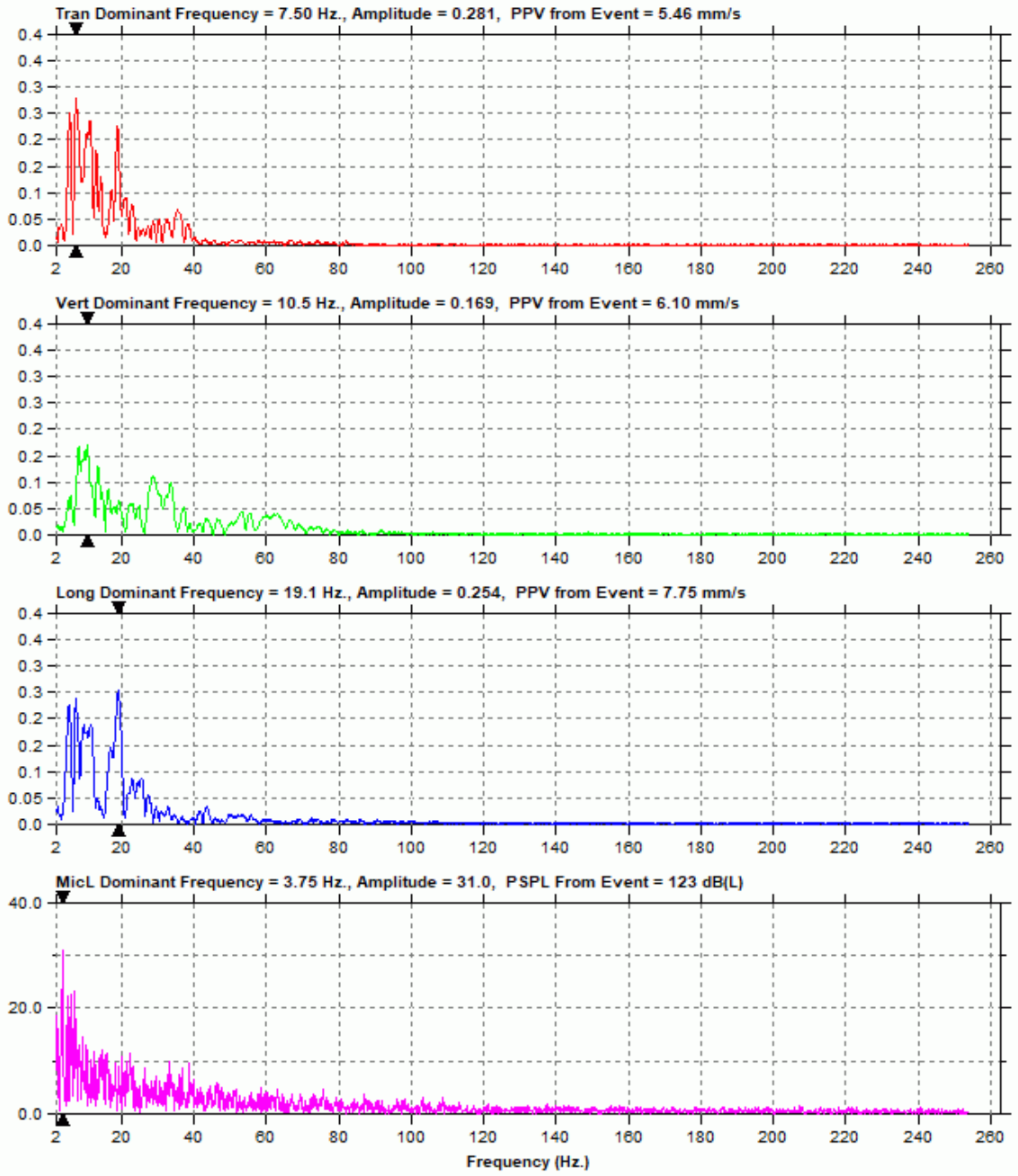
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 24, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:52:49 January 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IATW.410W

Post Event Notes

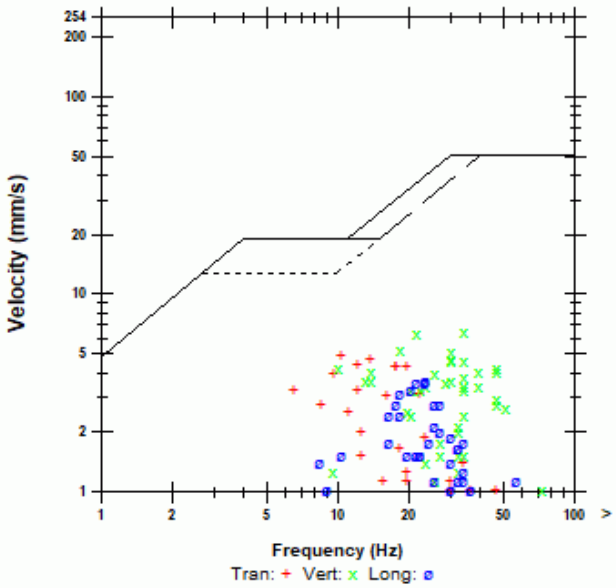
Extended Notes
Combo Mode January 25, 2020 05:17:32
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

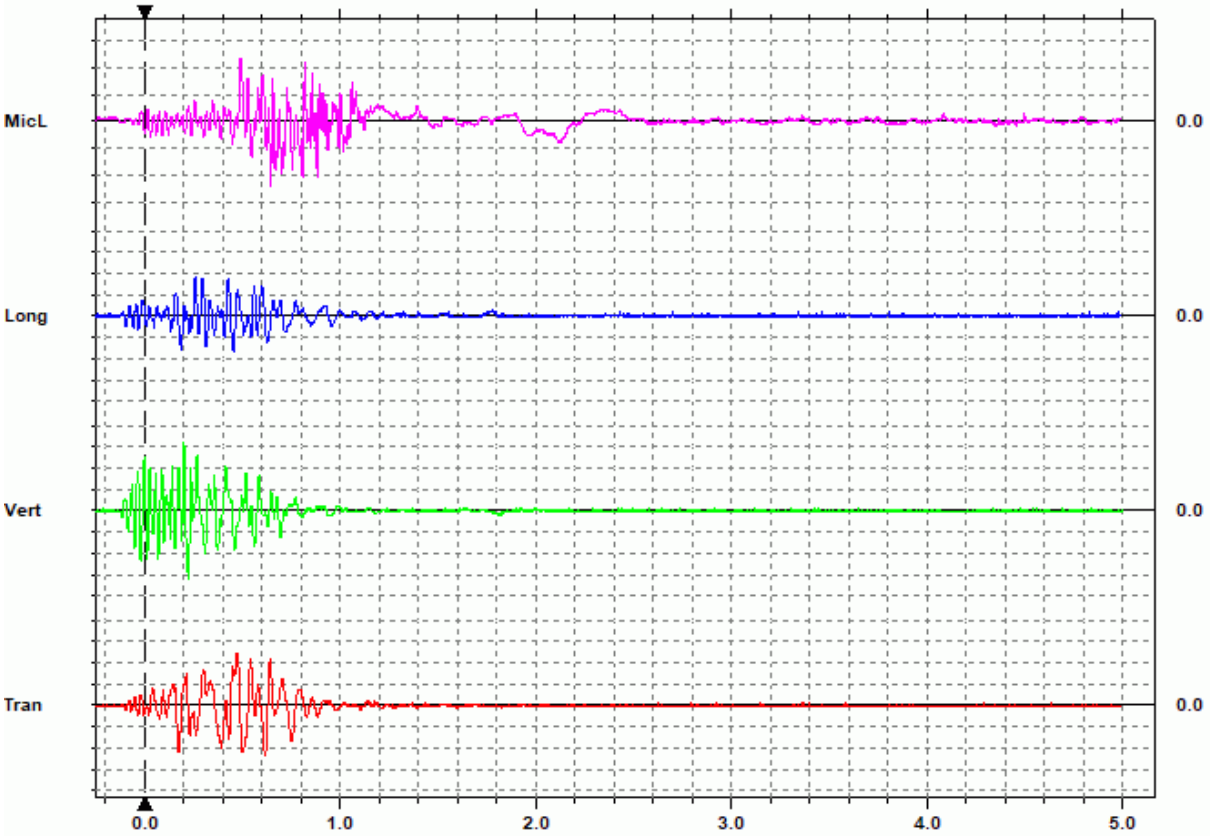
Microphone	Linear Weighting
PSPL	121.5 dB(L) at 0.646 sec.
ZC Freq	34 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	6.48	3.68	mm/s
ZC Freq	10	34	23	Hz
Time (Rel. to Trig)	0.476	0.203	0.262	sec
Peak Acceleration	0.0795	0.146	0.0663	g
Peak Displacement	0.0776	0.0505	0.0257	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.85 mm/s At 0.203 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:52:49 January 25, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IATW.410W
Job Number	8177		

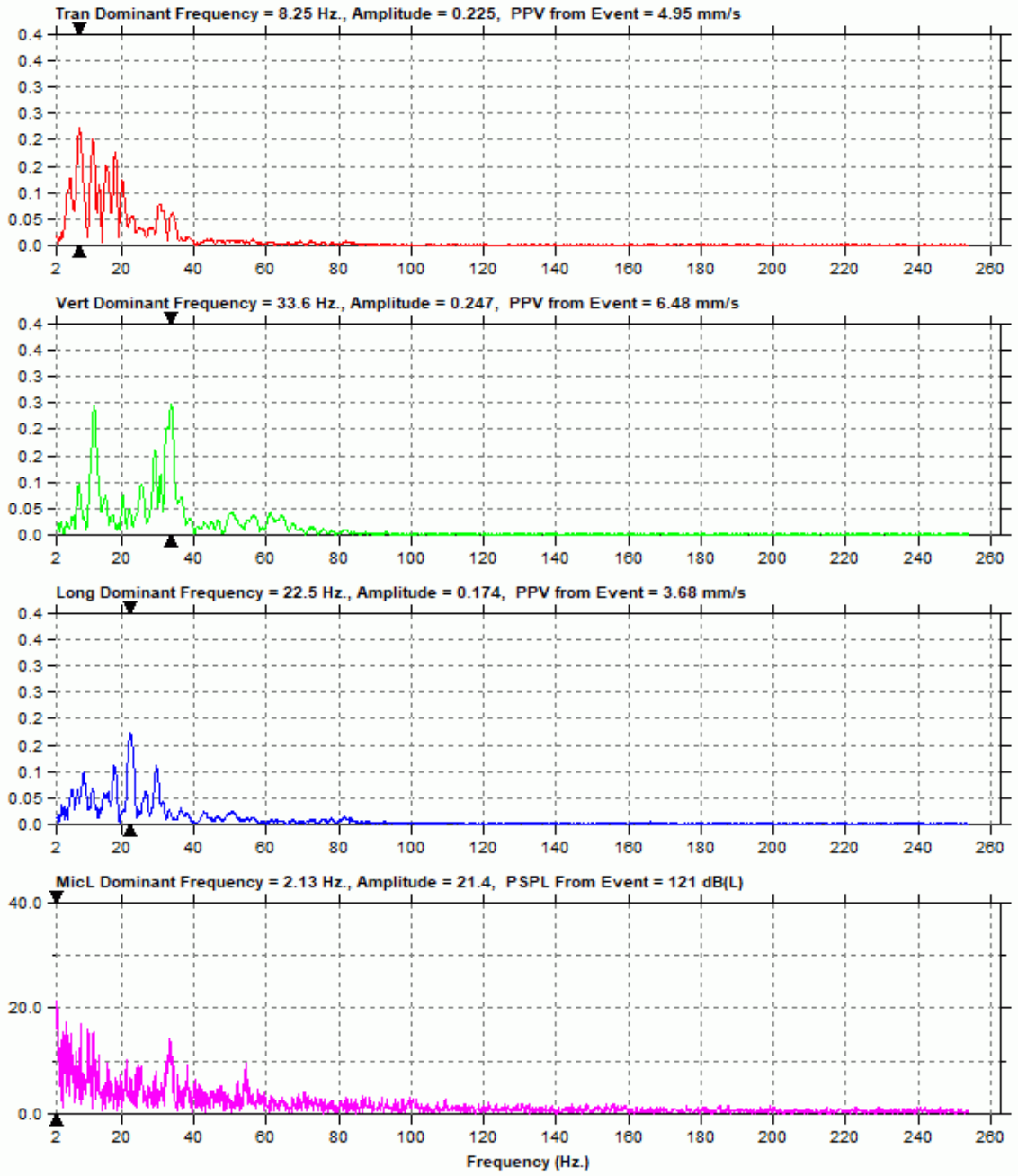
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 25, 2020 05:17:32
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:58:11 January 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IAZG.CZ0W

Post Event Notes

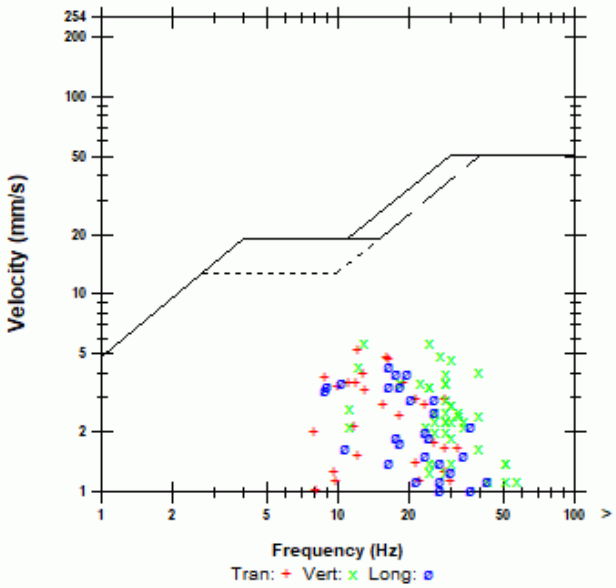
Extended Notes
Combo Mode January 28, 2020 05:18:07
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

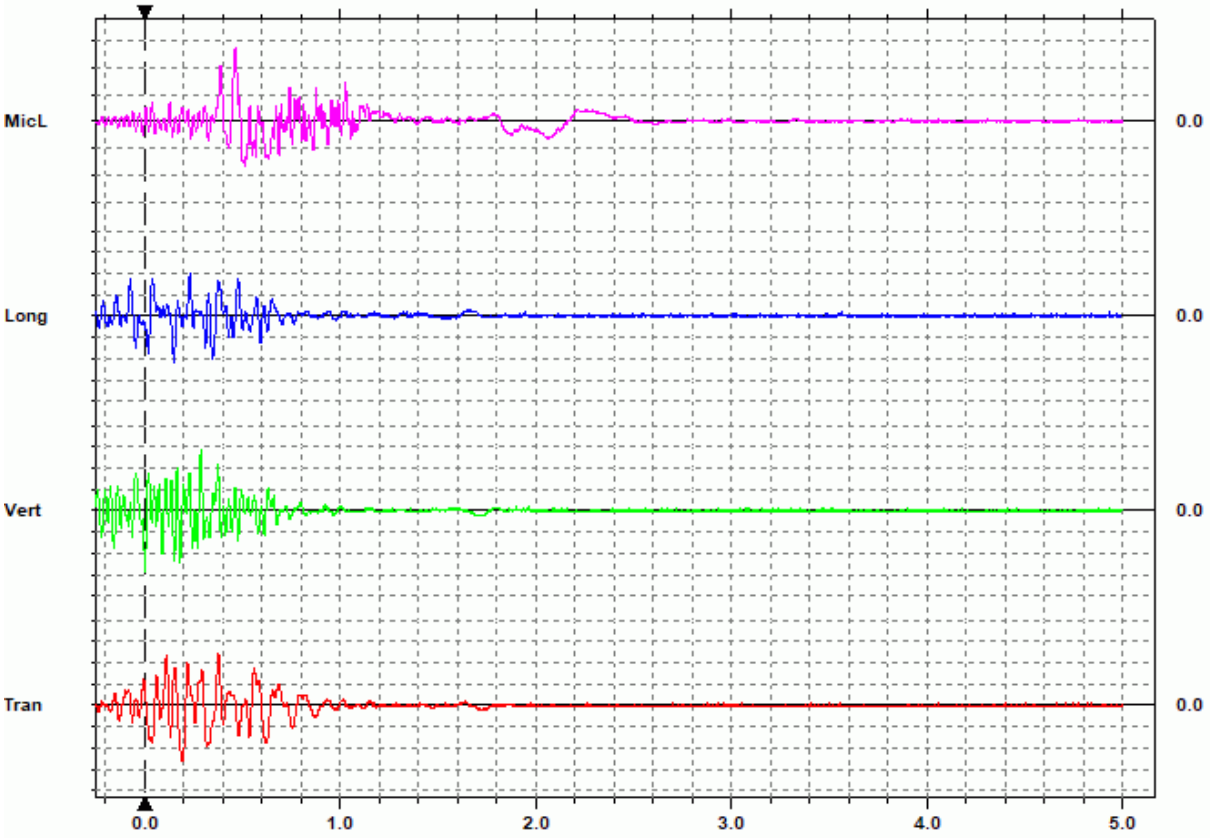
Microphone	Linear Weighting
PSPL	122.8 dB(L) at 0.465 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	5.71	4.32	mm/s
ZC Freq	12	13	17	Hz
Time (Rel. to Trig)	0.191	0.002	0.150	sec
Peak Acceleration	0.0663	0.119	0.0663	g
Peak Displacement	0.0727	0.0420	0.0446	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.21 mm/s At 0.376 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:58:11 January 28, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IAZG.CZ0W
Job Number	8177		

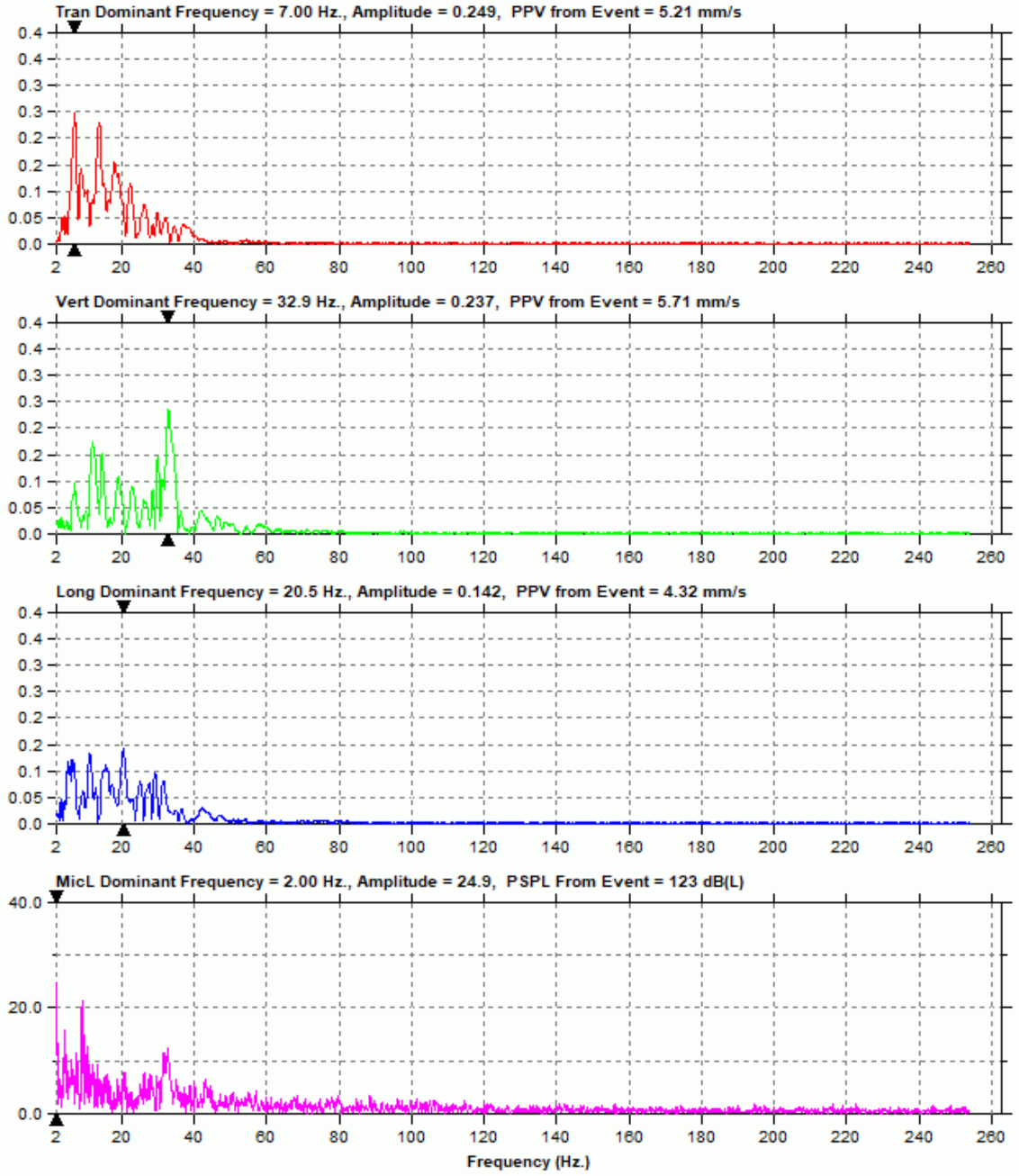
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 28, 2020 05:18:07
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:51 January 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IAQ7.8R0W

Post Event Notes

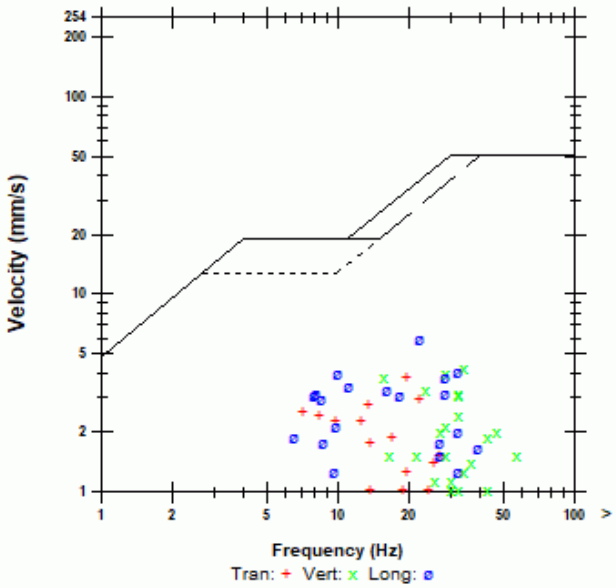
Extended Notes
Combo Mode January 23, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

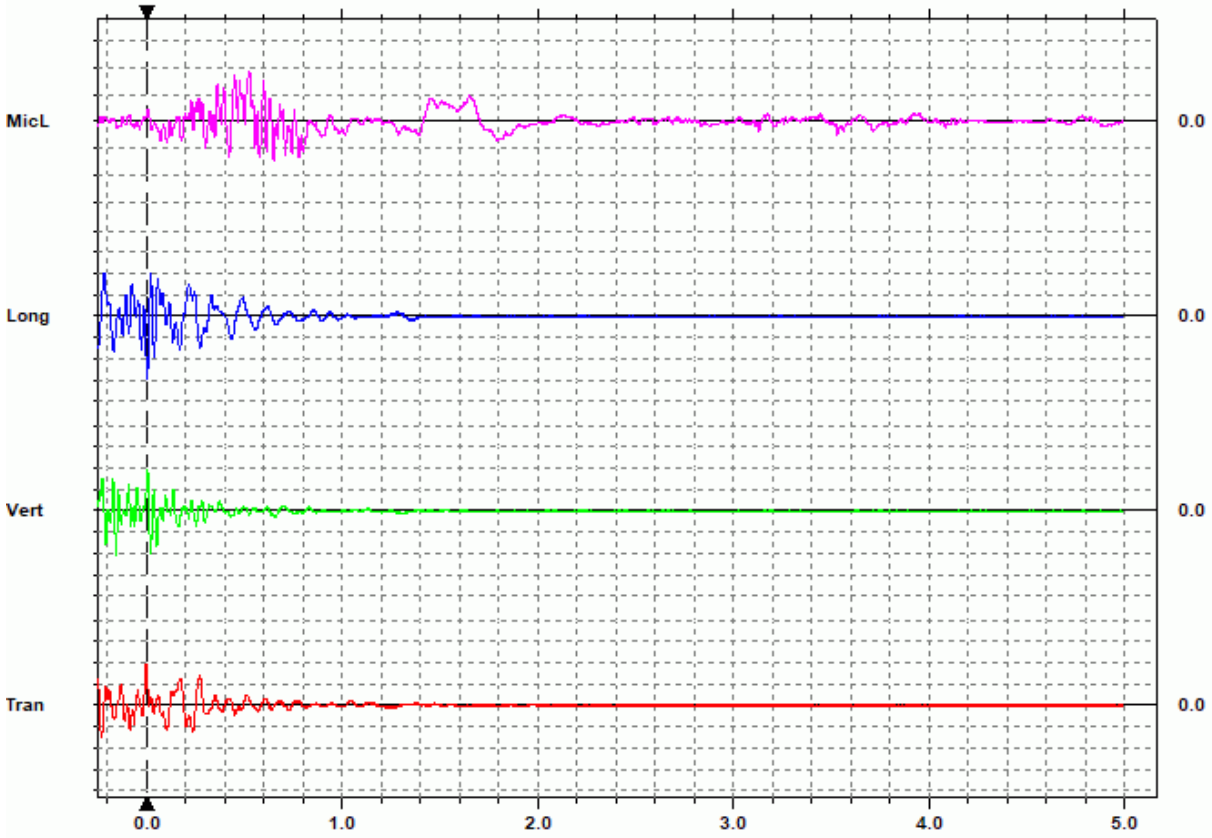
Microphone	Linear Weighting
PSPL	119.3 dB(L) at 0.522 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.81	4.19	5.97	mm/s
ZC Freq	20	34	22	Hz
Time (Rel. to Trig)	-0.003	-0.156	0.003	sec
Peak Acceleration	0.0530	0.0928	0.106	g
Peak Displacement	0.0513	0.0278	0.0579	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.64 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:51 January 23, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IAQ7.8R0W
Job Number	8177		

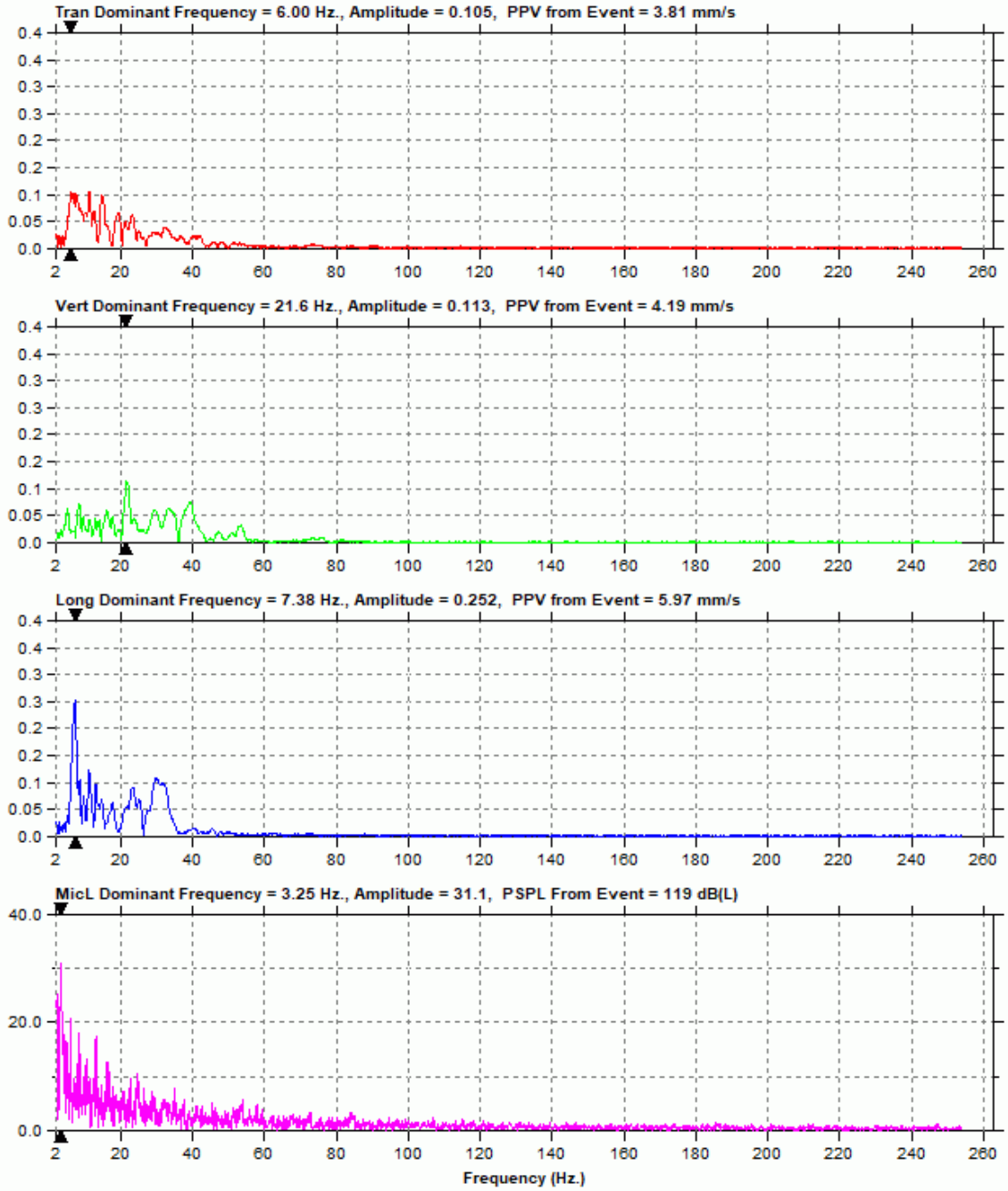
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 23, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:03 January 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IATW.9F0W

Post Event Notes

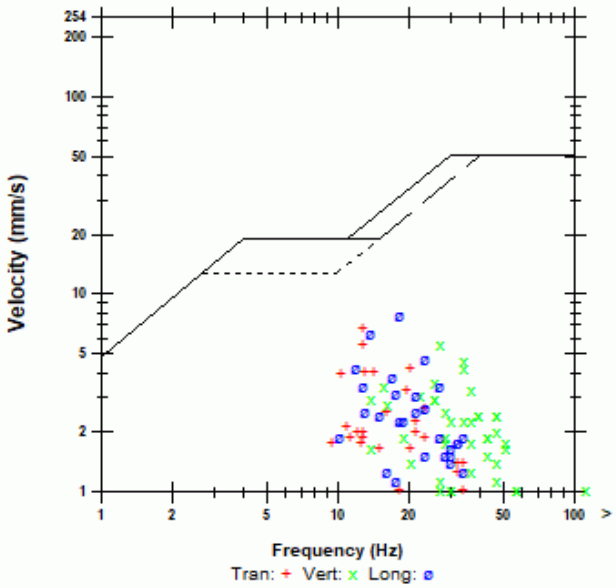
Extended Notes
Combo Mode January 25, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

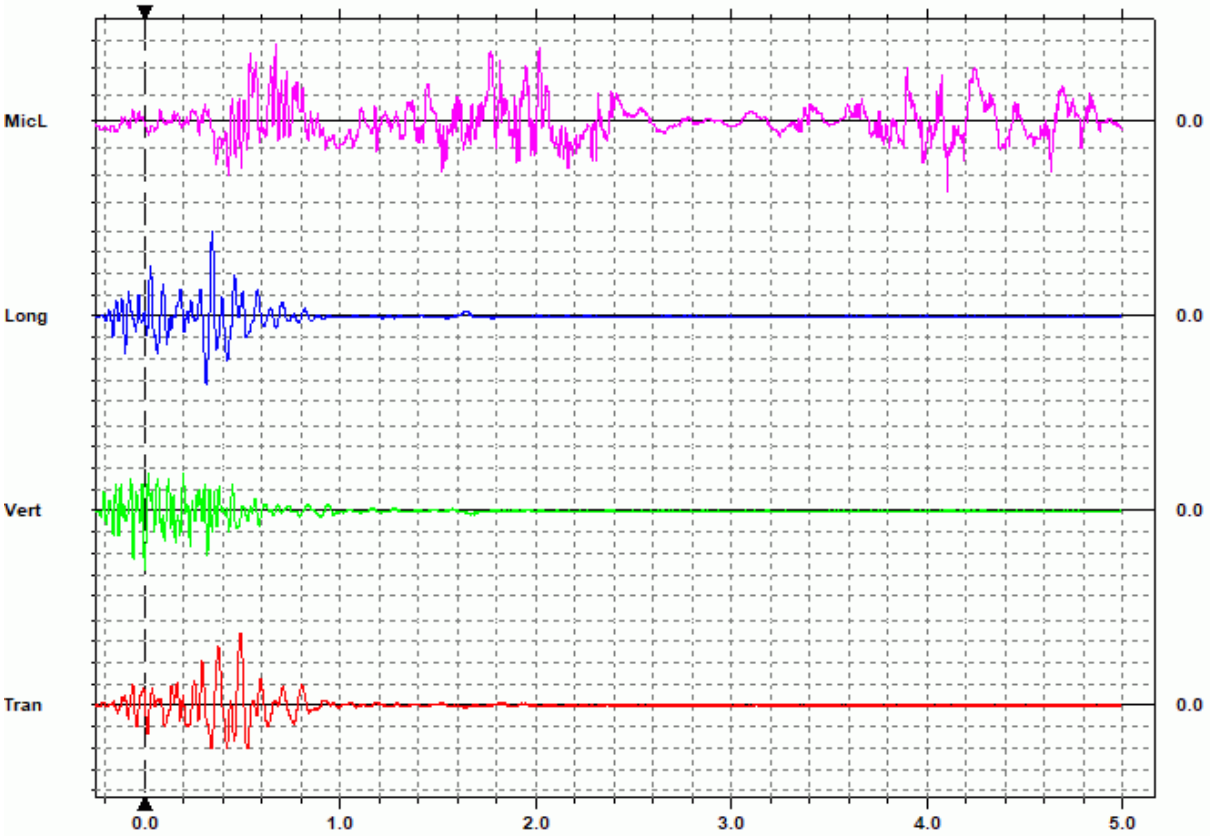
Microphone	Linear Weighting
PSPL	123.2 dB(L) at 0.672 sec.
ZC Freq	24 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.73	5.59	7.87	mm/s
ZC Freq	13	27	18	Hz
Time (Rel. to Trig)	0.490	0.002	0.347	sec
Peak Acceleration	0.0663	0.119	0.0928	g
Peak Displacement	0.0847	0.0328	0.0665	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.95 mm/s At 0.347 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:03 January 25, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IATW.9F0W
Job Number	8177		

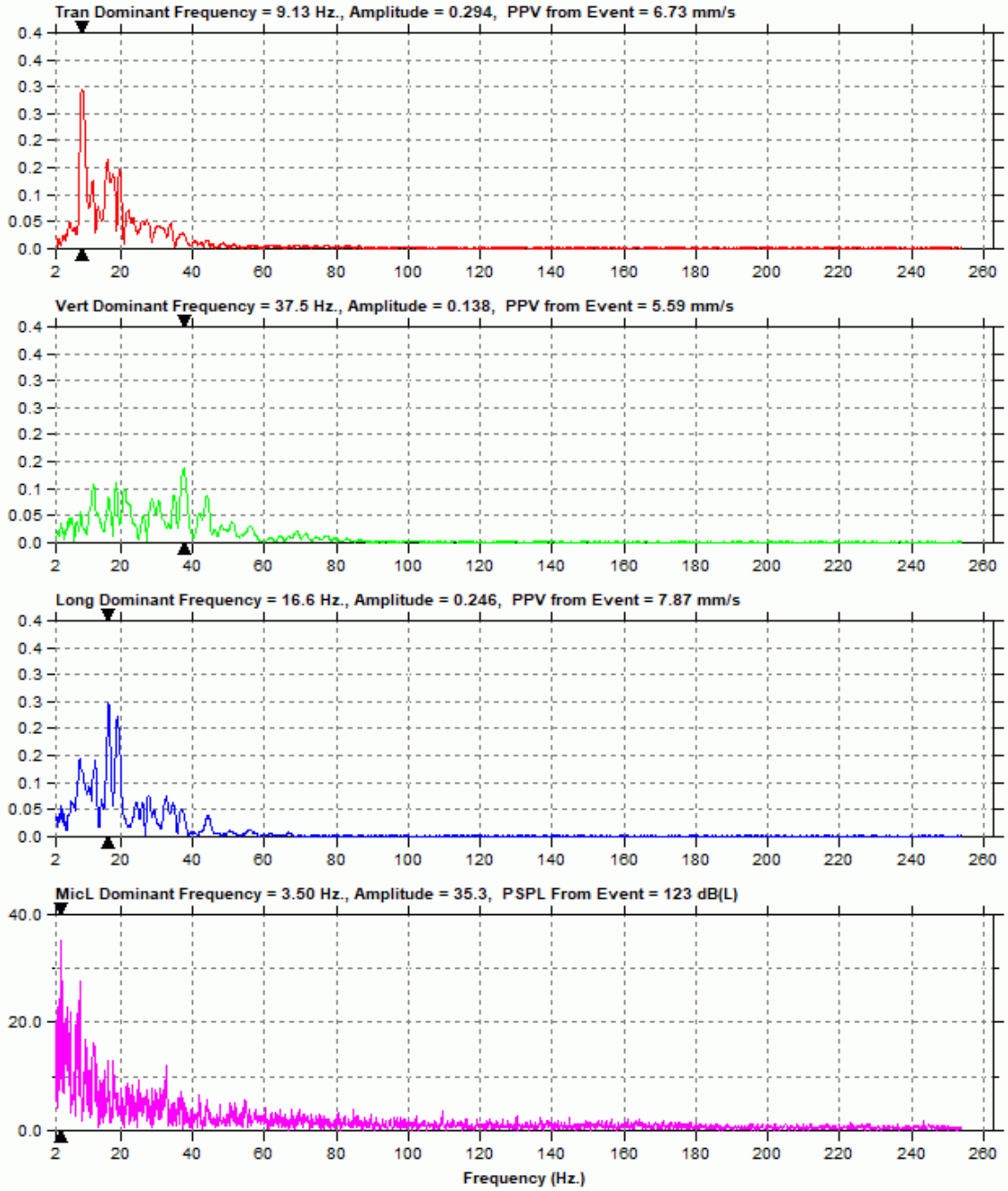
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 25, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:29 January 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IAZG.IH0W

Post Event Notes

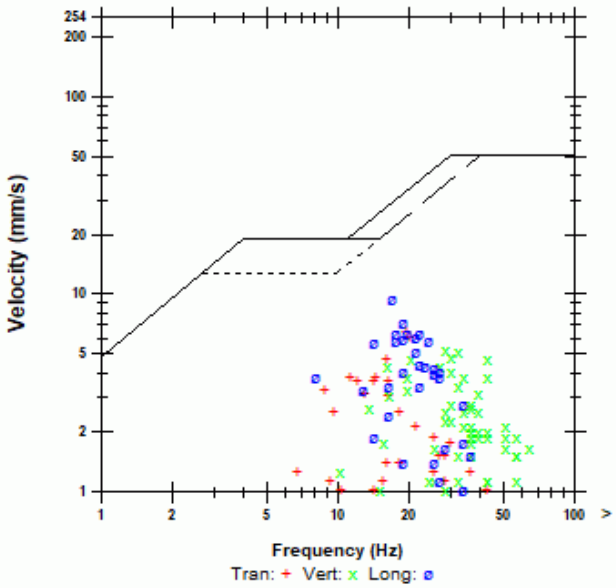
Extended Notes
Combo Mode January 28, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

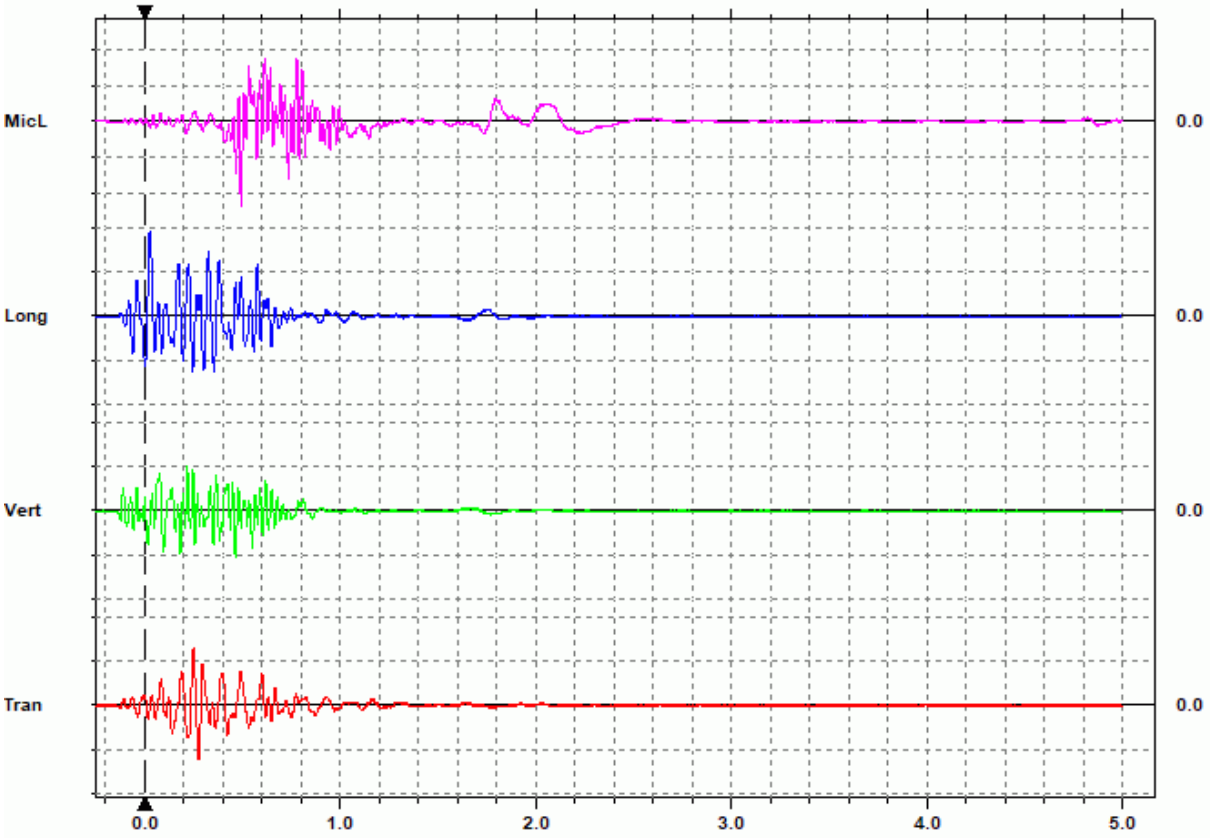
Microphone	Linear Weighting
PSPL	127.4 dB(L) at 0.494 sec.
ZC Freq	28 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.48	5.21	9.52	mm/s
ZC Freq	20	28	17	Hz
Time (Rel. to Trig)	0.250	0.465	0.027	sec
Peak Acceleration	0.106	0.146	0.106	g
Peak Displacement	0.0518	0.0464	0.0853	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.98 mm/s At 0.248 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: January 28, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:29 January 28, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IAZG.IH0W
Job Number	8177		

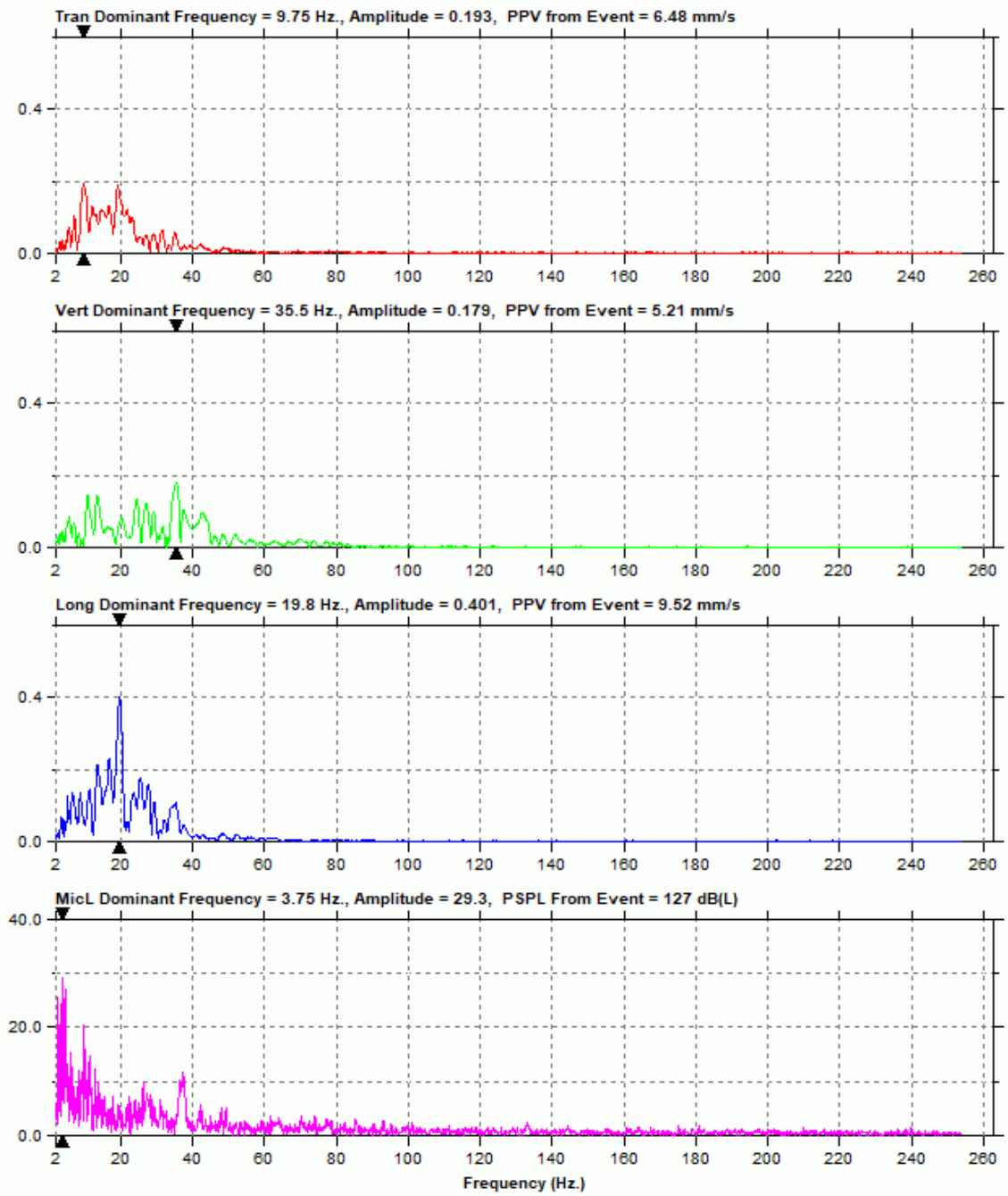
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 28, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:29 January 30, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IB35.W50W

Post Event Notes

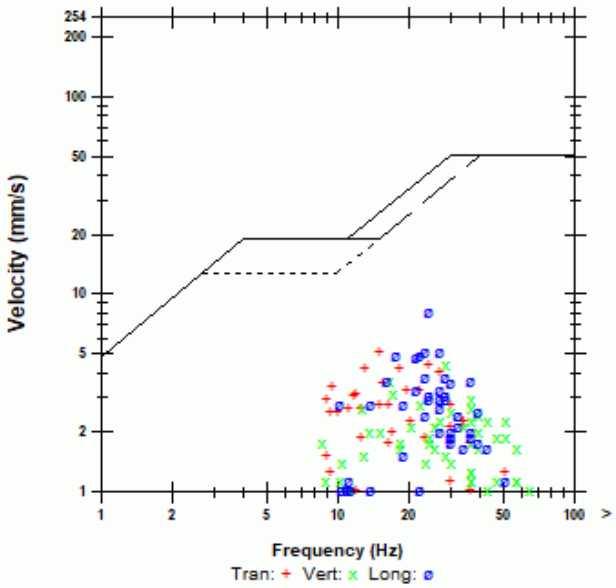
Extended Notes
Combo Mode January 30, 2020 05:16:52
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

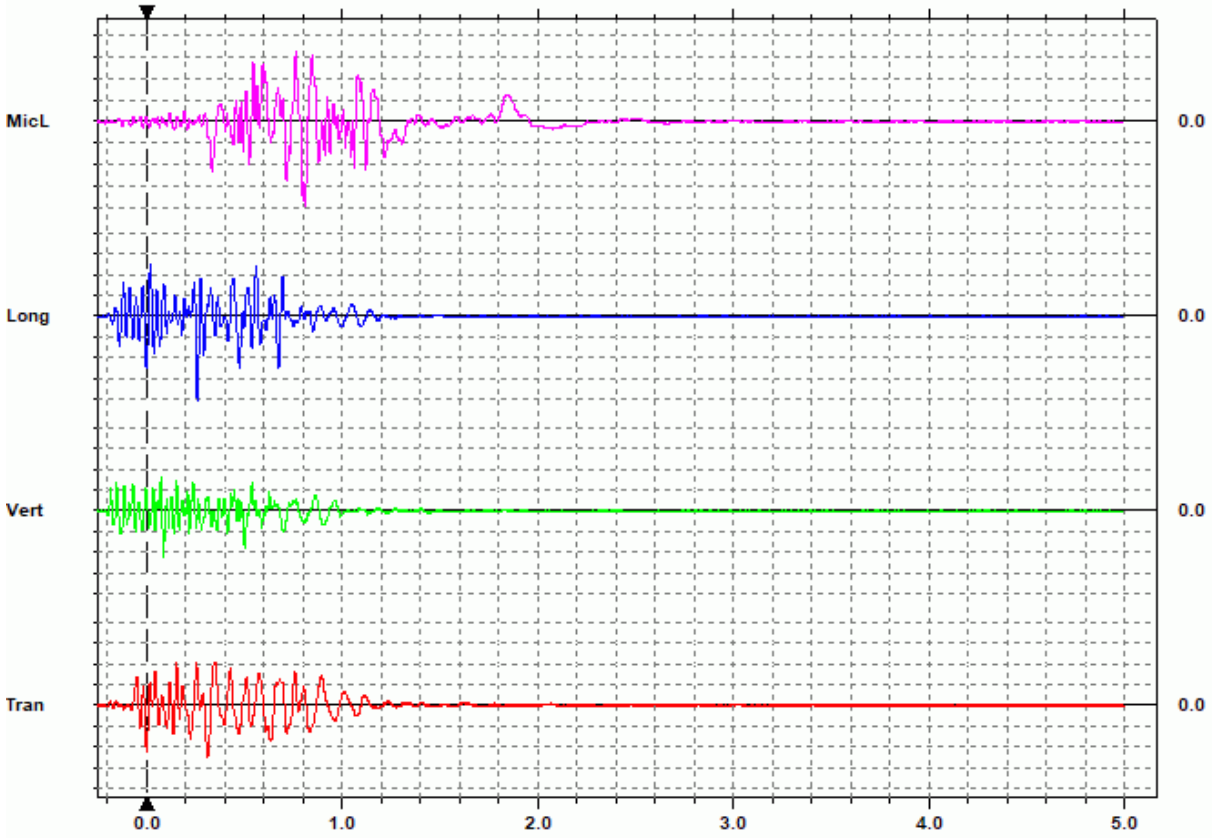
Microphone	Linear Weighting
PSPL	125.7 dB(L) at 0.813 sec.
ZC Freq	15 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	4.44	8.13	mm/s
ZC Freq	15	28	24	Hz
Time (Rel. to Trig)	0.315	0.088	0.262	sec
Peak Acceleration	0.0663	0.106	0.119	g
Peak Displacement	0.0602	0.0273	0.0518	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.79 mm/s At 0.261 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: January 30, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:29 January 30, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IB35.W50W
Job Number	8177		

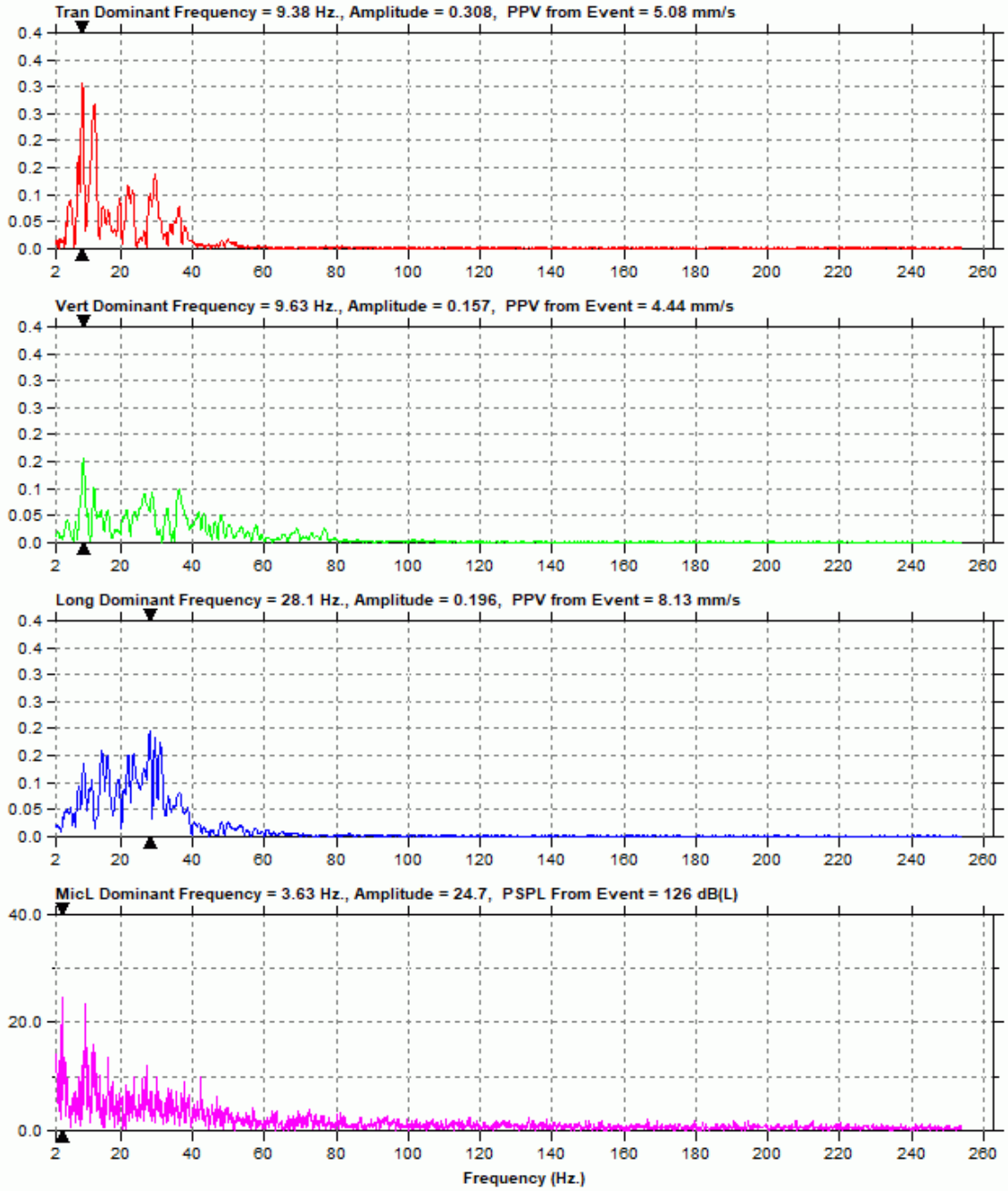
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode January 30, 2020 05:16:52
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: January 30, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units

			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	**Blast no.**	**Blast time:**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**
3-Feb-20	**WCRR-42**	16:00	11.60mm/s	128.5dB(L)	1.27mm/s	112.6dB(L)	14.40mm/s	130.9dB(L)	1.02mm/s	112.3dB(L)	16.80mm/s	129.9dB(L)	4.83mm/s	124.3dB(L)	2.92mm/s	121.5dB(L)	2.67mm/s	124.5dB(L)	2.29mm/s	116.4dB(L)
4-Feb-20	**WCRR-43**	16:05	1.14mm/s	126.7dB(L)	3.05mm/s	124.1dB(L)	1.65mm/s	117.8dB(L)	0.38mm/s	132.9dB(L)	1.40mm/s	120.0dB(L)	0.89mm/s	131.7dB(L)	0.51mm/s	124.2dB(L)	0.51mm/s	118.2dB(L)	0.51mm/s	124.8dB(L)
5-Feb-20	**WCRR-44**	16:02	5.33mm/s	125.3dB(L)	0.89mm/s	112.8dB(L)	4.70mm/s	126.2dB(L)	1.02mm/s	113.1dB(L)	5.59mm/s	127.3dB(L)	4.38mm/s	123.0dB(L)	1.78mm/s	117.9dB(L)	2.16mm/s	119.7dB(L)	1.27mm/s	113.8dB(L)
6-Feb-20	**WCRR-45**	16:07	5.33mm/s	124.6dB(L)	0.64mm/s	109.2dB(L)	2.92mm/s	119.8dB(L)	2.29mm/s	112.8dB(L)	4.83mm/s	123.4dB(L)	4.45mm/s	122.2dB(L)	2.54mm/s	119.1dB(L)	3.56mm/s	122.4dB(L)	1.91mm/s	113.5dB(L)
7-Feb-20	**WCRR-46**	16:08	3.68mm/s	121.8dB(L)	0.64mm/s	108.0dB(L)	2.79mm/s	120.2dB(L)	1.91mm/s	112.8dB(L)	4.45mm/s	123.9dB(L)	4.19mm/s	120.2dB(L)	3.05mm/s	120.4dB(L)	2.67mm/s	119.3dB(L)	2.41mm/s	114.6dB(L)
8-Feb-20	**WCRR-47**	16:01	2.79mm/s	120.2dB(L)	0.51mm/s	108.0dB(L)	2.67mm/s	118.7dB(L)	2.03mm/s	113.3dB(L)	2.79mm/s	119.8dB(L)	3.43mm/s	122.4dB(L)	3.56mm/s	120.8dB(L)	4.19mm/s	121.3dB(L)	2.03mm/s	119.9dB(L)
10-Feb-20	**WCRR-48**	16:00	2.03mm/s	119.4dB(L)	0.51mm/s	114.6dB(L)	1.78mm/s	117.2dB(L)	1.65mm/s	118.8dB(L)	2.16mm/s	118.3dB(L)	4.95mm/s	125.6dB(L)	2.92mm/s	126.6dB(L)	4.57mm/s	126.5dB(L)	2.54mm/s	121.4dB(L)
11-Feb-20	**WCRR-49**	16:04	1.40mm/s	119.1dB(L)	0.51mm/s	107.5dB(L)	1.78mm/s	115.4dB(L)	2.92mm/s	115.7dB(L)	2.16mm/s	115.9dB(L)	5.21mm/s	124.8dB(L)	3.30mm/s	126.8dB(L)	5.97mm/s	109.2dB(L)	2.79mm/s	119.0dB(L)
12-Feb-20	**WCRR-50**	16:00	1.27mm/s	116.4dB(L)	0.38mm/s	104.2dB(L)	1.65mm/s	116.6dB(L)	2.03mm/s	120.1dB(L)	2.03mm/s	117.8dB(L)	4.57mm/s	123.2dB(L)	5.72mm/s	124.5dB(L)	6.73mm/s	125.7dB(L)	4.45mm/s	124.0dB(L)
19-Feb-20	**WCRR-51**	16:02	0.89mm/s	111.8dB(L)	1.91mm/s	122.3dB(L)	1.65mm/s	112.8dB(L)	0.38mm/s	101.9dB(L)	1.52mm/s	111.8dB(L)	0.51mm/s	107.0dB(L)	0.38mm/s	106.5dB(L)	0.64mm/s	105.5dB(L)	0.38mm/s	102.8dB(L)
20-Feb-20	**WCRR-52**	16:02	4.06mm/s	126.2dB(L)	0.64mm/s	11.3dB(L)	3.43mm/s	124.9dB(L)	1.40mm/s	133.3dB(L)	3.81mm/s	124.9dB(L)	9.02mm/s	131.4dB(L)	4.83mm/s	125.1dB(L)	5.84mm/s	130.7dB(L)	2.79mm/s	123.7dB(L)
21-Feb-20	**WCRR-53**	16:30	6.86mm/s	120.8dB(L)	0.25mm/s	109.5dB(L)	2.54mm/s	120.0dB(L)	0.51mm/s	131.6dB(L)	8.00mm/s	123.5dB(L)	1.78mm/s	135.7dB(L)	0.64mm/s	121.9dB(L)	0.89mm/s	118.6dB(L)	0.64mm/s	124.7dB(L)
		16:45	0.25mm/s	123.4dB(L)	0.38mm/s	119.3dB(L)	4.70mm/s	124.2dB(L)	0.64mm/s	134.4dB(L)	0.38mm/s	125.9dB(L)	3.94mm/s	130.4dB(L)	1.27mm/s	122.5dB(L)	1.78mm/s	118.8dB(L)	1.14mm/s	123.9dB(L)
		18:06	1.14mm/s	127.0dB(L)	0.25mm/s	108.0dB(L)	1.40mm/s	121.0dB(L)	0.76mm/s	133.1dB(L)	1.65mm/s	125.7dB(L)	0.51mm/s	130.2dB(L)	0.25mm/s	119.1dB(L)	0.38mm/s	115.6dB(L)	0.25mm/s	120.3dB(L)
22-Feb-20	**WCRR-54**	16:11	3.05mm/s	123.7dB(L)	0.64mm/s	109.2dB(L)	2.16mm/s	121.7dB(L)	1.91mm/s	122.3dB(L)	2.54mm/s	121.7dB(L)	7.62mm/s	131.7dB(L)	4.45mm/s	128.3dB(L)	10.29mm/s	129.9dB(L)	3.30mm/s	124.4dB(L)
24-Feb-20	**WCRR-55**	16:11	5.97mm/s	123.9dB(L)	0.51mm/s	107.5dB(L)	2.67mm/s	122.4dB(L)	1.02mm/s	108.8dB(L)	5.21mm/s	123.5dB(L)	7.37mm/s	121.9dB(L)	1.78mm/s	117.2dB(L)	2.67mm/s	118.7dB(L)	1.40mm/s	111.8dB(L)
25-Feb-20	**WCRR-56**	16:00	2.16mm/s	118.7dB(L)	0.38mm/s	111.2dB(L)	2.30mm/s	120.2dB(L)	1.65mm/s	118.1dB(L)	2.03mm/s	119.2dB(L)	5.97mm/s	126.0dB(L)	4.57mm/s	127.1dB(L)	10.54mm/s	129.2dB(L)	3.05mm/s	121.8dB(L)
26-Feb-20	**WCRR-57**	16:04	0.64mm/s	114.4dB(L)	4.32mm/s	126.7dB(L)	0.64mm/s	114.2dB(L)	0.25mm/s	120.0dB(L)	0.64mm/s	116.3dB(L)	0.38mm/s	123.4dB(L)	0.25mm/s	114.4dB(L)	0.25mm/s	111.2dB(L)	0.25mm/s	110.2dB(L)
27-Feb-20	**WCRR-58**	16:03	1.91mm/s	124.1dB(L)	1.40mm/s	121.2dB(L)	3.68mm/s	126.3dB(L)	0.64mm/s	126.7dB(L)	3.94mm/s	124.9dB(L)	1.52mm/s	128.7dB(L)	0.89mm/s	118.7dB(L)	0.89mm/s	119.3dB(L)	0.89mm/s	116.4dB(L)
28-Feb-20	**WCRR-59**	16:03	1.91mm/s	122.8dB(L)	0.38mm/s	111.8dB(L)	1.40mm/s	121.0dB(L)	1.78mm/s	125.5dB(L)	1.78mm/s	122.0dB(L)	7.62mm/s	130.4dB(L)	6.48mm/s	130.2dB(L)	6.22mm/s	130.8dB(L)	3.30mm/s	128.3dB(L)
29-Feb-20	**WCRR-60**	16:00	2.92mm/s	129.9dB(L)	0.38mm/s	124.2dB(L)	3.43mm/s	126.2dB(L)	1.02mm/s	129.2dB(L)	2.92mm/s	119.0dB(L)	6.35mm/s	126.1dB(L)	2.41mm/s	131.9dB(L)	3.18mm/s	125.2dB(L)	2.03mm/s	129.7dB(L)

Click on a highighted cell to view the seismograph report for the corresponding date and location.

EXPLOTECH

Date/Time	Long At 15:55:50 February 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IBAK.920W

Post Event Notes

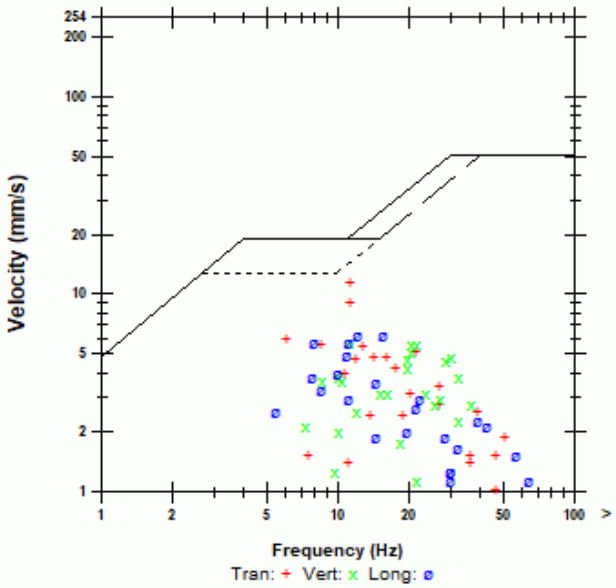
Extended Notes
Combo Mode February 3, 2020 05:16:49
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

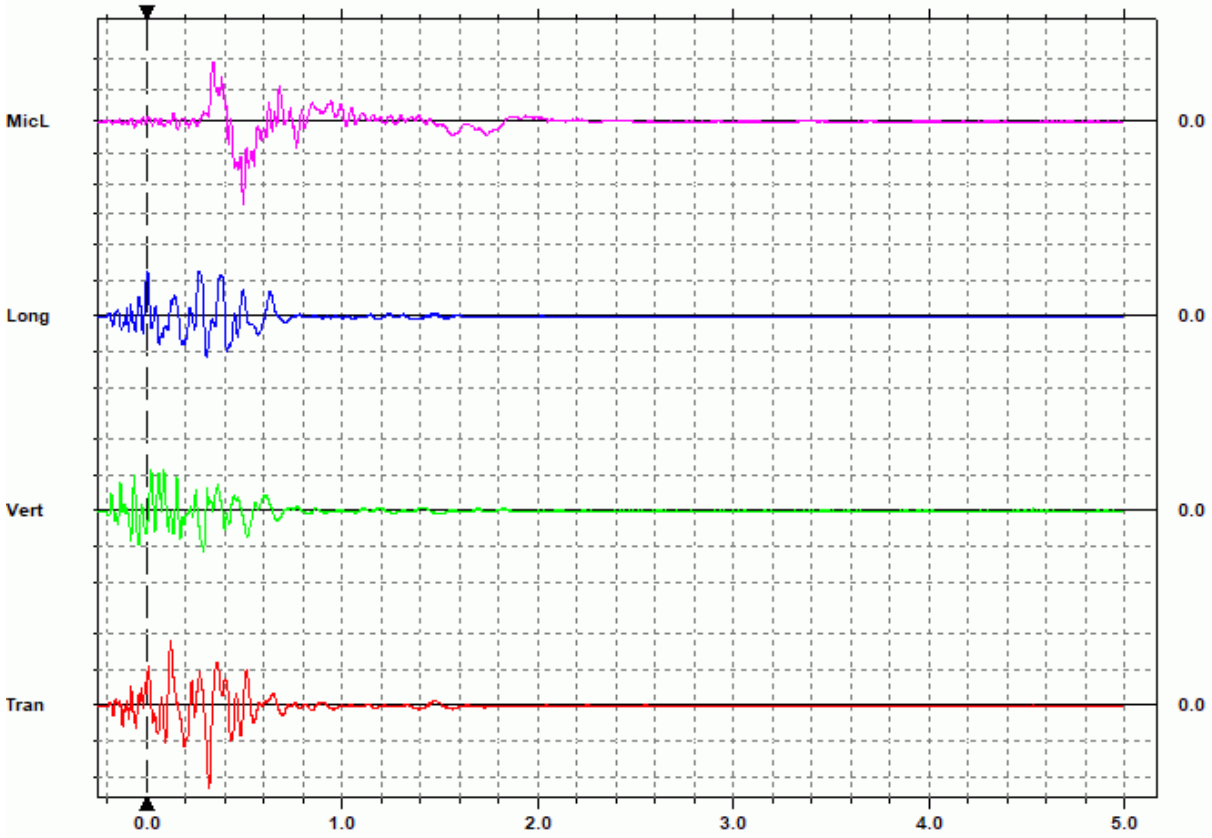
Microphone	Linear Weighting
PSPL	128.5 dB(L) at 0.496 sec.
ZC Freq	2.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	11.6	5.71	6.22	mm/s
ZC Freq	11	11	16	Hz
Time (Rel. to Trig)	0.320	0.291	0.007	sec
Peak Acceleration	0.106	0.106	0.0795	g
Peak Displacement	0.135	0.0784	0.0912	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.1 mm/s At 0.320 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:55:50 February 3, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IBAK.920W
Job Number	8177		

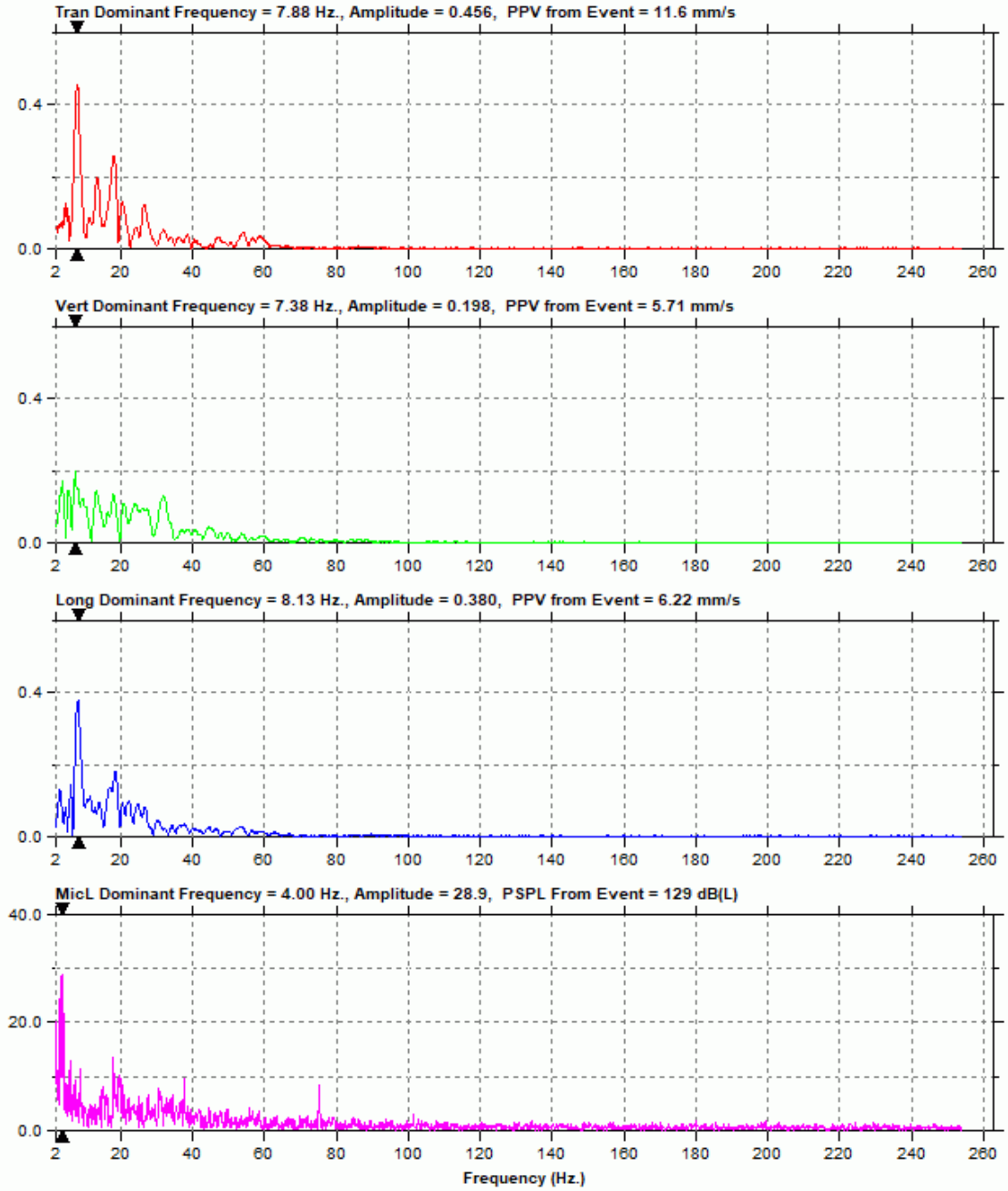
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 3, 2020 05:16:49
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:56:19 February 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IBE9.LV0W

Post Event Notes

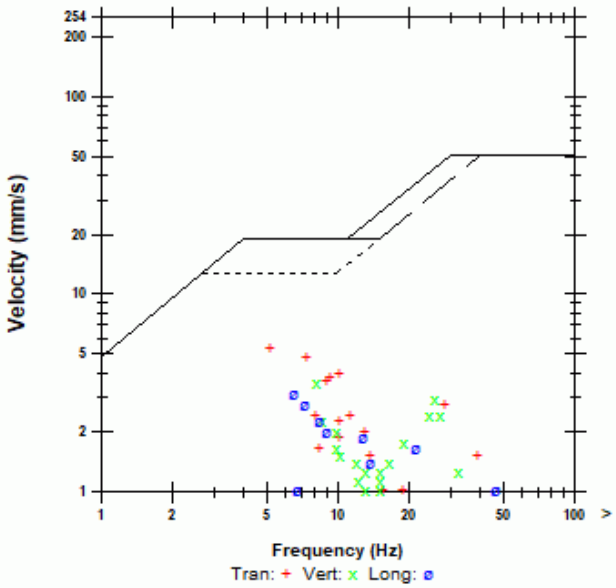
Extended Notes
Combo Mode February 5, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

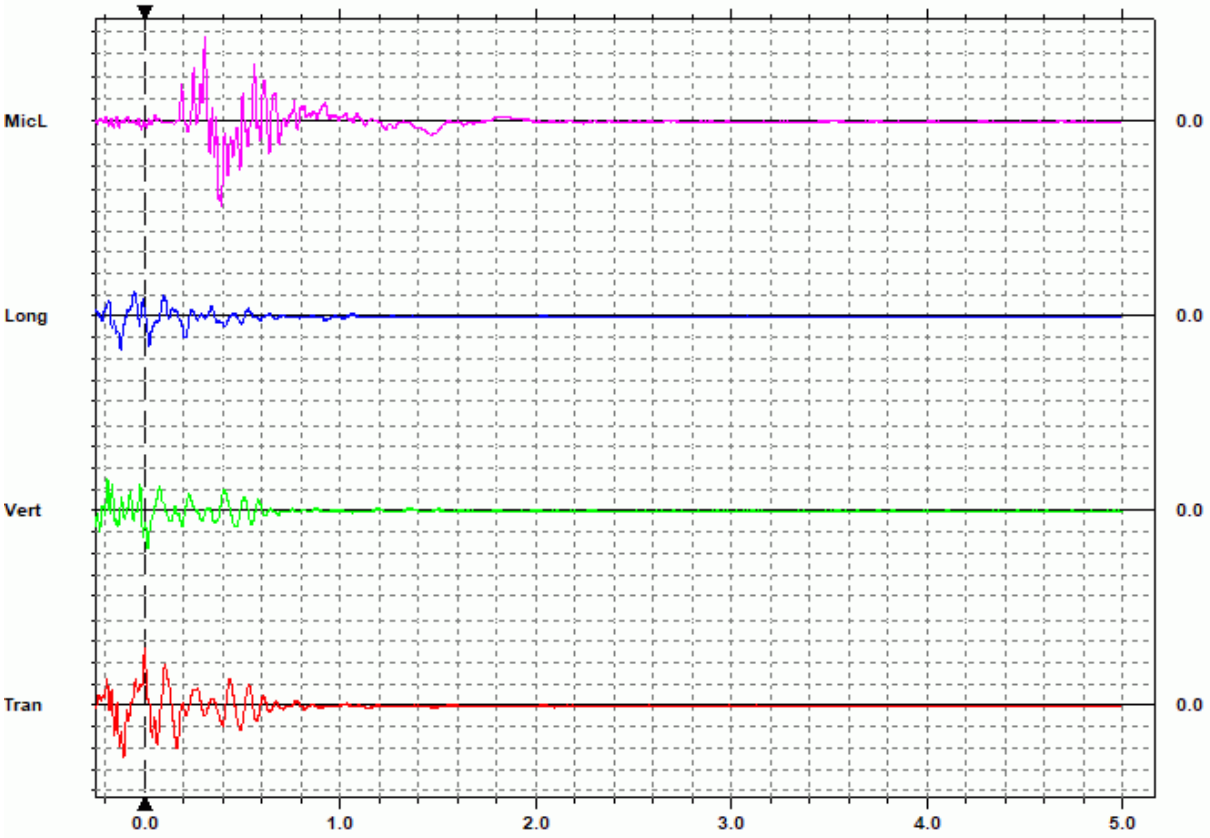
Microphone	Linear Weighting
PSPL	125.3 dB(L) at 0.309 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	3.56	3.17	mm/s
ZC Freq	5.2	8.1	6.5	Hz
Time (Rel. to Trig)	0.001	0.018	-0.122	sec
Peak Acceleration	0.0530	0.0530	0.0398	g
Peak Displacement	0.0908	0.0525	0.0529	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.52 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:56:19 February 5, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IBE9.LV0W
Job Number	8177		

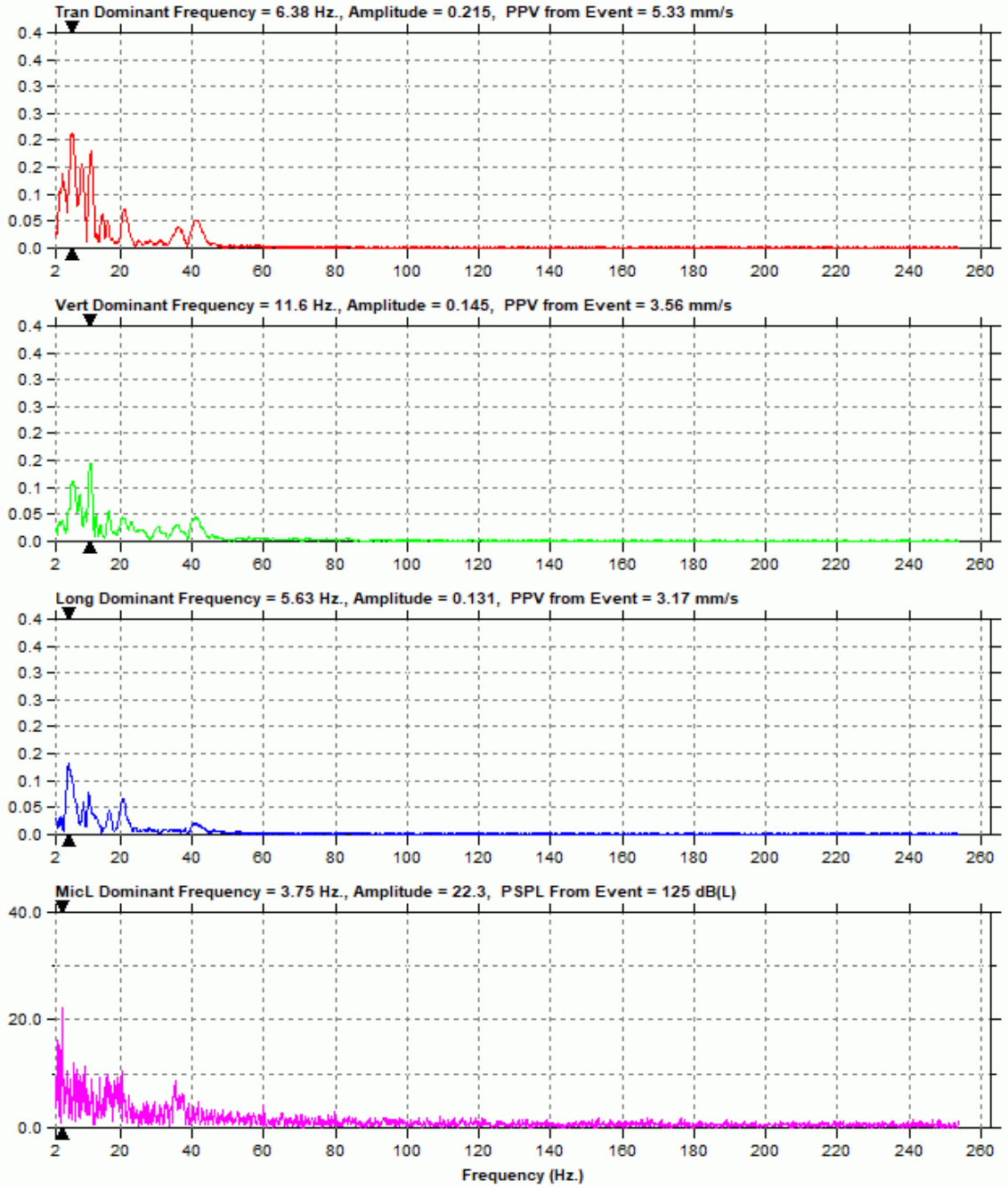
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 5, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:21 February 6, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IBG4.JX0W

Post Event Notes

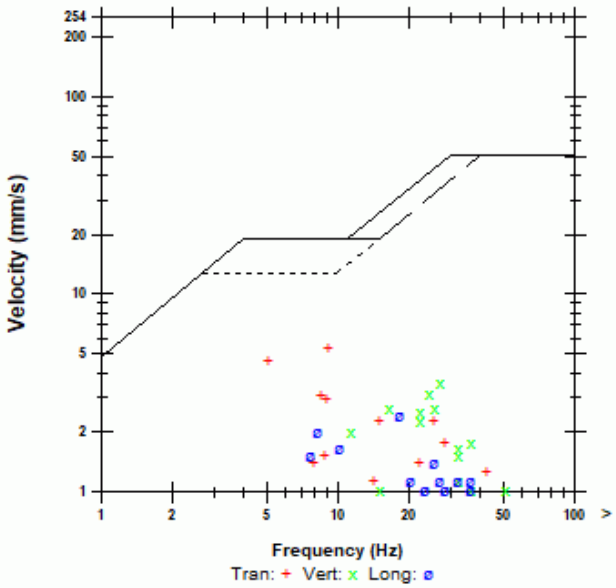
Extended Notes
Combo Mode February 6, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

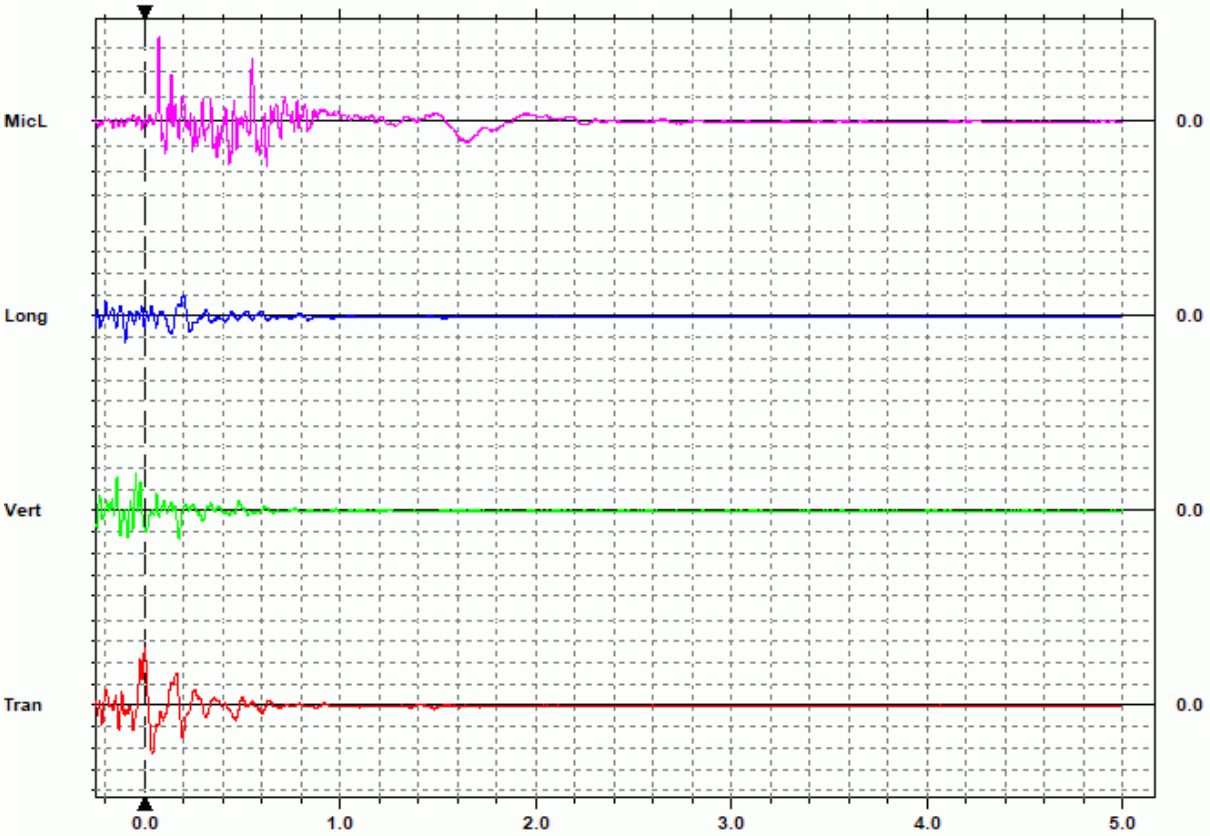
Microphone	Linear Weighting
PSPL	124.6 dB(L) at 0.074 sec.
ZC Freq	17 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	3.56	2.41	mm/s
ZC Freq	9.1	27	18	Hz
Time (Rel. to Trig)	0.002	-0.043	-0.097	sec
Peak Acceleration	0.0530	0.0663	0.0398	g
Peak Displacement	0.0940	0.0282	0.0355	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.80 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 6, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:21 February 6, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IBG4.JX0W
Job Number	8177		

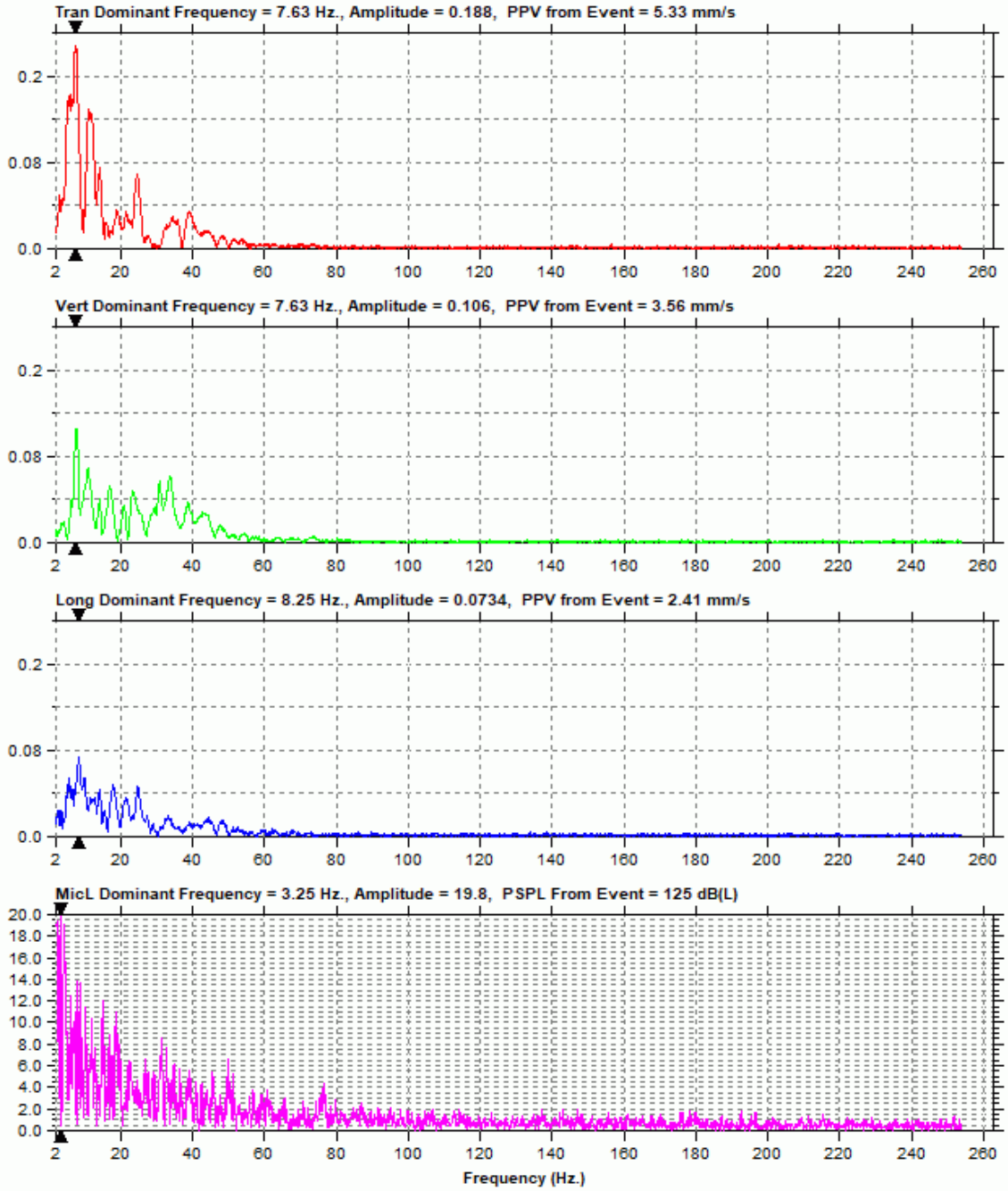
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 6, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 6, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:35:47 February 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IC7Y.3N0W

Post Event Notes

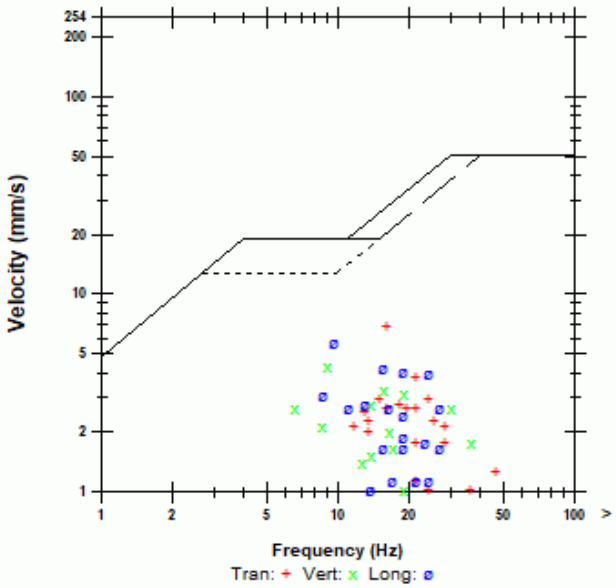
Extended Notes
Combo Mode February 21, 2020 05:16:50
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

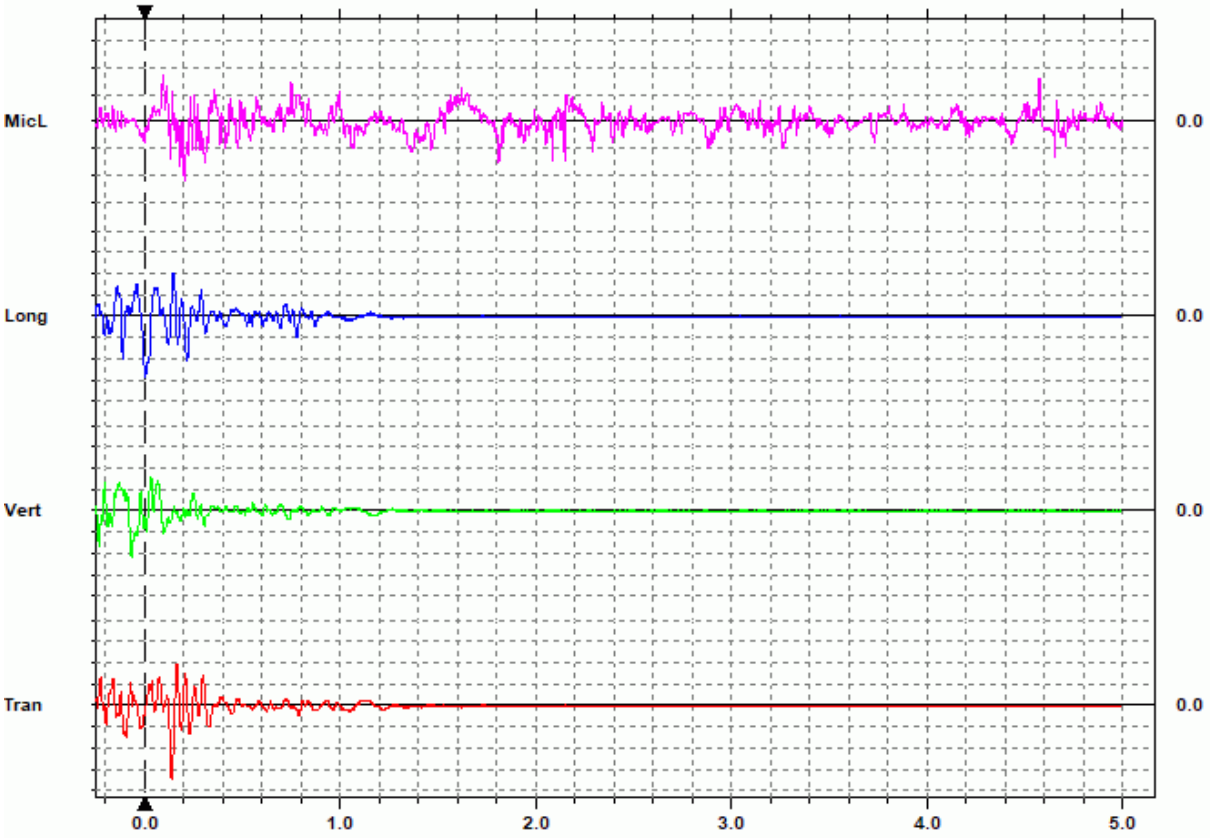
Microphone	Linear Weighting
PSPL	120.8 dB(L) at 0.206 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.86	4.32	5.71	mm/s
ZC Freq	16	9.0	9.7	Hz
Time (Rel. to Trig)	0.140	-0.066	0.004	sec
Peak Acceleration	0.0795	0.0530	0.0663	g
Peak Displacement	0.0636	0.0655	0.0929	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.18 mm/s At 0.142 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:35:47 February 21, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IC7Y.3N0W
Job Number	8177		

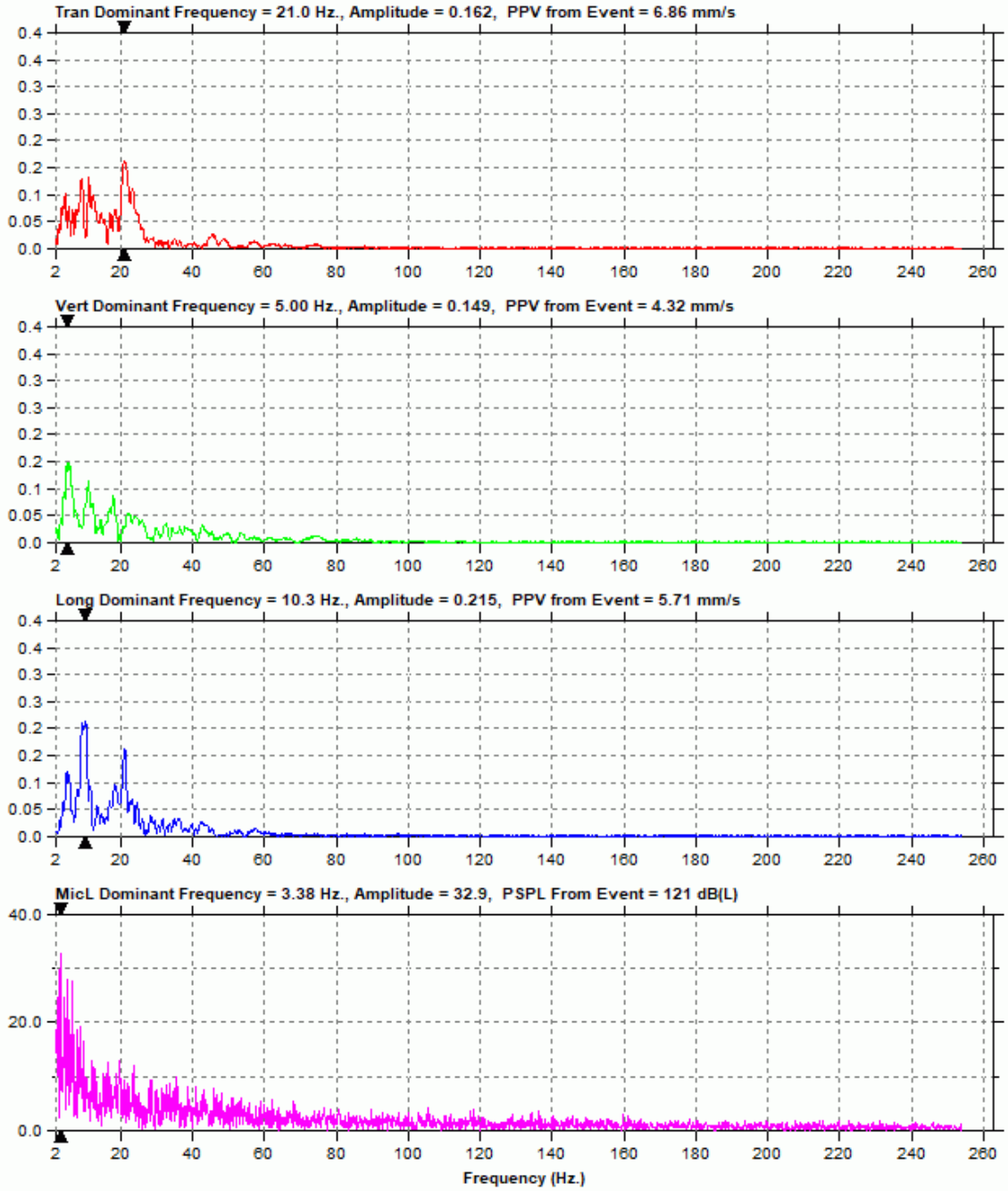
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 21, 2020 05:16:50
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:04:58 February 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408ICDG.OA0W

Post Event Notes

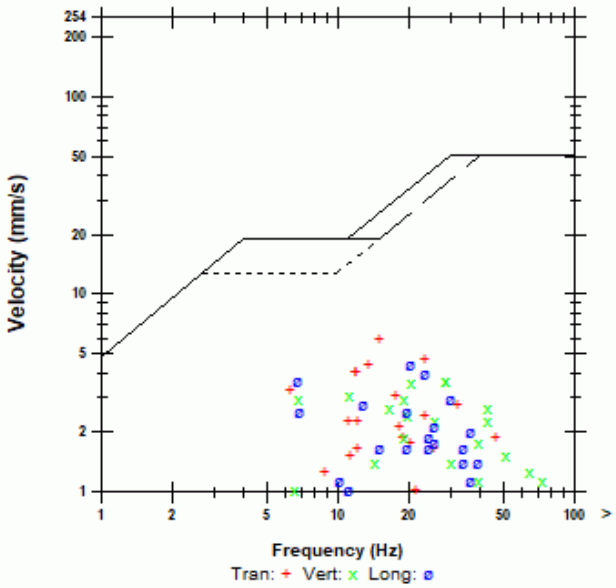
Extended Notes
Combo Mode February 24, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

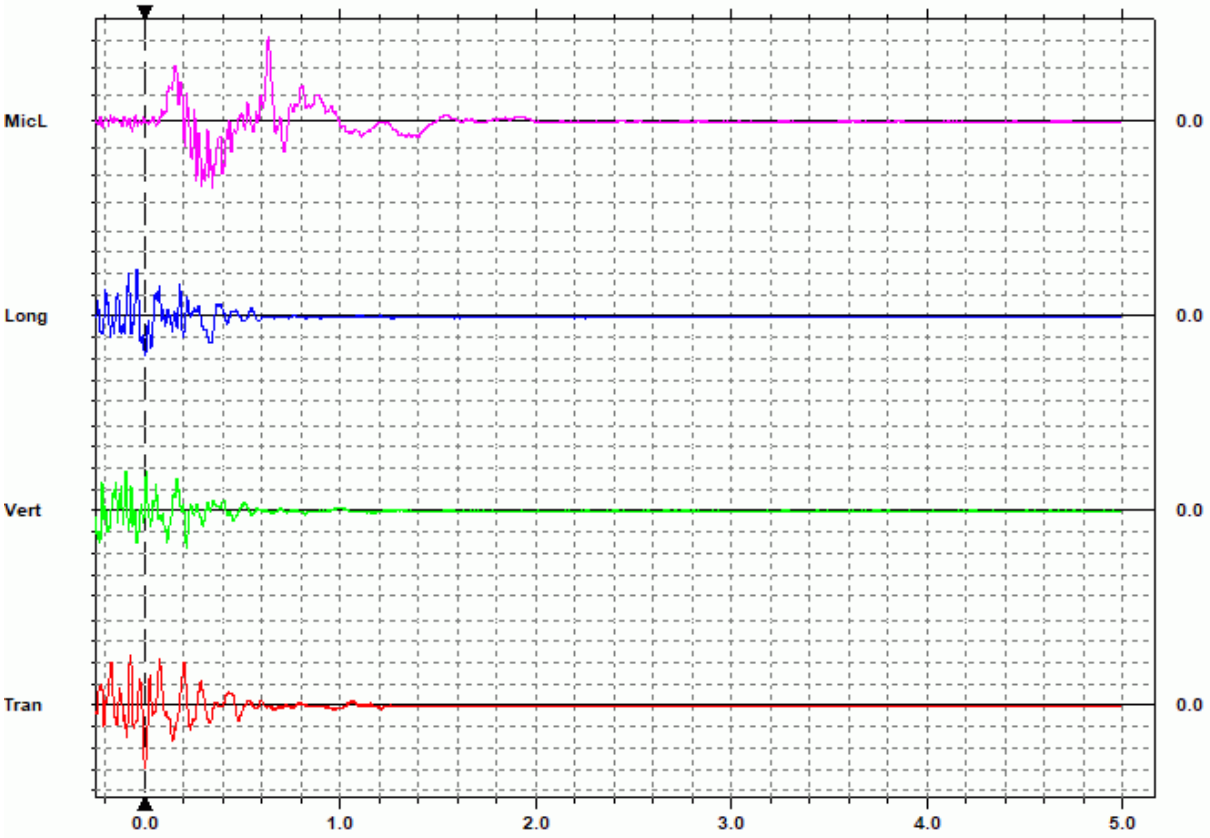
Microphone	Linear Weighting
PSPL	123.9 dB(L) at 0.634 sec.
ZC Freq	6.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.97	3.68	4.44	mm/s
ZC Freq	15	28	20	Hz
Time (Rel. to Trig)	0.003	-0.095	-0.039	sec
Peak Acceleration	0.0795	0.0928	0.0795	g
Peak Displacement	0.0639	0.0448	0.0778	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.20 mm/s At 0.006 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:04:58 February 24, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408ICDG.OA0W
Job Number	8177		

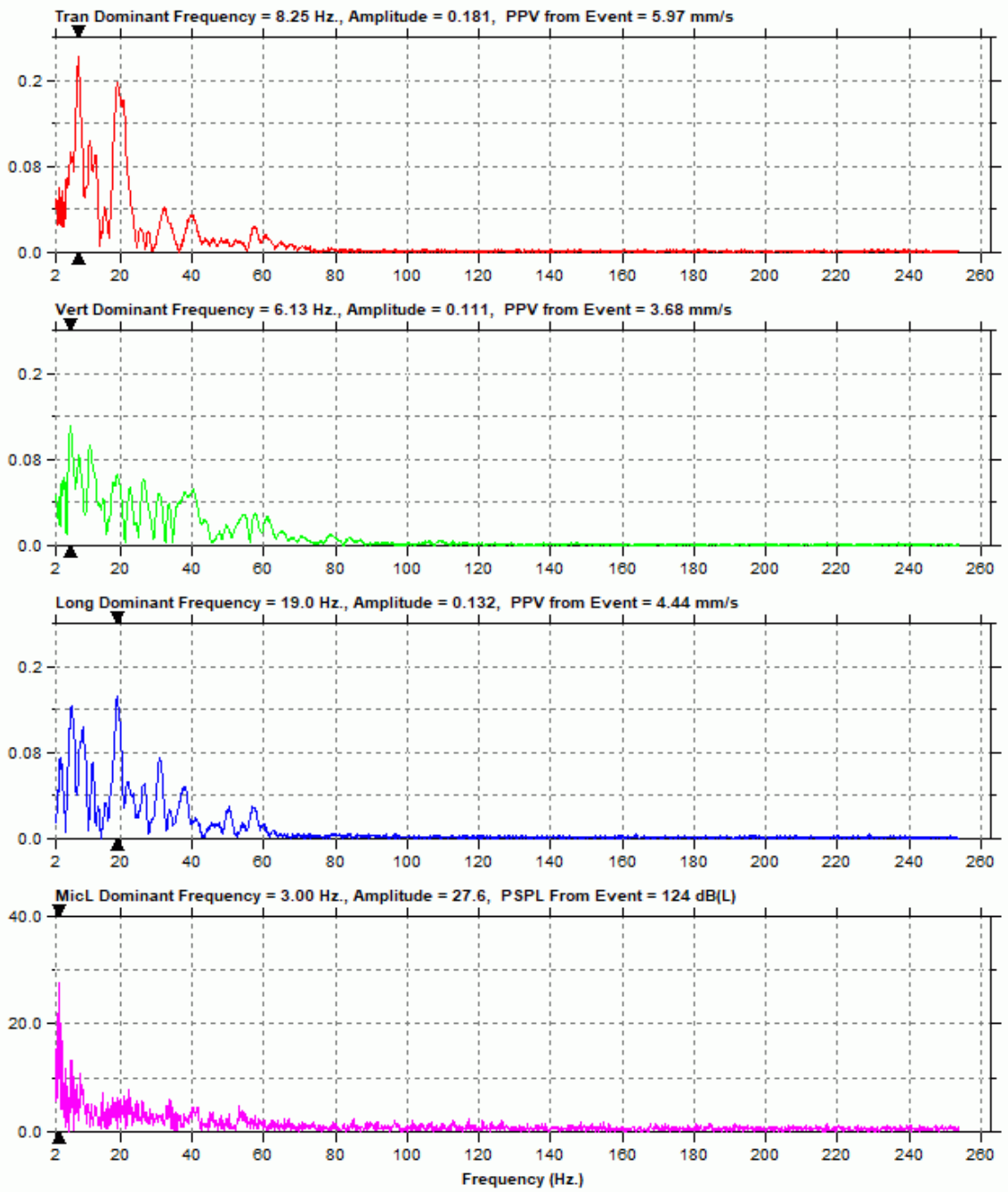
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 24, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:10 February 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IBAK.7Y0W

Post Event Notes

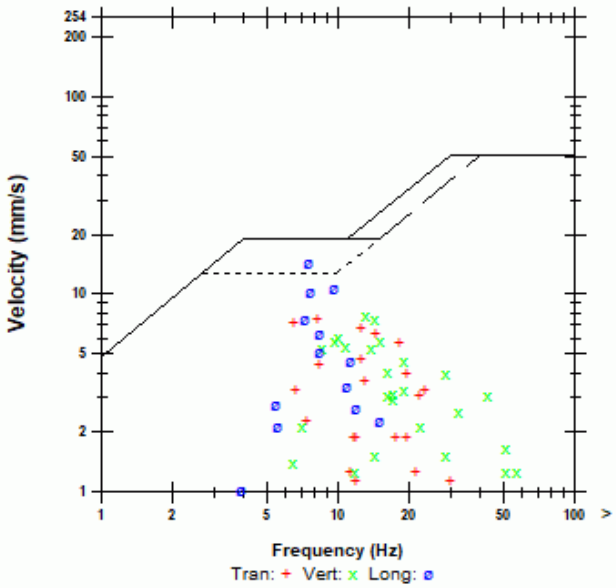
Extended Notes
Combo Mode February 3, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

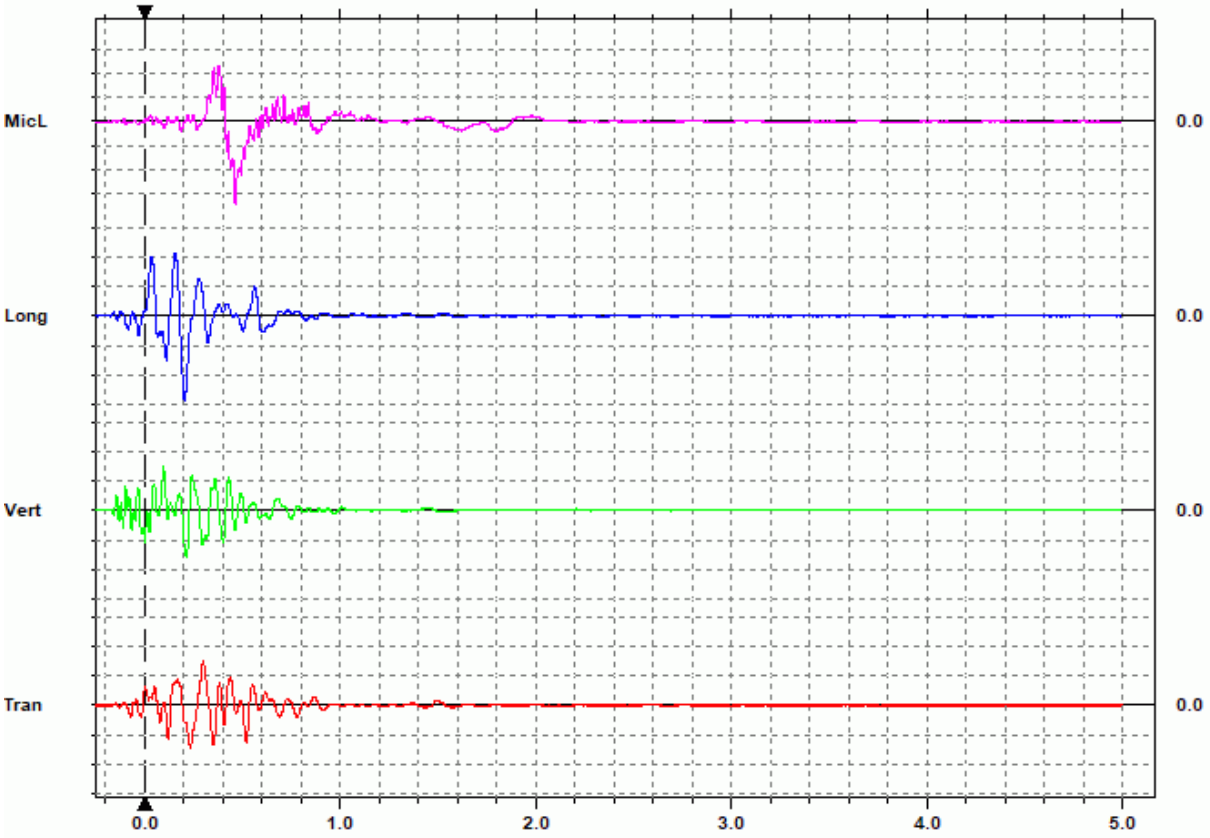
Microphone	Linear Weighting
PSPL	130.9 dB(L) at 0.465 sec.
ZC Freq	3.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.49	7.87	14.4	mm/s
ZC Freq	8.3	13	7.5	Hz
Time (Rel. to Trig)	0.297	0.213	0.203	sec
Peak Acceleration	0.0663	0.106	0.106	g
Peak Displacement	0.148	0.107	0.240	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 16.0 mm/s At 0.205 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:10 February 3, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IBAK.7Y0W
Job Number	8177		

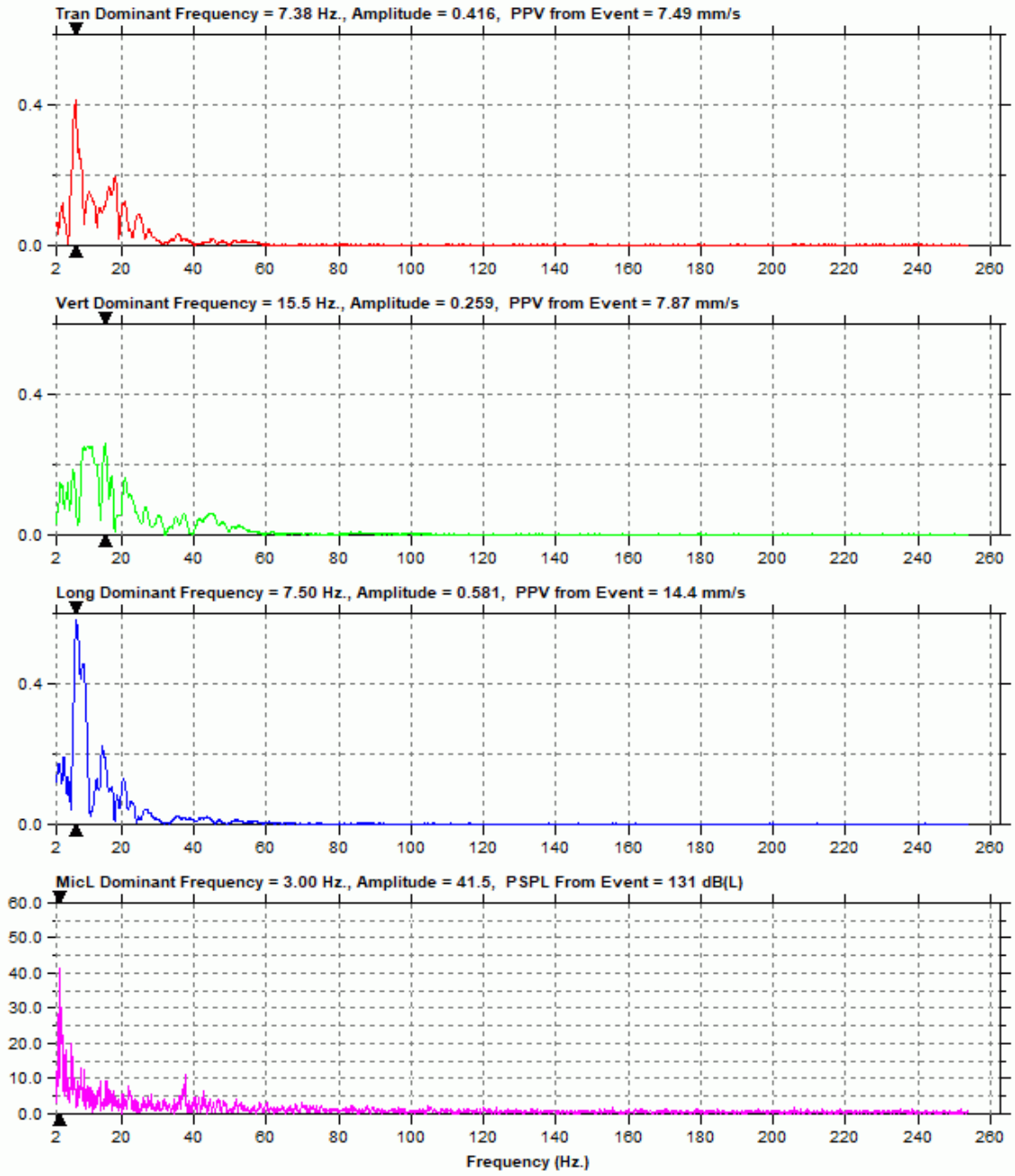
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 3, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:14 February 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IBAK.820W

Post Event Notes

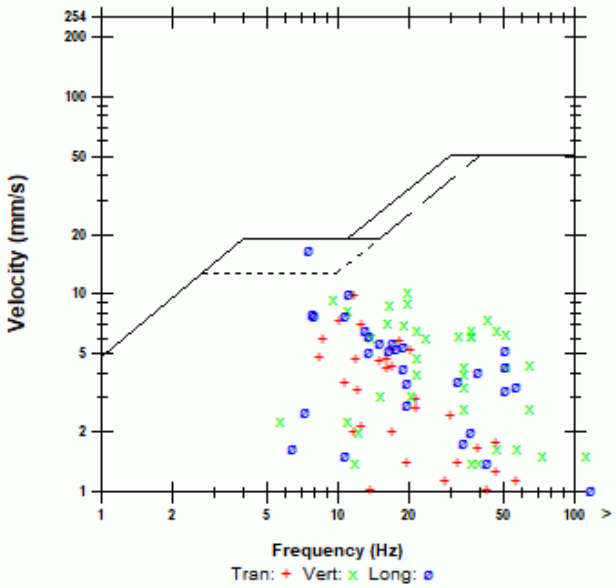
Extended Notes
Combo Mode February 3, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

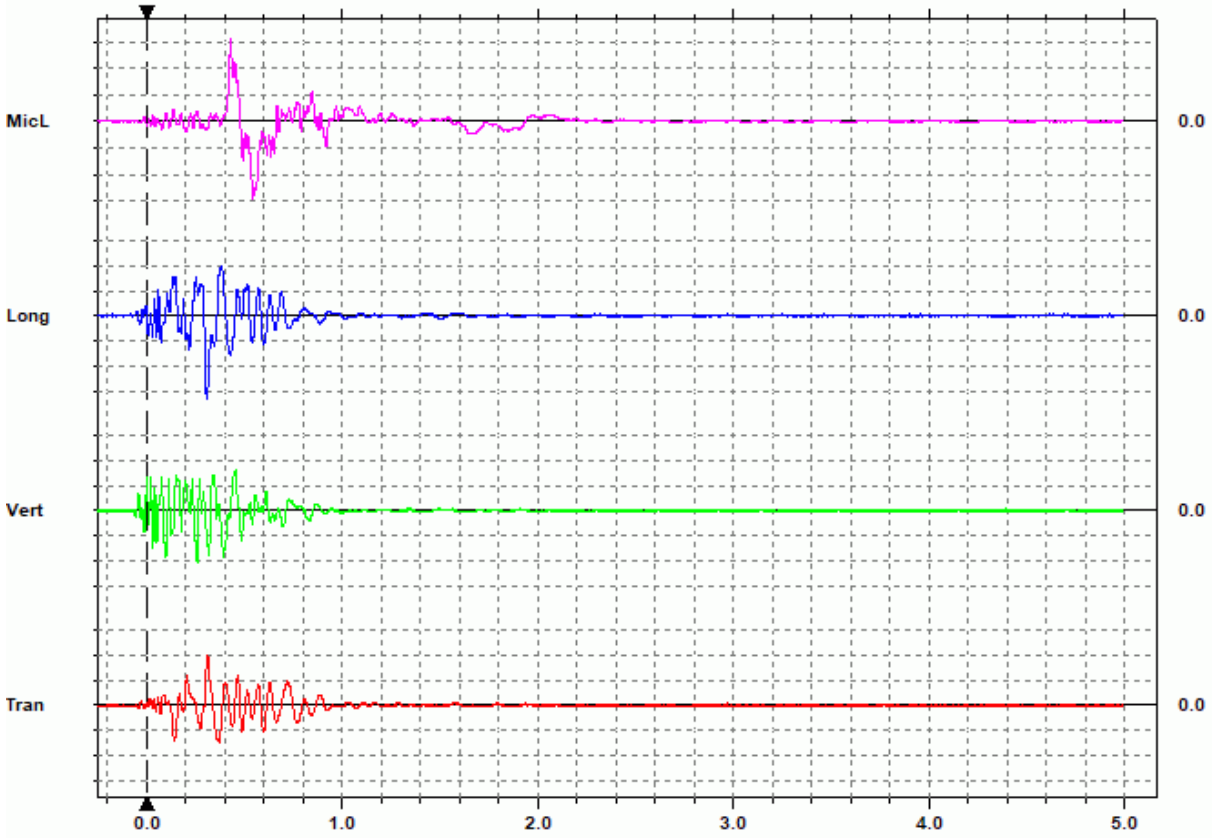
Microphone	Linear Weighting
PSPL	129.9 dB(L) at 0.430 sec.
ZC Freq	5.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.91	10.3	16.8	mm/s
ZC Freq	12	20	7.5	Hz
Time (Rel. to Trig)	0.313	0.259	0.309	sec
Peak Acceleration	0.106	0.225	0.186	g
Peak Displacement	0.118	0.117	0.252	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 19.8 mm/s At 0.310 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:14 February 3, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IBAK.820W
Job Number	8177		

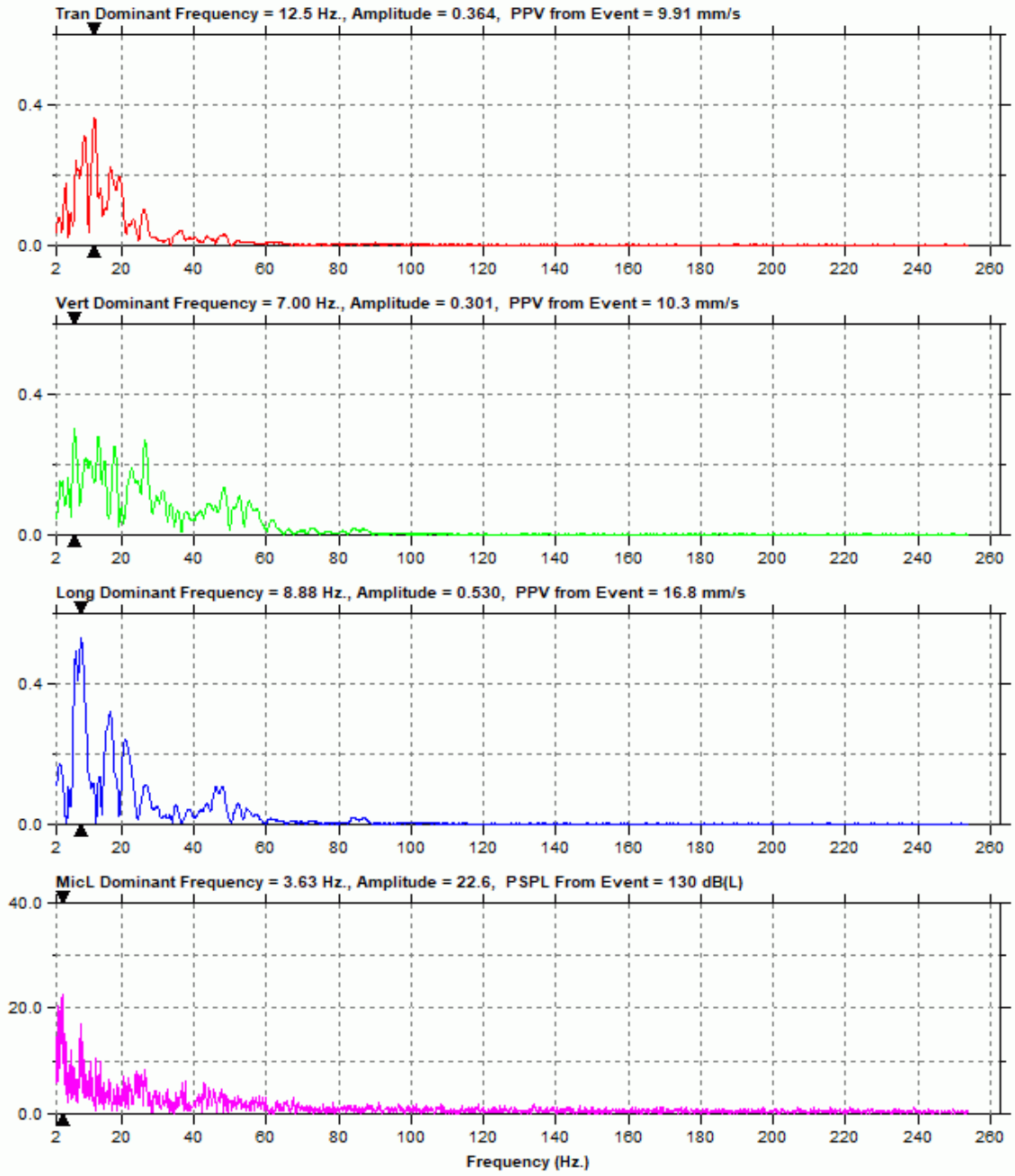
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 3, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:55:41 February 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IBE9.KT0W

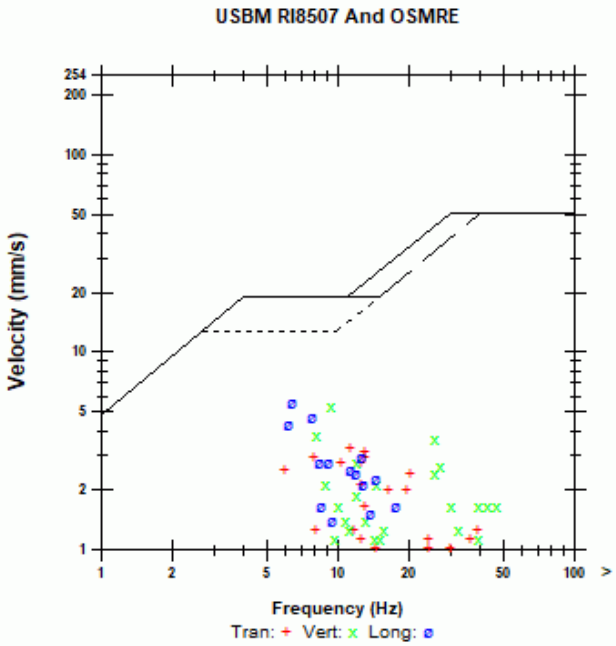
Post Event Notes

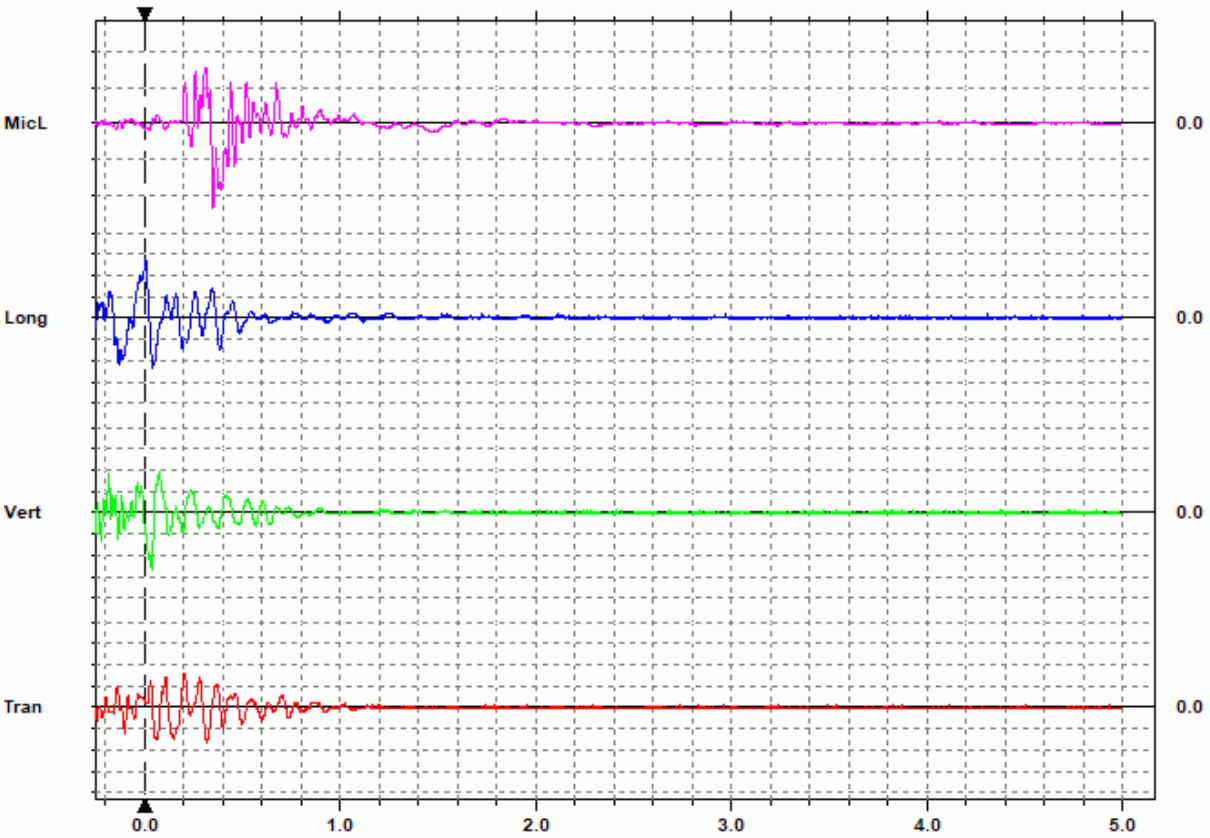
Extended Notes
Combo Mode February 5, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	127.3 dB(L) at 0.351 sec.
ZC Freq	5.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	5.33	5.59	mm/s
ZC Freq	11	9.3	6.4	Hz
Time (Rel. to Trig)	0.318	0.037	0.004	sec
Peak Acceleration	0.0398	0.0663	0.0530	g
Peak Displacement	0.0622	0.0855	0.128	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.89 mm/s At 0.039 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:55:41 February 5, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IBE9.KT0W
Job Number	8177		

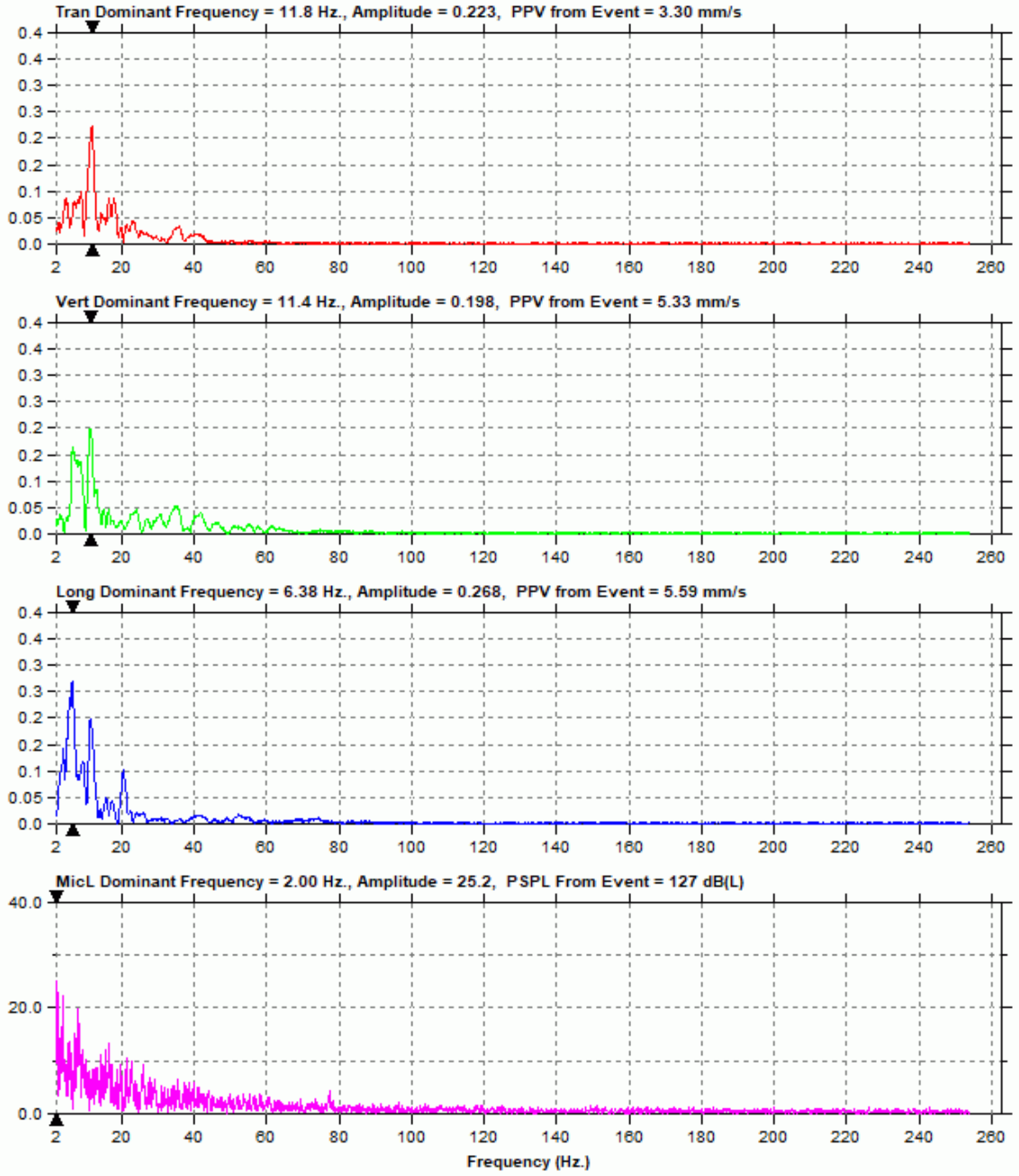
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 5, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:34:49 February 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IC7Y.210W

Post Event Notes

Extended Notes

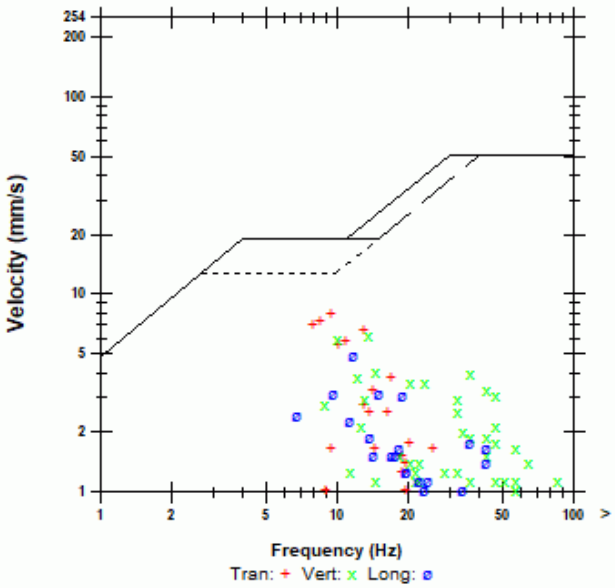
Combo Mode February 21, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

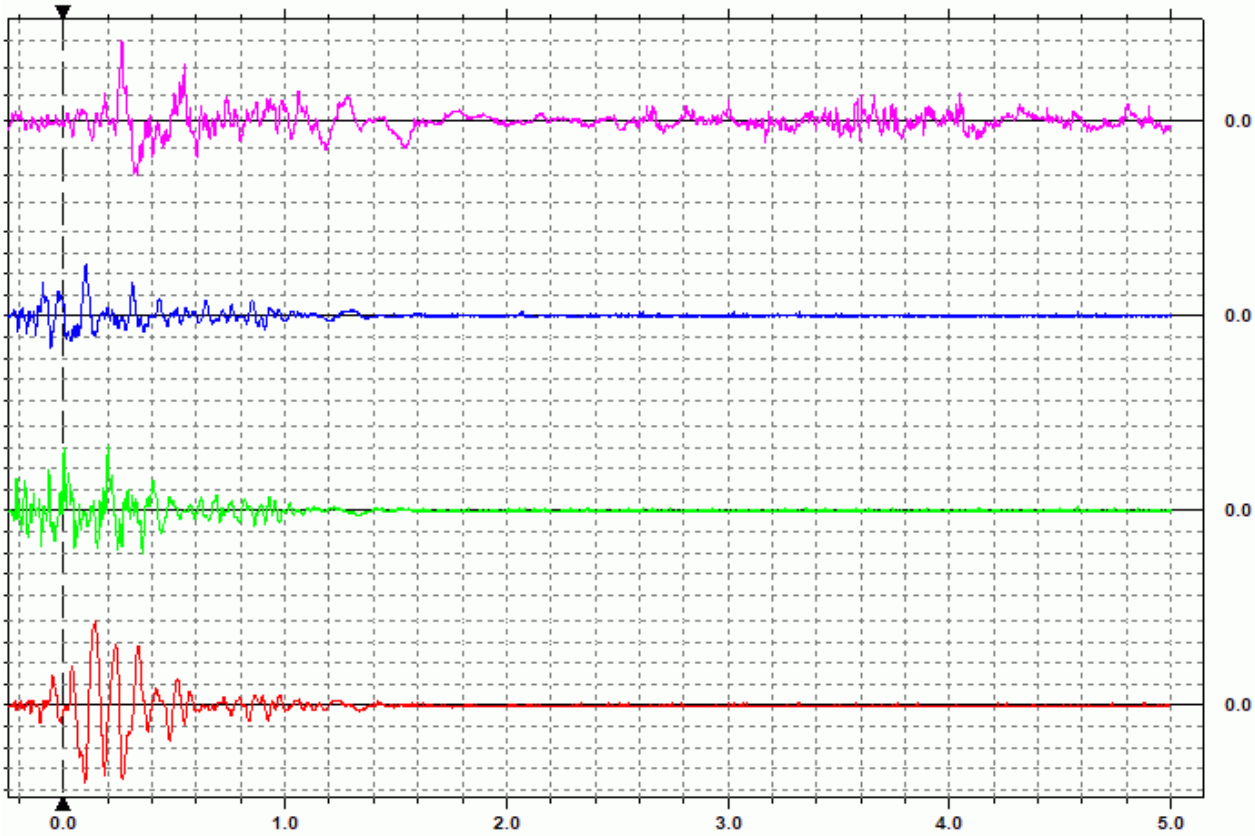
Microphone	Linear Weighting
PSPL	123.5 dB(L) at 0.263 sec.
ZC Freq	9.0 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.00	6.22	4.95	mm/s
ZC Freq	9.5	13	12	Hz
Time (Rel. to Trig)	0.143	0.199	0.100	sec
Peak Acceleration	0.0795	0.106	0.0663	g
Peak Displacement	0.140	0.0549	0.0590	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.70 mm/s At 0.099 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:34:49 February 21, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IC7Y.210W
Job Number	8177		

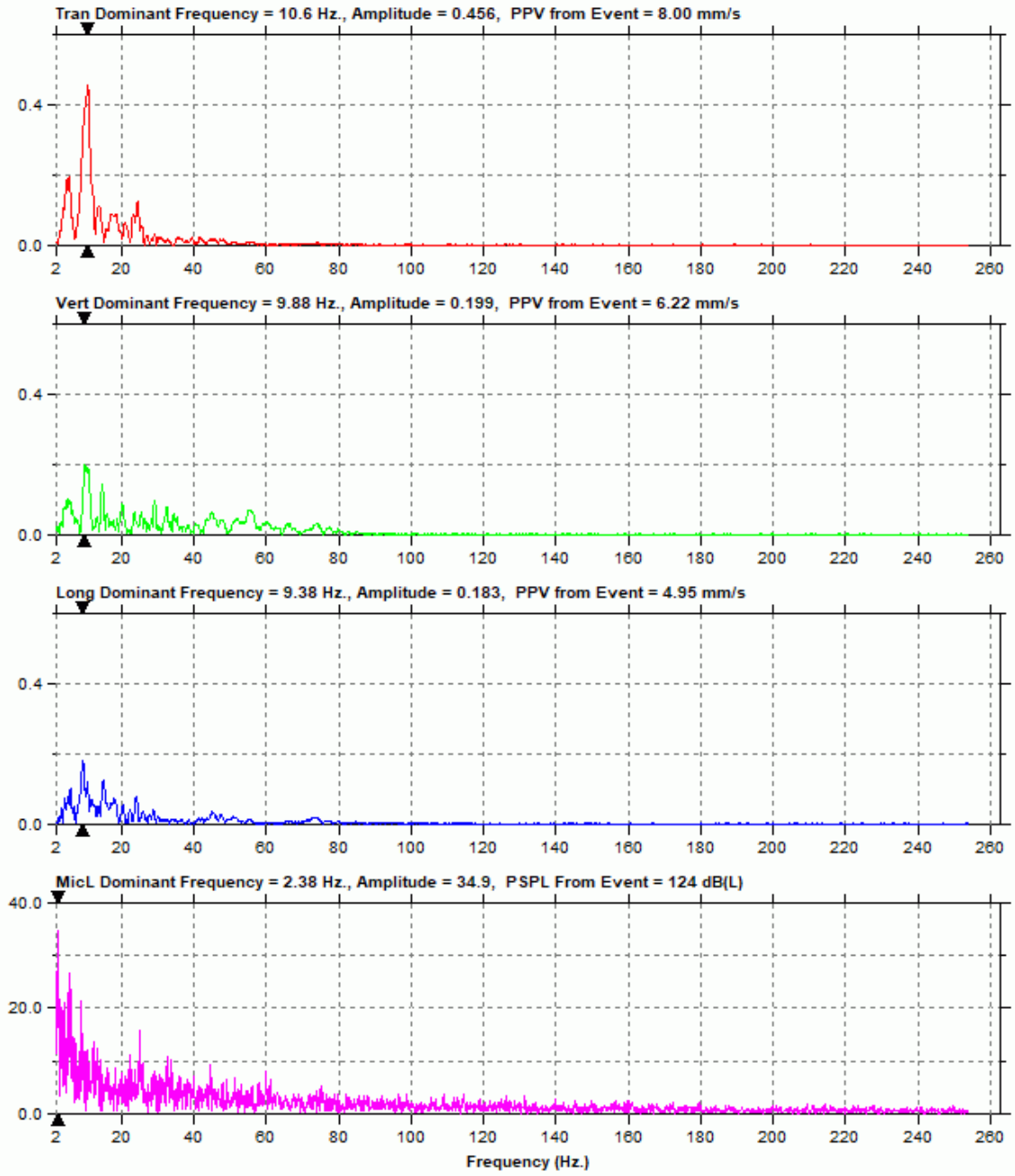
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 21, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:03:57 February 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263ICDG.ML0W

Post Event Notes

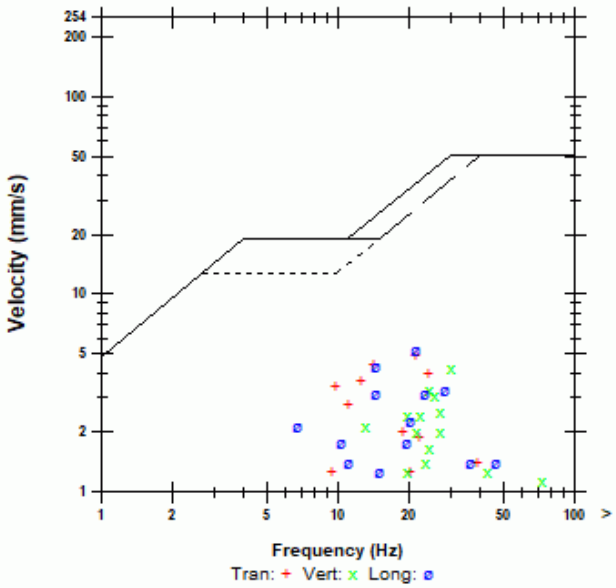
Extended Notes
Combo Mode February 24, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

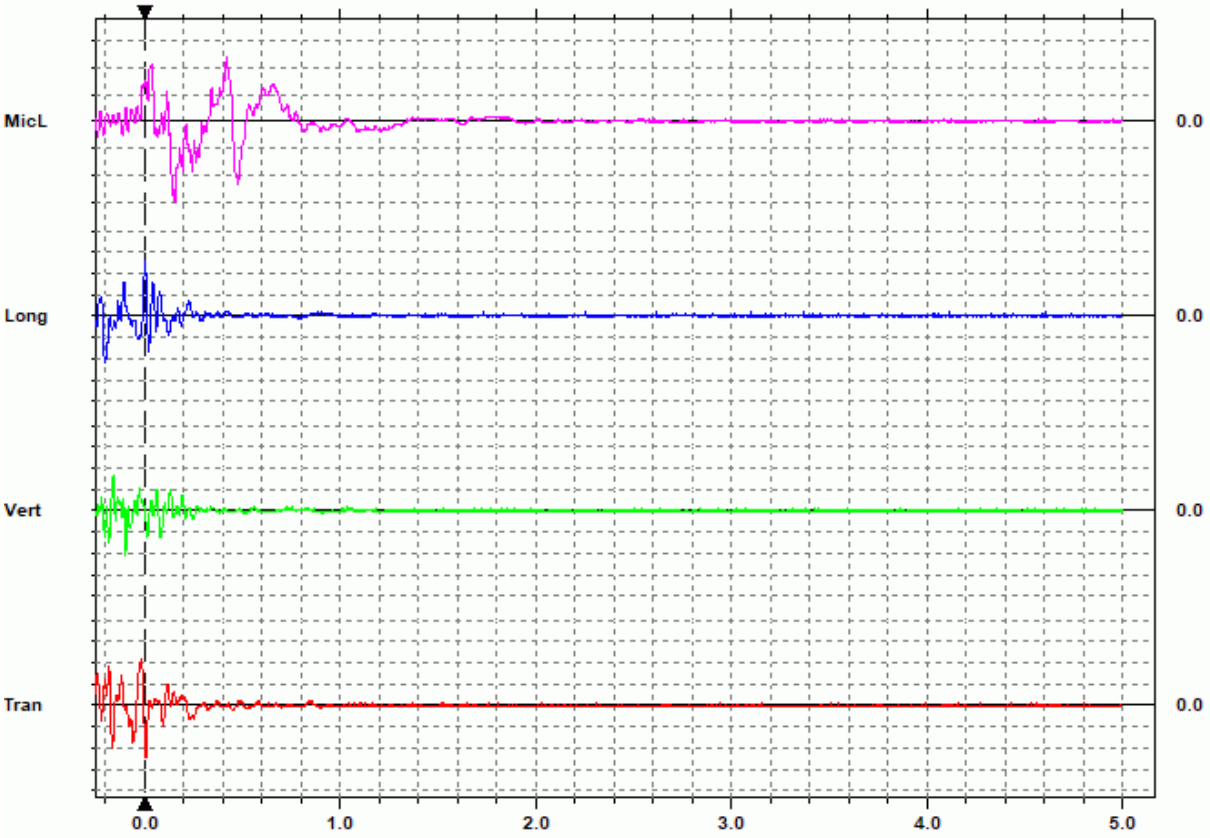
Microphone	Linear Weighting
PSPL	123.5 dB(L) at 0.155 sec.
ZC Freq	2.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	4.19	5.21	mm/s
ZC Freq	21	30	21	Hz
Time (Rel. to Trig)	0.005	-0.098	0.002	sec
Peak Acceleration	0.0795	0.0795	0.0795	g
Peak Displacement	0.0536	0.0216	0.0475	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.01 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:03:57 February 24, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263ICDG.ML0W
Job Number	8177		

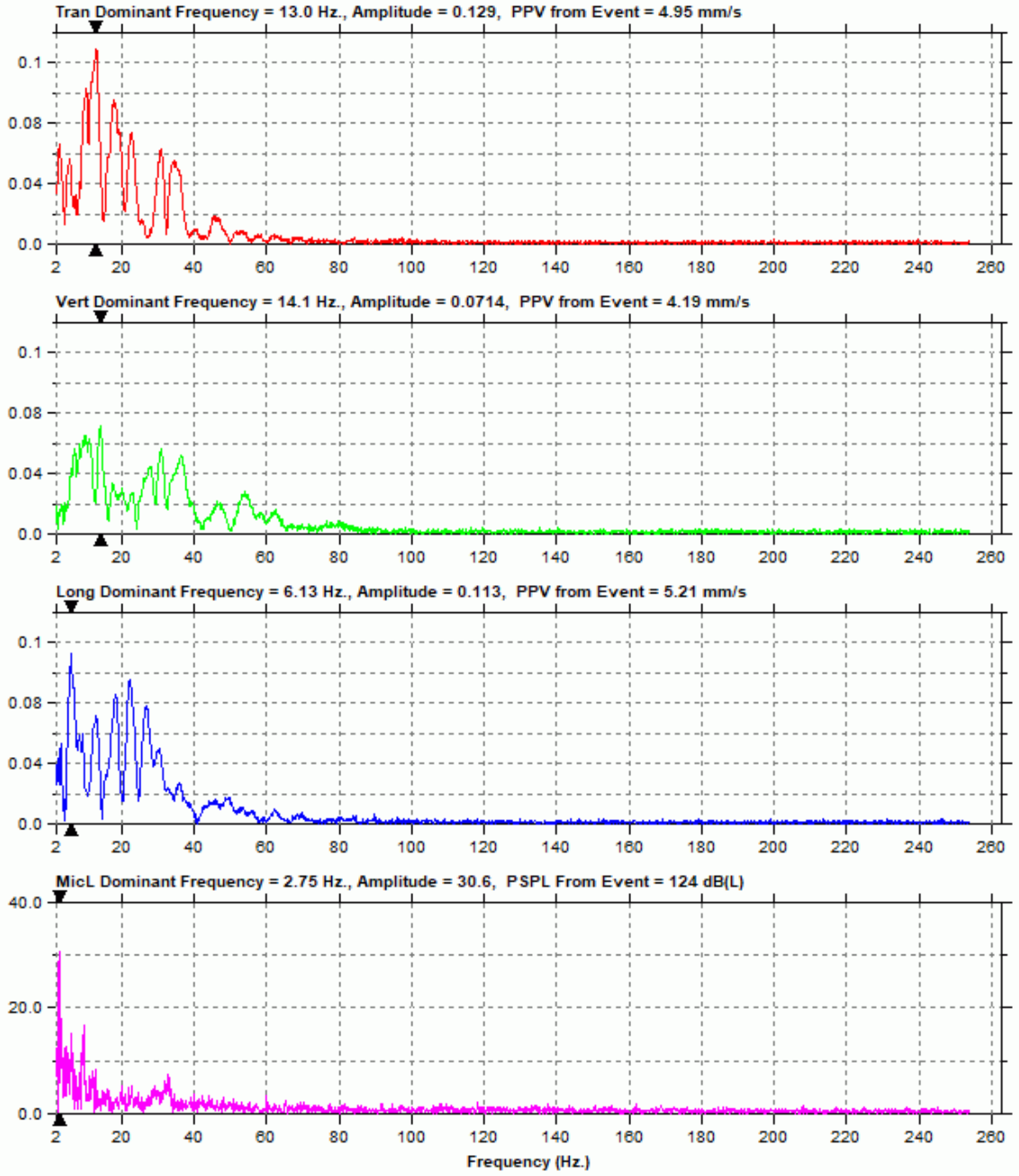
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 24, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:04:04 February 11, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IBPD.YS0W

Post Event Notes

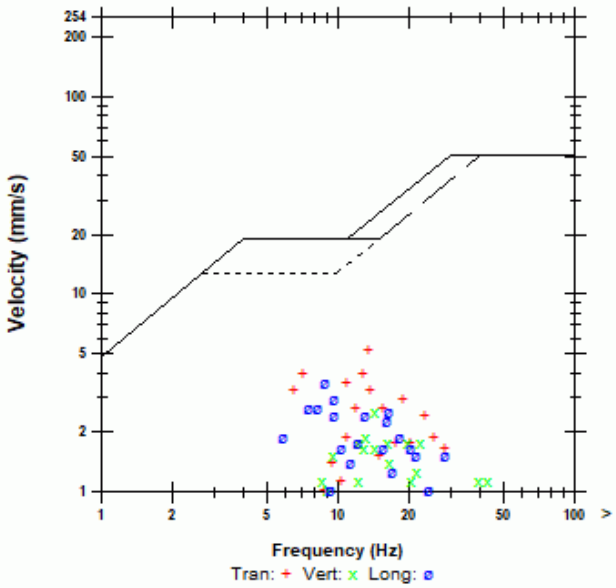
Extended Notes
Combo Mode February 11, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

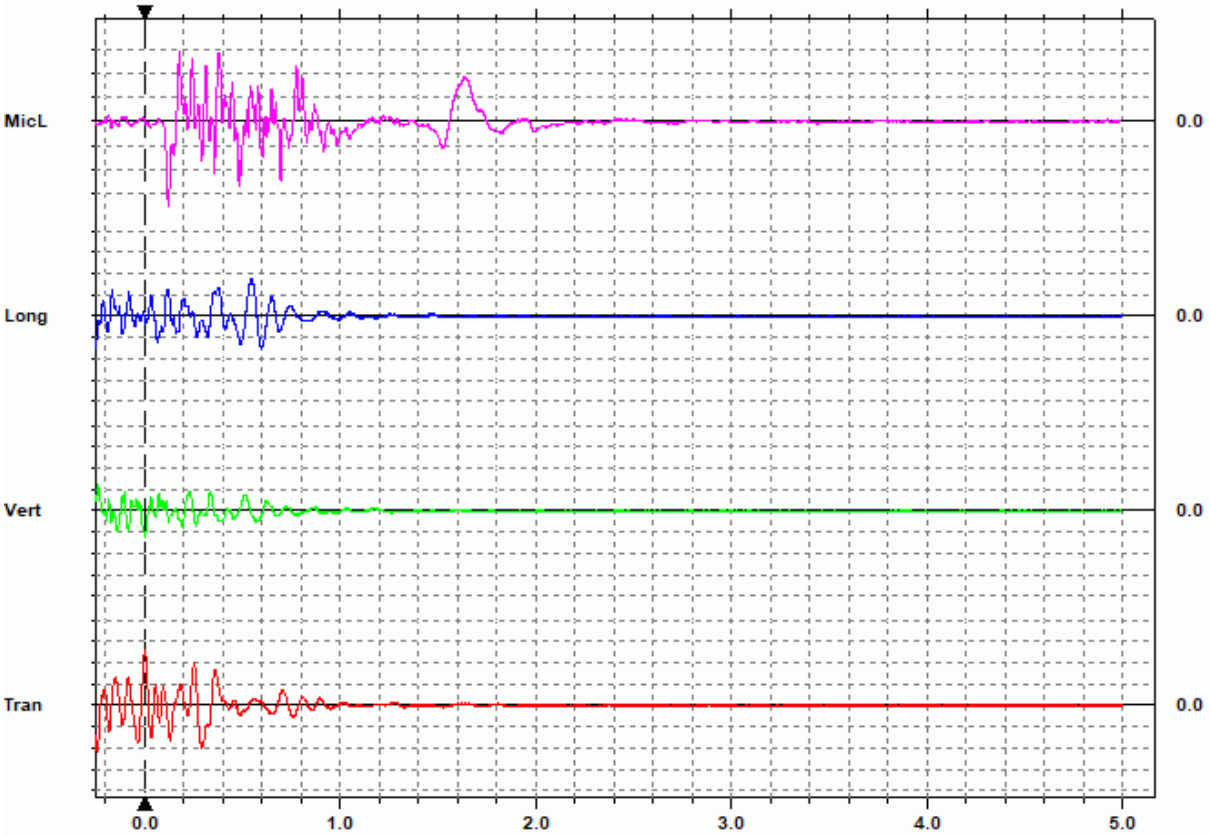
Microphone	Linear Weighting
PSPL	124.8 dB(L) at 0.123 sec.
ZC Freq	6.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	2.54	3.56	mm/s
ZC Freq	13	14	8.8	Hz
Time (Rel. to Trig)	0.004	0.005	0.546	sec
Peak Acceleration	0.0530	0.0663	0.0398	g
Peak Displacement	0.0841	0.0267	0.0634	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.75 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 11, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:04:04 February 11, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IBPD.YS0W
Job Number	8177		

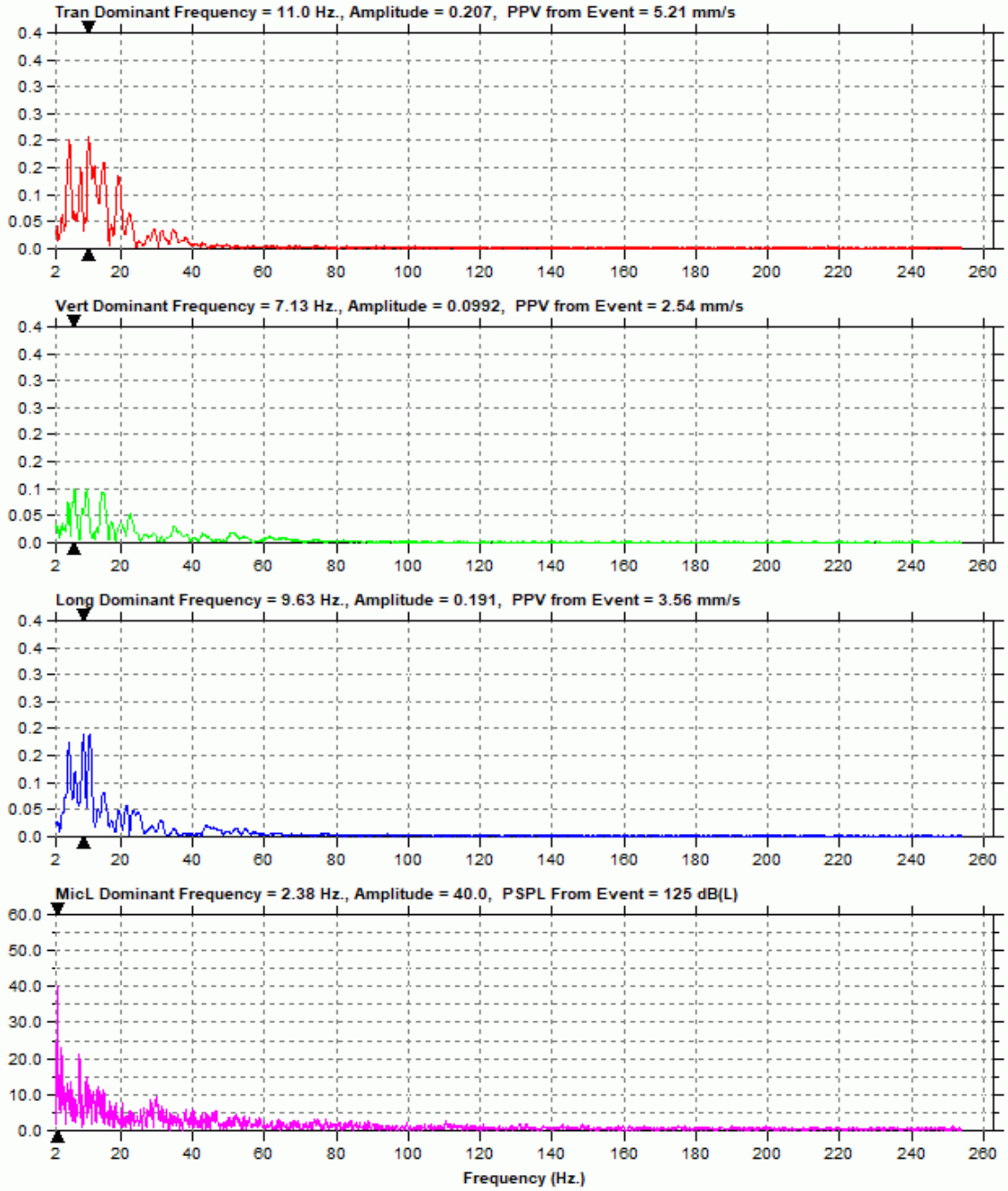
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 11, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 11, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:10 February 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IC61.QM0W

Post Event Notes

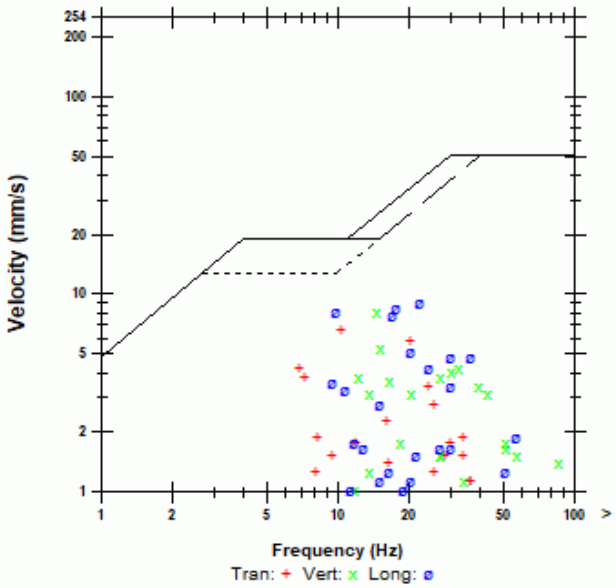
Extended Notes
Combo Mode February 20, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

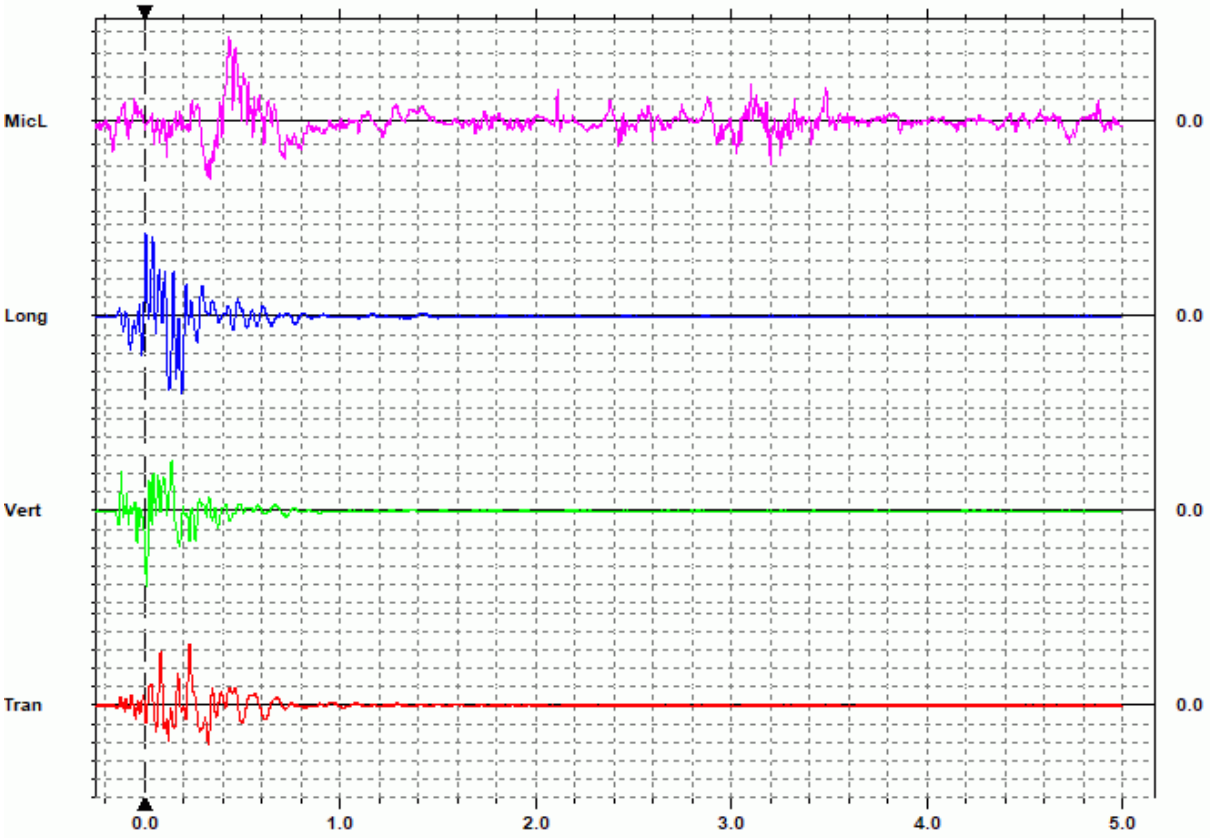
Microphone	Linear Weighting
PSPL	131.4 dB(L) at 0.433 sec.
ZC Freq	4.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.60	8.13	9.02	mm/s
ZC Freq	10	15	22	Hz
Time (Rel. to Trig)	0.229	0.010	0.005	sec
Peak Acceleration	0.0795	0.133	0.133	g
Peak Displacement	0.0817	0.0634	0.114	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.4 mm/s At 0.007 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:10 February 20, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IC61.QM0W
Job Number	8177		

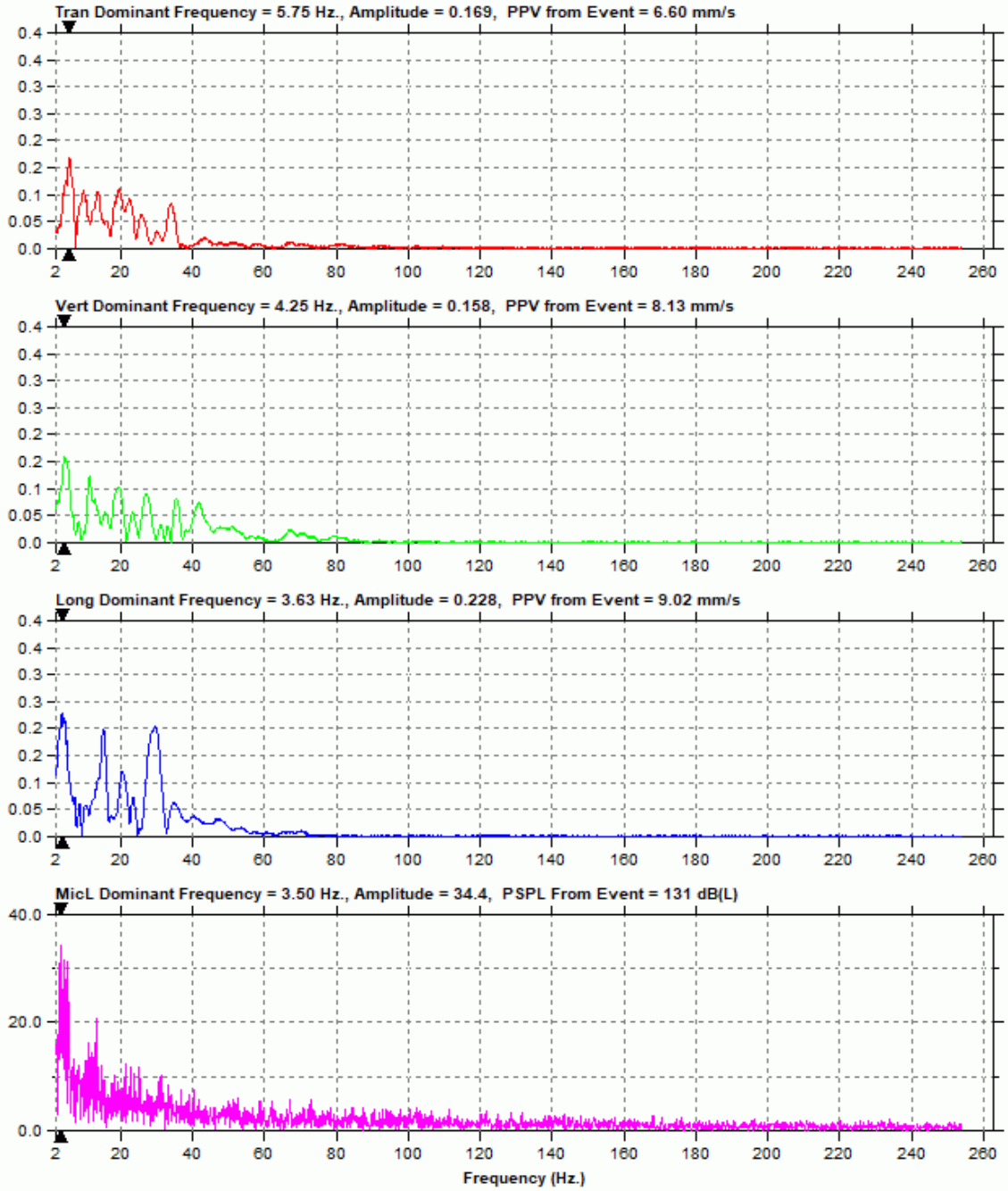
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 20, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:11:58 February 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IC9R.NY0W

Post Event Notes

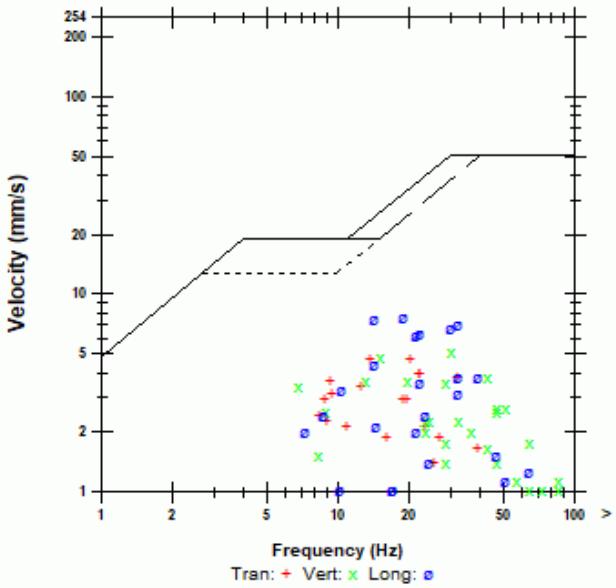
Extended Notes
Combo Mode February 22, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

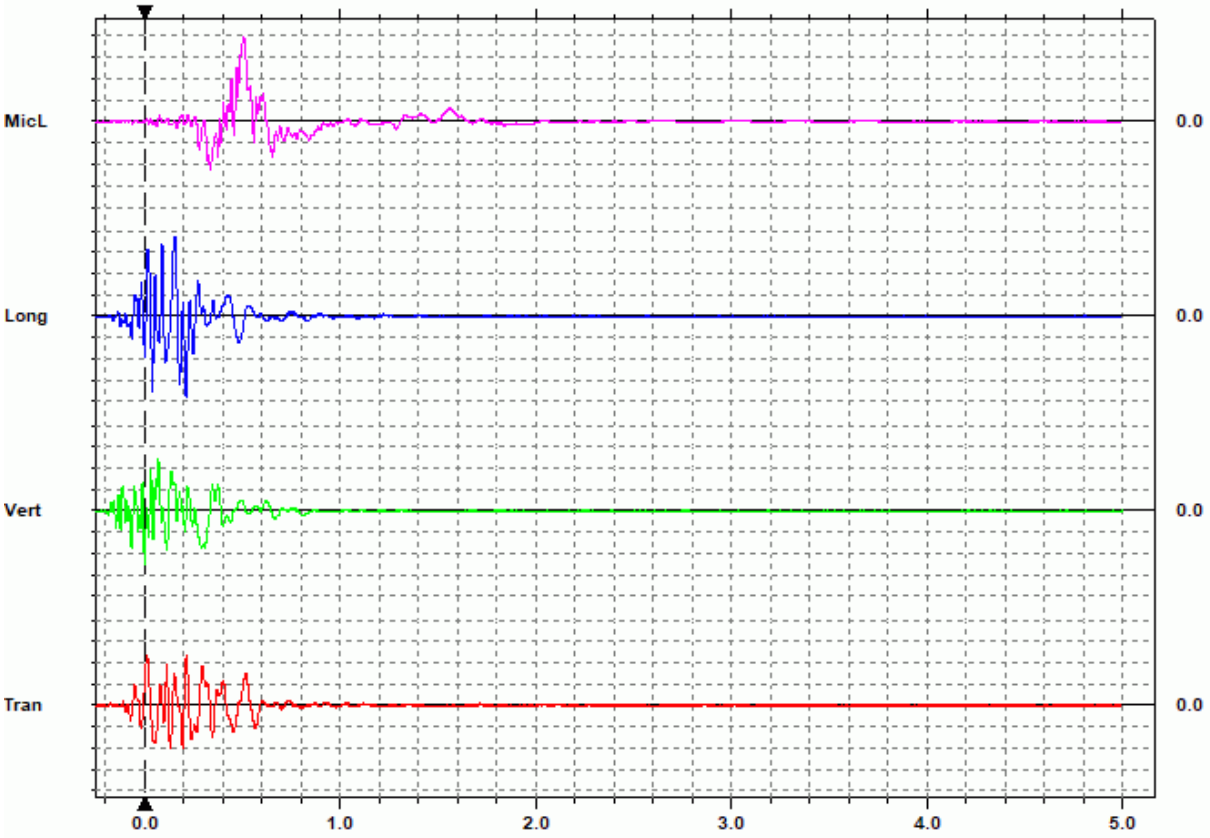
Microphone	Linear Weighting
PSPL	131.7 dB(L) at 0.509 sec.
ZC Freq	5.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	5.08	7.62	mm/s
ZC Freq	14	30	19	Hz
Time (Rel. to Trig)	0.014	0.000	0.212	sec
Peak Acceleration	0.0795	0.106	0.146	g
Peak Displacement	0.0590	0.0871	0.0800	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.95 mm/s At 0.213 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:11:58 February 22, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IC9R.NY0W
Job Number	8177		

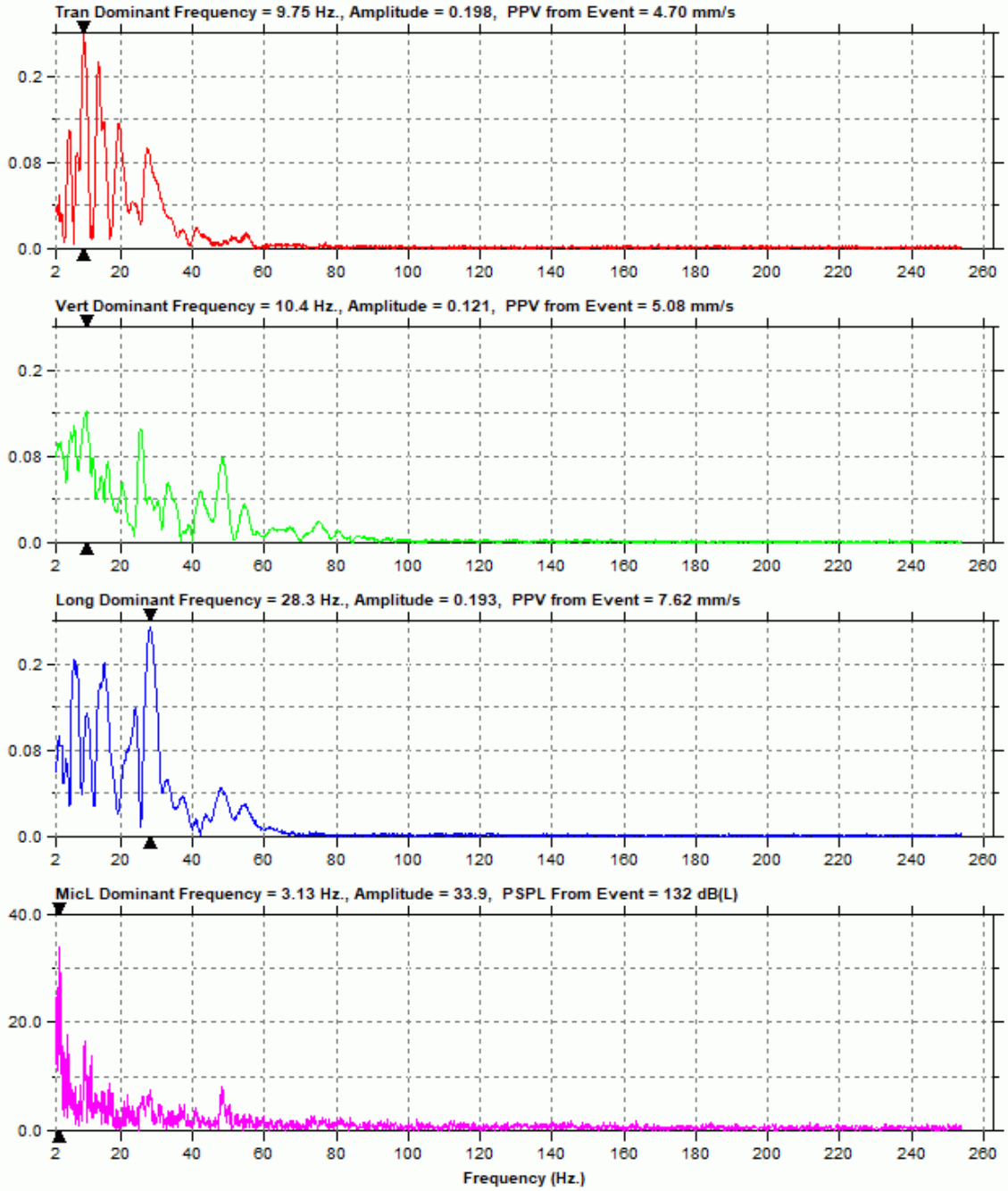
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 22, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:07:51 February 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028ICDG.T30W

Post Event Notes

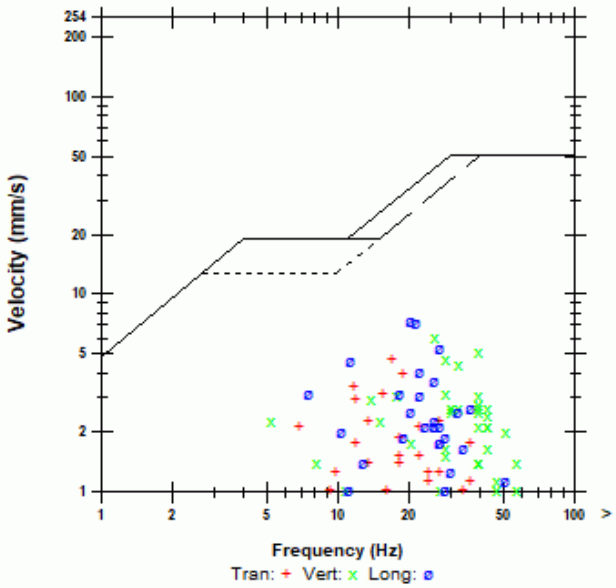
Extended Notes
Combo Mode February 24, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

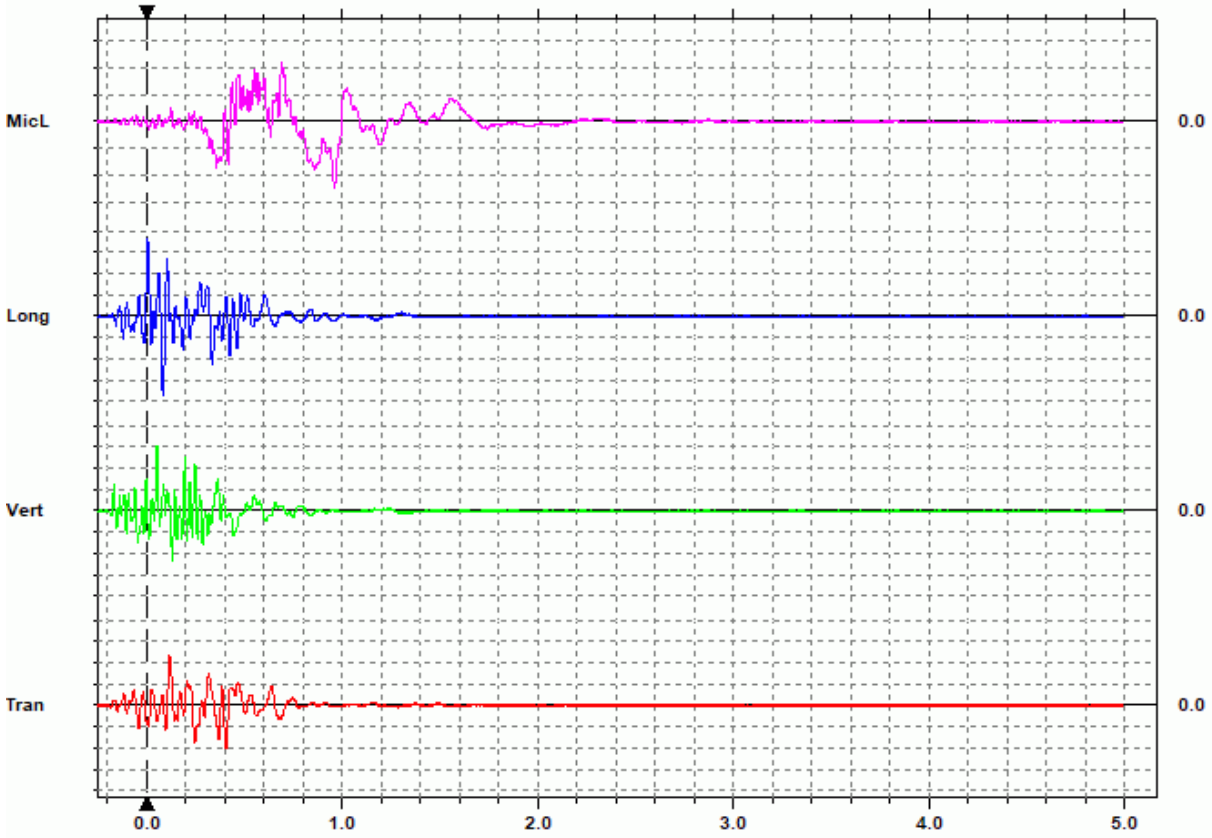
Microphone	Linear Weighting
PSPL	121.9 dB(L) at 0.959 sec.
ZC Freq	2.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	6.10	7.37	mm/s
ZC Freq	17	26	20	Hz
Time (Rel. to Trig)	0.116	0.052	0.082	sec
Peak Acceleration	0.0663	0.119	0.0928	g
Peak Displacement	0.0510	0.0433	0.0612	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.67 mm/s At 0.083 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:07:51 February 24, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028ICDG.T30W
Job Number	8177		

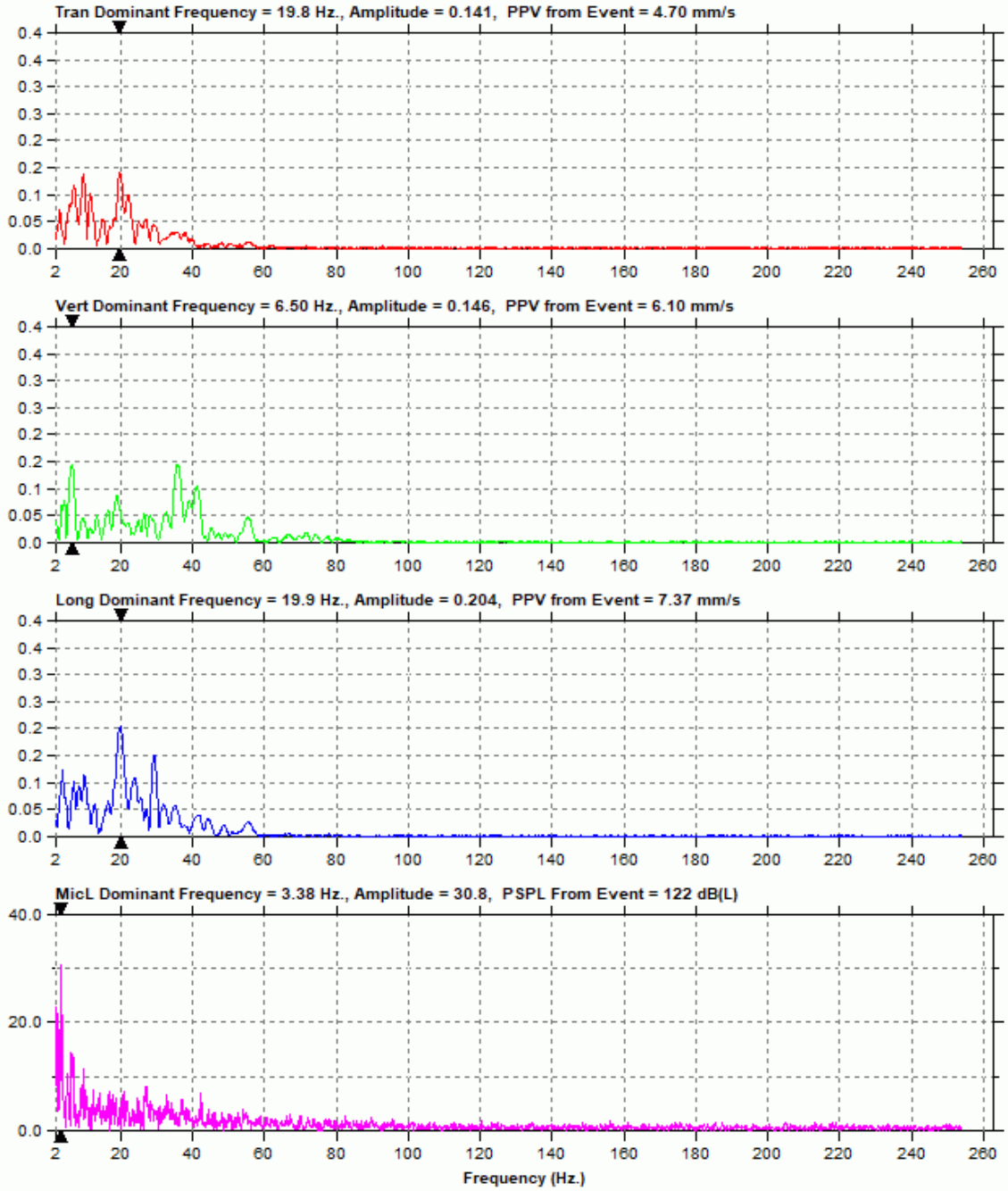
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 24, 2020 05:16:51
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:06 February 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028ICFA.Z60W

Post Event Notes

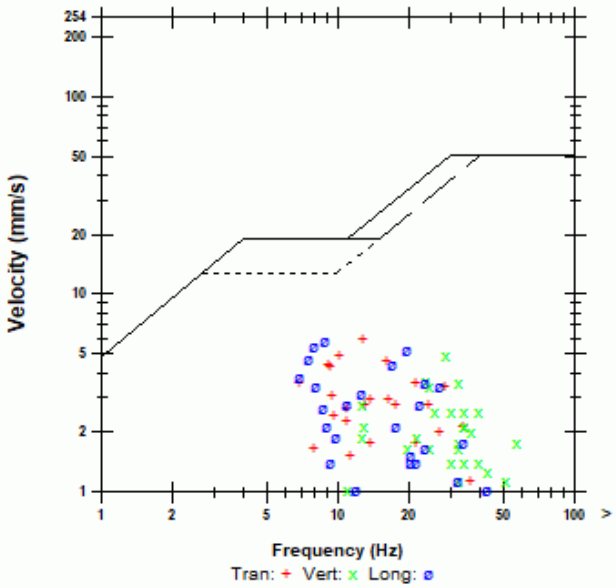
Extended Notes
Combo Mode February 25, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

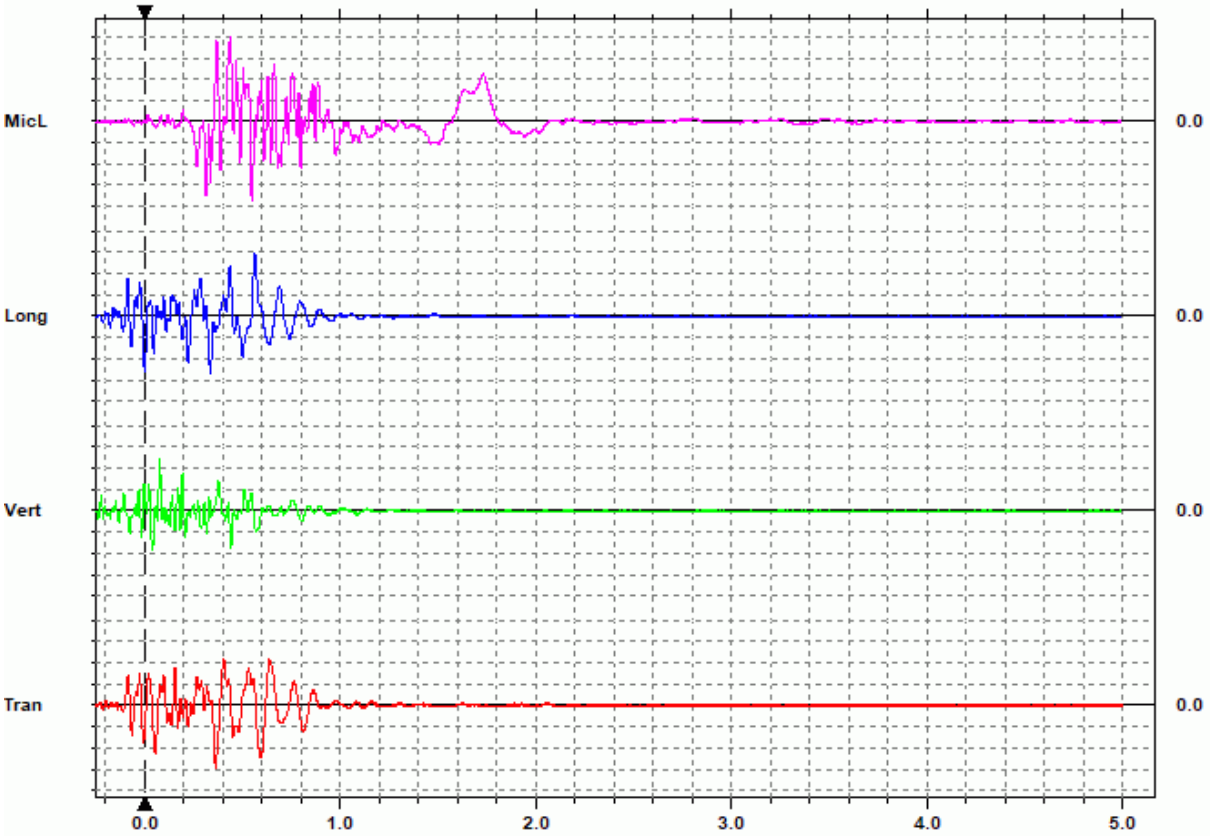
Microphone	Linear Weighting
PSPL	126.0 dB(L) at 0.439 sec.
ZC Freq	16 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.97	4.95	5.84	mm/s
ZC Freq	13	28	8.8	Hz
Time (Rel. to Trig)	0.365	0.080	0.566	sec
Peak Acceleration	0.0663	0.0928	0.0663	g
Peak Displacement	0.0810	0.0285	0.0714	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.45 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:06 February 25, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028ICFA.Z60W
Job Number	8177		

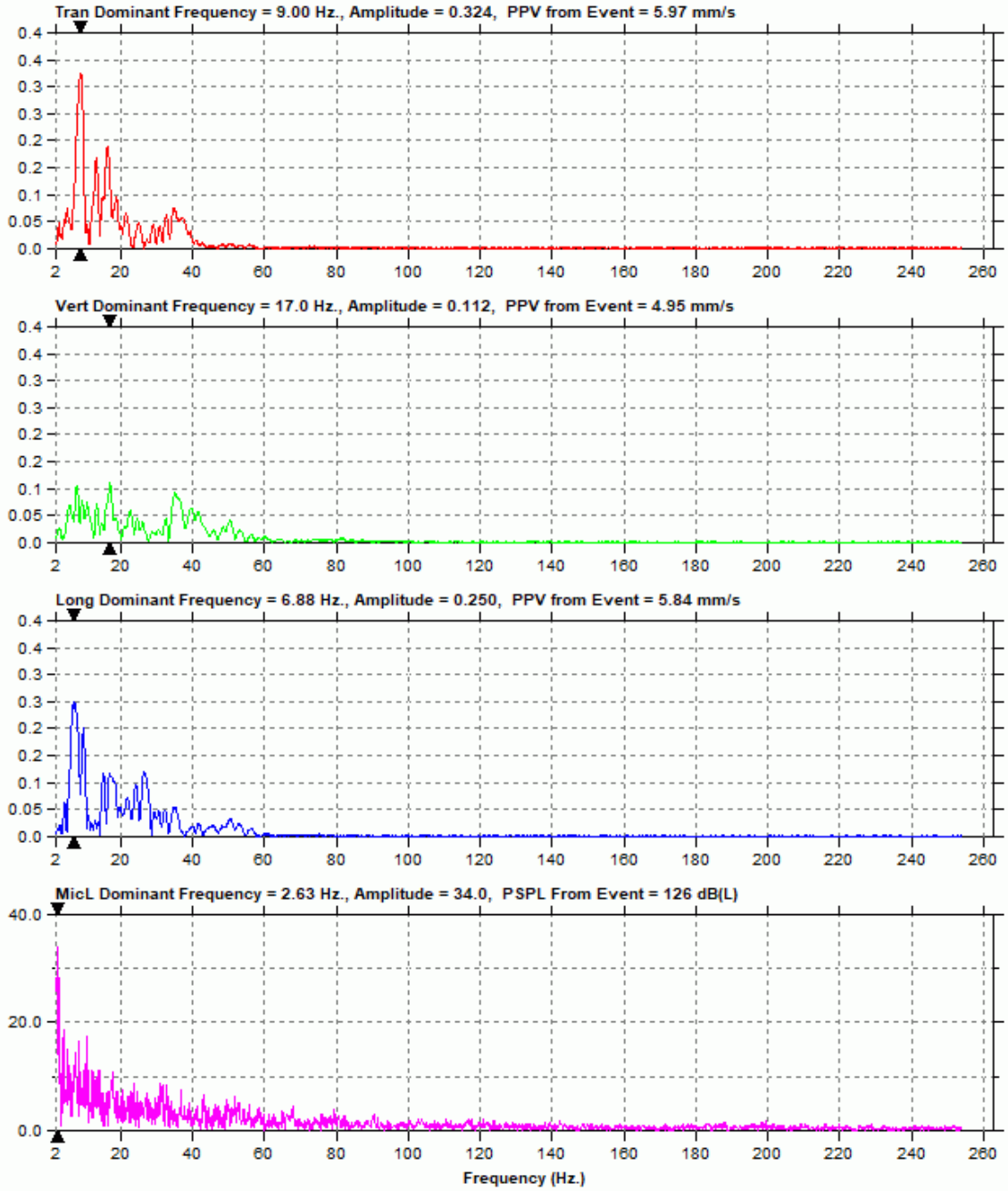
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 25, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:32 February 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028ICKV.4W0W

Post Event Notes

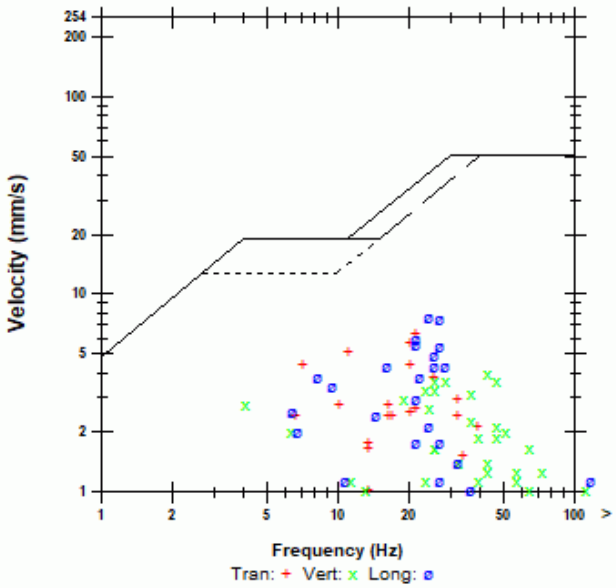
Extended Notes
Combo Mode February 28, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

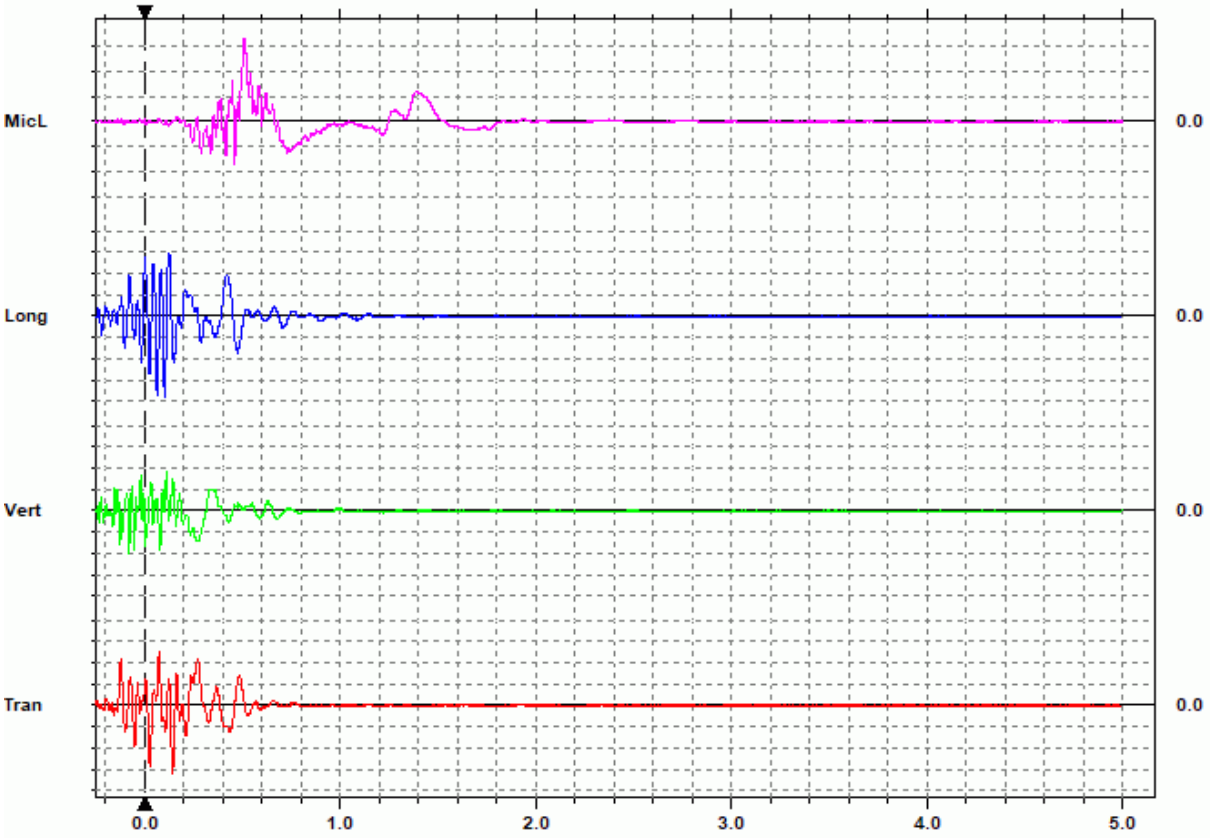
Microphone	Linear Weighting
PSPL	130.4 dB(L) at 0.508 sec.
ZC Freq	3.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	3.94	7.62	mm/s
ZC Freq	21	43	24	Hz
Time (Rel. to Trig)	0.143	-0.079	0.103	sec
Peak Acceleration	0.0795	0.0928	0.119	g
Peak Displacement	0.0914	0.0987	0.0742	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.99 mm/s At 0.146 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:32 February 28, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028ICKV.4W0W
Job Number	8177		

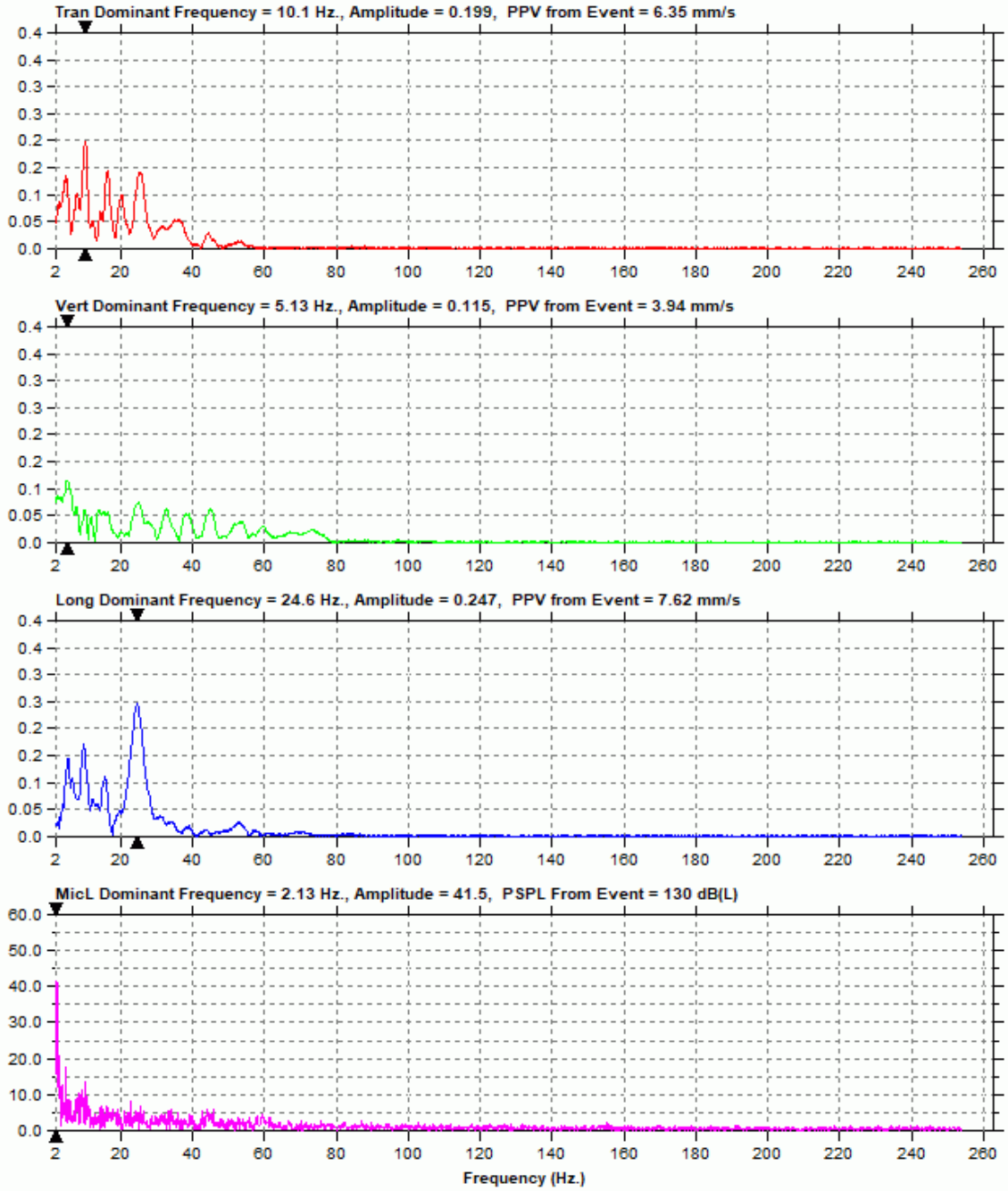
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 28, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:07 February 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028ICMP.LJ0W

Post Event Notes

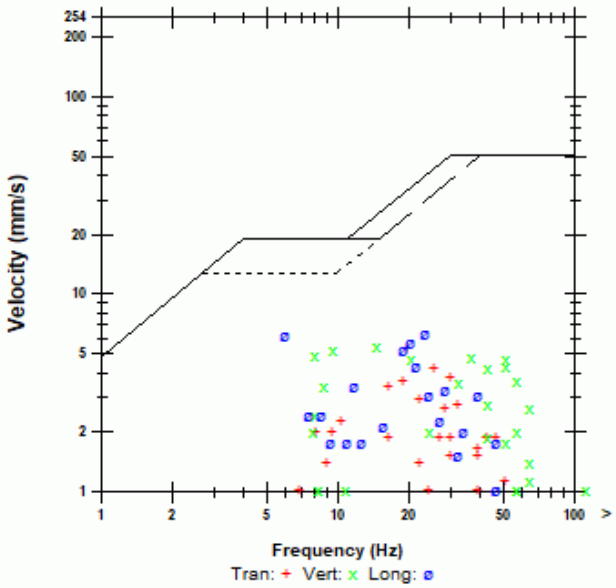
Extended Notes
Combo Mode February 29, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

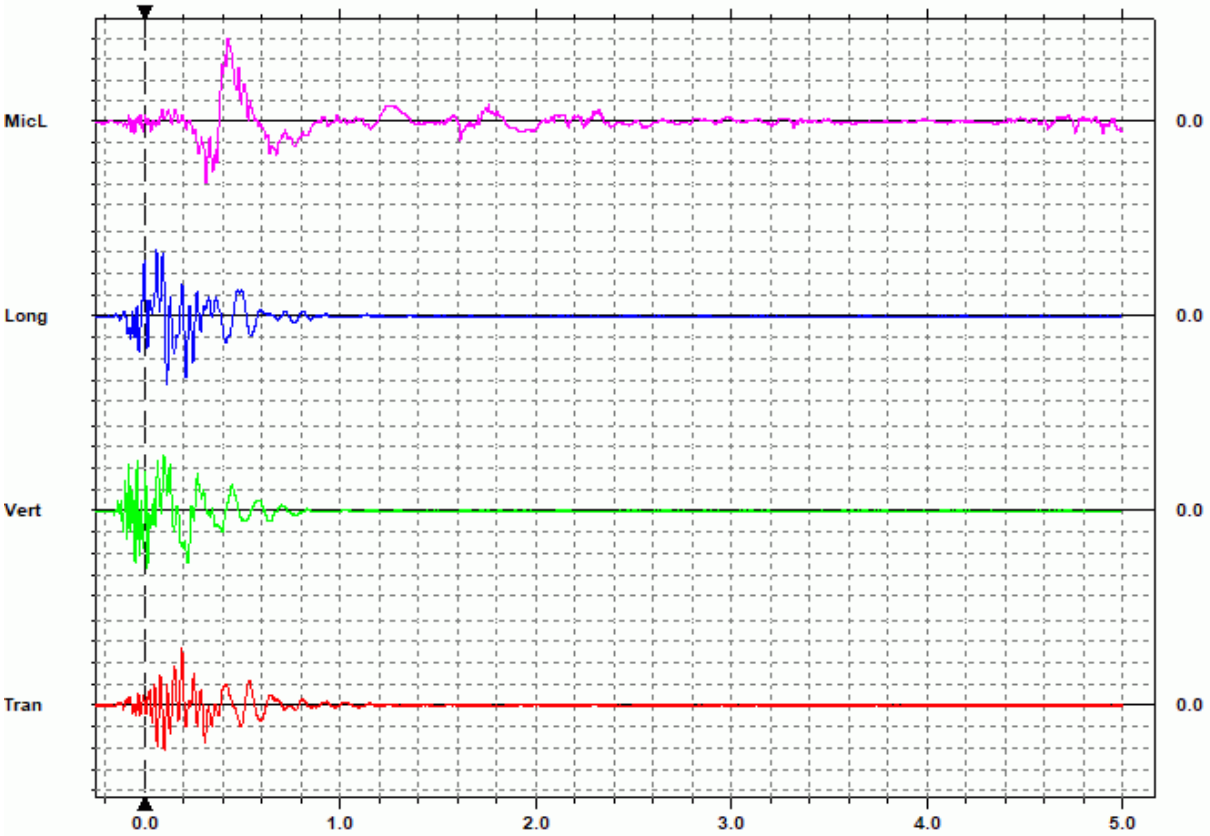
Microphone	Linear Weighting
PSPL	126.1 dB(L) at 0.427 sec.
ZC Freq	2.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	5.46	6.35	mm/s
ZC Freq	20	15	23	Hz
Time (Rel. to Trig)	0.193	0.017	0.115	sec
Peak Acceleration	0.0795	0.159	0.119	g
Peak Displacement	0.0397	0.0985	0.104	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.83 mm/s At 0.066 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:07 February 29, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028ICMP.LJ0W
Job Number	8177		

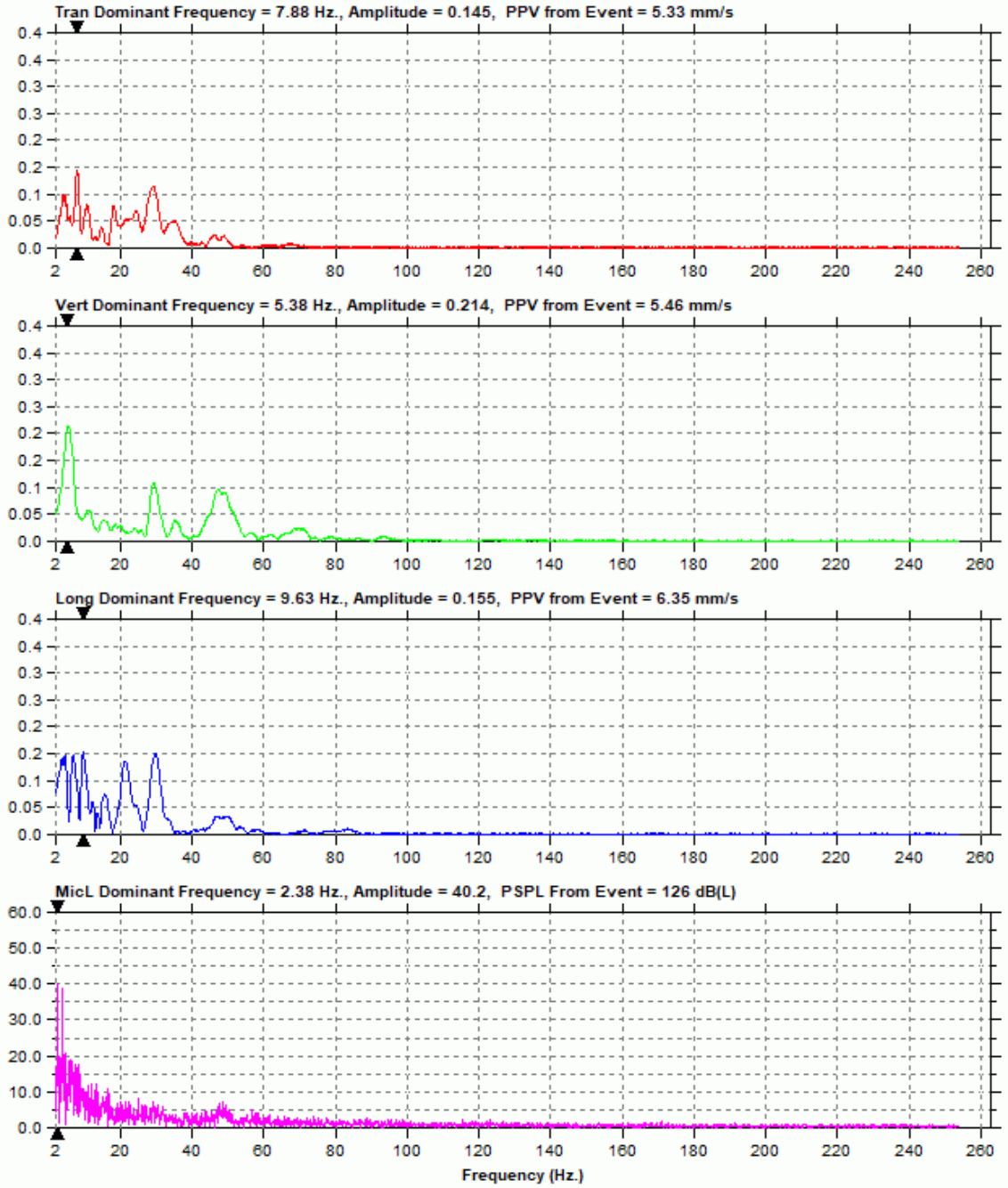
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 29, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:36 February 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	120 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21128 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	W128IBR8.DO0W

Post Event Notes

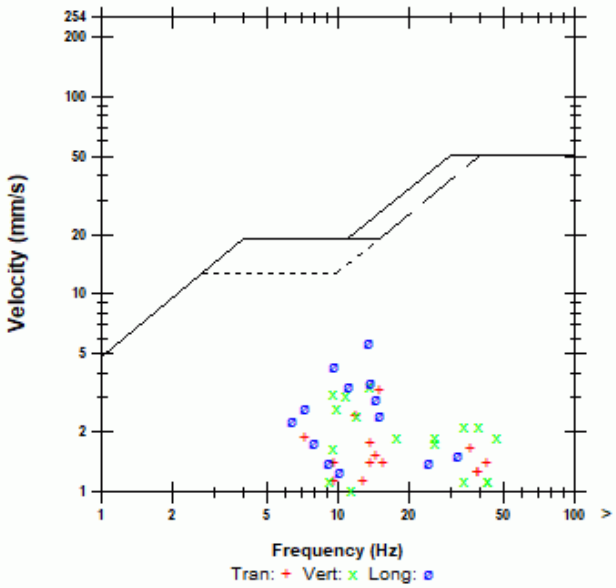
Extended Notes
Combo Mode February 12, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

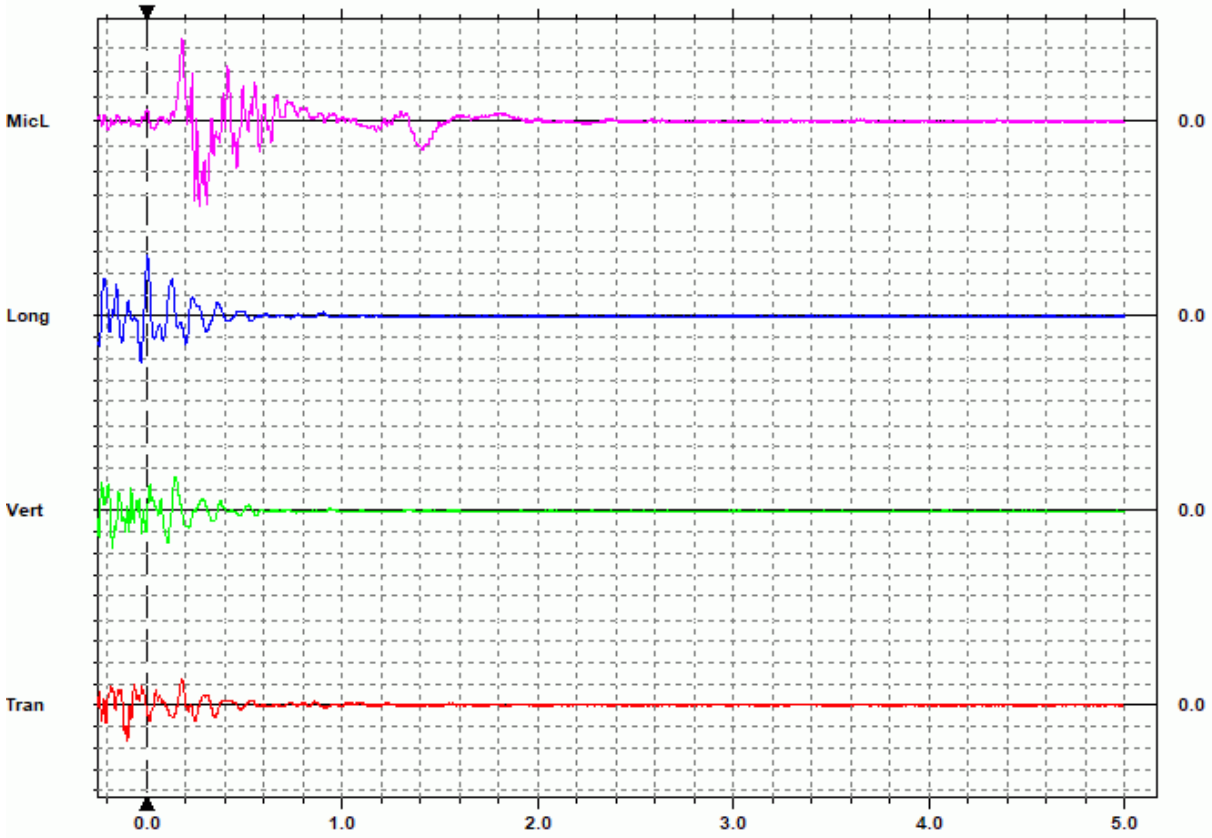
Microphone	Linear Weighting
PSPL	124.5 dB(L) at 0.270 sec.
ZC Freq	6.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	3.43	5.71	mm/s
ZC Freq	15	13	13	Hz
Time (Rel. to Trig)	-0.097	-0.174	0.004	sec
Peak Acceleration	0.0530	0.0663	0.0530	g
Peak Displacement	0.0364	0.0485	0.0644	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.82 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:36 February 12, 2020	**Serial Number**	BE21128 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W128IBR8.DO0W
Job Number	8177		

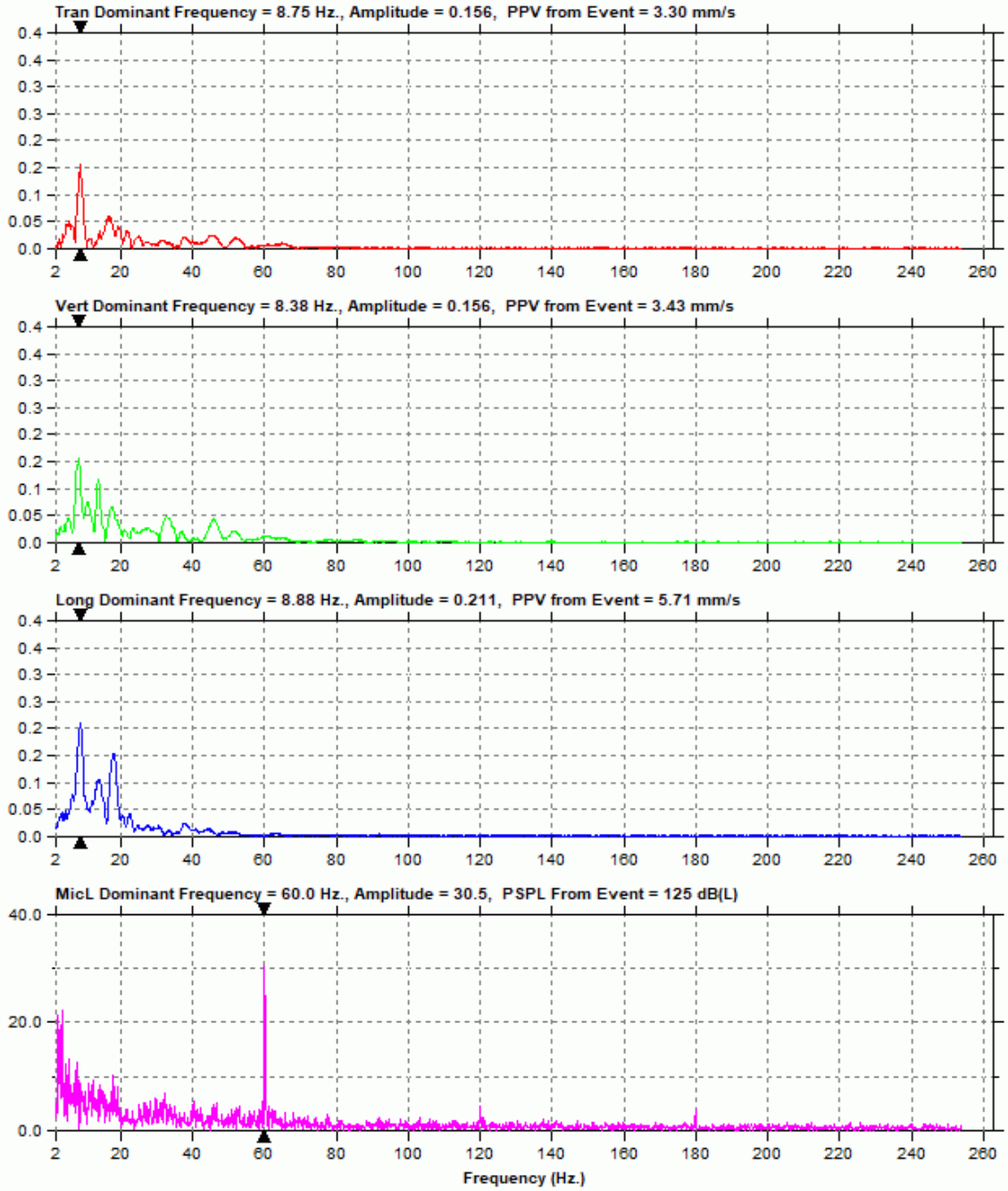
Notes

Location: 120 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 12, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:34 February 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	120 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21128 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	W128ICKV.4Y0W

Post Event Notes

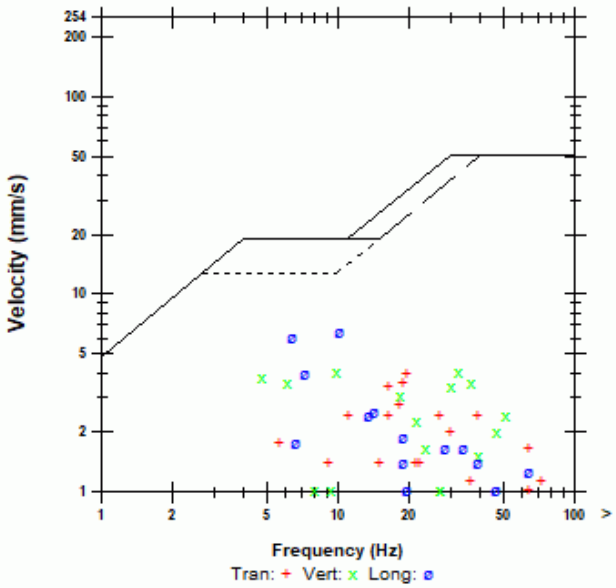
Extended Notes
Combo Mode February 28, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

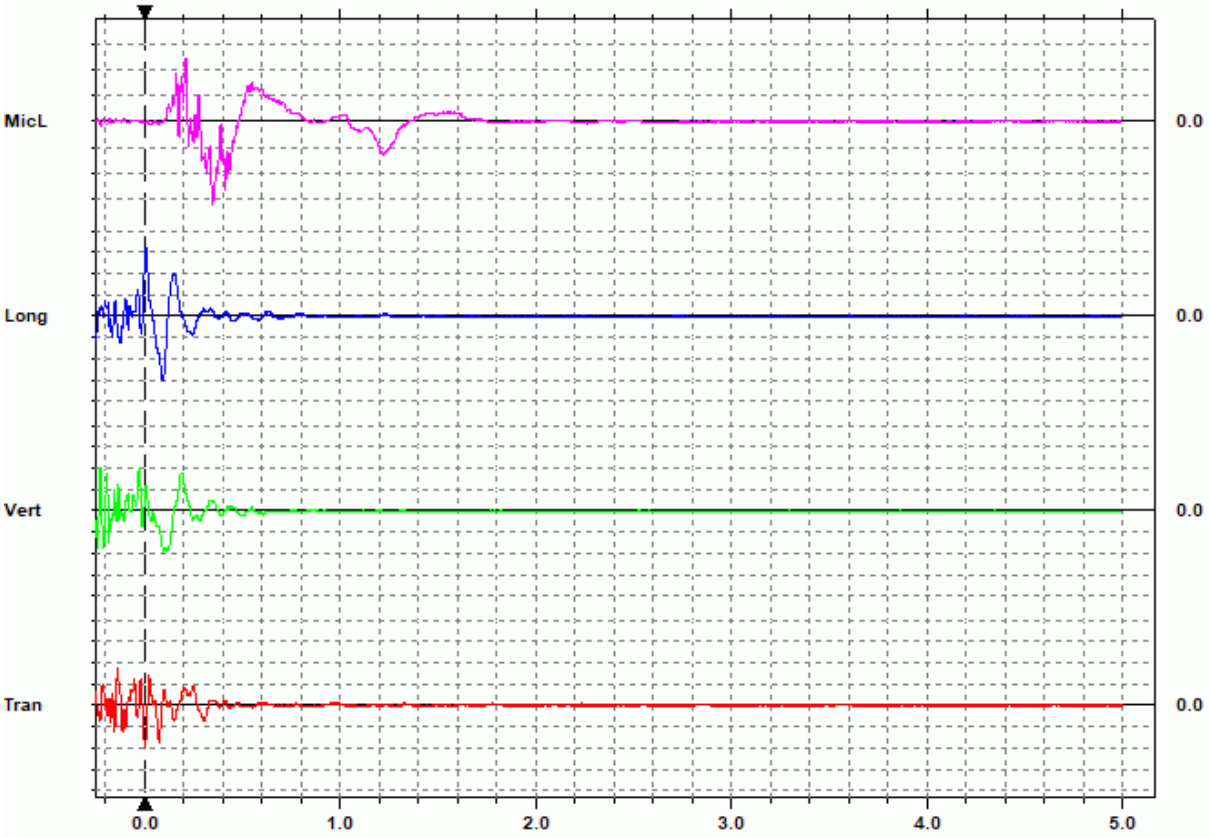
Microphone	Linear Weighting
PSPL	130.2 dB(L) at 0.348 sec.
ZC Freq	2.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.94	4.06	6.48	mm/s
ZC Freq	20	32	10	Hz
Time (Rel. to Trig)	0.001	-0.228	0.006	sec
Peak Acceleration	0.0663	0.106	0.0663	g
Peak Displacement	0.0519	0.121	0.130	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.73 mm/s At 0.006 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:34 February 28, 2020	**Serial Number**	BE21128 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W128ICKV.4Y0W
Job Number	8177		

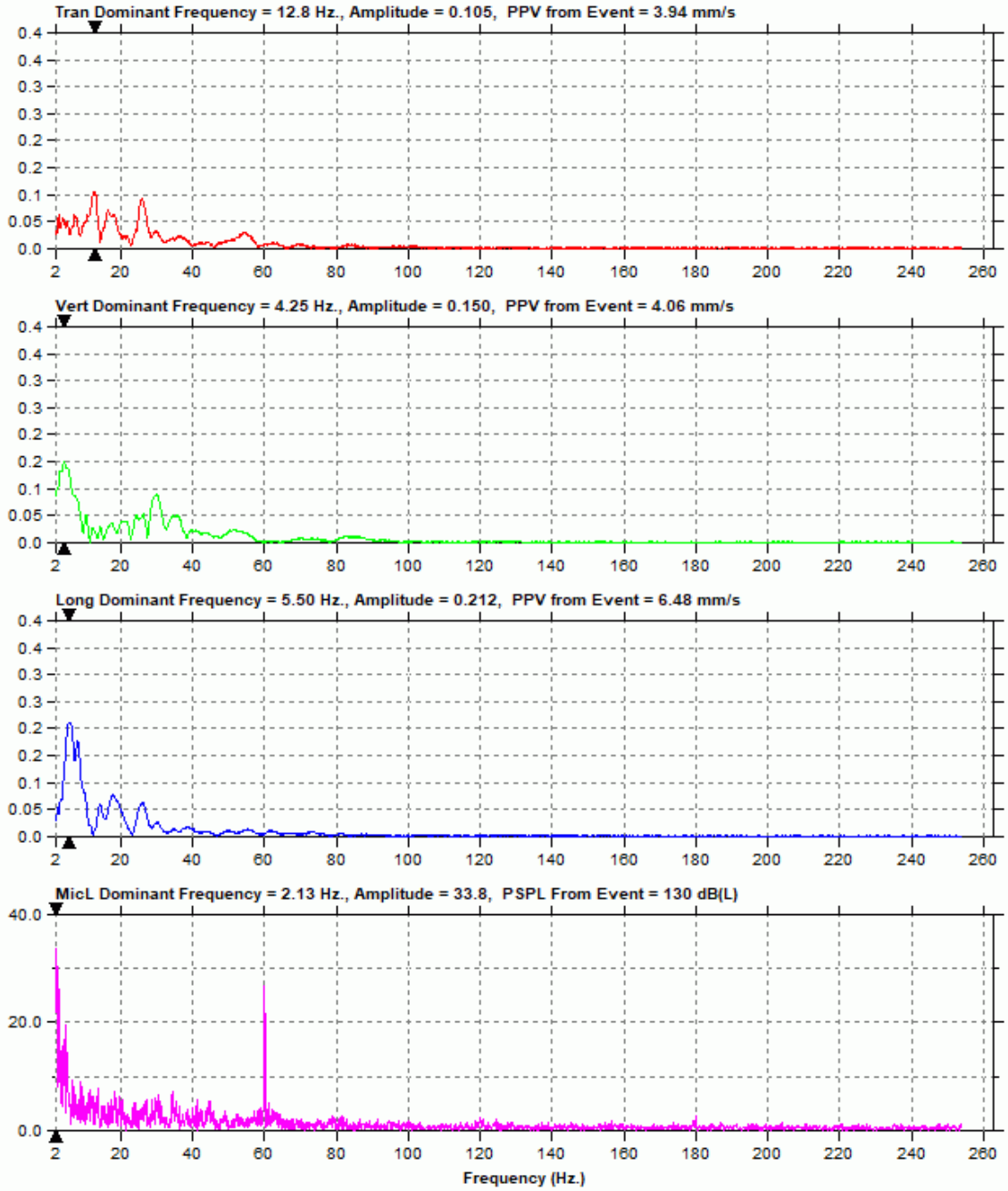
Notes

Location: 120 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 28, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 07:10:42 February 11, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IBOP.9U0W

Post Event Notes

Extended Notes

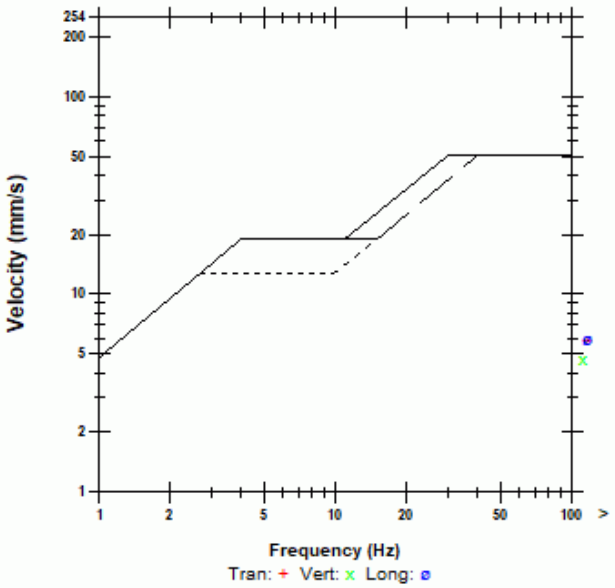
Combo Mode February 11, 2020 05:16:53
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

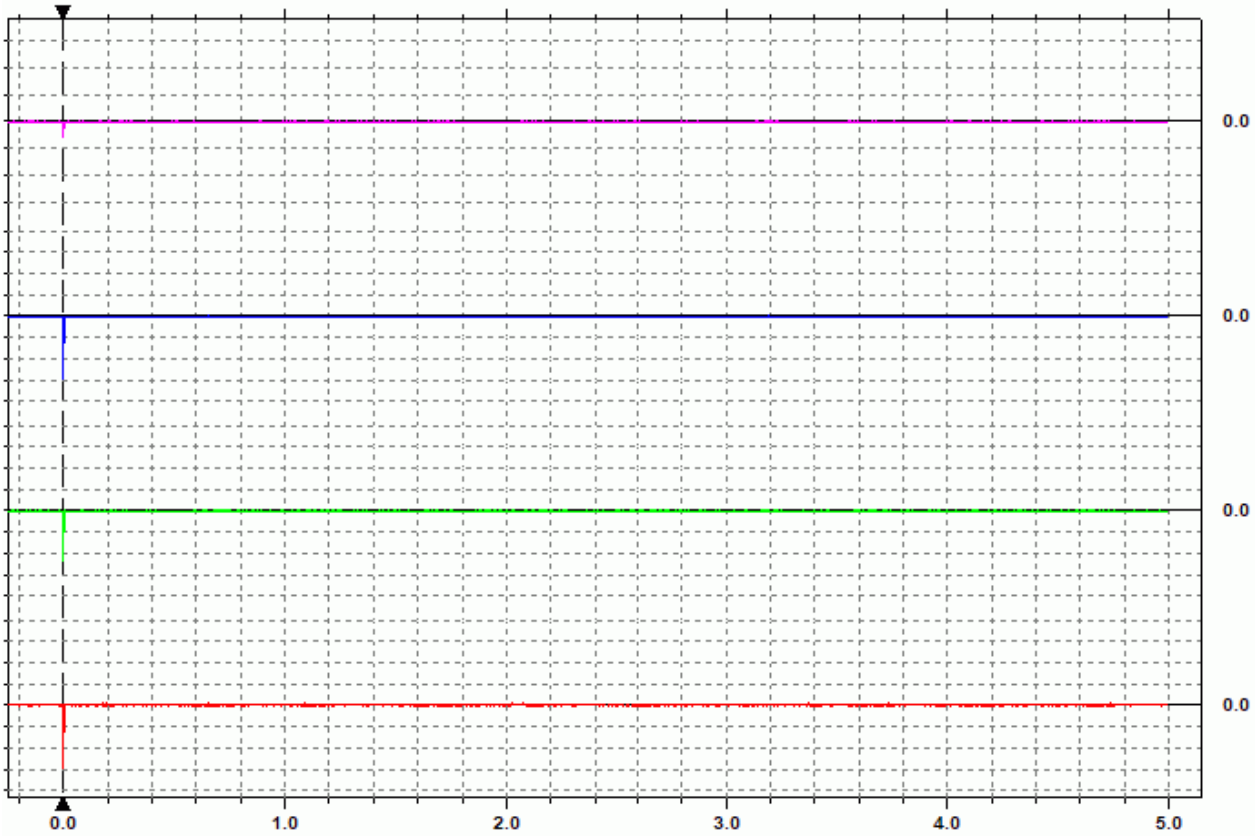
Microphone	Linear Weighting
PSPL	109.2 dB(L) at 0.000 sec.
ZC Freq	>100 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.84	4.70	5.97	mm/s
ZC Freq	>100	>100	>100	Hz
Time (Rel. to Trig)	0.000	0.000	0.000	sec
Peak Acceleration	0.623	0.504	0.623	g
Peak Displacement	0.00012	0.0	0.00291	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.58 mm/s At 0.000 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 11, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 07:10:42 February 11, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IBOP.9U0W
Job Number	8177		

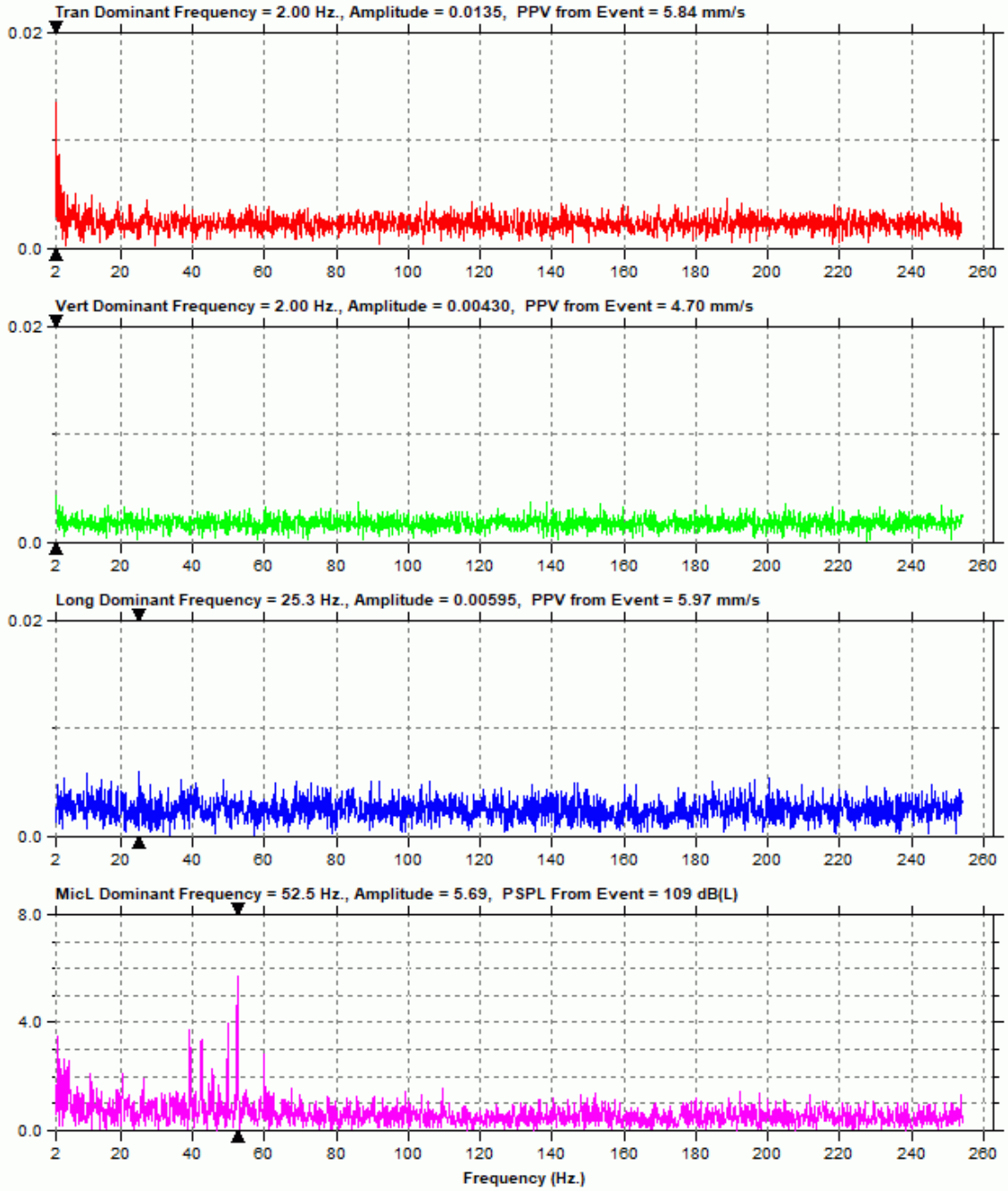
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 11, 2020 05:16:53
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 11, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:45 February 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IBR8.DX0W

Post Event Notes

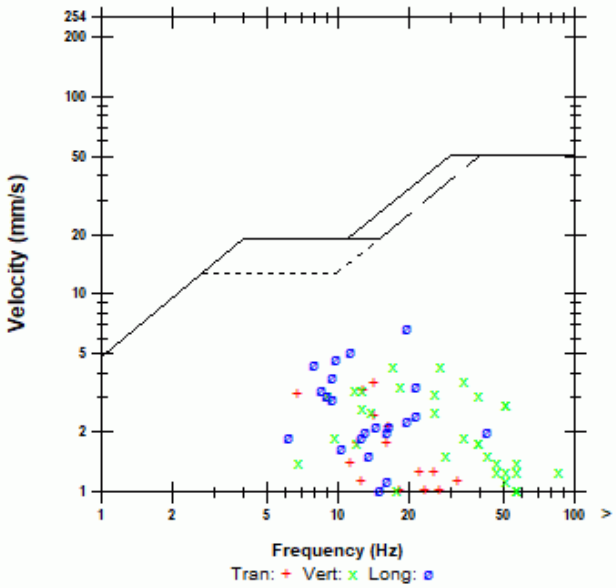
Extended Notes
Combo Mode February 12, 2020 07:57:49
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

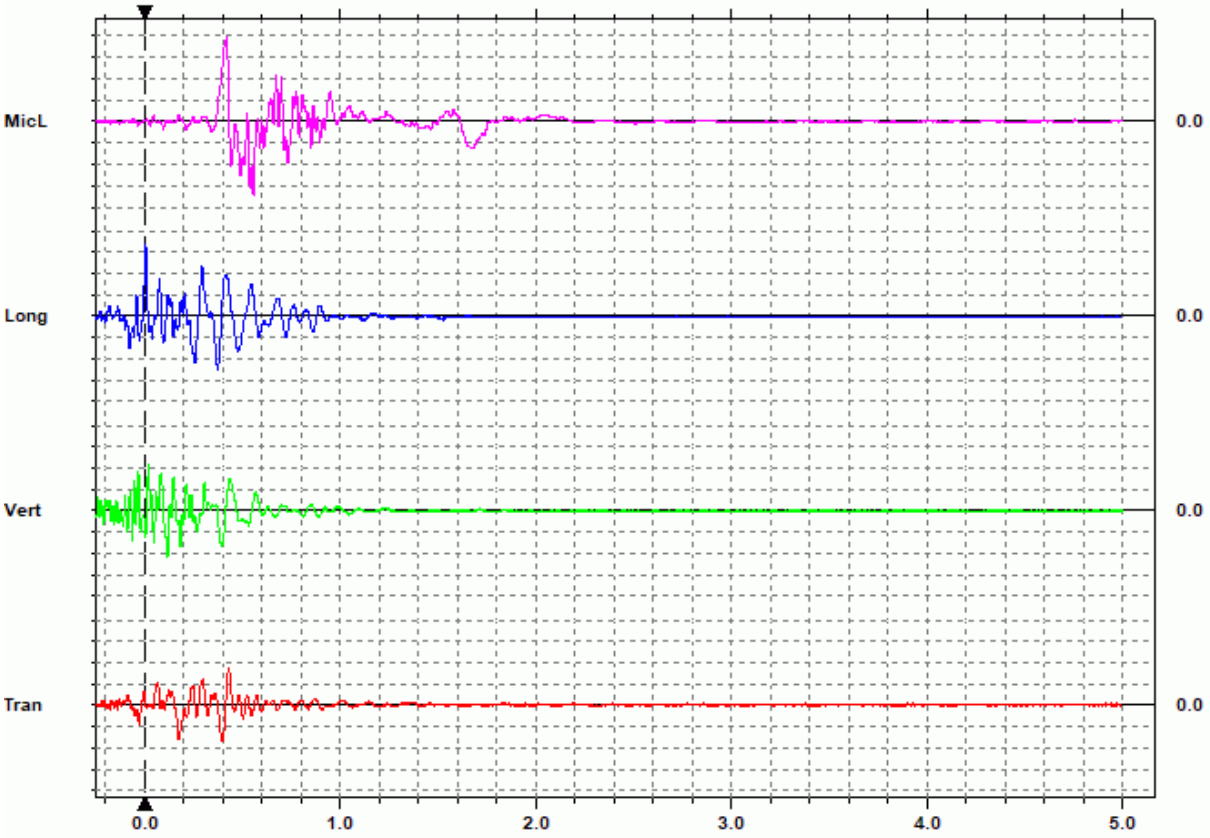
Microphone	Linear Weighting
PSPL	125.7 dB(L) at 0.418 sec.
ZC Freq	7.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.56	4.32	6.73	mm/s
ZC Freq	14	27	20	Hz
Time (Rel. to Trig)	0.429	0.019	0.005	sec
Peak Acceleration	0.0398	0.0795	0.0928	g
Peak Displacement	0.0478	0.0489	0.0695	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.20 mm/s At 0.005 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: February 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:45 February 12, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IBR8.DX0W
Job Number	8177		

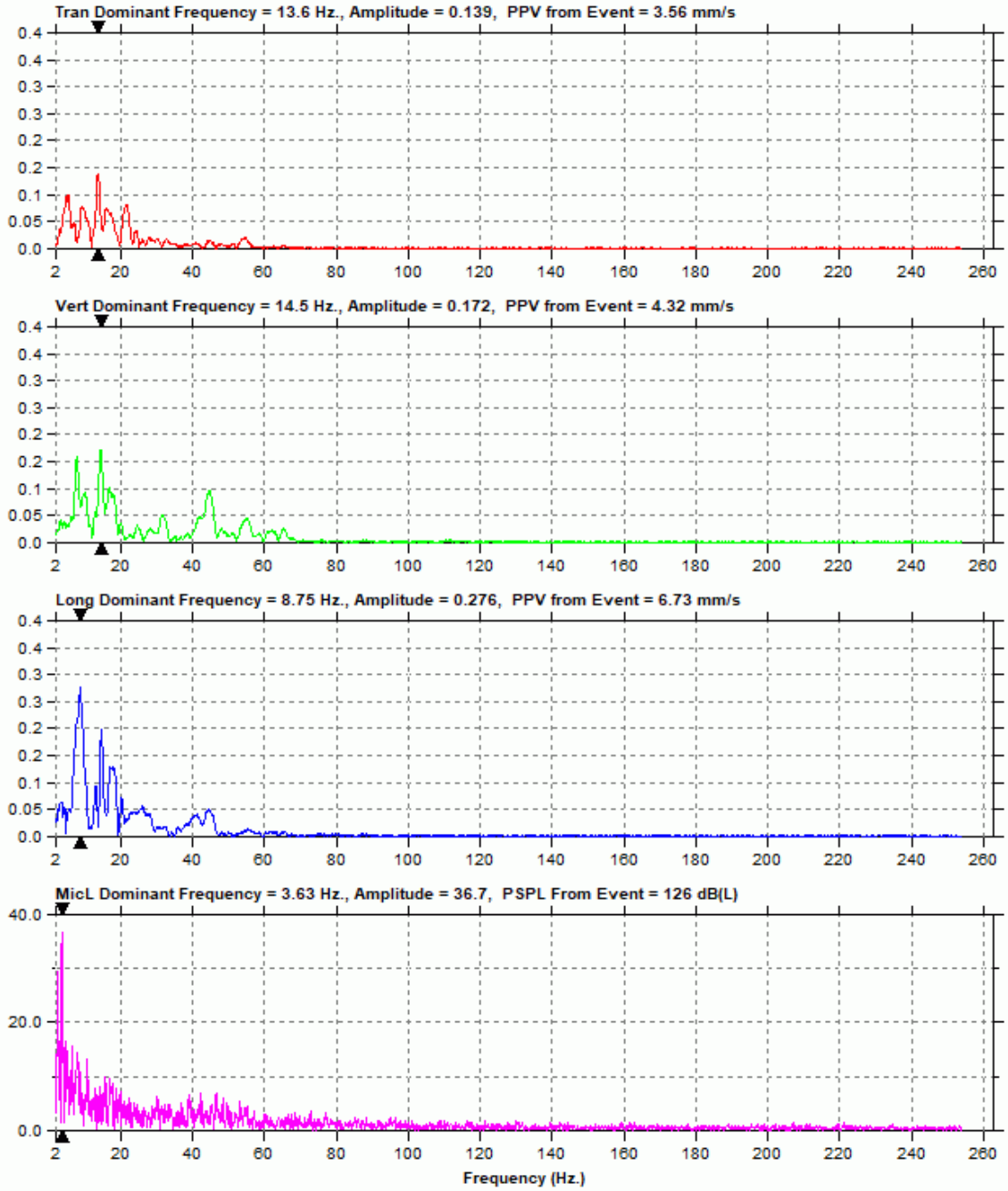
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 12, 2020 07:57:49
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:22 February 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IC61.QY0W

Post Event Notes

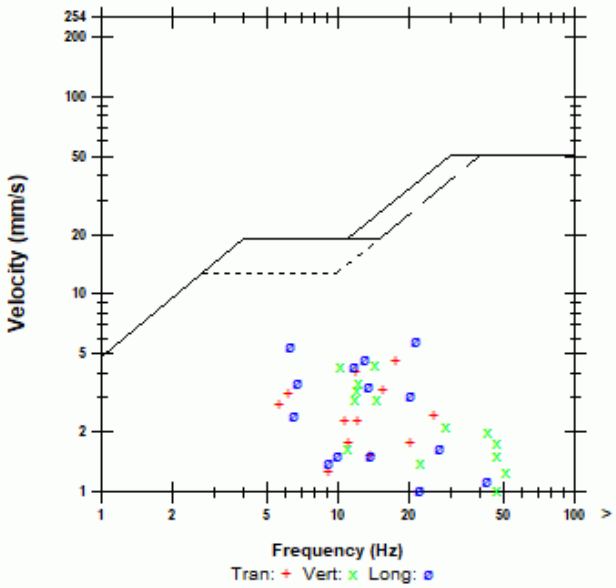
Extended Notes
Combo Mode February 20, 2020 05:16:54
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

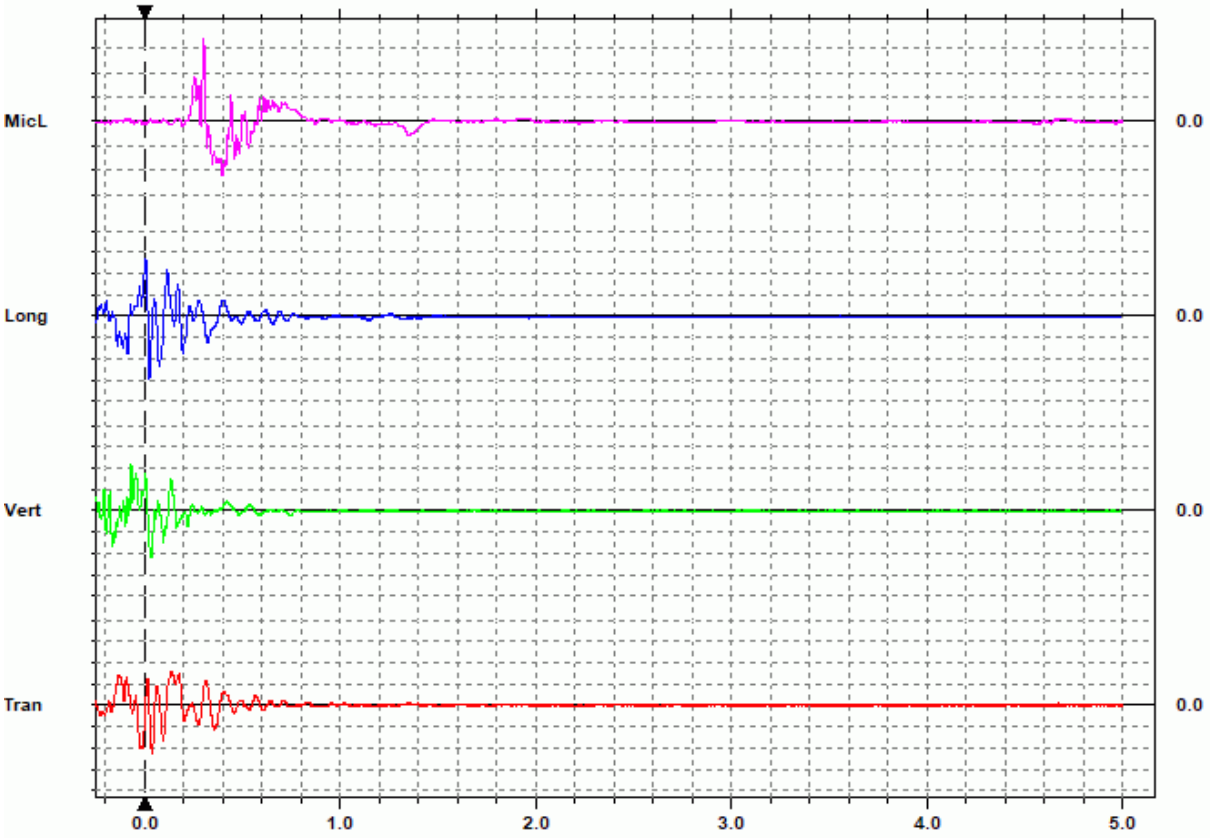
Microphone	Linear Weighting
PSPL	130.7 dB(L) at 0.302 sec.
ZC Freq	20 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.57	4.44	5.84	mm/s
ZC Freq	18	14	21	Hz
Time (Rel. to Trig)	0.038	0.030	0.024	sec
Peak Acceleration	0.0663	0.0928	0.106	g
Peak Displacement	0.0932	0.0548	0.0846	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.93 mm/s At 0.027 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:22 February 20, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IC61.QY0W
Job Number	8177		

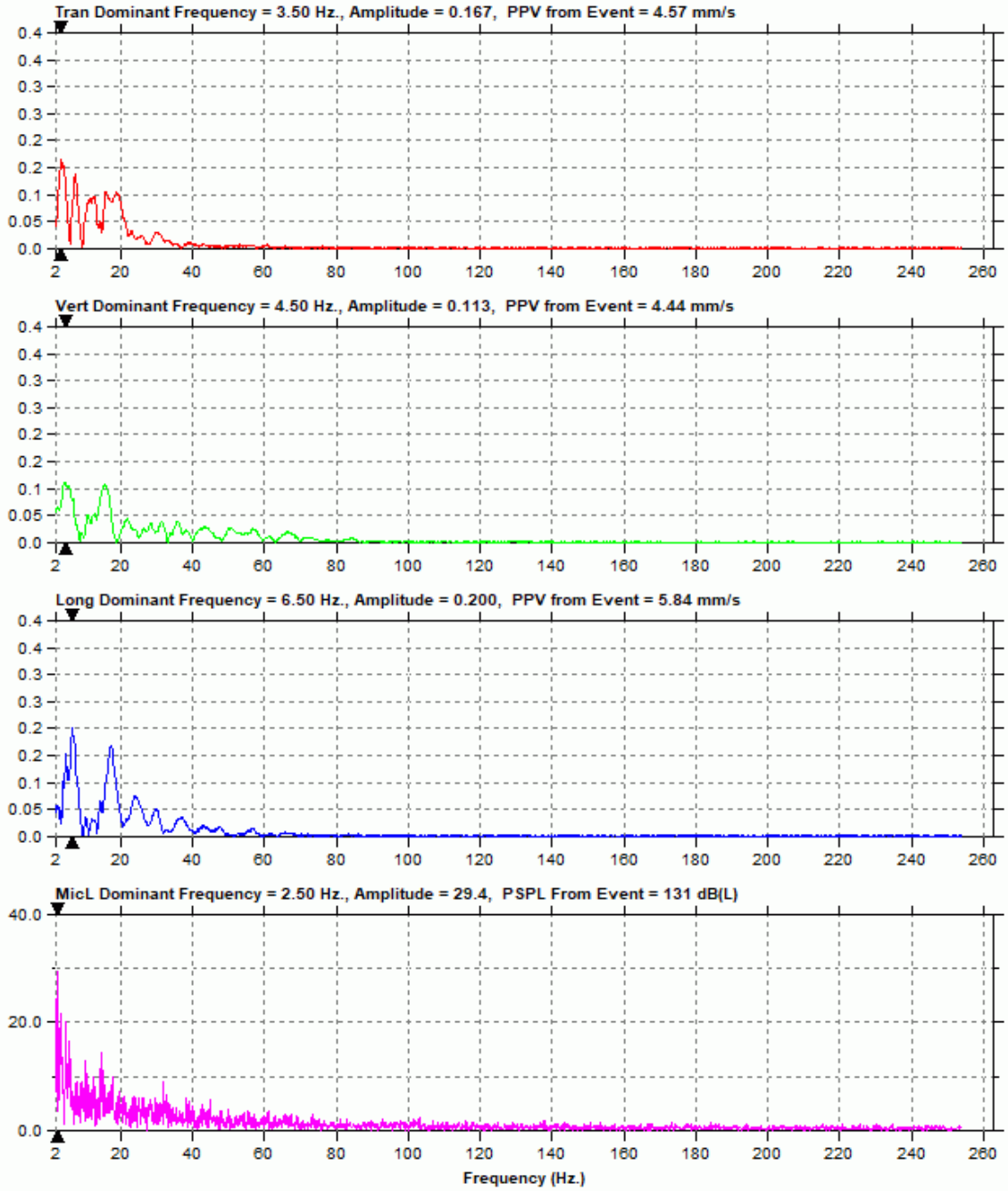
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 20, 2020 05:16:54
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:12:10 February 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IC9R.OA0W

Post Event Notes

Extended Notes

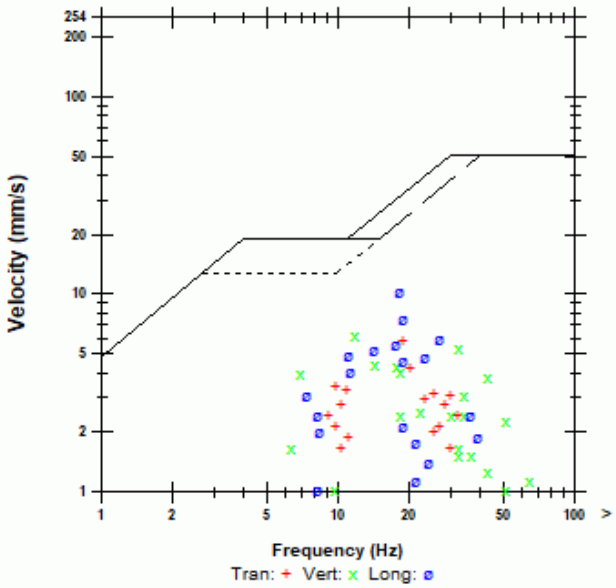
Combo Mode February 22, 2020 11:05:35
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

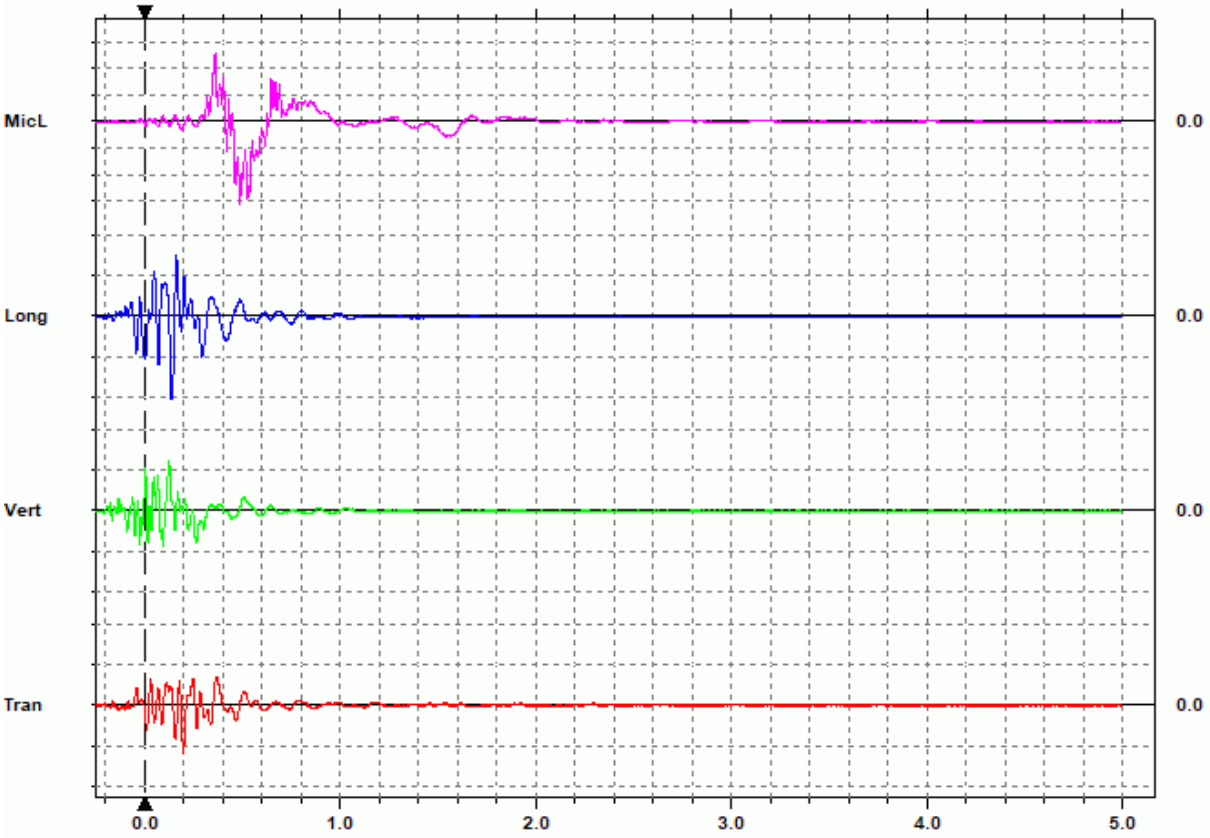
Microphone	Linear Weighting
PSPL	129.9 dB(L) at 0.488 sec.
ZC Freq	2.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.84	6.22	10.3	mm/s
ZC Freq	19	12	18	Hz
Time (Rel. to Trig)	0.198	0.125	0.139	sec
Peak Acceleration	0.0795	0.133	0.119	g
Peak Displacement	0.0515	0.0683	0.0899	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.5 mm/s At 0.139 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:12:10 February 22, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IC9R.OA0W
Job Number	8177		

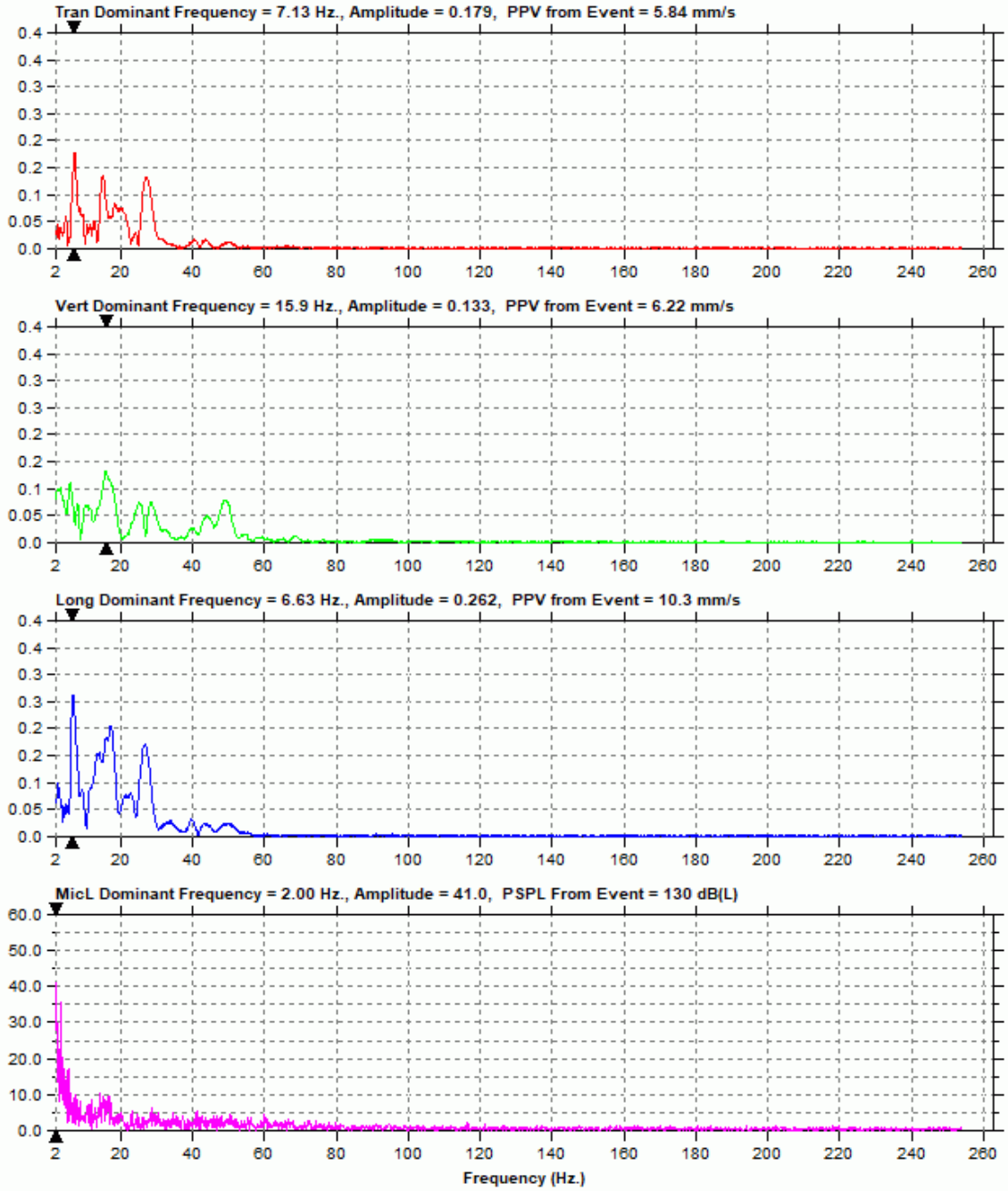
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 22, 2020 11:05:35
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:19 February 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043ICFA.ZJ0W

Post Event Notes

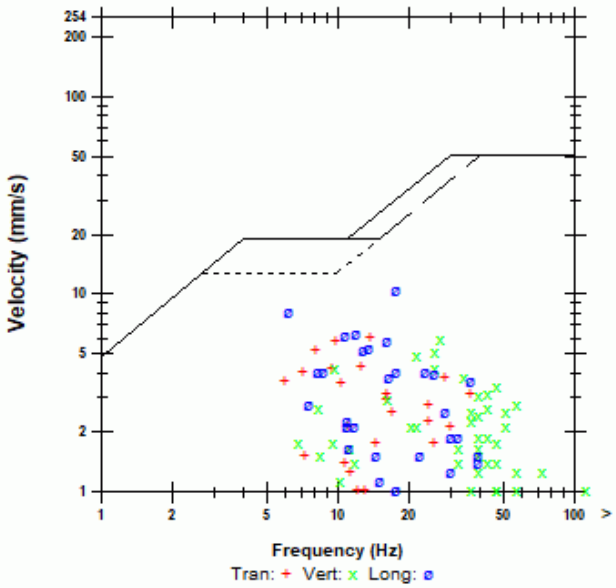
Extended Notes
Combo Mode February 25, 2020 05:16:50
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

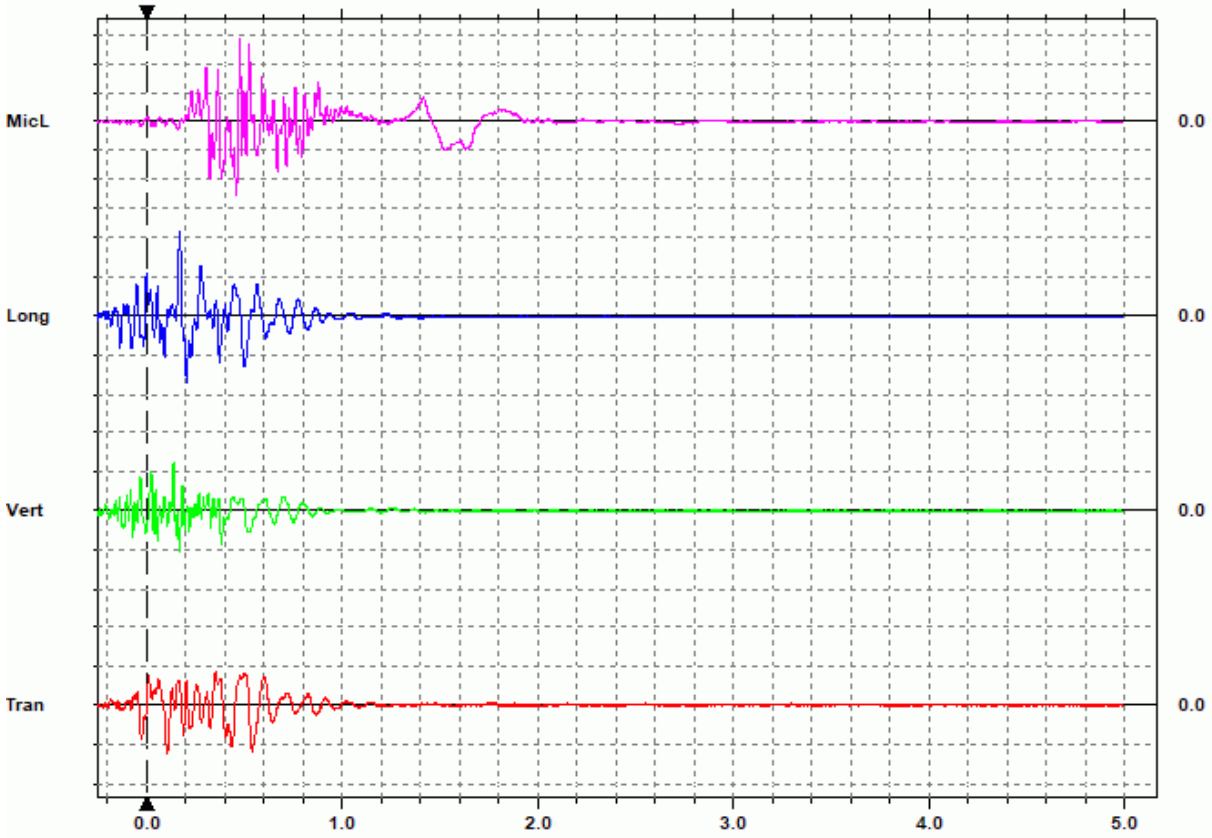
Microphone	Linear Weighting
PSPL	129.2 dB(L) at 0.479 sec.
ZC Freq	37 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	5.97	10.5	mm/s
ZC Freq	14	27	18	Hz
Time (Rel. to Trig)	0.107	0.140	0.171	sec
Peak Acceleration	0.0795	0.119	0.133	g
Peak Displacement	0.107	0.0527	0.135	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.0 mm/s At 0.171 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:19 February 25, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043ICFA.ZJ0W
Job Number	8177		

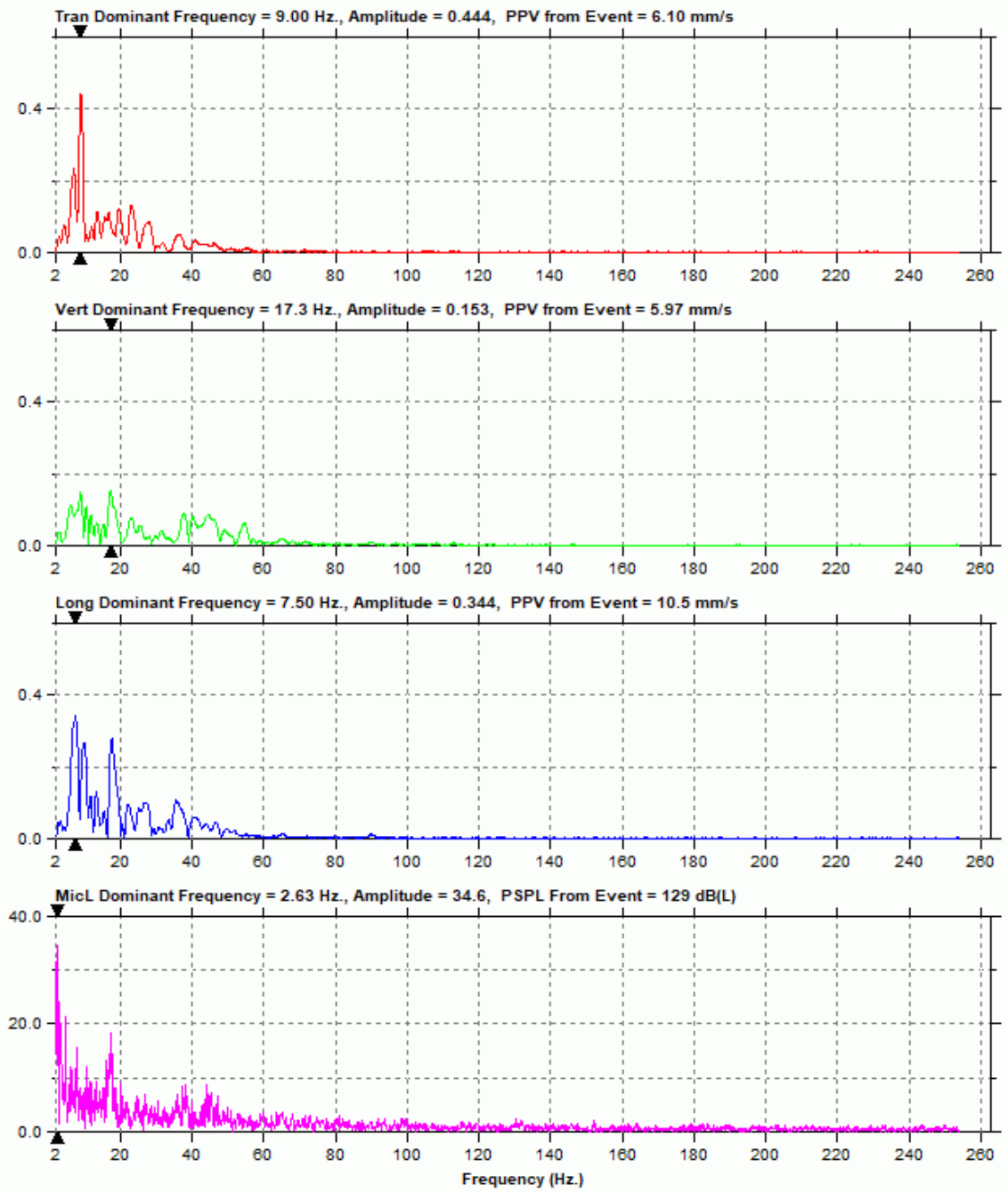
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 25, 2020 05:16:50
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:45 February 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043ICKV.590W

Post Event Notes

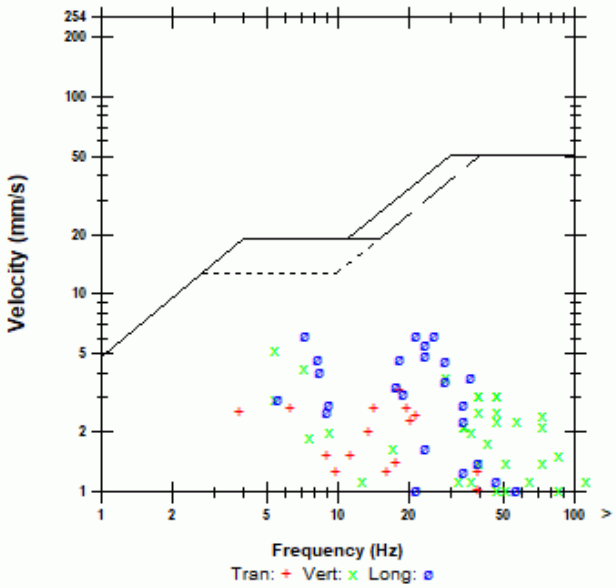
Extended Notes
Combo Mode February 28, 2020 06:47:17
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

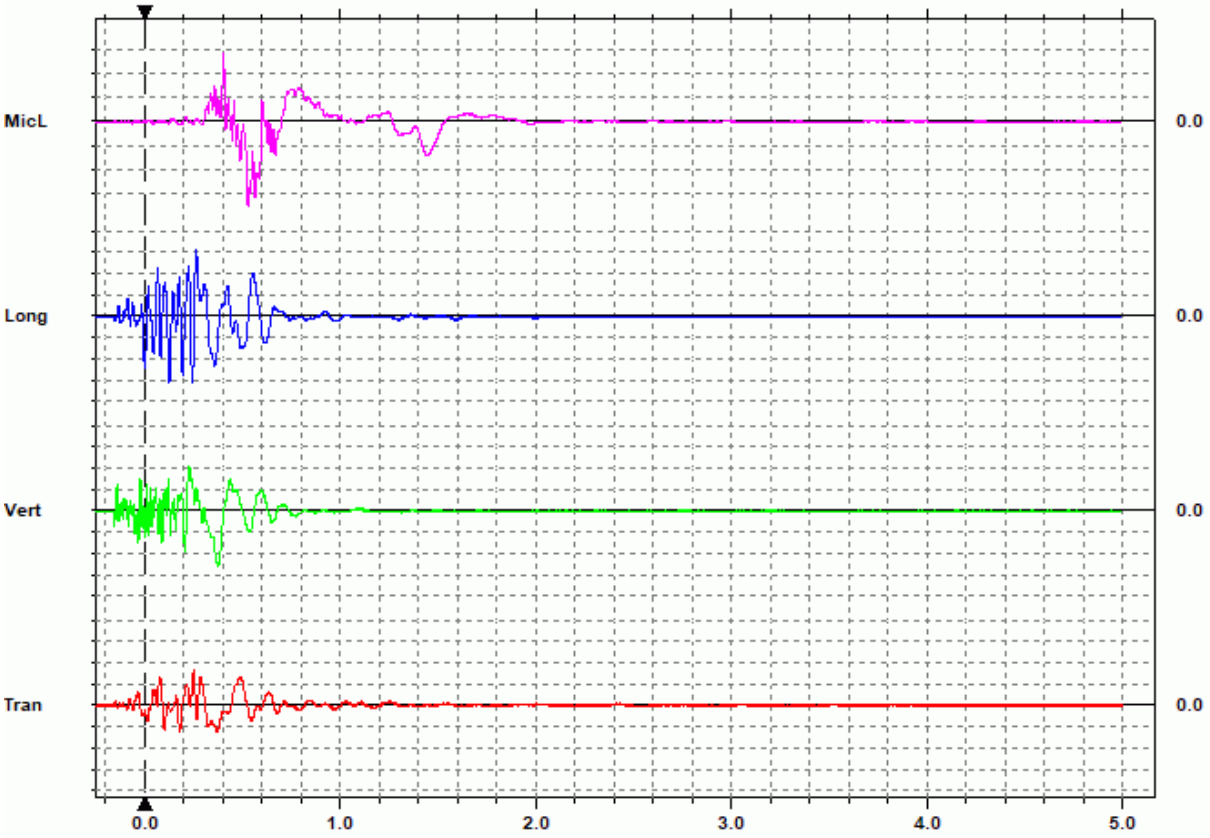
Microphone	Linear Weighting
PSPL	130.8 dB(L) at 0.528 sec.
ZC Freq	3.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	5.21	6.22	mm/s
ZC Freq	18	5.3	21	Hz
Time (Rel. to Trig)	0.250	0.372	0.127	sec
Peak Acceleration	0.0530	0.133	0.106	g
Peak Displacement	0.0882	0.131	0.0979	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.17 mm/s At 0.244 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: February 28, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:45 February 28, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043ICKV.590W
Job Number	8177		

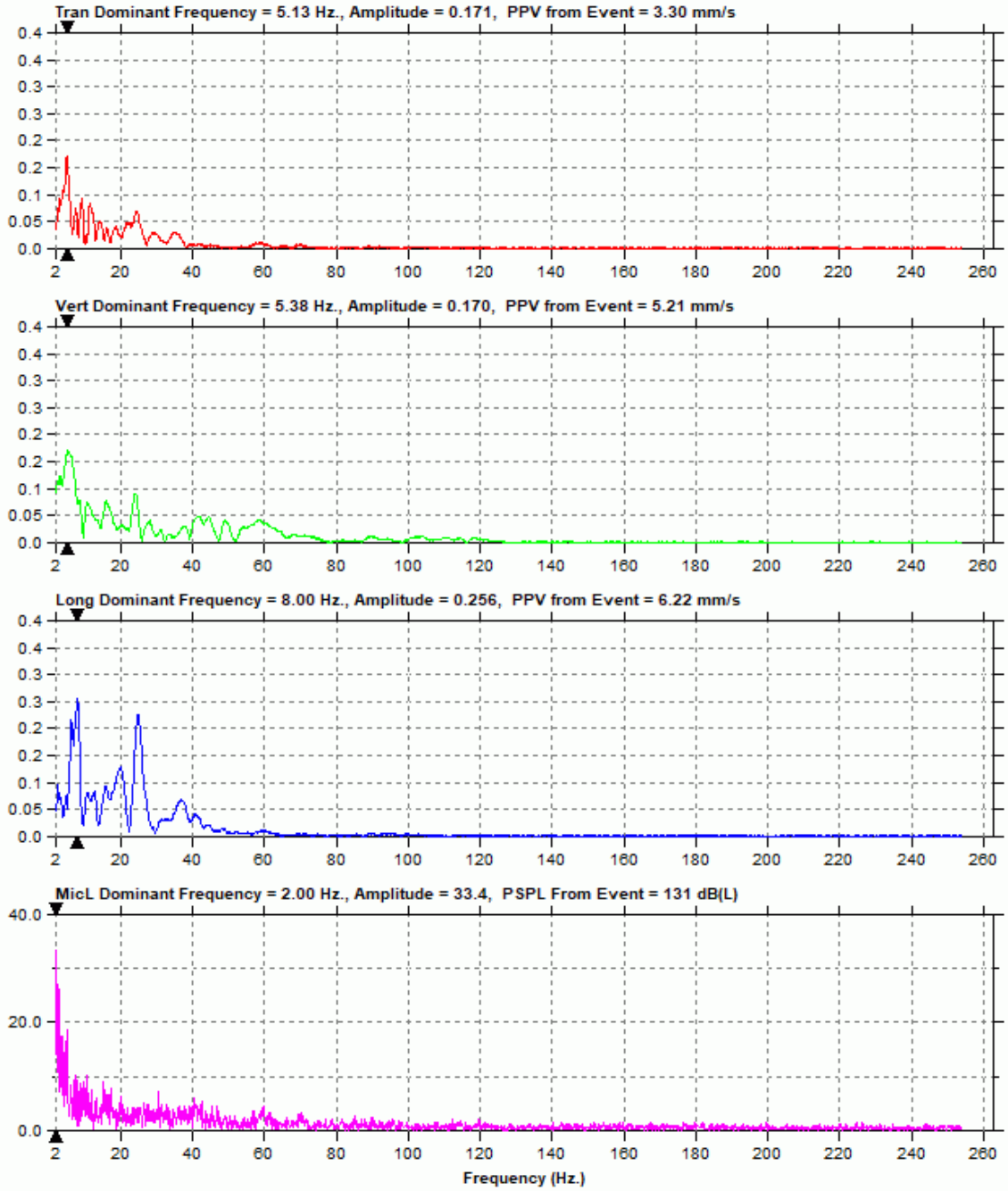
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode February 28, 2020 06:47:17
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: February 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units

			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
10-Dec-19	**WCRR-28**	15:58	0.38mm/s	109.2dB(L)	1.14mm/s	117.1dB(L)	0.64mm/s	110.9dB(L)	0.25mm/s	101.0dB(L)	0.64mm/s	108.8dB(L)	**Not Applicable**							
2-Mar-20	**WCRR-61**	16:00	0.51mm/s	131.1dB(L)	1.78mm/s	124.7dB(L)	0.51mm/s	124.0dB(L)	0.51mm/s	142.2dB(L)	0.64mm/s	125.6dB(L)	1.40mm/s	138.8dB(L)	0.25mm/s	126.2dB(L)	0.38mm/s	125.0dB(L)	0.25mm/s	130.4dB(L)
		18:10	0.25mm/s	127.0dB(L)	0.25mm/s	114.4dB(L)	0.25mm/s	122.8dB(L)	0.25mm/s	134.5dB(L)	0.38mm/s	125.6dB(L)	0.76mm/s	132.0dB(L)	0.25mm/s	122.8dB(L)	0.25mm/s	119.0dB(L)	0.25mm/s	122.0dB(L)
3-Mar-20	**WCRR-62**	16:00	8.13mm/s	125.6dB(L)	1.14mm/s	120.3dB(L)	16.60mm/s	130.5dB(L)	0.76mm/s	134.5dB(L)	12.06mm/s	130.2dB(L)	3.18mm/s	134.1dB(L)	1.27mm/s	126.5dB(L)	1.91mm/s	118.6dB(L)	1.52mm/s	123.9dB(L)
4-Mar-20	**WCRR-63**	16:00	4.70mm/s	132.4dB(L)	1.40mm/s	125.3dB(L)	6.86mm/s	125.3dB(L)	0.38mm/s	137.6dB(L)	8.00mm/s	123.4dB(L)	2.29mm/s	139.9dB(L)	0.64mm/s	128.2dB(L)	1.27mm/s	128.3dB(L)	0.64mm/s	130.6dB(L)
	WCRR-64																			
5-Mar-20	**WCRR-65**	16:00	3.94mm/s	121.8dB(L)	0.76mm/s	110.6dB(L)	4.45mm/s	122.0dB(L)	1.02mm/s	111.5dB(L)	5.21mm/s	123.6dB(L)	2.67mm/s	119.9dB(L)	1.14mm/s	117.2dB(L)	1.52mm/s	119.0dB(L)	1.52mm/s	114.4dB(L)
6-Mar-20	**WCRR-66**	16:00	2.41mm/s	118.6dB(L)	0.51mm/s	103.5dB(L)	2.03mm/s	117.9dB(L)	1.14mm/s	109.5dB(L)	2.54mm/s	117.2dB(L)	3.05mm/s	118.5dB(L)	1.52mm/s	118.2dB(L)	1.91mm/s	119.0dB(L)	1.14mm/s	112.8dB(L)
7-Mar-20	**WCRR-67**	15:51	1.78mm/s	126.0dB(L)	0.51mm/s	108.4dB(L)	1.52mm/s	120.0dB(L)	1.14mm/s	117.1dB(L)	1.91mm/s	121.3dB(L)	2.03mm/s	125.1dB(L)	1.52mm/s	125.9dB(L)	2.03mm/s	125.8dB(L)	1.52mm/s	120.4dB(L)
17-Mar-20	**WCRR-68**	16:00	0.76mm/s	125.2dB(L)	3.18mm/s	132.3dB(L)	1.14mm/s	127.1dB(L)	0.38mm/s	119.1dB(L)	1.02mm/s	125.6dB(L)	0.64mm/s	121.3dB(L)	0.38mm/s	120.1dB(L)	0.38mm/s	120.2dB(L)	0.38mm/s	119.9dB(L)
18-Mar-20	**WCRR-69**	16:00	2.29mm/s	116.4dB(L)	1.02mm/s	117.5dB(L)	3.94mm/s	120.8dB(L)	0.51mm/s	103.5dB(L)	3.56mm/s	119.7dB(L)	1.27mm/s	110.6dB(L)	0.64mm/s	108.0dB(L)	0.89mm/s	110.2dB(L)	0.64mm/s	108.8dB(L)
19-Mar-20	**WCRR-70**	16:10	0.76mm/s	111.2dB(L)	0.89mm/s	119.2dB(L)	1.27mm/s	111.8dB(L)	0.25mm/s	118.1dB(L)	1.02mm/s	111.5dB(L)	0.51mm/s	112.3dB(L)	0.38mm/s	111.5dB(L)	0.38mm/s	101.9dB(L)	0.38mm/s	100.0dB(L)
20-Mar-20	**WCRR-71**	16:10	1.27mm/s	115.7dB(L)	0.38mm/s	107.0dB(L)	1.02mm/s	113.1dB(L)	2.29mm/s	113.3dB(L)	1.52mm/s	114.4dB(L)	4.19mm/s	121.8dB(L)	6.48mm/s	121.9dB(L)	6.98mm/s	125.1dB(L)	5.46mm/s	118.1dB(L)
21-Mar-20	**WCRR-72**	16:03	1.14mm/s	116.9dB(L)	0.51mm/s	104.2dB(L)	1.02mm/s	114.6dB(L)	2.16mm/s	117.8dB(L)	1.14mm/s	114.4dB(L)	3.81mm/s	120.1dB(L)	8.51mm/s	123.2dB(L)	7.87mm/s	124.3dB(L)	5.97mm/s	122.4dB(L)
23-Mar-20	**WCRR-73**	16:03	0.64mm/s	114.2dB(L)	2.79mm/s	117.4dB(L)	1.27mm/s	120.5dB(L)	0.25mm/s	117.2dB(L)	0.89mm/s	117.8dB(L)	0.51mm/s	114.8dB(L)	0.38mm/s	113.1dB(L)	0.38mm/s	107.5dB(L)	0.25mm/s	107.0dB(L)
24-Mar-20	**WCRR-74**	16:15	1.14mm/s	115.9dB(L)	0.51mm/s	105.5dB(L)	0.89mm/s	116.6dB(L)	2.92mm/s	117.5dB(L)	1.02mm/s	119.0dB(L)	3.05mm/s	126.2dB(L)	6.22mm/s	125.3dB(L)	4.45mm/s	123.5dB(L)	4.83mm/s	123.2dB(L)
25-Mar-20	**WCRR-75**	15:58	0.51mm/s	107.5dB(L)	3.56mm/s	123.9dB(L)	1.02mm/s	109.9dB(L)	0.25mm/s	116.3dB(L)	0.76mm/s	110.2dB(L)	0.38mm/s	108.4dB(L)	0.38mm/s	108.8dB(L)	0.38mm/s	112.6dB(L)	0.25mm/s	101.9dB(L)
26-Mar-20	**WCRR-76**	15:59	1.14mm/s	129.2dB(L)	3.05mm/s	122.0dB(L)	2.16mm/s	124.4dB(L)	0.76mm/s	135.6dB(L)	1.65mm/s	127.8dB(L)	0.89mm/s	130.2dB(L)	0.76mm/s	120.5dB(L)	0.76mm/s	118.2dB(L)	0.51mm/s	120.8dB(L)
27-Mar-20	**WCRR-77**	16:10	1.52mm/s	123.4dB(L)	2.54mm/s	120.0dB(L)	3.05mm/s	116.4dB(L)	0.51mm/s	135.1dB(L)	2.12mm/s	117.5dB(L)	1.14mm/s	134.1dB(L)	0.89mm/s	118.1dB(L)	1.02mm/s	112.6dB(L)	0.64mm/s	117.2dB(L)
28-Mar-20	**WCRR-78**	16:05	1.65mm/s	117.2dB(L)	2.54mm/s	124.3dB(L)	2.92mm/s	120.4dB(L)	0.38mm/s	113.1dB(L)	2.67mm/s	119.0dB(L)	1.27mm/s	113.5dB(L)	0.51mm/s	110.6dB(L)	0.64mm/s	110.9dB(L)	0.51mm/s	108.8dB(L)
30-Mar-20	**WCRR-79**	16:03	0.89mm/s	114.2dB(L)	3.68mm/s	123.4dB(L)	1.65mm/s	117.1dB(L)	0.38mm/s	104.9dB(L)	1.27mm/s	116.1dB(L)	0.64mm/s	110.6dB(L)	0.64mm/s	108.0dB(L)	0.64mm/s	107.0dB(L)	0.51mm/s	104.9dB(L)
31-Mar-20	**WCRR-80**	16:03	1.14mm/s	113.3dB(L)	2.79mm/s	118.2dB(L)	3.30mm/s	115.4dB(L)	0.38mm/s	105.5dB(L)	2.29mm/s	115.0dB(L)	1.02mm/s	109.5dB(L)	0.38mm/s	105.5dB(L)	0.76mm/s	107.5dB(L)	0.38mm/s	108.4dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Long At 15:53:06 March 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408ICS9.GI0W

Post Event Notes

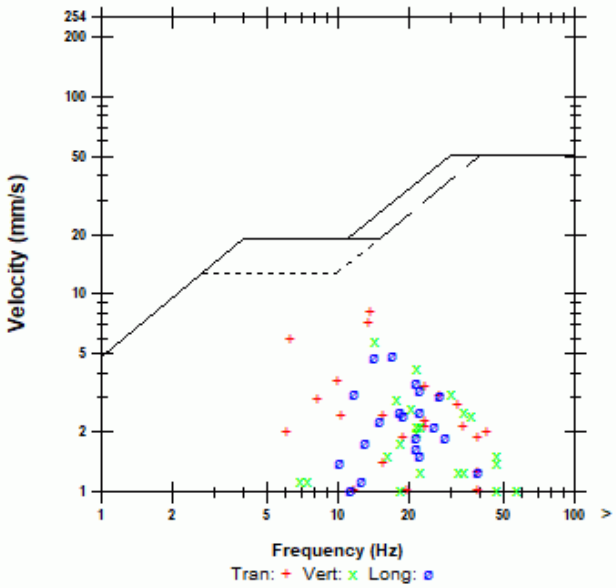
Extended Notes
Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

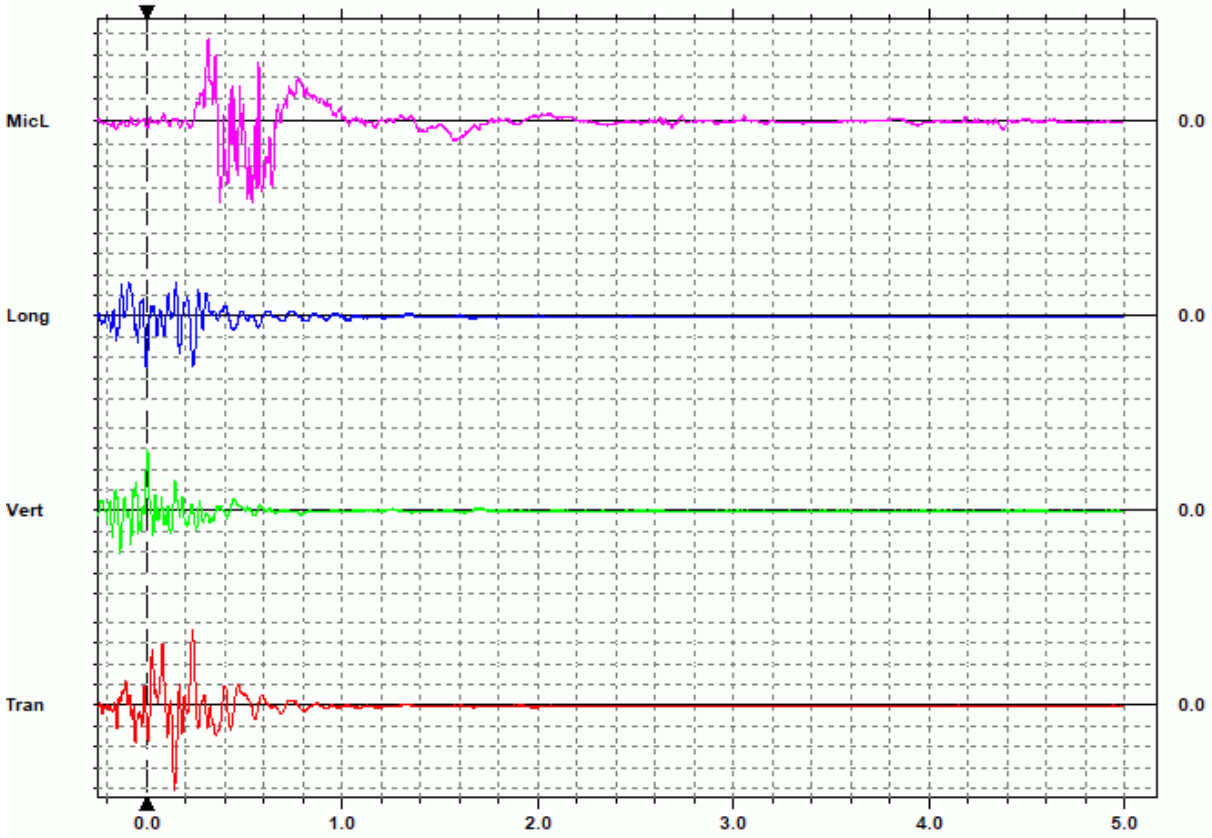
Microphone	Linear Weighting
PSPL	125.6 dB(L) at 0.316 sec.
ZC Freq	4.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.13	5.84	4.95	mm/s
ZC Freq	14	14	17	Hz
Time (Rel. to Trig)	0.146	0.007	0.000	sec
Peak Acceleration	0.0795	0.0795	0.0795	g
Peak Displacement	0.101	0.0486	0.0531	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.73 mm/s At 0.146 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:53:06 March 3, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408ICS9.GI0W
Job Number	8177		

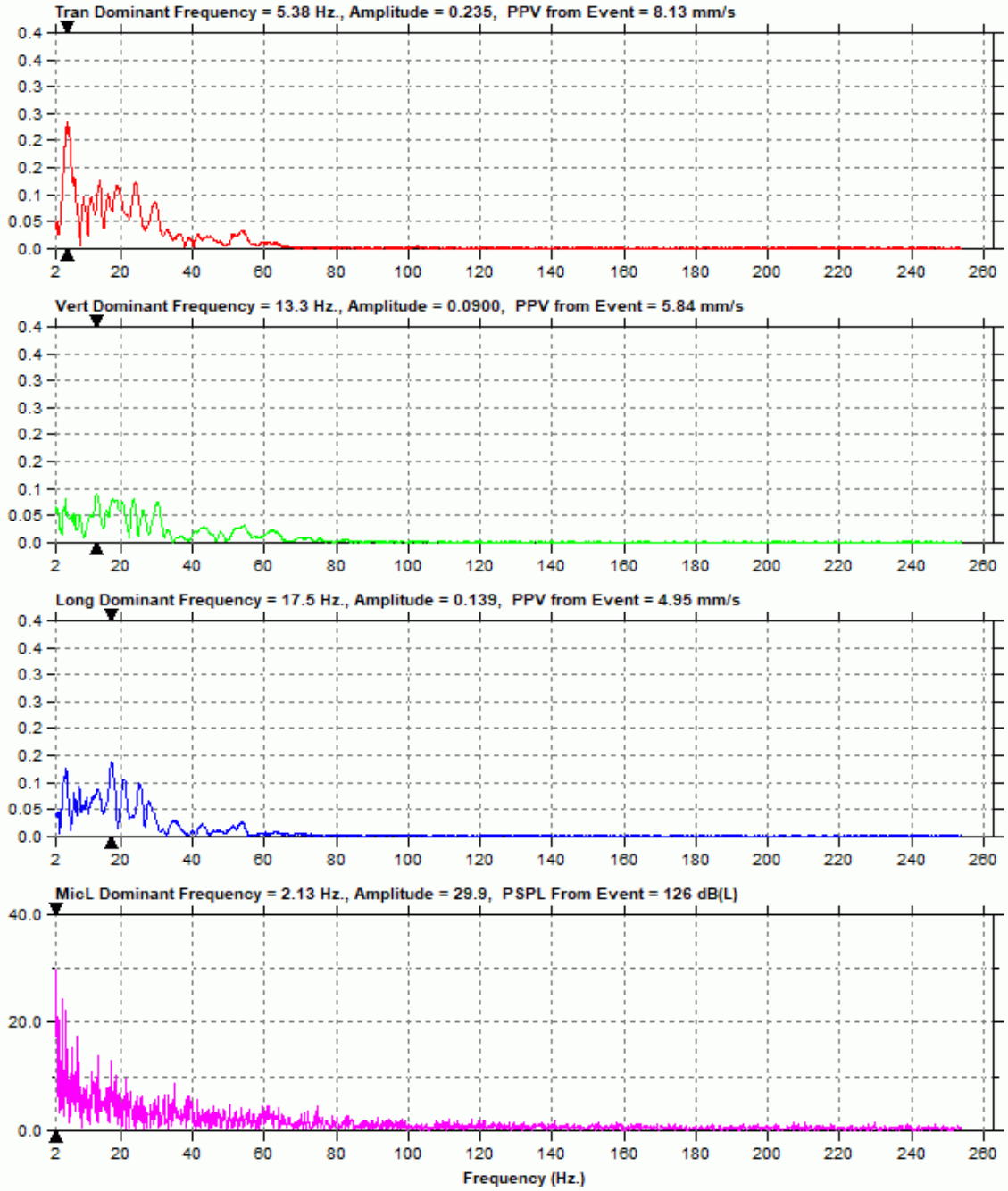
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:51:39 March 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251ICS9.E30W

Post Event Notes

Extended Notes

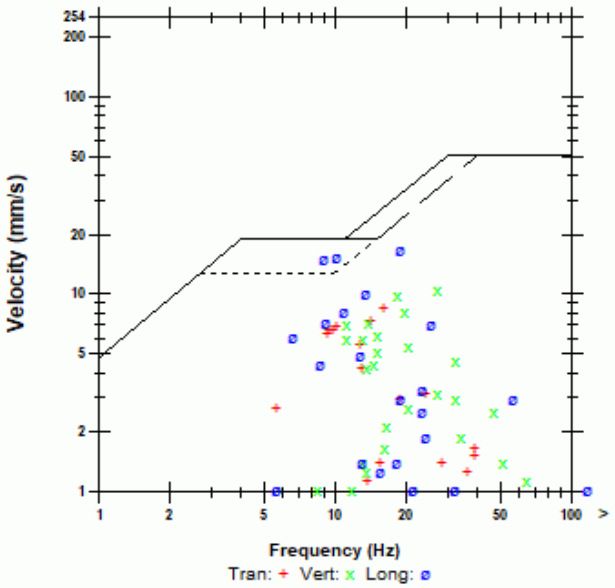
Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

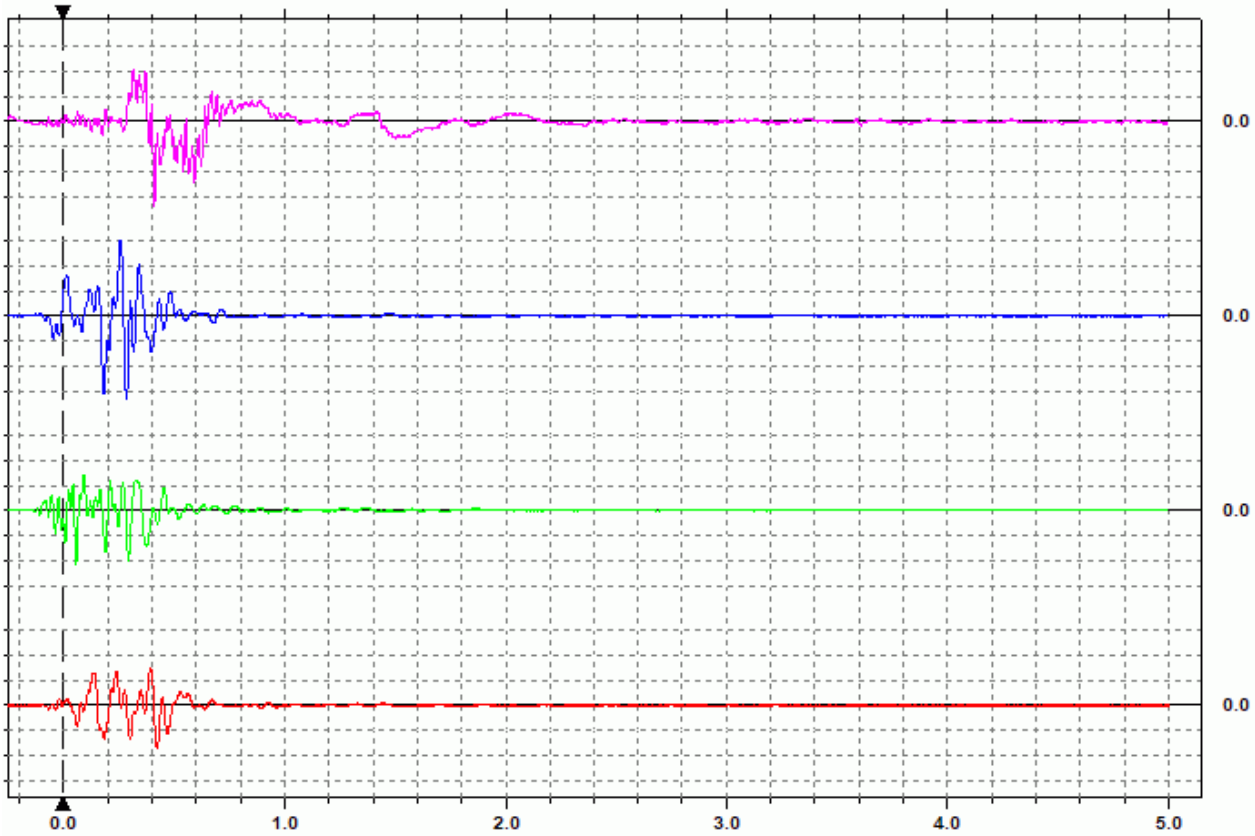
Microphone	Linear Weighting
PSPL	130.5 dB(L) at 0.411 sec.
ZC Freq	8.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.51	10.5	16.6	mm/s
ZC Freq	16	27	19	Hz
Time (Rel. to Trig)	0.422	0.057	0.284	sec
Peak Acceleration	0.106	0.186	0.212	g
Peak Displacement	0.117	0.101	0.195	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 17.6 mm/s At 0.183 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: March 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

FFT Report

Date/Time	Long at 15:51:39 March 3, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.000 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254.0 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Record Time	5.0 sec at 1024 sps	**File Name**	M251ICS9.E30W
Job Number:	8177		

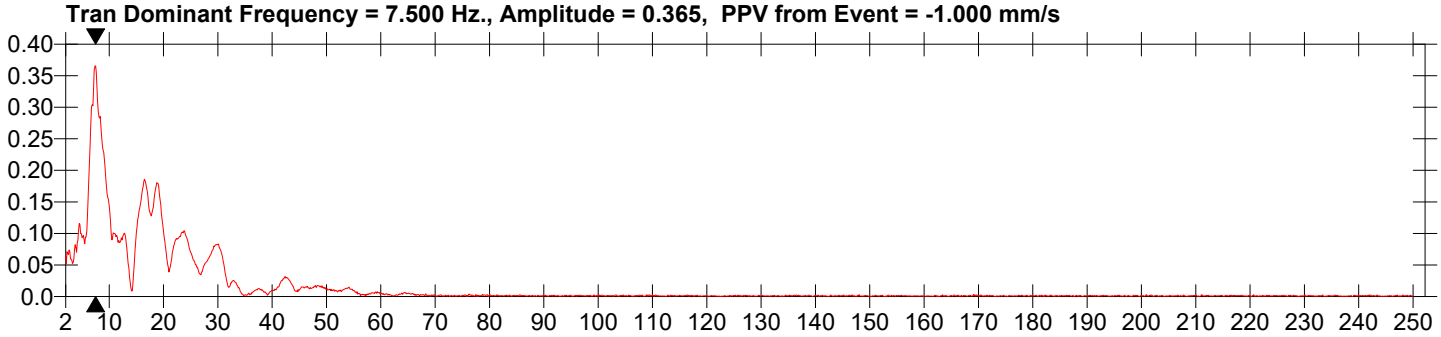
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

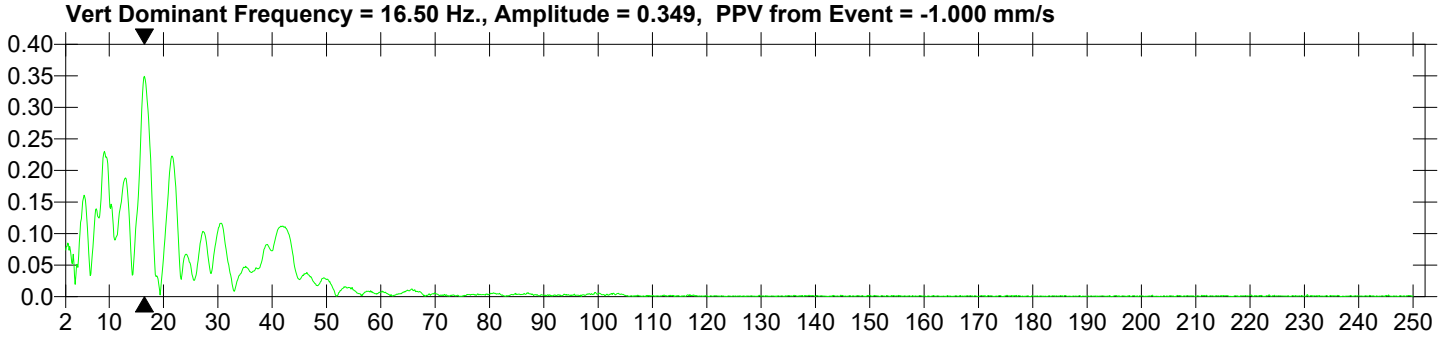
Extended Notes

Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

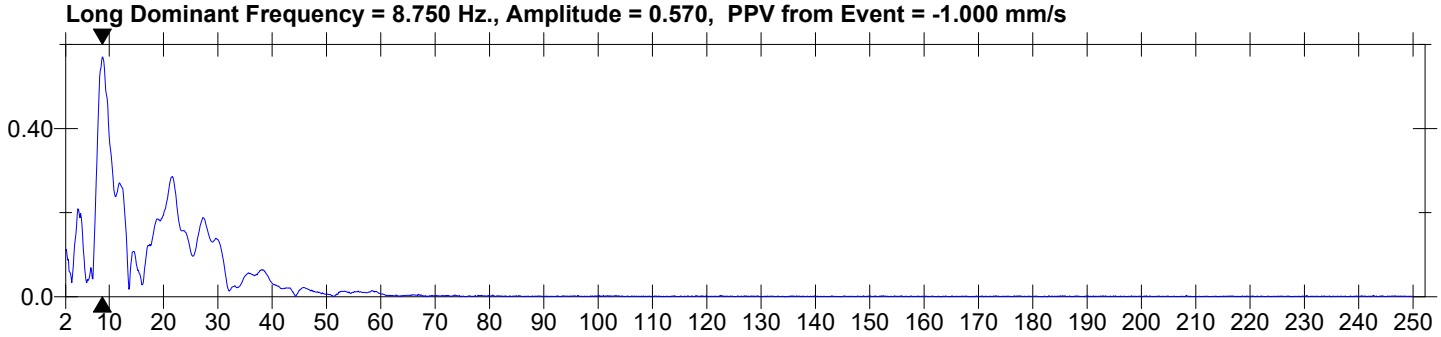
Tran Dominant Frequency = 7.500 Hz., Amplitude = 0.365, PPV from Event = -1.000 mm/s



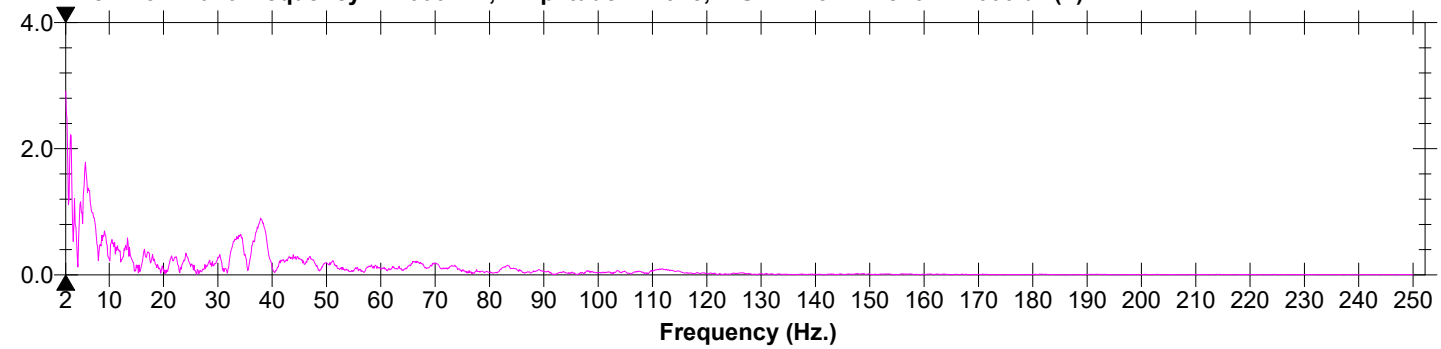
Vert Dominant Frequency = 16.50 Hz., Amplitude = 0.349, PPV from Event = -1.000 mm/s



Long Dominant Frequency = 8.750 Hz., Amplitude = 0.570, PPV from Event = -1.000 mm/s



MicL Dominant Frequency = 2.000 Hz., Amplitude = 2.913, PSPL From Event = -1.000 dB(L)



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EXPLOTECH

Date/Time	Long At 15:53:11 March 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251ICU4.4N0W

Post Event Notes

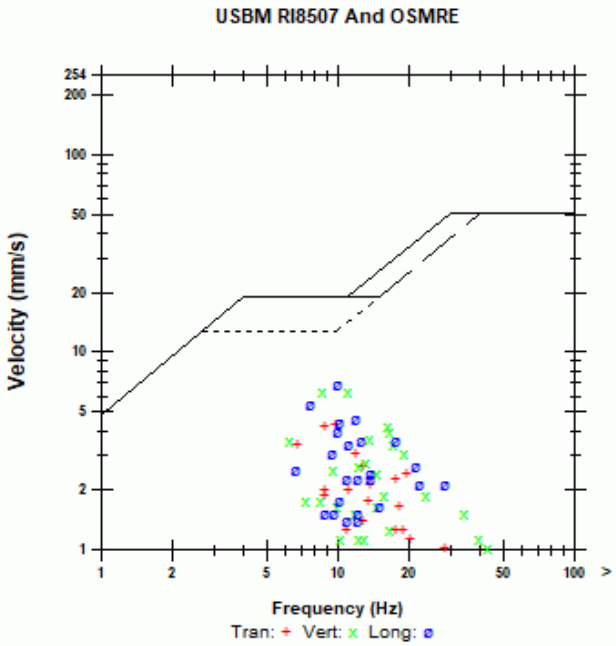
Extended Notes

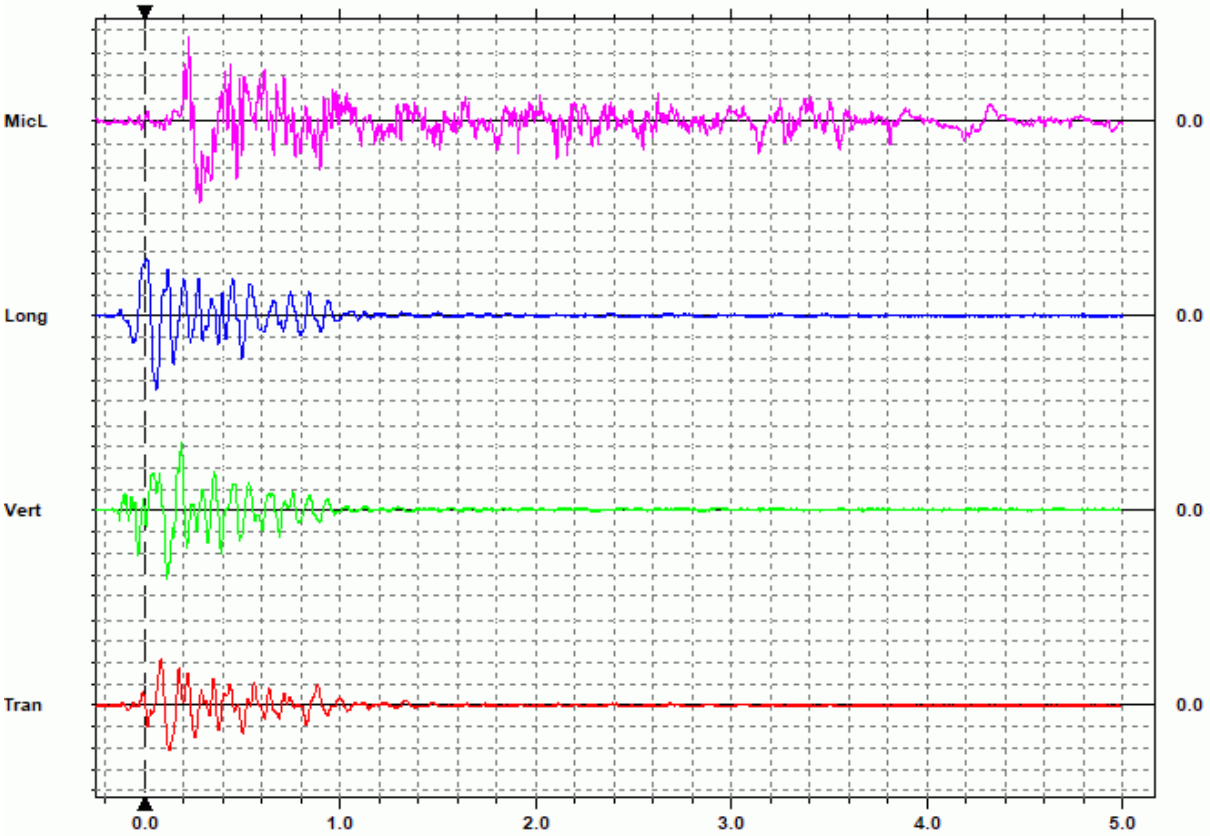
Combo Mode March 4, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	125.3 dB(L) at 0.229 sec.
ZC Freq	4.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.32	6.35	6.86	mm/s
ZC Freq	9.8	8.5	10	Hz
Time (Rel. to Trig)	0.084	0.115	0.063	sec
Peak Acceleration	0.0398	0.0663	0.0663	g
Peak Displacement	0.0797	0.104	0.128	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.36 mm/s At 0.121 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:53:11 March 4, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251ICU4.4N0W
Job Number	8177		

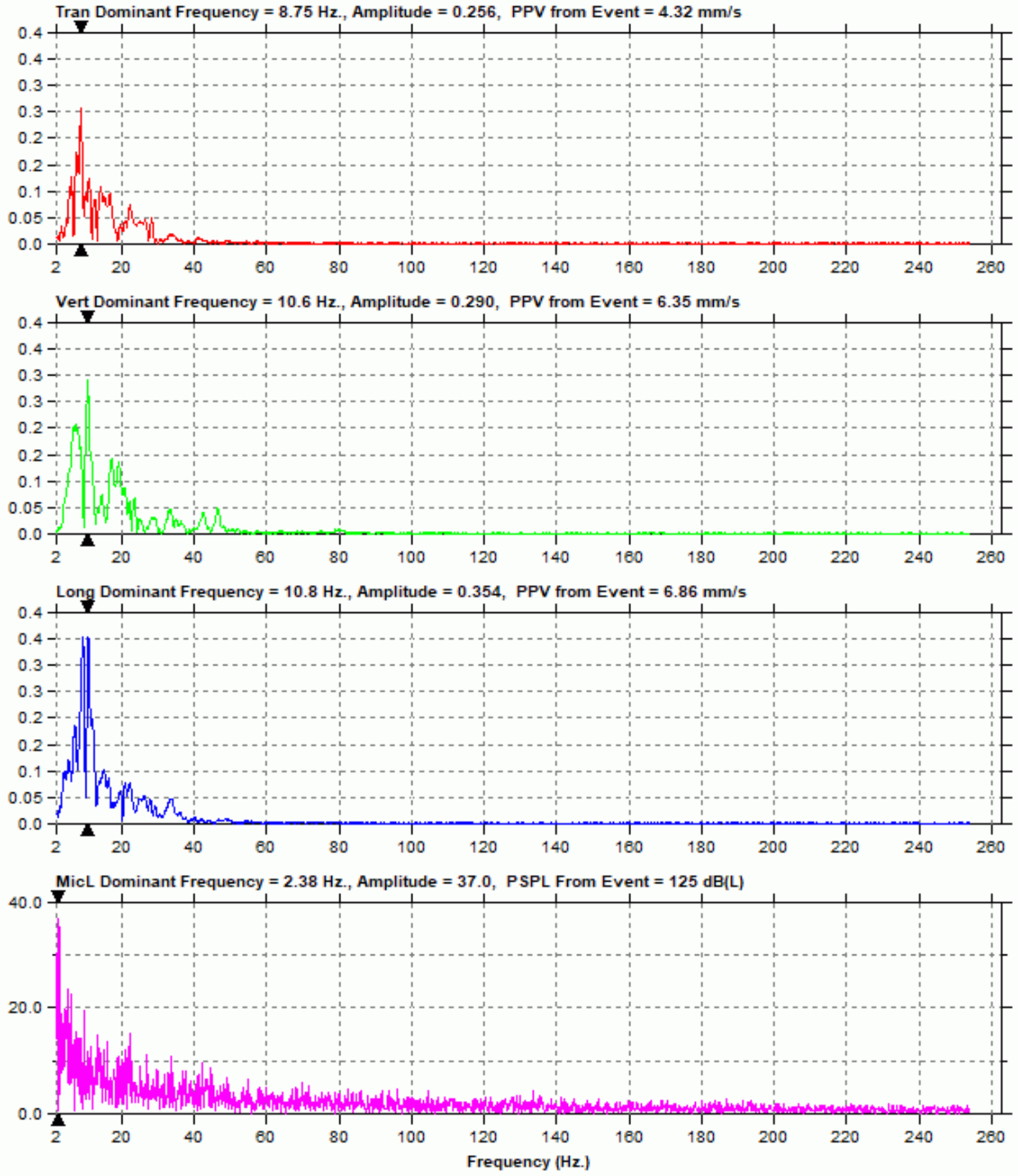
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 4, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:51:57 March 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263ICS9.EL0W

Post Event Notes

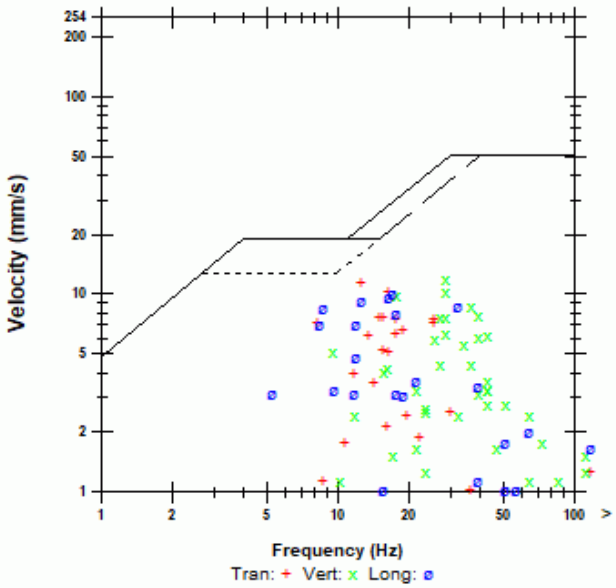
Extended Notes
Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

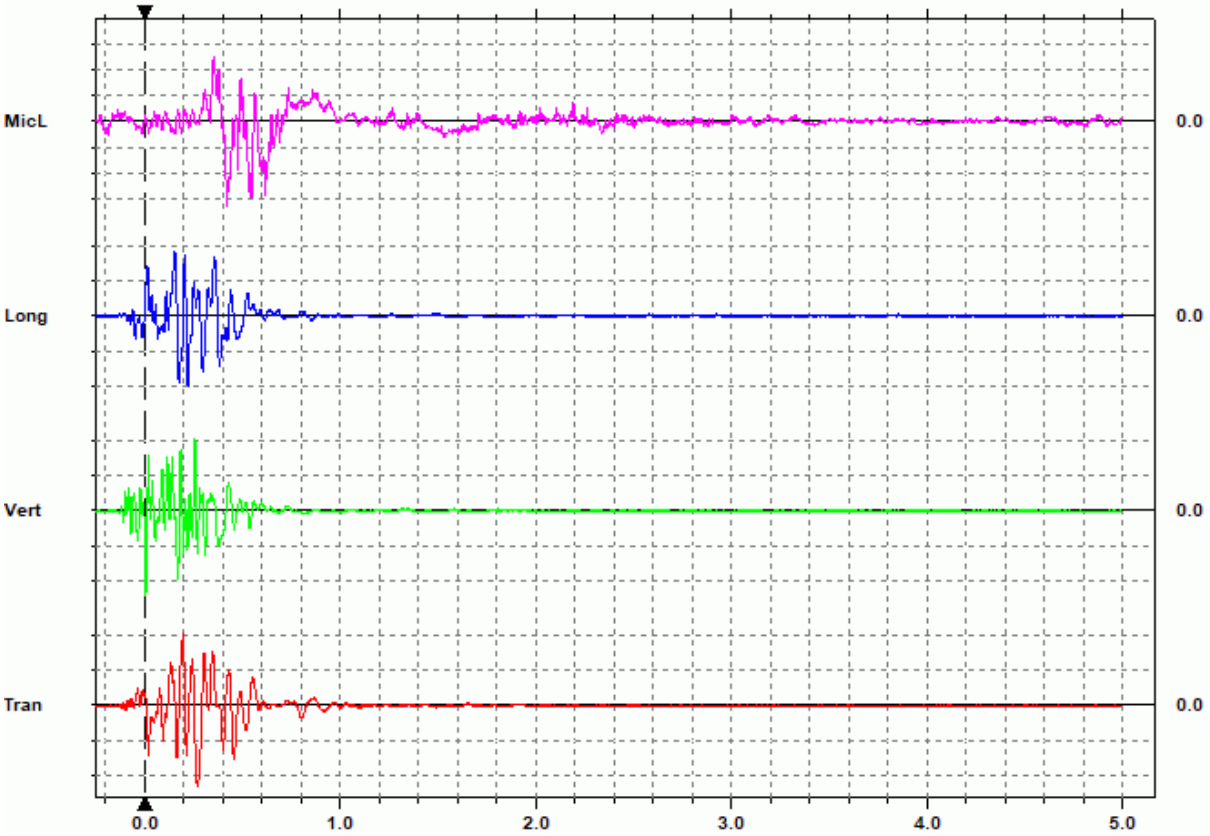
Microphone	Linear Weighting
PSPL	130.2 dB(L) at 0.421 sec.
ZC Freq	9.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	11.6	12.1	10.0	mm/s
ZC Freq	12	28	17	Hz
Time (Rel. to Trig)	0.270	0.006	0.221	sec
Peak Acceleration	0.159	0.225	0.199	g
Peak Displacement	0.156	0.0868	0.121	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.4 mm/s At 0.270 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: March 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:51:57 March 3, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263ICS9.EL0W
Job Number	8177		

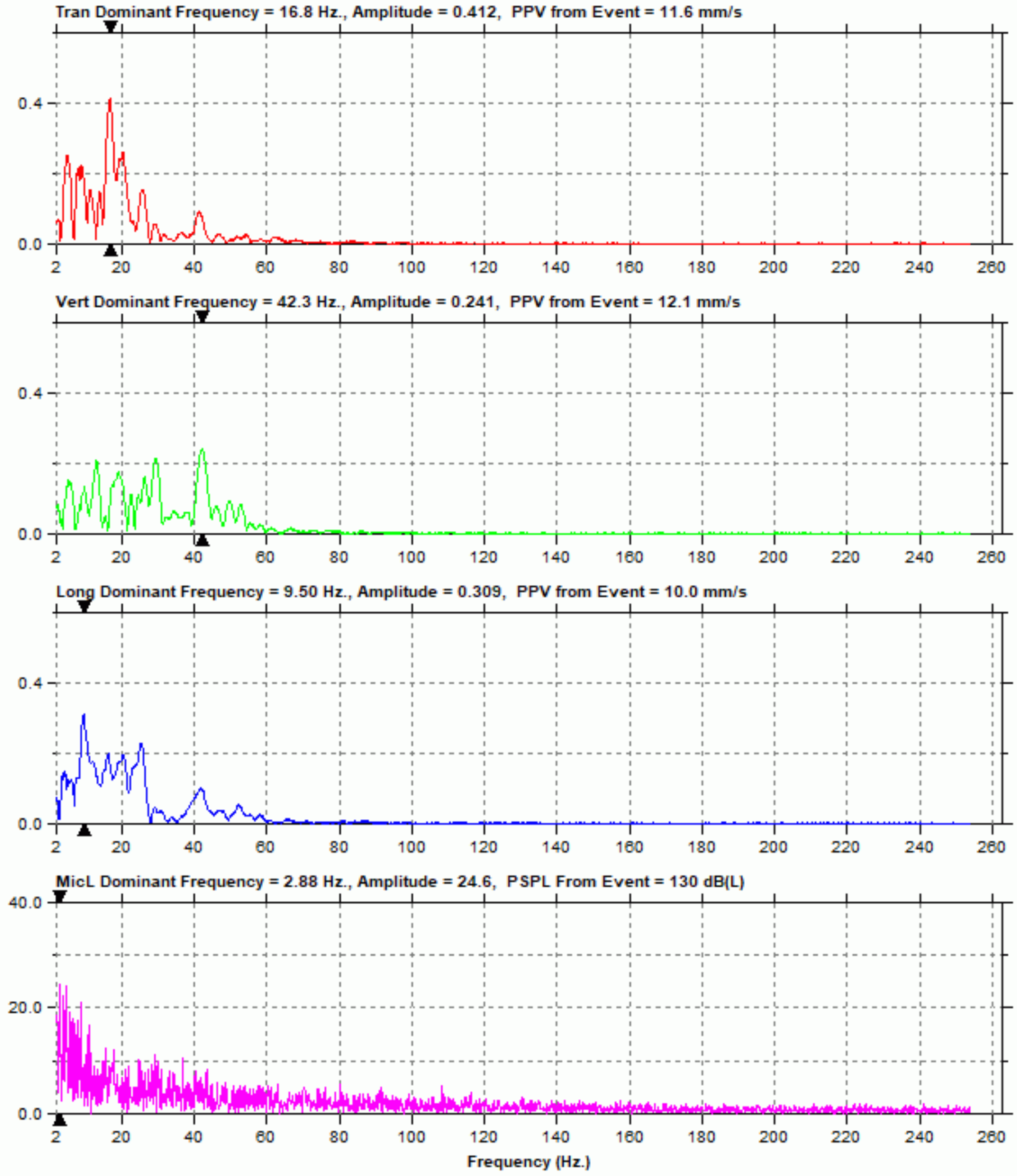
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 3, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:53:30 March 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263ICU4.560W

Post Event Notes

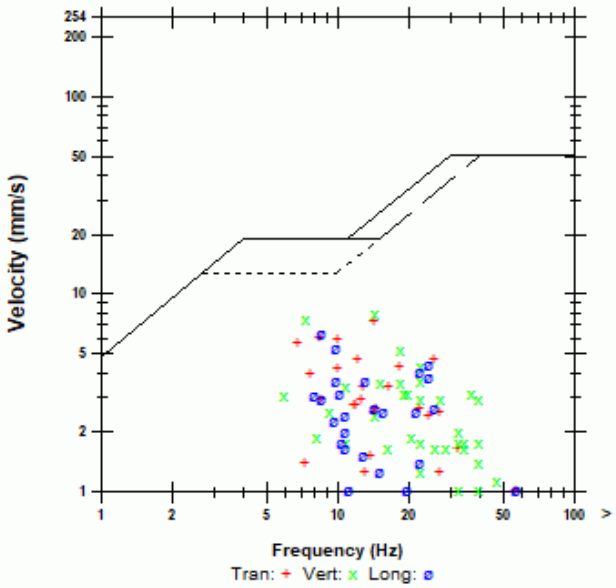
Extended Notes
Combo Mode March 4, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

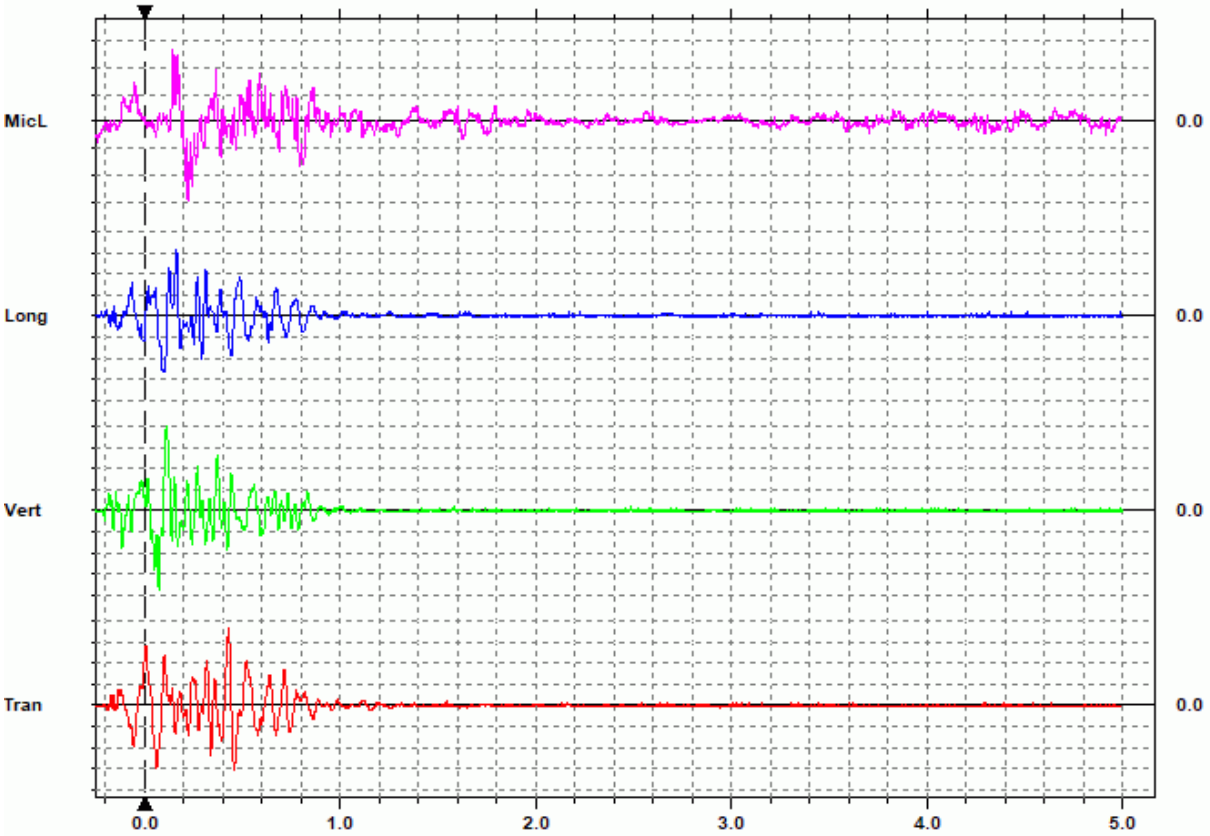
Microphone	Linear Weighting
PSPL	123.4 dB(L) at 0.223 sec.
ZC Freq	6.0 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.37	8.00	6.35	mm/s
ZC Freq	14	14	8.5	Hz
Time (Rel. to Trig)	0.431	0.110	0.164	sec
Peak Acceleration	0.0928	0.106	0.106	g
Peak Displacement	0.0938	0.118	0.0900	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.31 mm/s At 0.106 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:53:30 March 4, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263ICU4.560W
Job Number	8177		

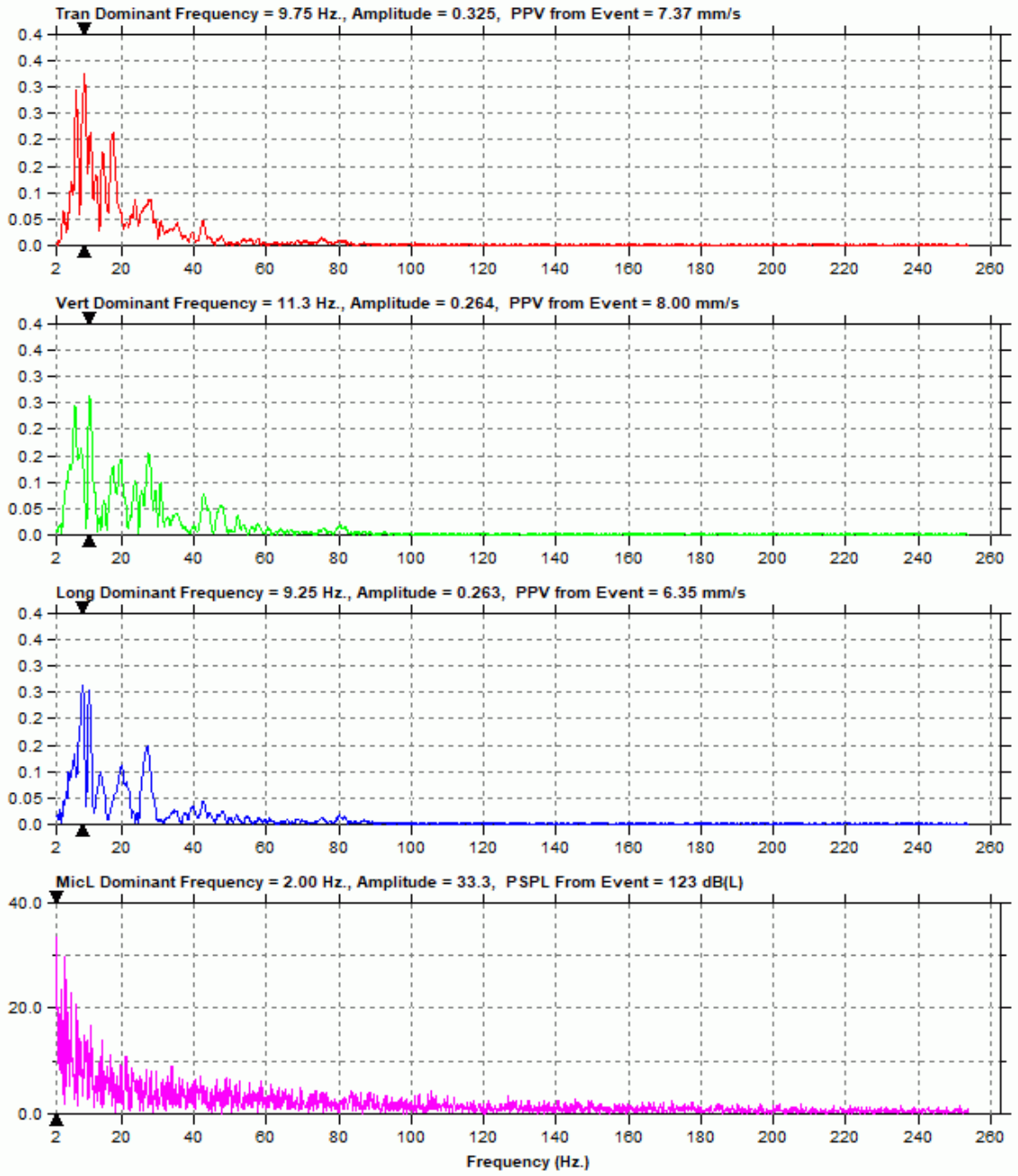
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 4, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:01 March 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263ICVY.U10W

Post Event Notes

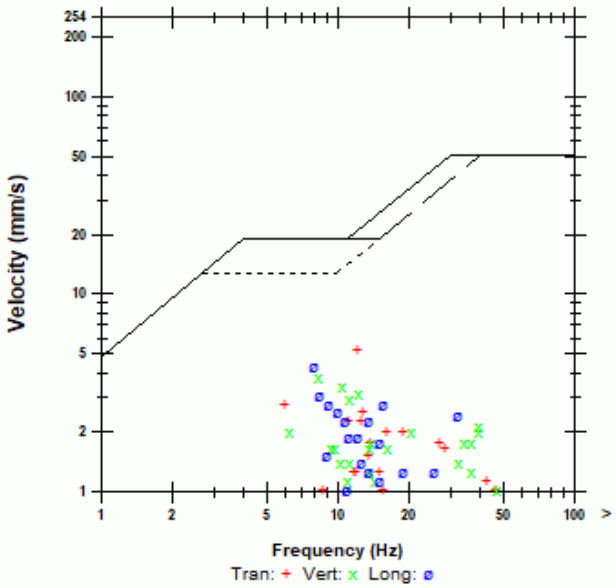
Extended Notes
Combo Mode March 5, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

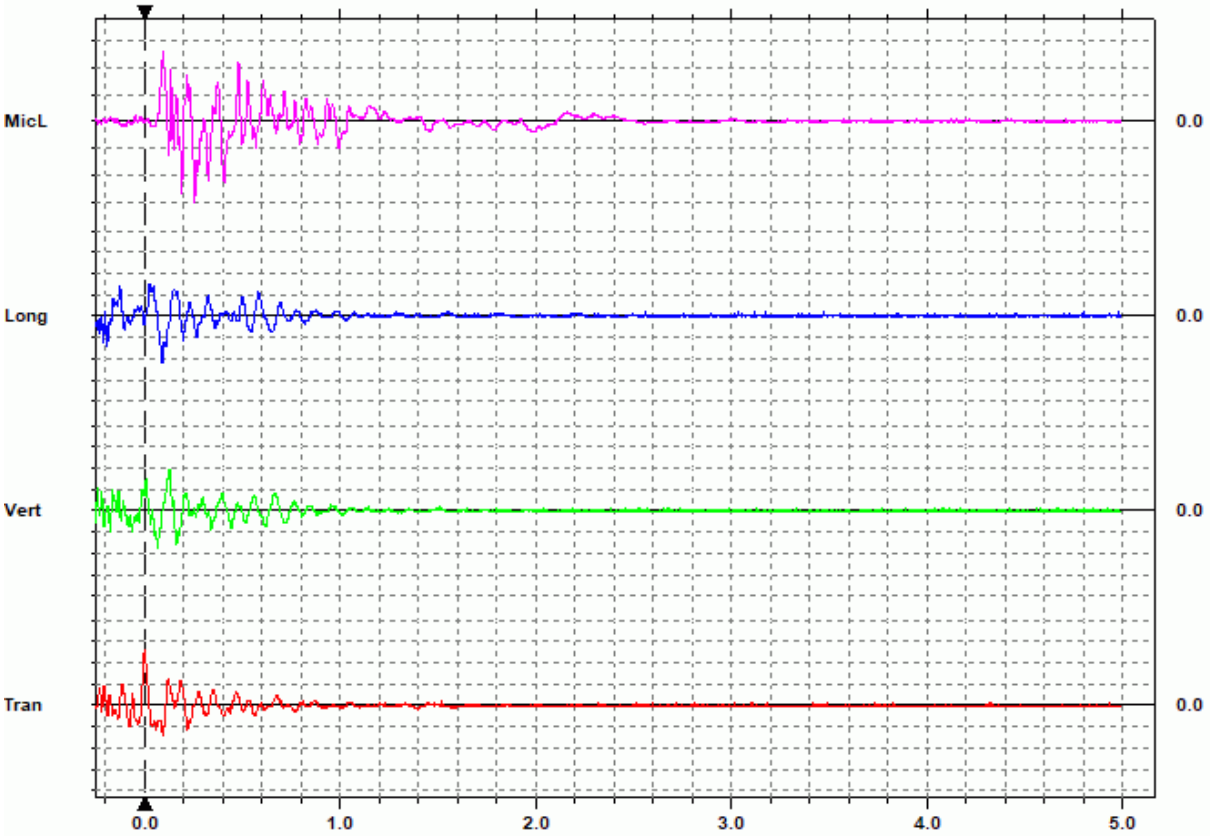
Microphone	Linear Weighting
PSPL	123.6 dB(L) at 0.258 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	3.81	4.32	mm/s
ZC Freq	12	8.3	8.0	Hz
Time (Rel. to Trig)	0.002	0.129	0.092	sec
Peak Acceleration	0.0398	0.0663	0.0663	g
Peak Displacement	0.0722	0.0540	0.0711	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.50 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:01 March 5, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263ICVY.U10W
Job Number	8177		

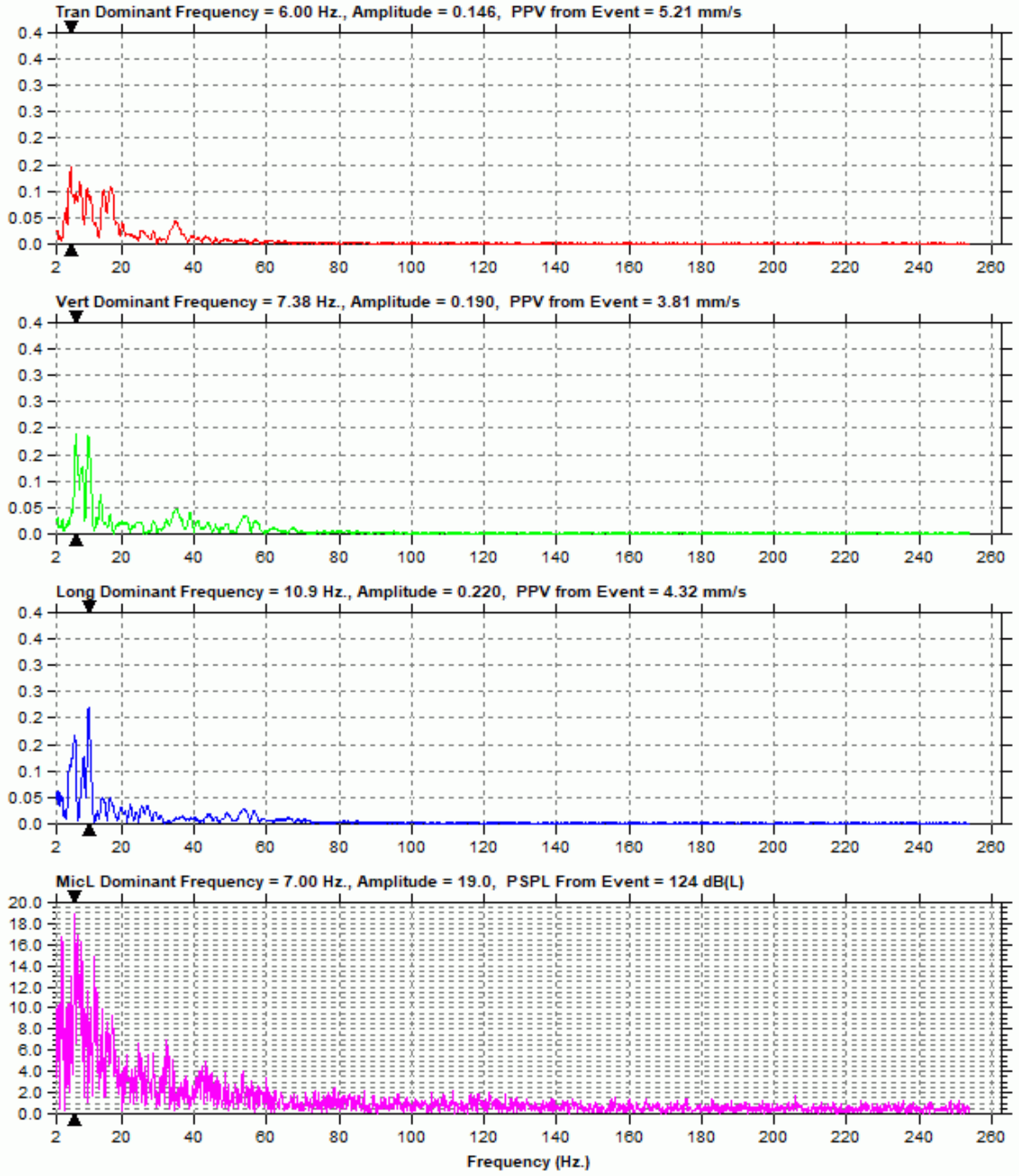
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 5, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:08:20 March 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	120 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21128 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	W128IDNR.HW0W

Post Event Notes

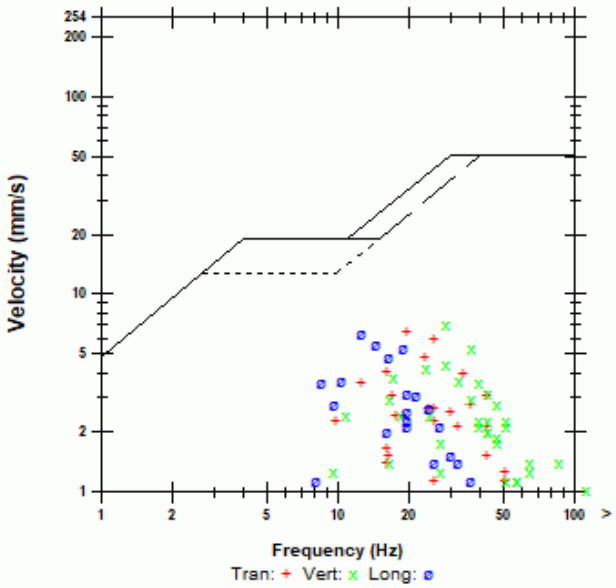
Extended Notes
Combo Mode March 20, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

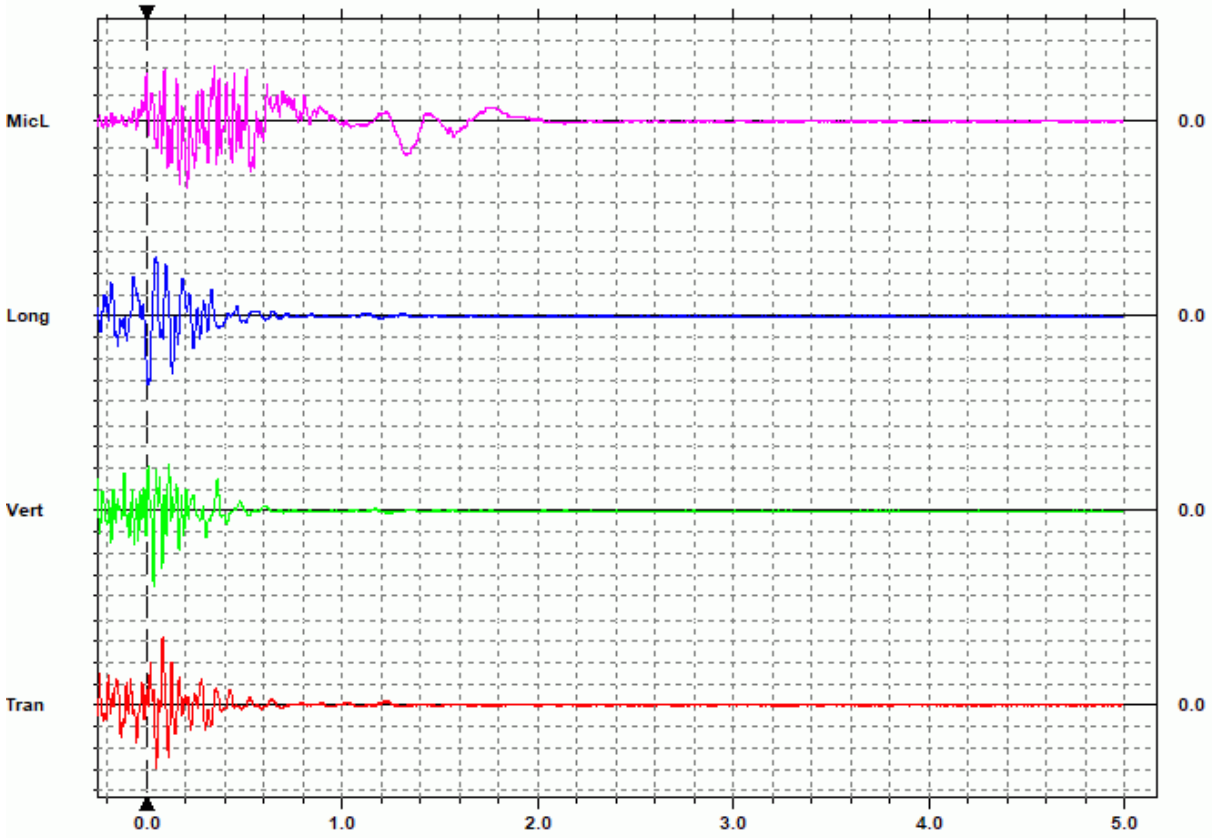
Microphone	Linear Weighting
PSPL	121.9 dB(L) at 0.207 sec.
ZC Freq	15 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.48	7.11	6.35	mm/s
ZC Freq	20	28	12	Hz
Time (Rel. to Trig)	0.083	0.036	0.006	sec
Peak Acceleration	0.119	0.146	0.0928	g
Peak Displacement	0.0431	0.0355	0.0851	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.87 mm/s At 0.050 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:08:20 March 20, 2020	**Serial Number**	BE21128 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W128IDNR.HW0W
Job Number	8177		

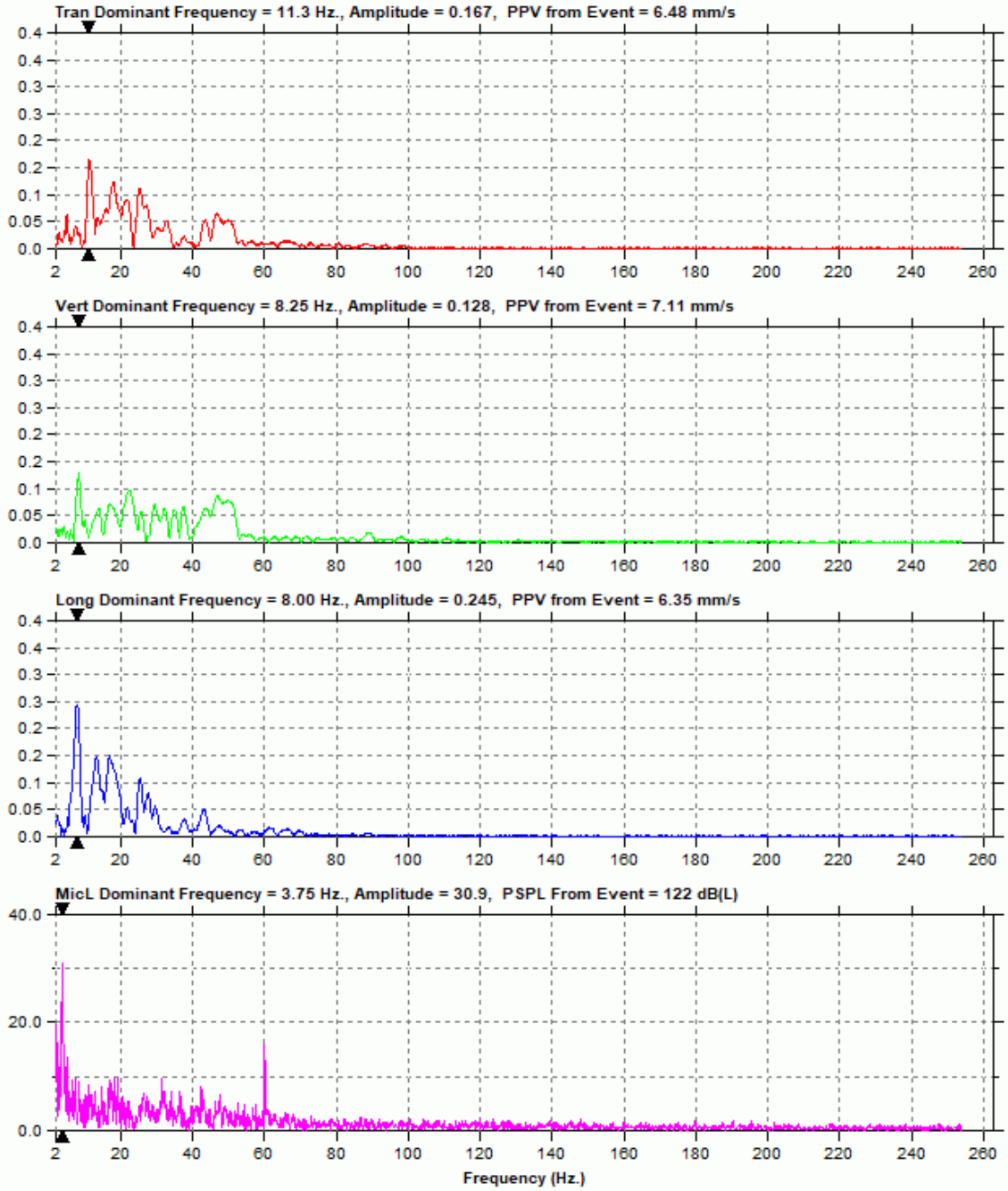
Notes

Location: 120 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 20, 2020 05:16:51
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:58 March 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	120 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21128 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	W128IDPL.VA0W

Post Event Notes

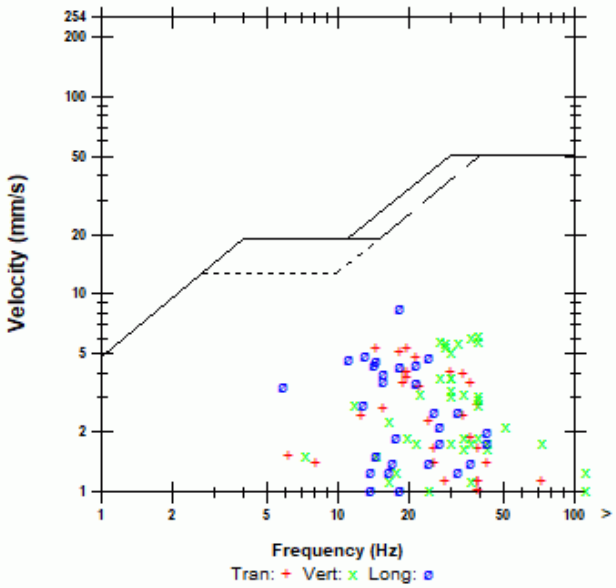
Extended Notes
Combo Mode March 21, 2020 05:16:48
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

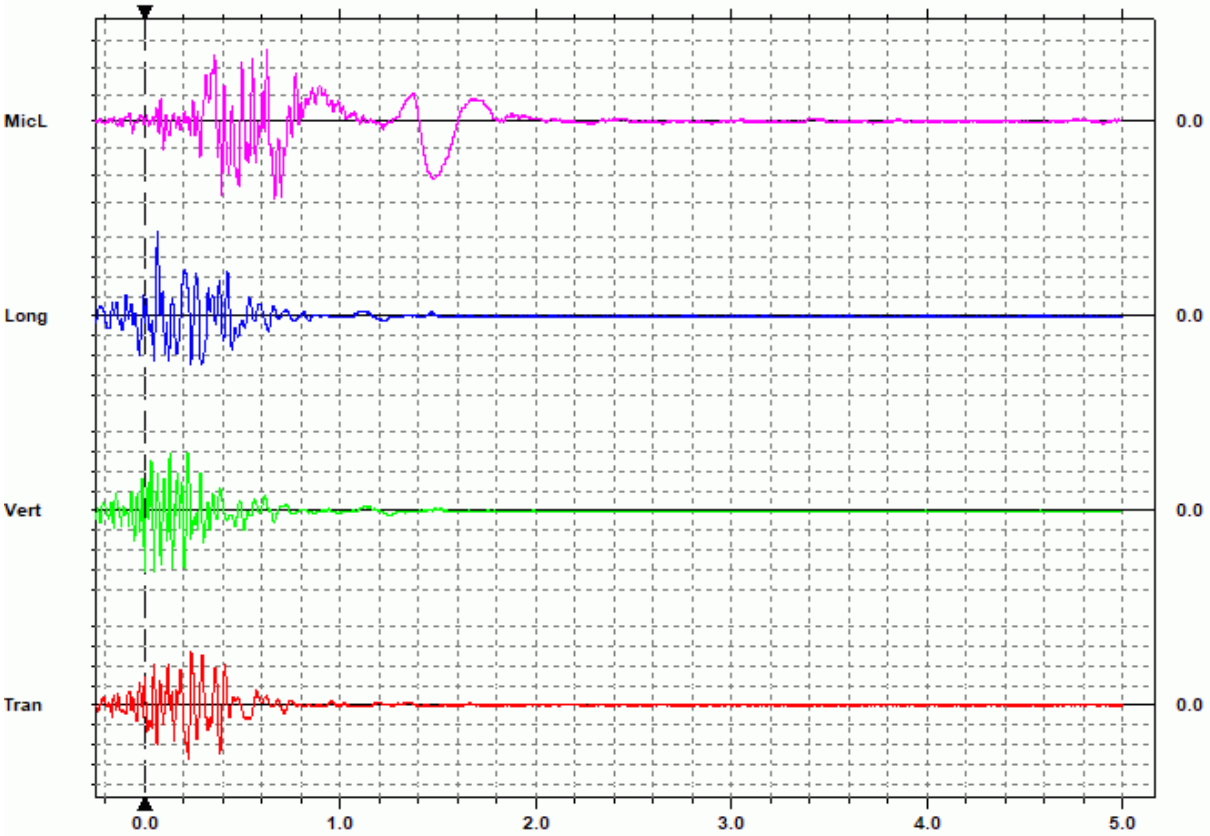
Microphone	Linear Weighting
PSPL	123.2 dB(L) at 0.667 sec.
ZC Freq	5.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	6.22	8.51	mm/s
ZC Freq	15	39	18	Hz
Time (Rel. to Trig)	0.225	0.050	0.067	sec
Peak Acceleration	0.119	0.159	0.146	g
Peak Displacement	0.0602	0.0358	0.0726	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.81 mm/s At 0.067 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:58 March 21, 2020	**Serial Number**	BE21128 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W128IDPL.VA0W
Job Number	8177		

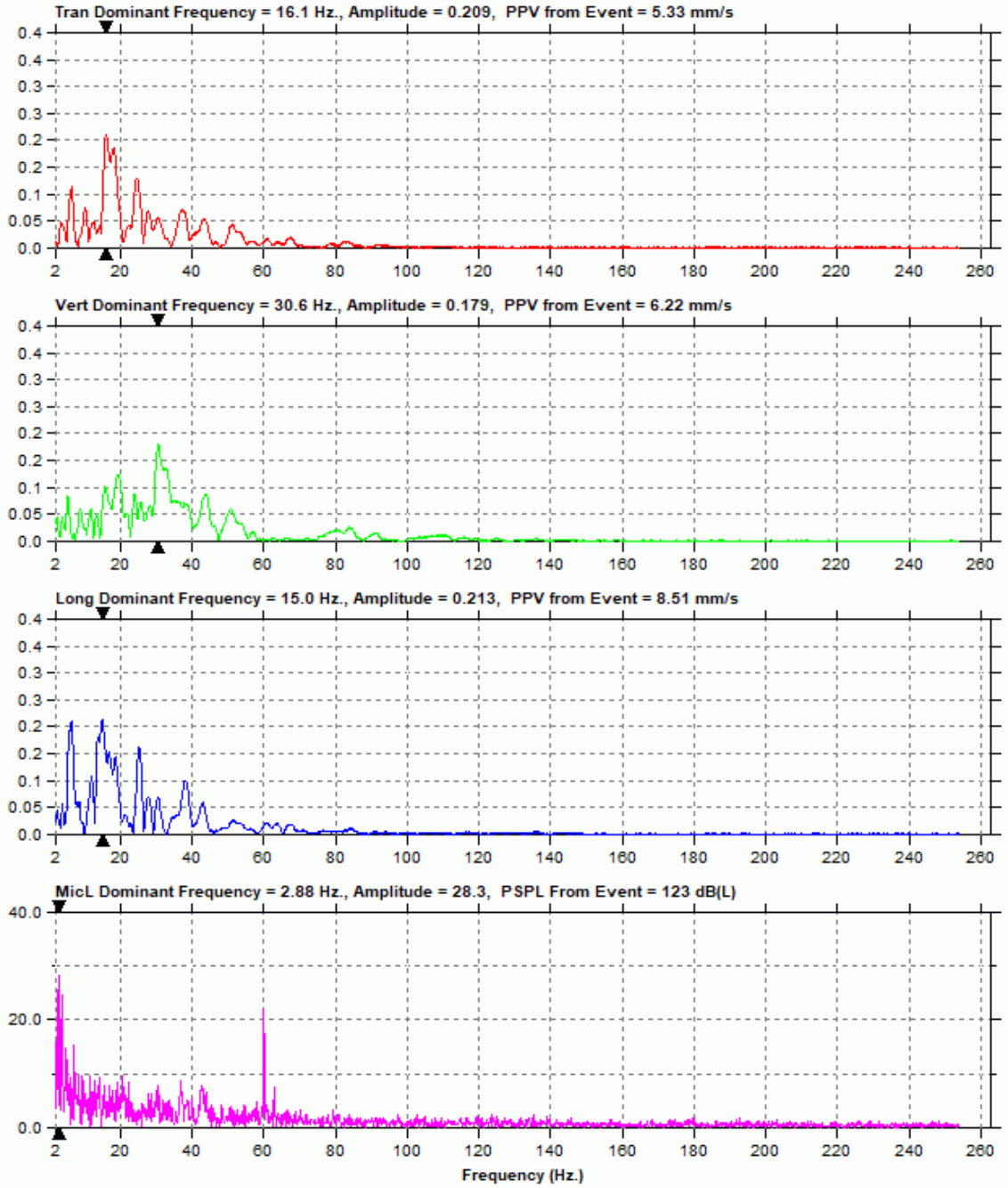
Notes

Location: 120 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 21, 2020 05:16:48
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:13:02 March 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	120 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21128 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	W128IDV6.DQ0W

Post Event Notes

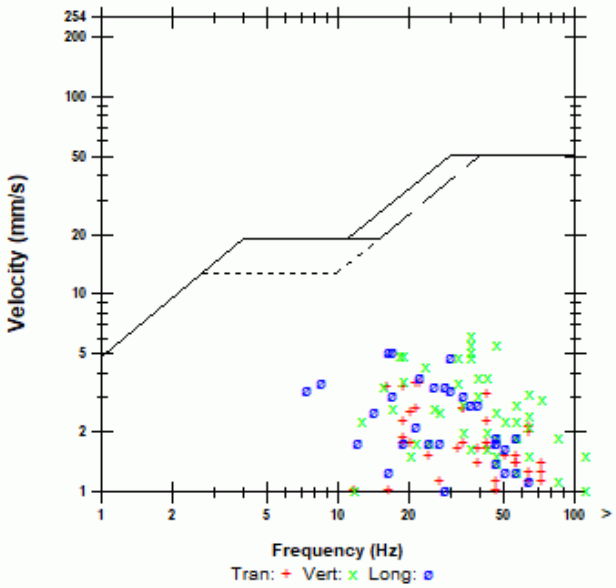
Extended Notes
Combo Mode March 24, 2020 05:16:52
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

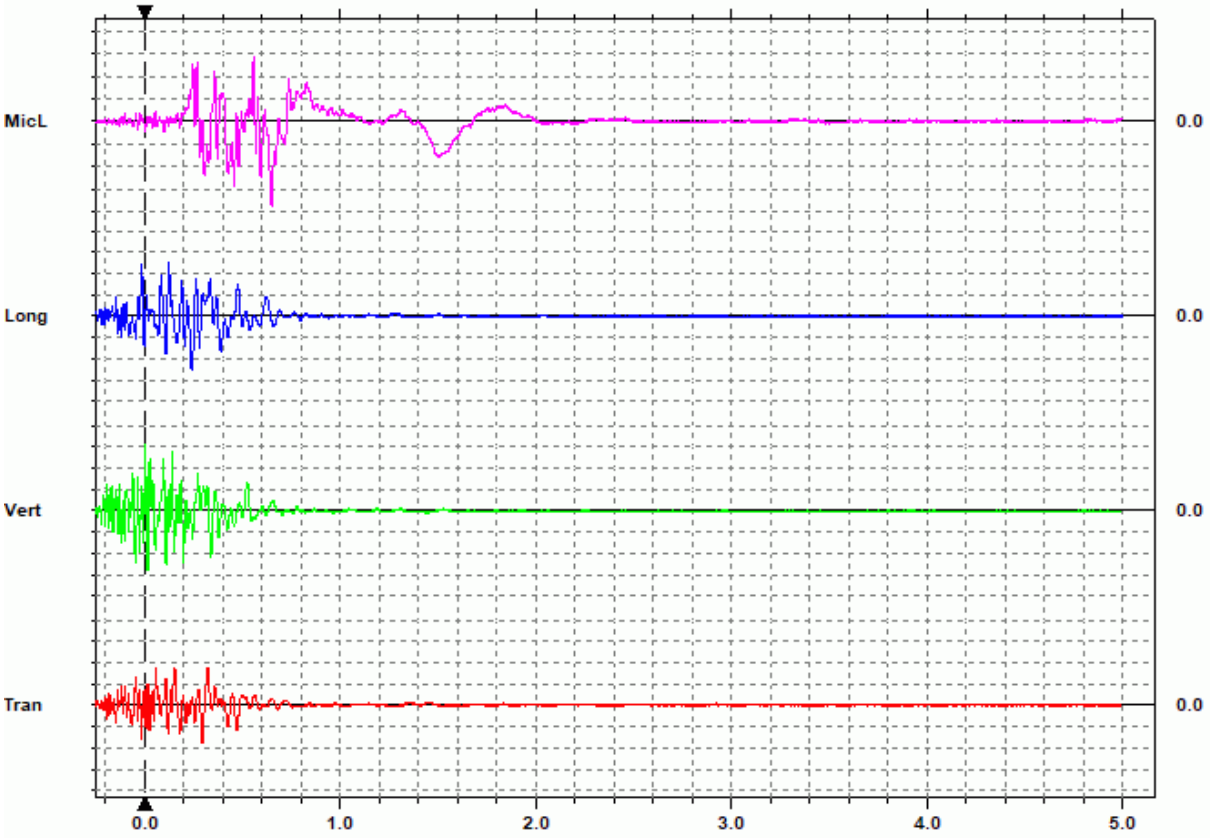
Microphone	Linear Weighting
PSPL	125.3 dB(L) at 0.648 sec.
ZC Freq	7.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.56	6.22	5.08	mm/s
ZC Freq	21	37	17	Hz
Time (Rel. to Trig)	0.153	0.002	0.123	sec
Peak Acceleration	0.0795	0.186	0.106	g
Peak Displacement	0.0305	0.0290	0.0557	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.63 mm/s At 0.108 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:13:02 March 24, 2020	**Serial Number**	BE21128 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W128IDV6.DQ0W
Job Number	8177		

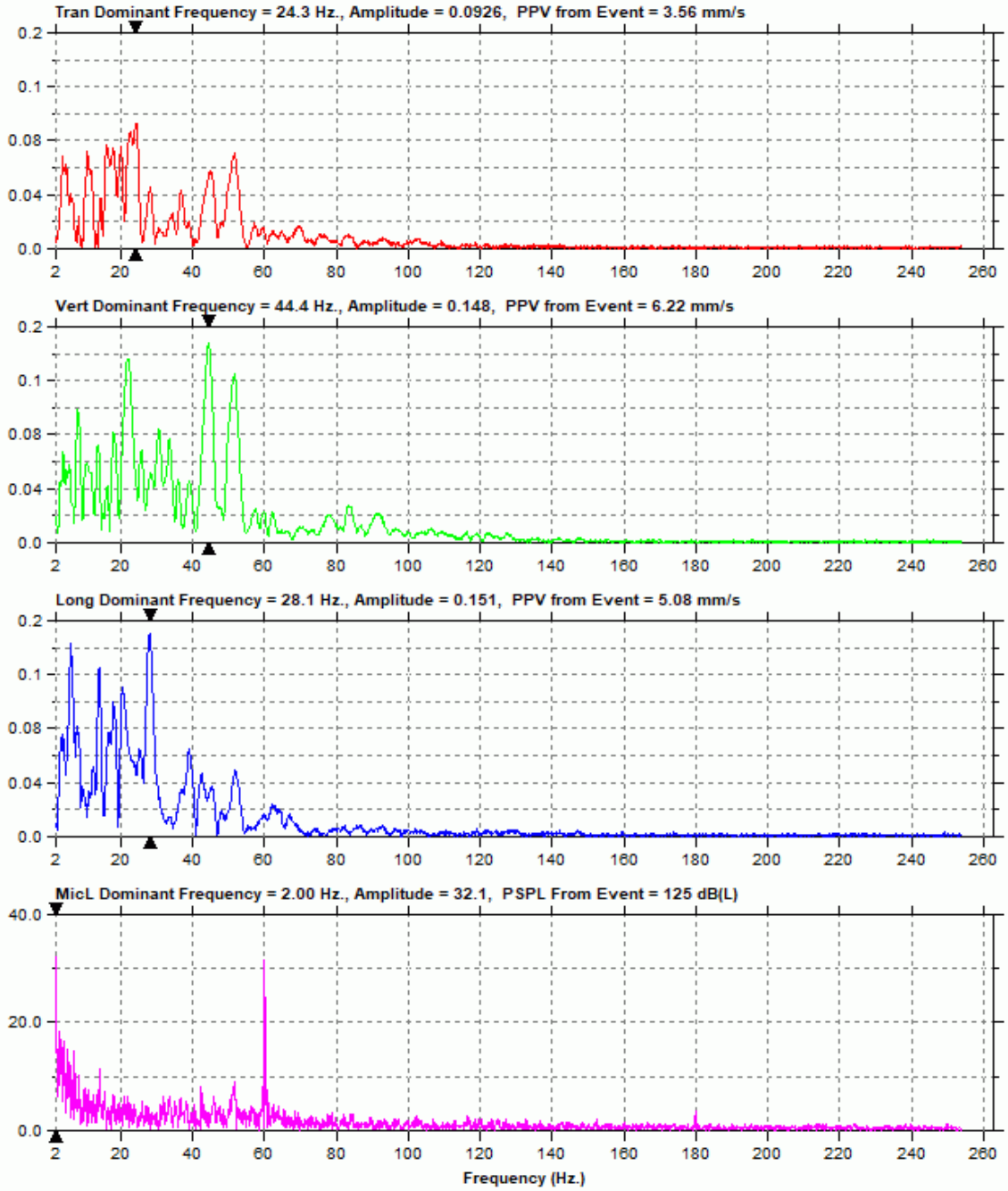
Notes

Location: 120 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 24, 2020 05:16:52
Geophone is sandbagged in the backyard of 120 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:08:25 March 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IDNR.I10W

Post Event Notes

Extended Notes

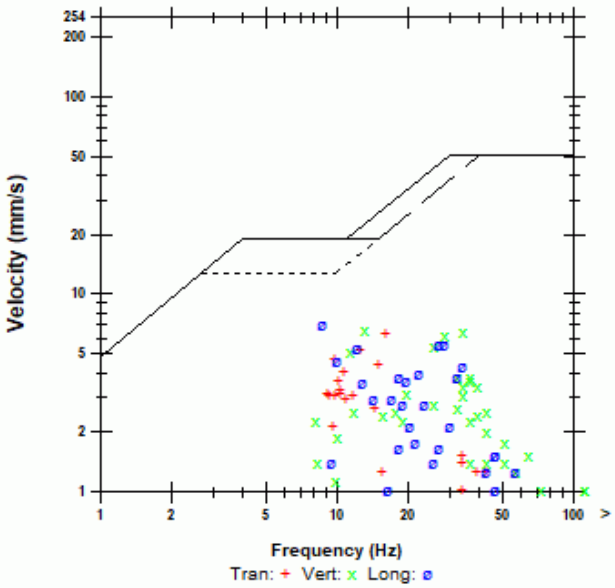
Combo Mode March 20, 2020 12:56:06
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

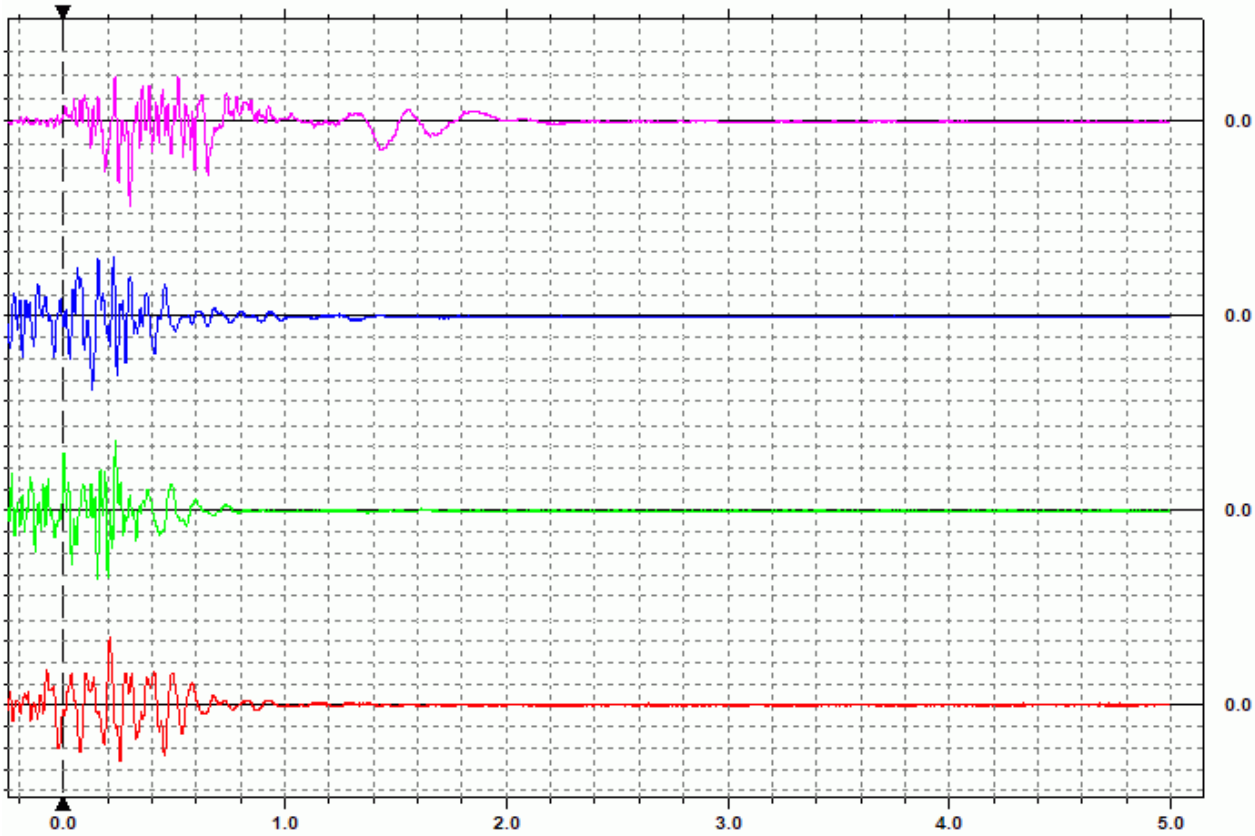
Microphone	Linear Weighting
PSPL	125.1 dB(L) at 0.300 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	6.60	6.98	mm/s
ZC Freq	16	13	8.7	Hz
Time (Rel. to Trig)	0.208	0.235	0.130	sec
Peak Acceleration	0.0795	0.146	0.119	g
Peak Displacement	0.0646	0.0499	0.0868	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.08 mm/s At 0.154 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:08:25 March 20, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IDNR.I10W
Job Number	8177		

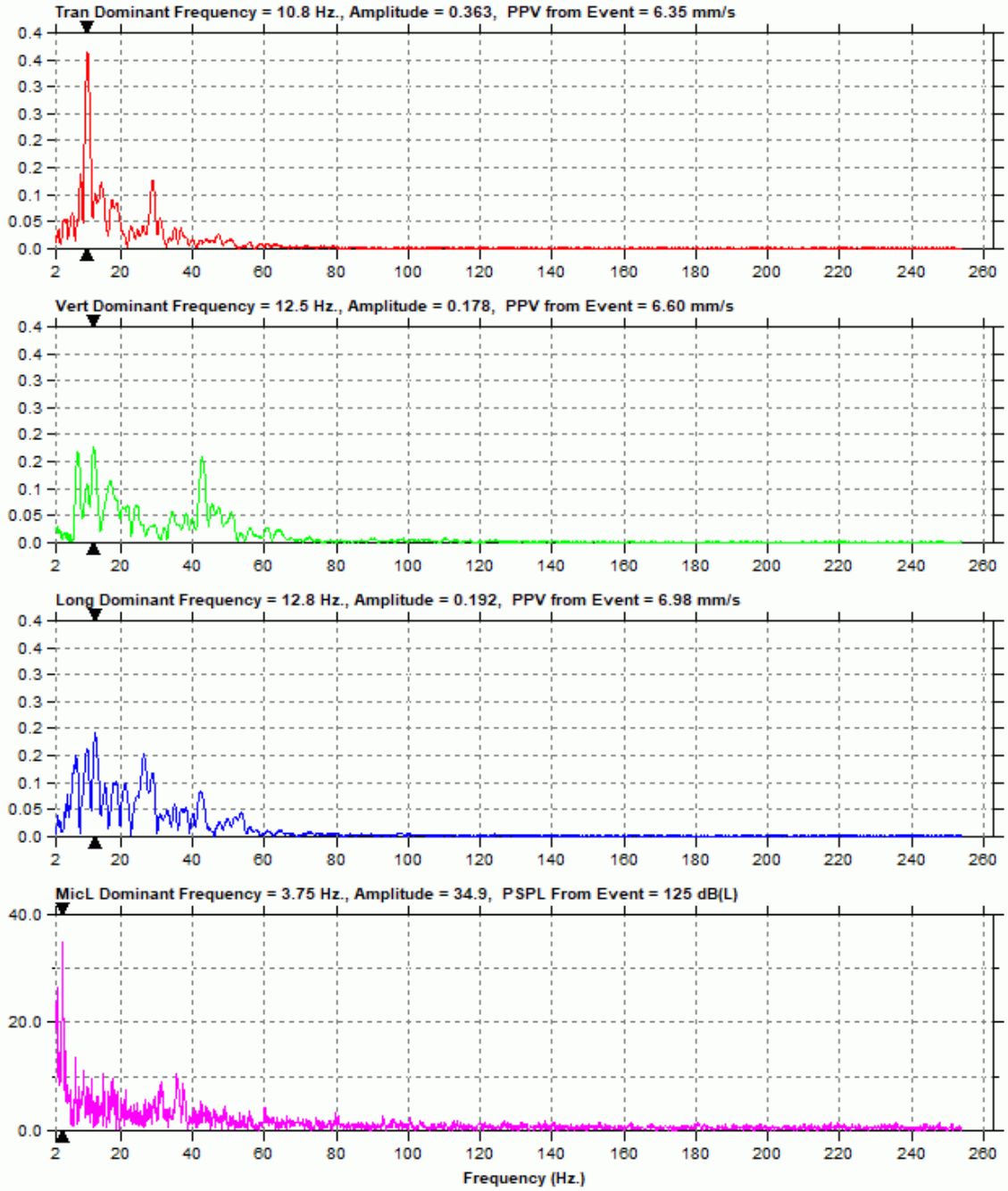
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 20, 2020 12:56:06
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:03 March 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IDPL.VF0W

Post Event Notes

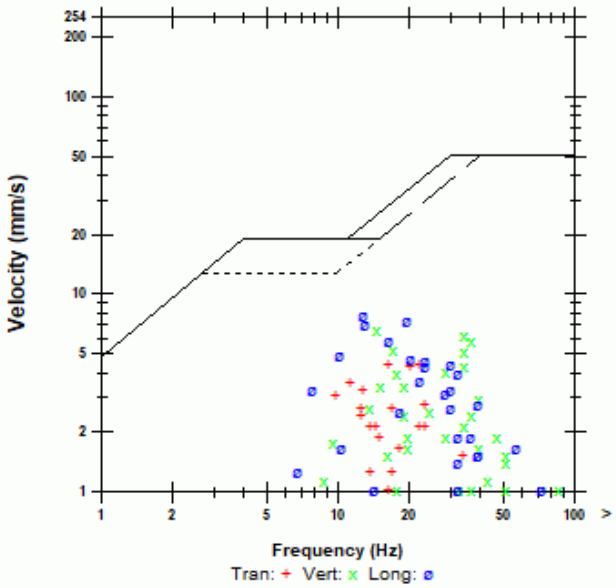
Extended Notes
Combo Mode March 21, 2020 05:16:49
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

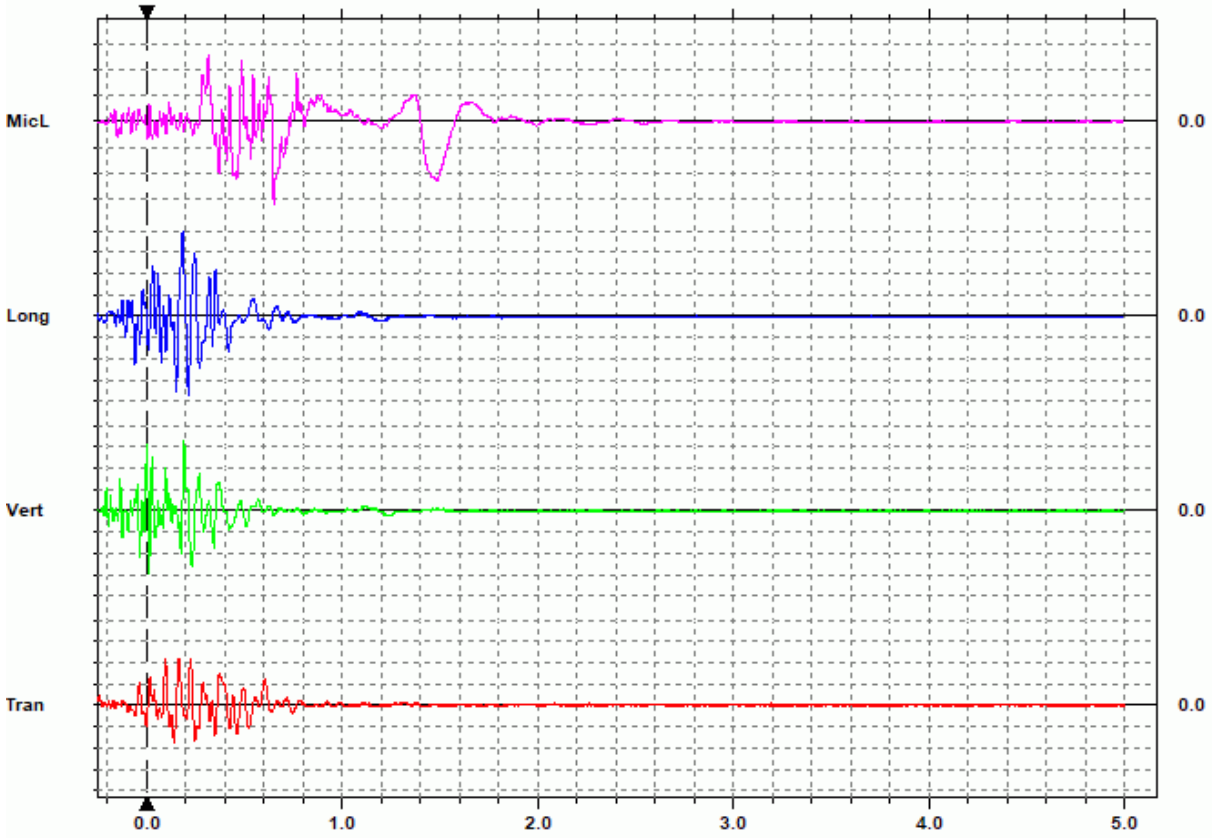
Microphone	Linear Weighting
PSPL	124.3 dB(L) at 0.652 sec.
ZC Freq	5.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.44	6.60	7.87	mm/s
ZC Freq	22	15	13	Hz
Time (Rel. to Trig)	0.098	0.193	0.186	sec
Peak Acceleration	0.0663	0.172	0.0928	g
Peak Displacement	0.0515	0.0532	0.0858	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.82 mm/s At 0.189 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:03 March 21, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IDPL.VF0W
Job Number	8177		

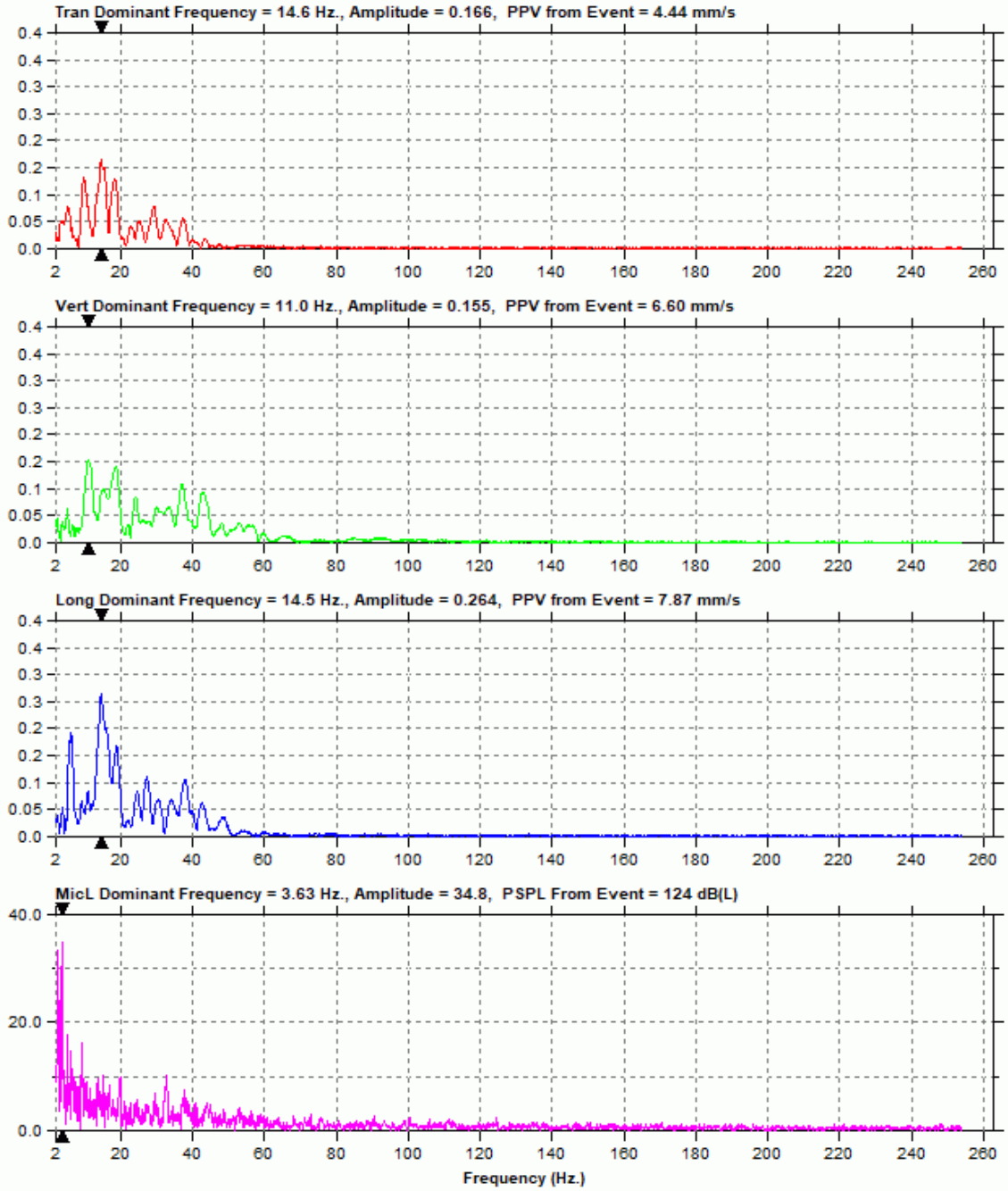
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 21, 2020 05:16:49
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:08:13 March 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	135 Cougarstone Court SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21127 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 29, 2019 by Instantel
File Name	W127IDNR.HP0W

Post Event Notes

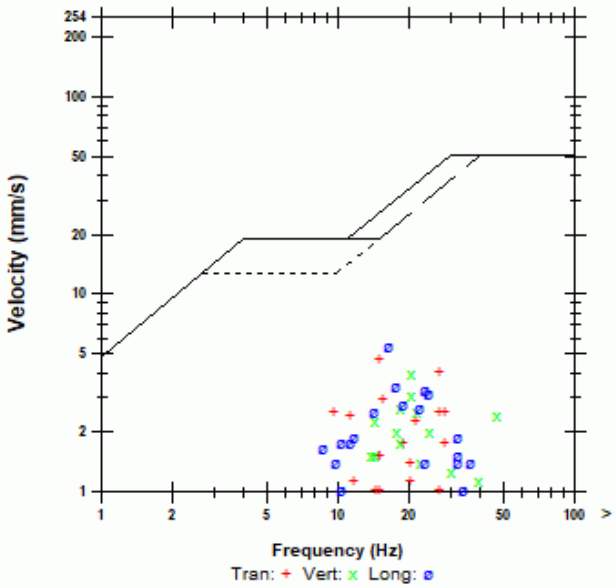
Extended Notes
Combo Mode March 20, 2020 05:16:50
Geophone is sandbagged in the backyard of 135 Cougarstone Court SW adjacent ongoing blasting operations.

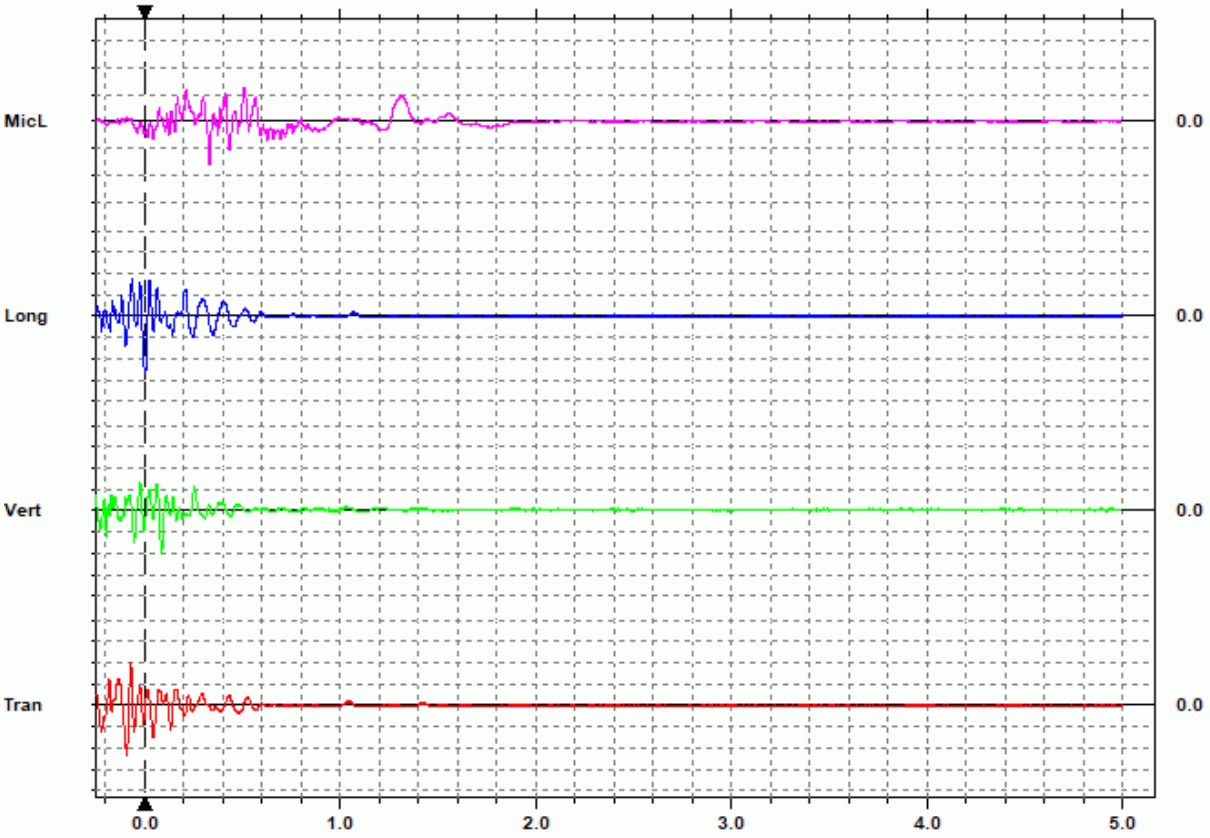
Microphone	Linear Weighting
PSPL	118.1 dB(L) at 0.334 sec.
ZC Freq	17 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	3.94	5.46	mm/s
ZC Freq	15	20	17	Hz
Time (Rel. to Trig)	-0.090	0.089	0.004	sec
Peak Acceleration	0.0795	0.0663	0.0795	g
Peak Displacement	0.0451	0.0301	0.0554	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.62 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:08:13 March 20, 2020	**Serial Number**	BE21127 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 29, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W127IDNR.HP0W
Job Number	8177		

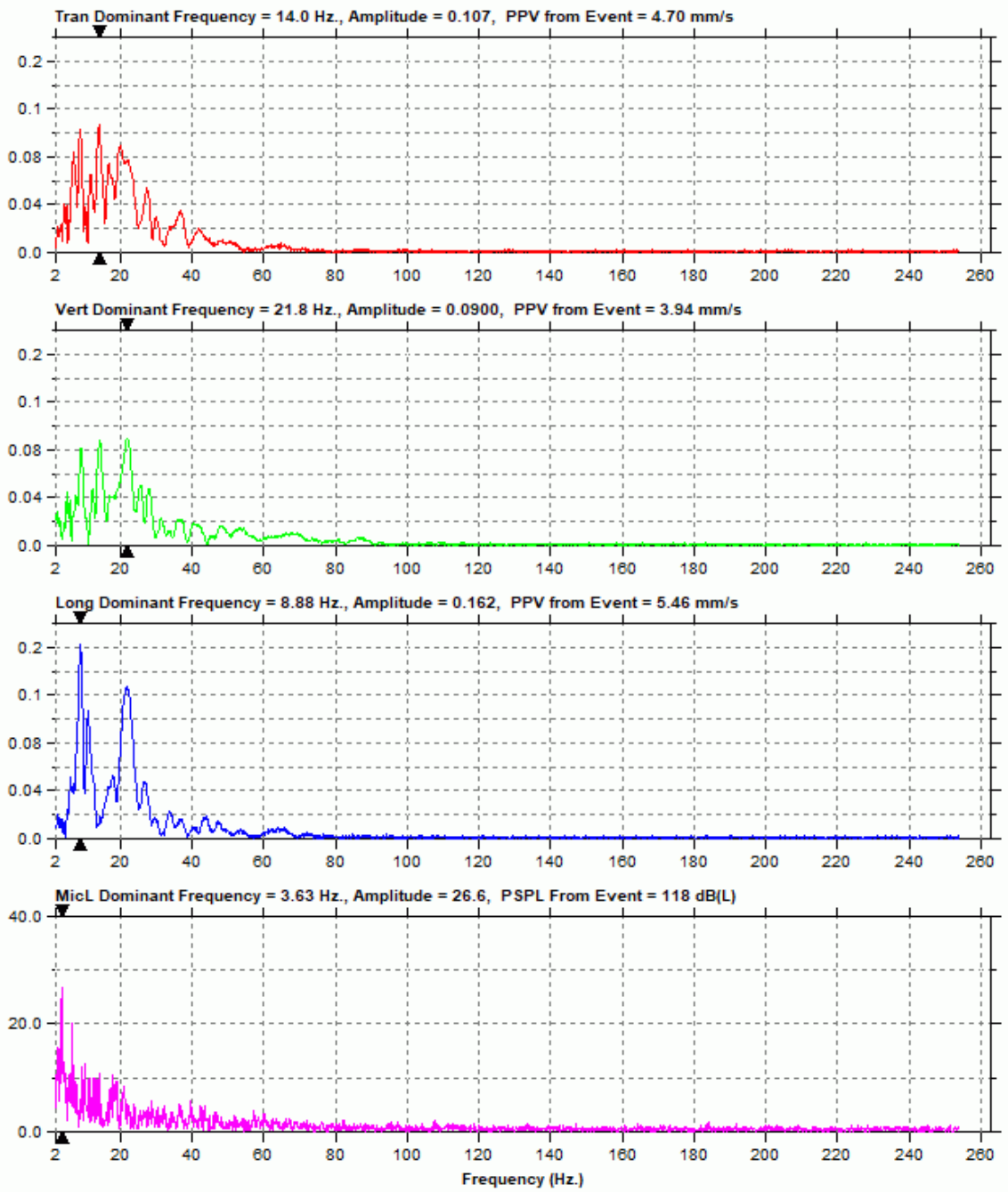
Notes

Location: 135 Cougarstone Court SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 20, 2020 05:16:50
Geophone is sandbagged in the backyard of 135 Cougarstone Court SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:50 March 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	135 Cougarstone Court SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE21127 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	November 29, 2019 by Instantel
File Name	W127IDPL.V20W

Post Event Notes

Extended Notes

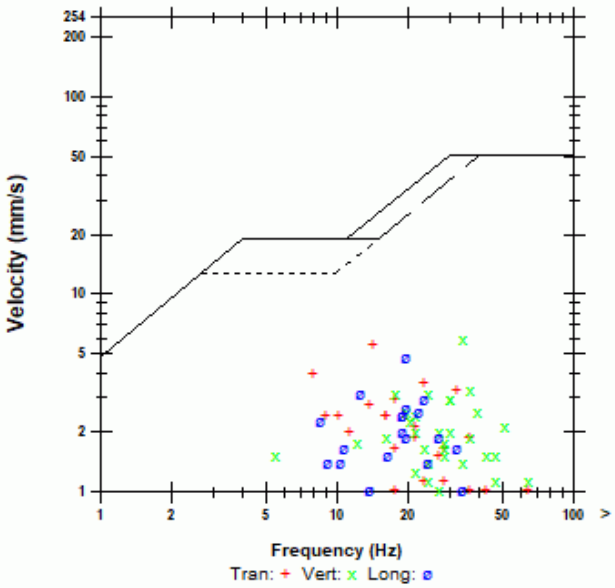
Combo Mode March 21, 2020 05:16:59
Geophone is sandbagged in the backyard of 135 Cougarstone Court SW adjacent ongoing blasting operations.

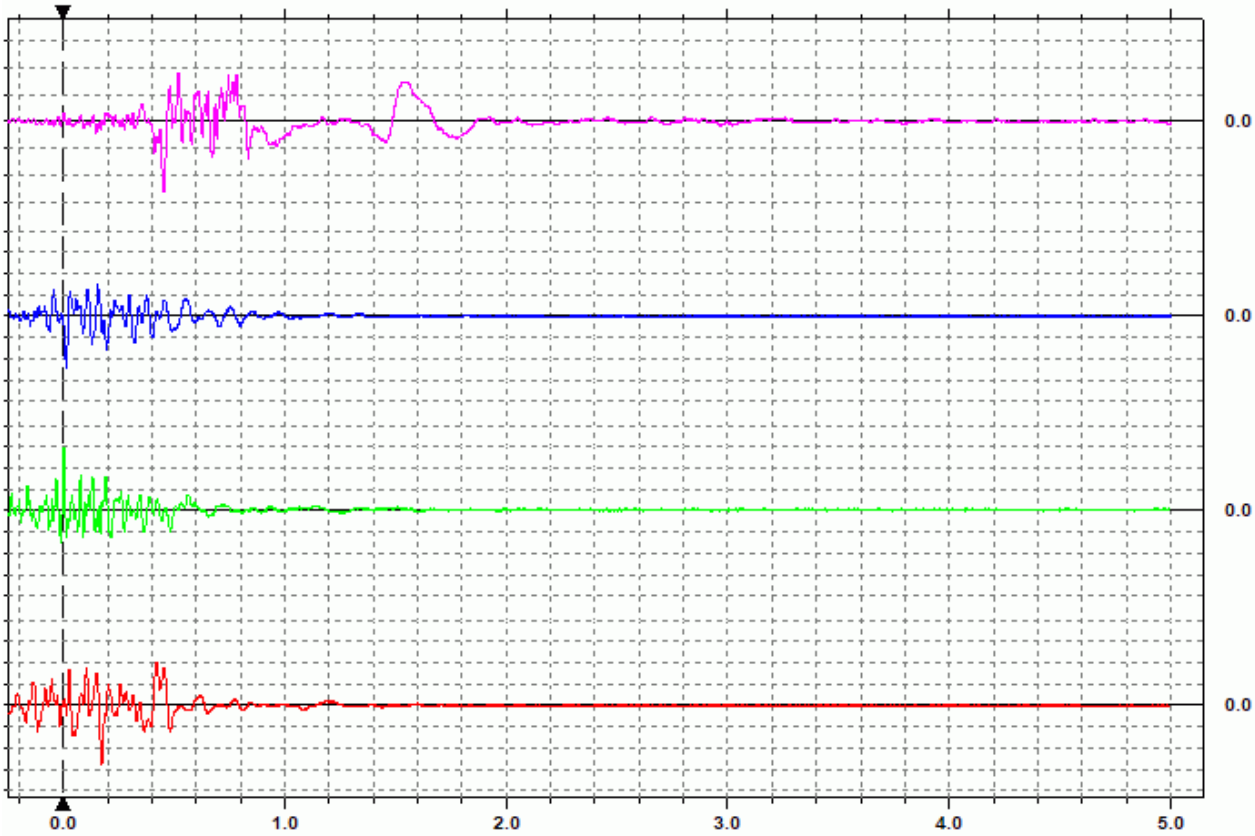
Microphone	Linear Weighting
PSPL	122.4 dB(L) at 0.455 sec.
ZC Freq	6.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.59	5.97	4.83	mm/s
ZC Freq	14	34	20	Hz
Time (Rel. to Trig)	0.174	0.002	0.013	sec
Peak Acceleration	0.0663	0.119	0.0795	g
Peak Displacement	0.0789	0.0317	0.0329	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.03 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: March 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:50 March 21, 2020	**Serial Number**	BE21127 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 29, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	W127IDPL.V20W
Job Number	8177		

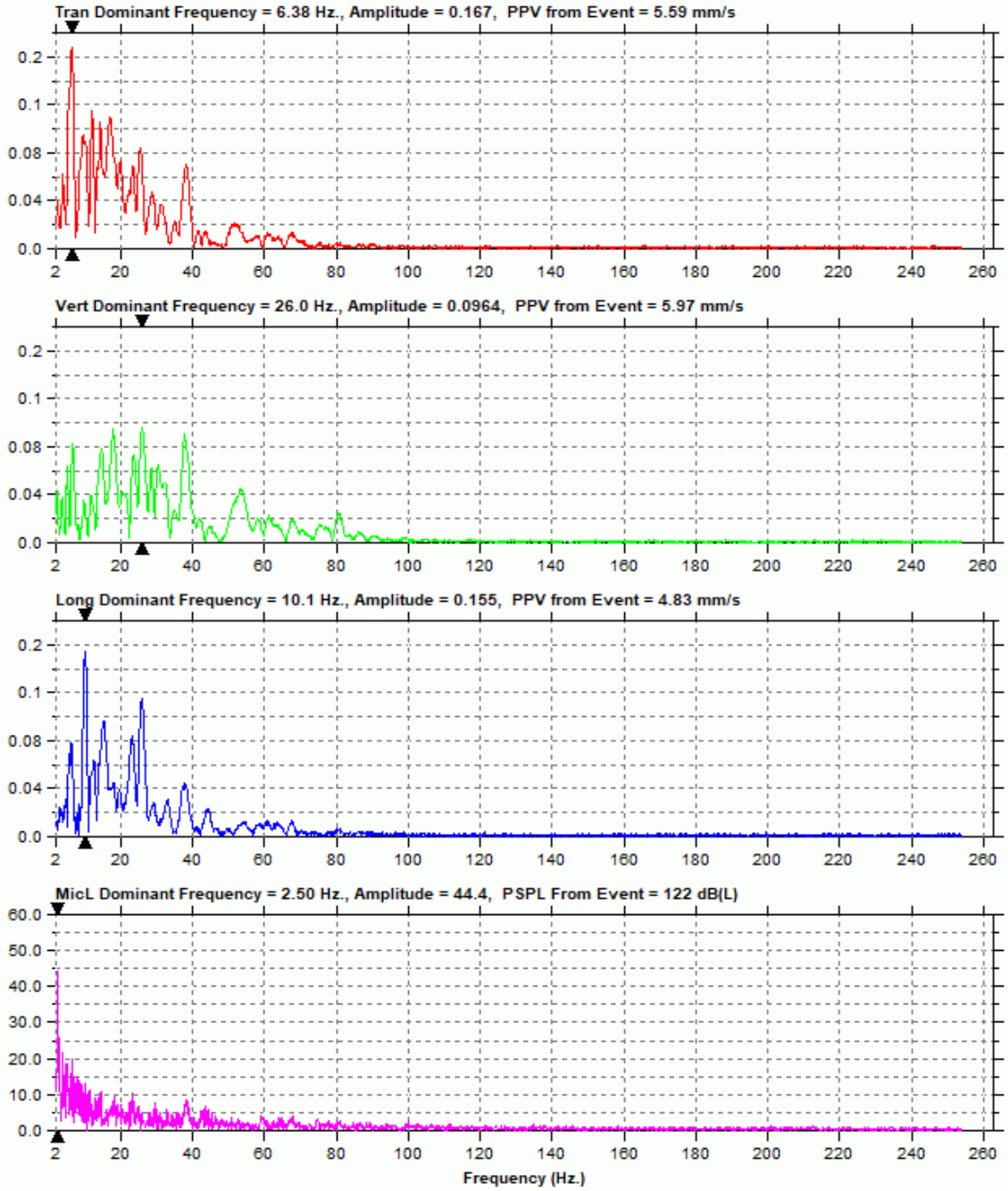
Notes

Location: 135 Cougarstone Court SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode March 21, 2020 05:16:59
Geophone is sandbagged in the backyard of 135 Cougarstone Court SW adjacent ongoing blasting operations.

Post Event Notes



Created: March 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																				
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
1-Apr-20	WCRR-81	15:58	4.70mm/s	127.4dB(L)	1.14mm/s	110.9dB(L)	9.27mm/s	130.2dB(L)	0.51mm/s	112.8dB(L)	9.40mm/s	128.6dB(L)	2.16mm/s	121.0dB(L)	1.14mm/s	116.1dB(L)	1.40mm/s	117.4dB(L)	0.89mm/s	114.8dB(L)
2-Apr-20	WCRR-82	16:03	4.19mm/s	121.4dB(L)	0.89mm/s	116.3dB(L)	13.20mm/s	128.7dB(L)	0.51mm/s	106.5dB(L)	14.60mm/s	121.7dB(L)	1.91mm/s	115.7dB(L)	0.89mm/s	110.6dB(L)	1.02mm/s	112.3dB(L)	0.76mm/s	106.5dB(L)
3-Apr-20	WCRR-83	16:00	1.40mm/s	112.6dB(L)	2.54mm/s	120.6dB(L)	2.16mm/s	116.3dB(L)	0.51mm/s	105.5dB(L)	2.03mm/s	113.8dB(L)	1.02mm/s	111.2dB(L)	0.64mm/s	107.5dB(L)	0.76mm/s	108.4dB(L)	0.76mm/s	106.5dB(L)
4-Apr-20	WCRR-84	16:00	6.35mm/s	127.9dB(L)	0.89mm/s	112.8dB(L)	11.80mm/s	132.5dB(L)	0.89mm/s	114.0dB(L)	13.30mm/s	130.2dB(L)	4.45mm/s	124.3dB(L)	1.78mm/s	117.6dB(L)	2.67mm/s	119.7dB(L)	1.40mm/s	115.7dB(L)
14-Apr-20	WCRR-85	16:21	4.45mm/s	121.4dB(L)	1.02mm/s	104.9dB(L)	7.37mm/s	125.0dB(L)	0.76mm/s	112.0dB(L)	6.60mm/s	123.6dB(L)	5.59mm/s	115.9dB(L)	1.27mm/s	114.6dB(L)	1.91mm/s	115.9dB(L)	0.89mm/s	110.2dB(L)
15-Apr-20	WCRR-86	16:20	1.52mm/s	112.3dB(L)	0.38mm/s	111.5dB(L)	0.76mm/s	109.2dB(L)	1.02mm/s	115.9dB(L)	1.40mm/s	111.2dB(L)	5.08mm/s	116.1dB(L)	3.30mm/s	118.5dB(L)	3.30mm/s	117.5dB(L)	2.16mm/s	114.0dB(L)
16-Apr-20	WCRR-87	16:05	1.14mm/s	113.8dB(L)	1.27mm/s	116.6dB(L)	1.78mm/s	116.3dB(L)	0.51mm/s	102.8dB(L)	1.52mm/s	117.2dB(L)	0.89mm/s	106.5dB(L)	1.27mm/s	116.6dB(L)	0.64mm/s	107.0dB(L)	0.38mm/s	105.5dB(L)
20-Apr-20	WCRR-88	16:00	2.29mm/s	117.1dB(L)	1.02mm/s	114.0dB(L)	3.68mm/s	120.5dB(L)	0.76mm/s	125.3dB(L)	3.94mm/s	121.0dB(L)	2.03mm/s	120.3dB(L)	1.27mm/s	117.4dB(L)	1.40mm/s	112.6dB(L)	0.89mm/s	108.4dB(L)
22-Apr-20	WCRR-89	16:06	4.70mm/s	116.6dB(L)	0.51mm/s	102.8dB(L)	6.10mm/s	116.7dB(L)	0.51mm/s	100.0dB(L)	8.25mm/s	117.4dB(L)	5.72mm/s	110.6dB(L)	1.52mm/s	108.0dB(L)	2.03mm/s	107.0dB(L)	1.40mm/s	101.9dB(L)
23-Apr-20	WCRR-90	16:21	1.02mm/s	111.5dB(L)	0.76mm/s	112.3dB(L)	2.16mm/s	113.8dB(L)	0.25mm/s	101.9dB(L)	1.52mm/s	109.9dB(L)	0.64mm/s	104.9dB(L)	0.38mm/s	107.5dB(L)	0.38mm/s	106.0dB(L)	1.27mm/s	101.9dB(L)
24-Apr-20	WCRR-91	16:05	0.38mm/s	114.6dB(L)	3.30mm/s	122.4dB(L)	0.76mm/s	109.9dB(L)	0.25mm/s	124.2dB(L)	0.64mm/s	106.5dB(L)	0.38mm/s	117.4dB(L)	0.25mm/s	104.9dB(L)	0.38mm/s	104.9dB(L)	0.38mm/s	101.9dB(L)
27-Apr-20	WCRR-92	16:03	3.30mm/s	122.8dB(L)	0.89mm/s	112.3dB(L)	6.86mm/s	125.7dB(L)	0.64mm/s	131.2dB(L)	4.95mm/s	125.4dB(L)	3.05mm/s	127.6dB(L)	1.14mm/s	120.6dB(L)	1.91mm/s	117.4dB(L)	1.52mm/s	119.0dB(L)
28-Apr-20	WCRR-93	16:05	3.81mm/s	125.7dB(L)	1.27mm/s	119.7dB(L)	4.83mm/s	127.1dB(L)	1.27mm/s	122.3dB(L)	6.98mm/s	125.6dB(L)	3.18mm/s	124.2dB(L)	1.65mm/s	122.6dB(L)	2.67mm/s	122.2dB(L)	1.78mm/s	119.0dB(L)
29-Apr-20	WCRR-94	16:07	8.00mm/s	123.6dB(L)	1.02mm/s	108.4dB(L)	9.78mm/s	120.5dB(L)	1.27mm/s	107.0dB(L)	10.40mm/s	123.4dB(L)	11.40mm/s	116.4dB(L)	2.41mm/s	115.7dB(L)	4.19mm/s	115.6dB(L)	2.29mm/s	108.8dB(L)
30-Apr-20	WCRR-95	16:00	2.16mm/s	119.8dB(L)	0.89mm/s	116.1dB(L)	5.33mm/s	118.2dB(L)	0.64mm/s	133.7dB(L)	2.92mm/s	122.2dB(L)	6.22mm/s	118.3dB(L)	0.89mm/s	122.8dB(L)	1.14mm/s	119.4dB(L)	0.89mm/s	122.9dB(L)

Permanent Monitoring Units								
Crestmont			90 Valley Ridge Heights NW		254 Crestridge Place SW		148 Valley Meadow Close NW	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP
17-Apr-20	CM-01	16:40	1.27mm/s	106.0dB(L)	0.76mm/s	104.2dB(L)	0.89mm/s	112.3dB(L)
21-Apr-20	CM-02	16:27	1.91mm/s	105.5dB(L)	1.78mm/s	125.2dB(L)	0.89mm/s	115.4dB(L)
25-Apr-20	CM-03	16:04	2.03mm/s	97.5dB(L)	1.65mm/s	105.5dB(L)	0.76mm/s	114.4dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Long At 16:00:16 April 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IEFJ.4G0W

Post Event Notes

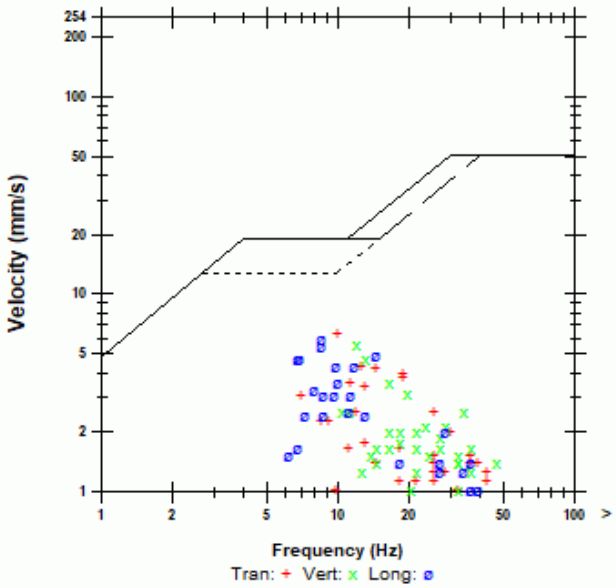
Extended Notes
Combo Mode April 4, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

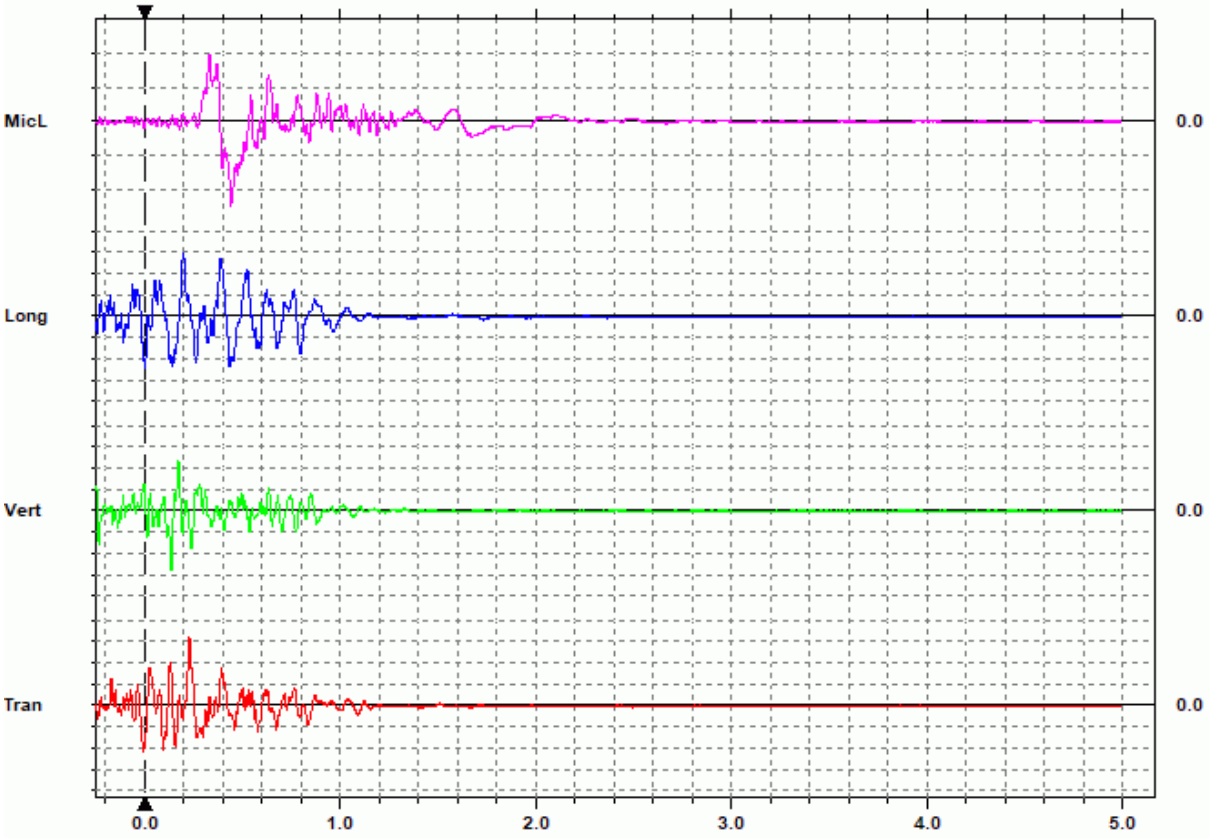
Microphone	Linear Weighting
PSPL	127.9 dB(L) at 0.441 sec.
ZC Freq	3.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	5.59	5.97	mm/s
ZC Freq	10	12	8.5	Hz
Time (Rel. to Trig)	0.228	0.136	0.194	sec
Peak Acceleration	0.0663	0.0795	0.0663	g
Peak Displacement	0.0719	0.0554	0.0960	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.49 mm/s At 0.135 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:16 April 4, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IEFJ.4G0W
Job Number	8177		

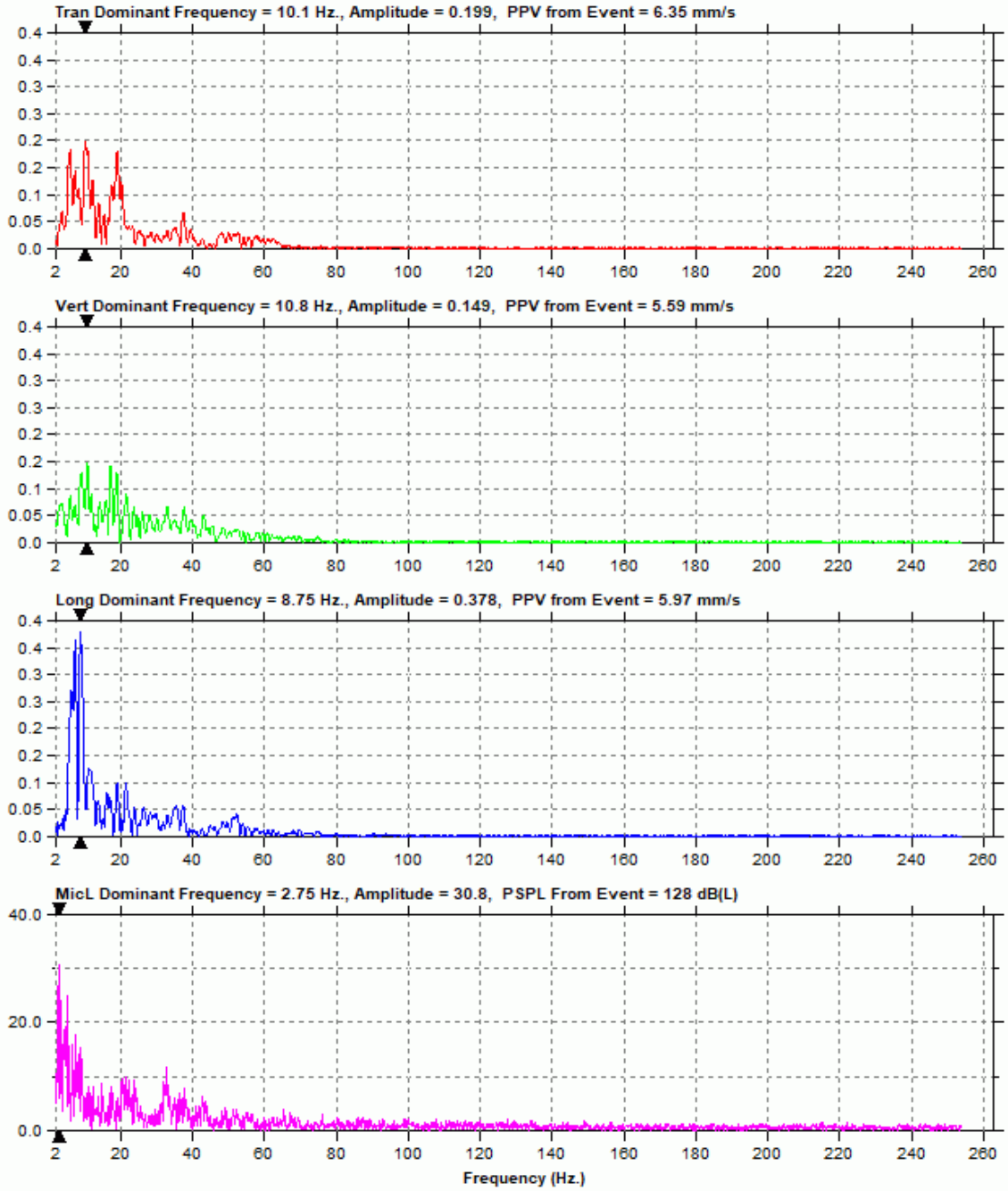
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 4, 2020 05:16:48
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:40 April 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IFPT.WG0W

Post Event Notes

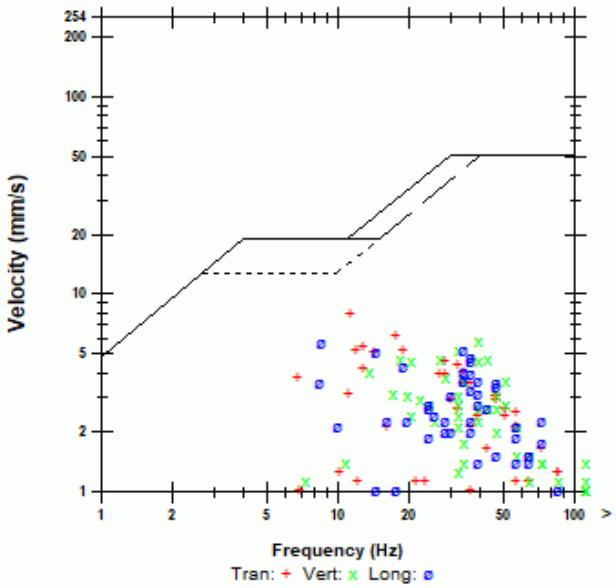
Extended Notes
Combo Mode April 29, 2020 10:33:16
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

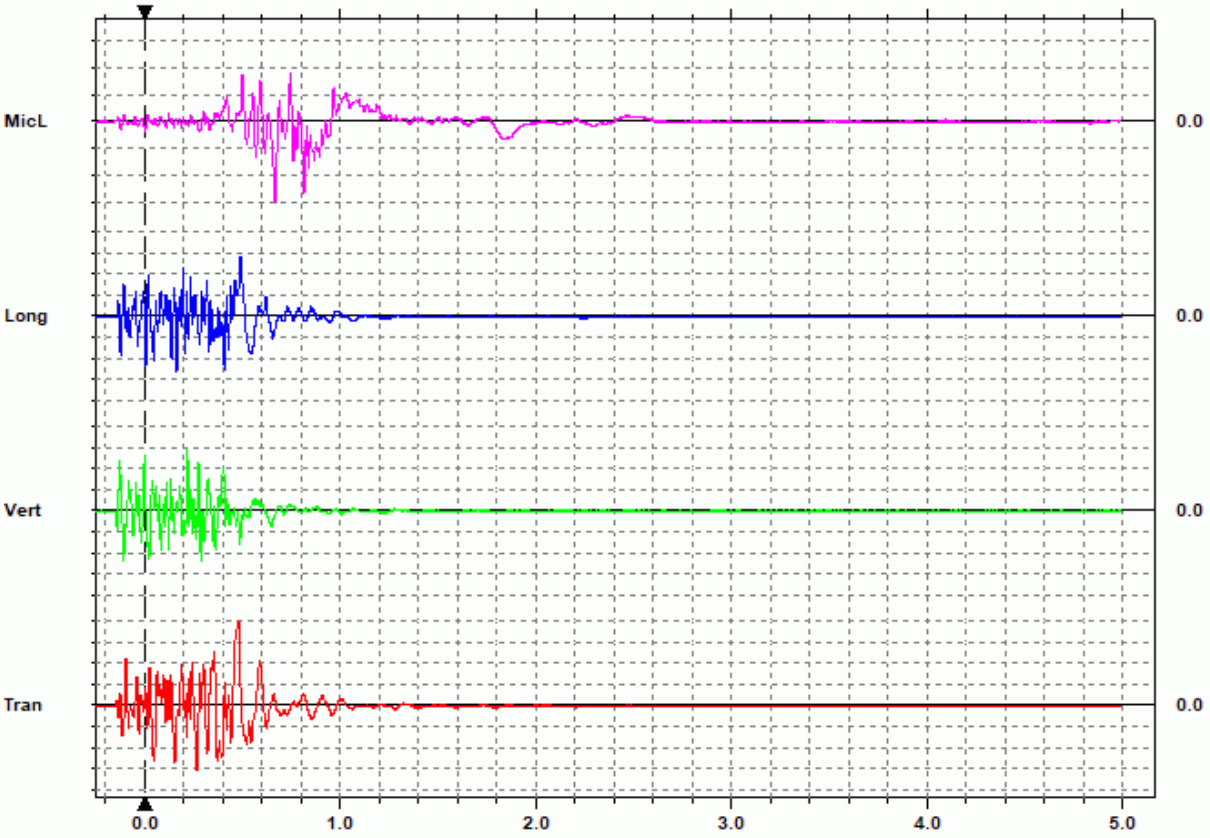
Microphone	Linear Weighting
PSPL	123.6 dB(L) at 0.669 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.00	5.84	5.71	mm/s
ZC Freq	11	39	8.5	Hz
Time (Rel. to Trig)	0.479	0.220	0.491	sec
Peak Acceleration	0.146	0.133	0.119	g
Peak Displacement	0.117	0.0383	0.0845	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.43 mm/s At 0.481 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:40 April 29, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IFPT.WG0W
Job Number	8177		

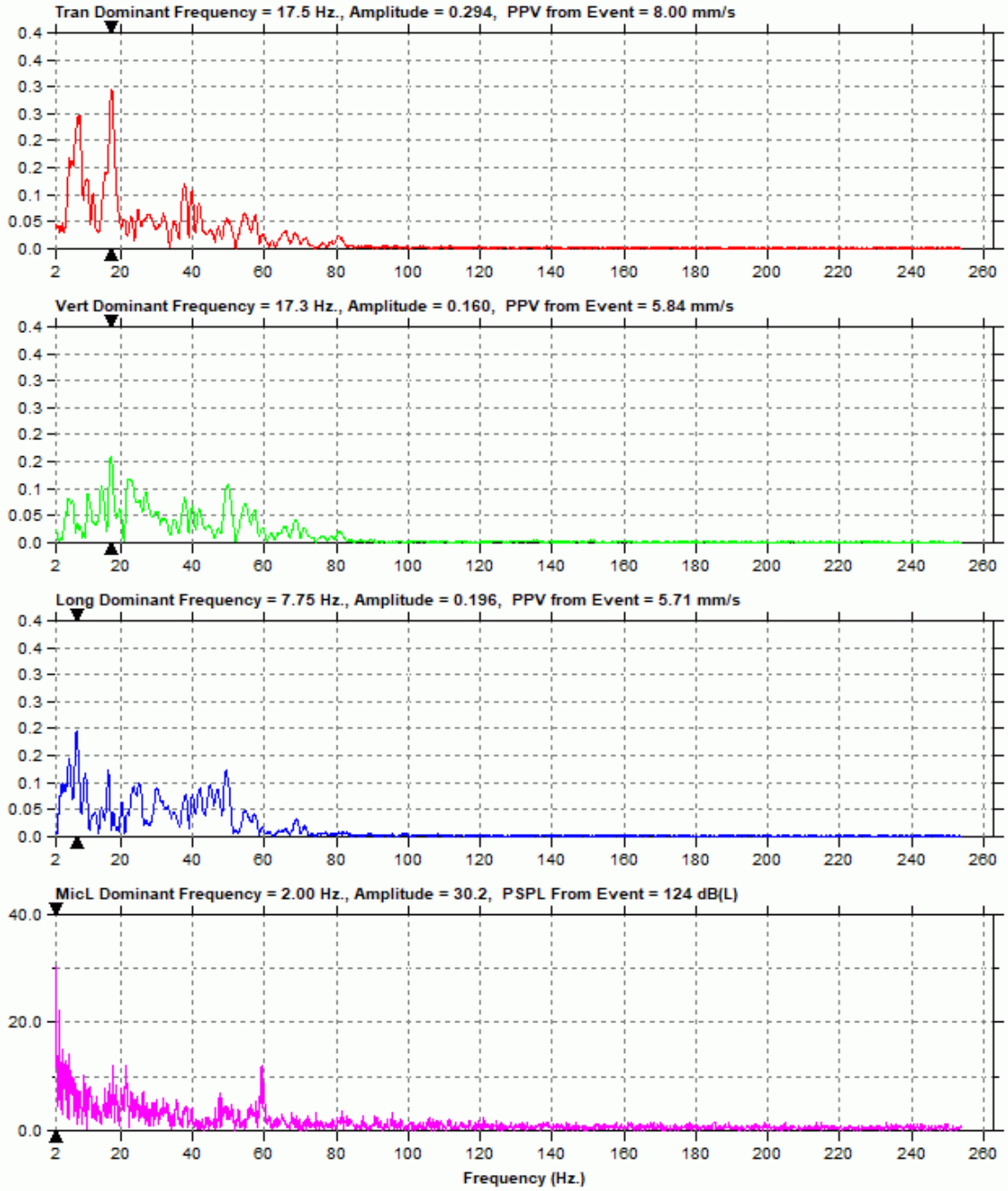
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 29, 2020 10:33:16
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 29, 2020 (V - 10.72)

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EXPLOTECH

Date/Time	Vert At 15:55:00 April 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IE9Y.VO0W

Post Event Notes

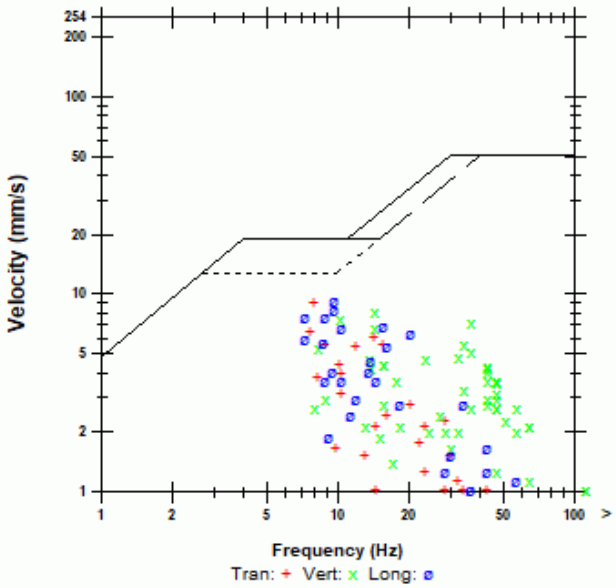
Extended Notes
Combo Mode April 1, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

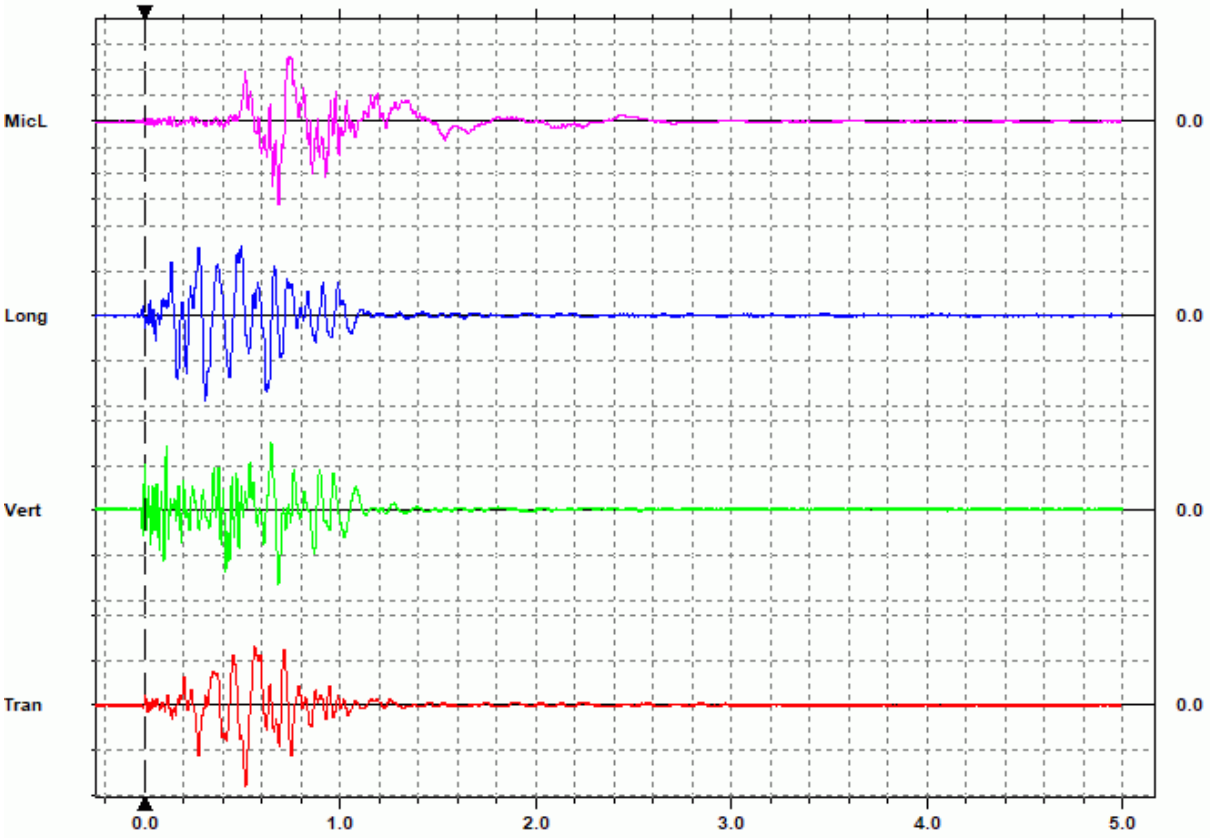
Microphone	Linear Weighting
PSPL	130.2 dB(L) at 0.685 sec.
ZC Freq	7.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.02	8.13	9.27	mm/s
ZC Freq	7.9	14	9.7	Hz
Time (Rel. to Trig)	0.517	0.684	0.310	sec
Peak Acceleration	0.0795	0.172	0.0928	g
Peak Displacement	0.145	0.0856	0.141	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.67 mm/s At 0.276 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:00 April 1, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IE9Y.VO0W
Job Number	8177		

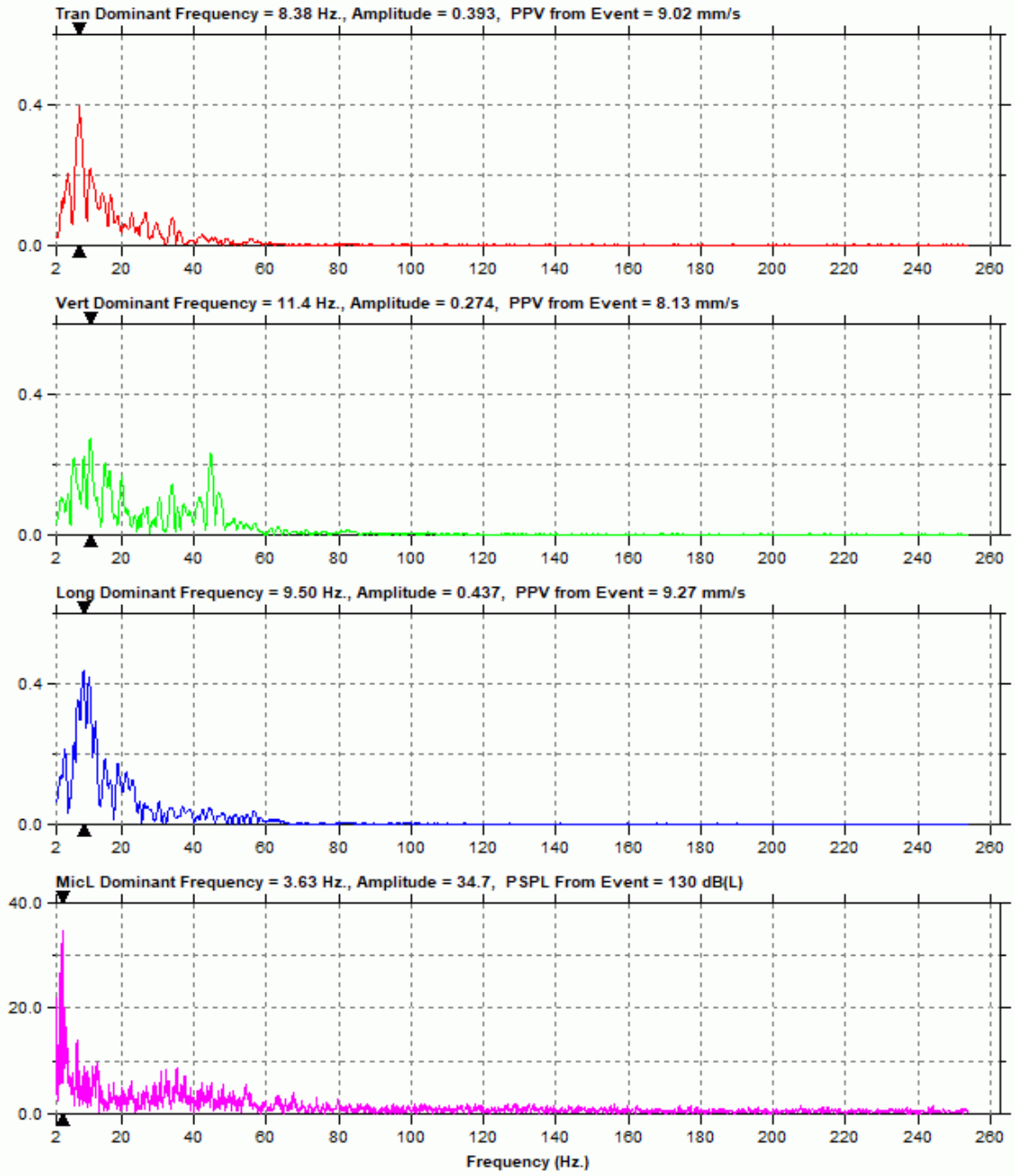
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 1, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:12 April 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IEBT.SC0W

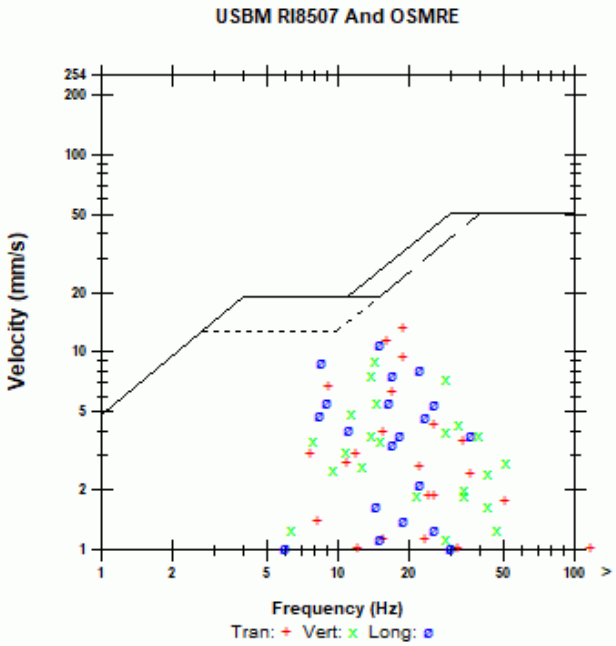
Post Event Notes

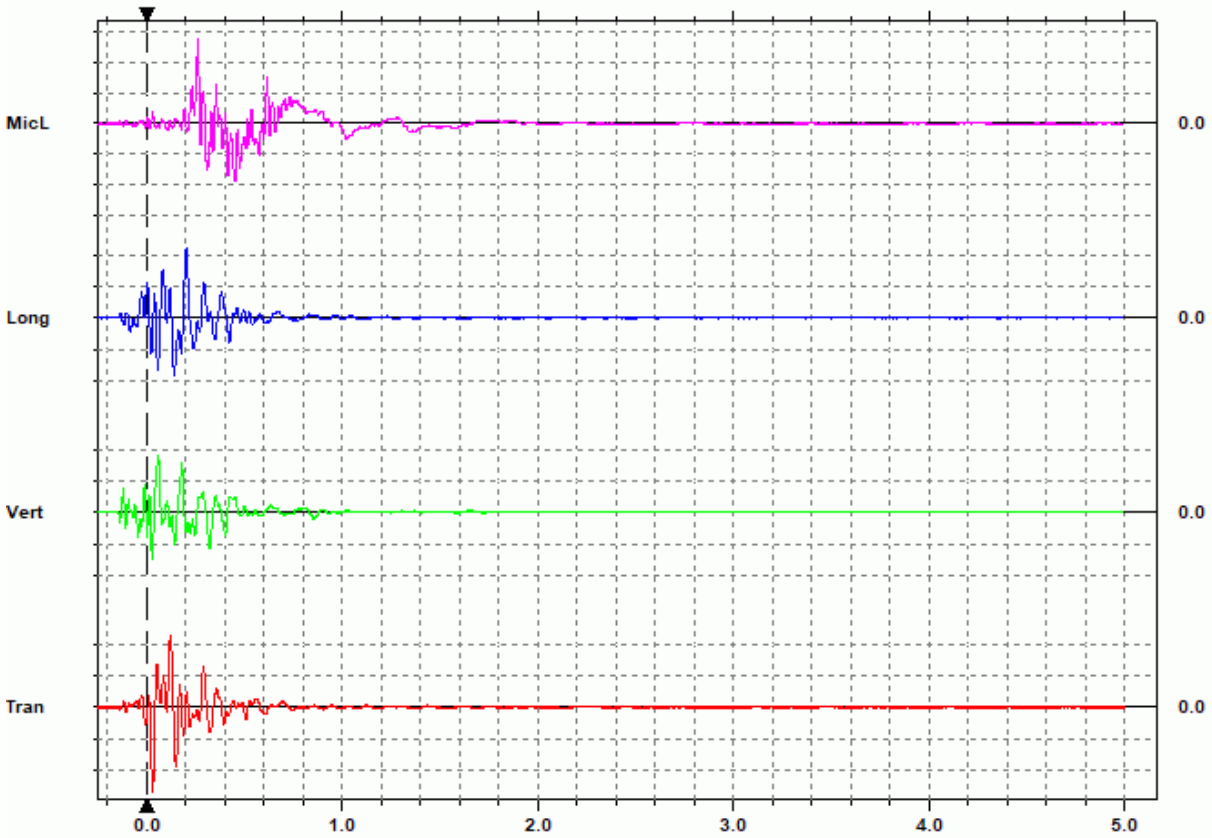
Extended Notes
Combo Mode April 2, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	128.7 dB(L) at 0.262 sec.
ZC Freq	9.0 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	13.2	9.14	10.9	mm/s
ZC Freq	19	14	15	Hz
Time (Rel. to Trig)	0.030	0.058	0.202	sec
Peak Acceleration	0.159	0.119	0.119	g
Peak Displacement	0.108	0.0954	0.134	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 15.2 mm/s At 0.029 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:12 April 2, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IEBT.SC0W
Job Number	8177		

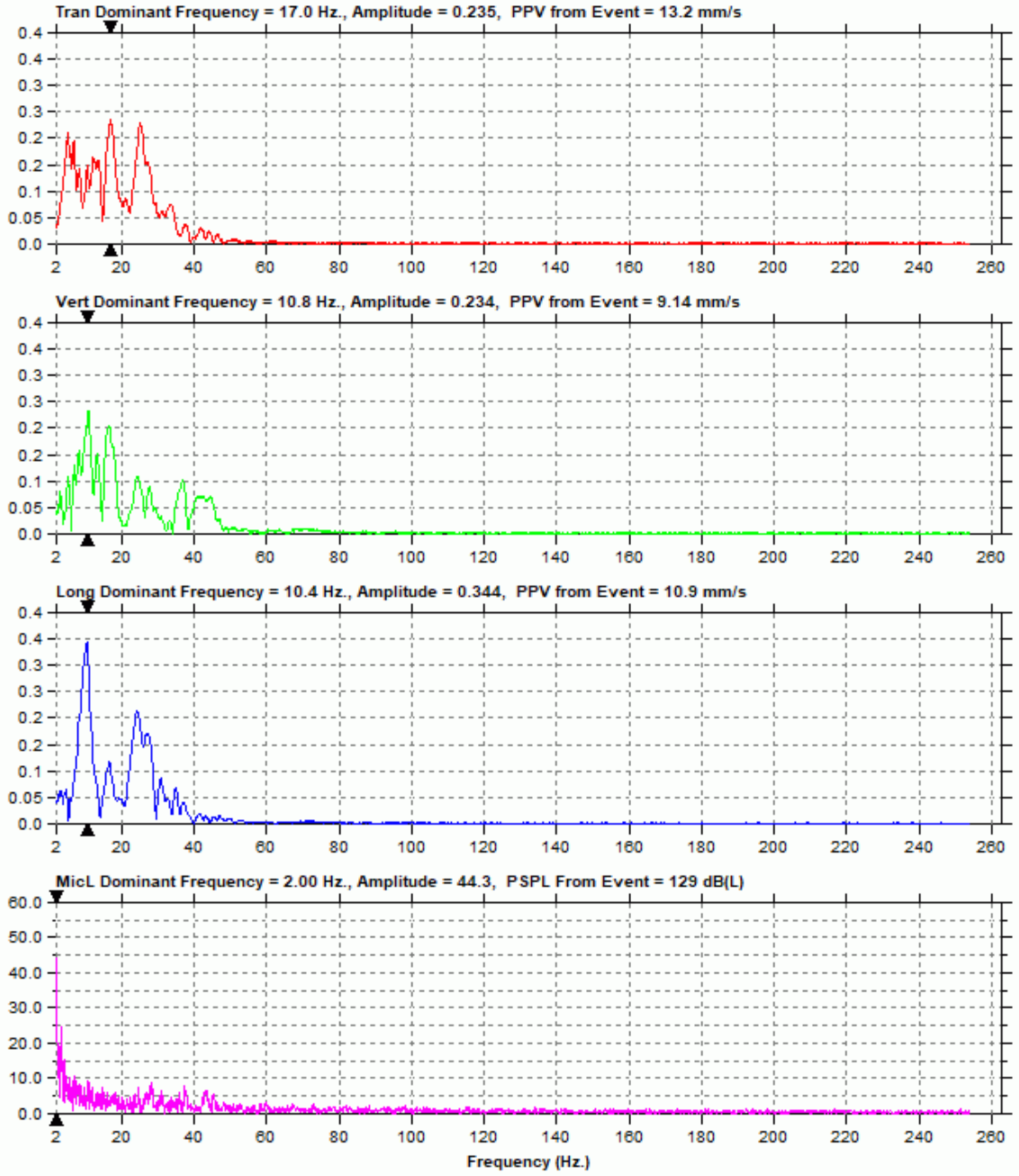
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 2, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:27 April 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IEFJ.330W

Post Event Notes

Extended Notes

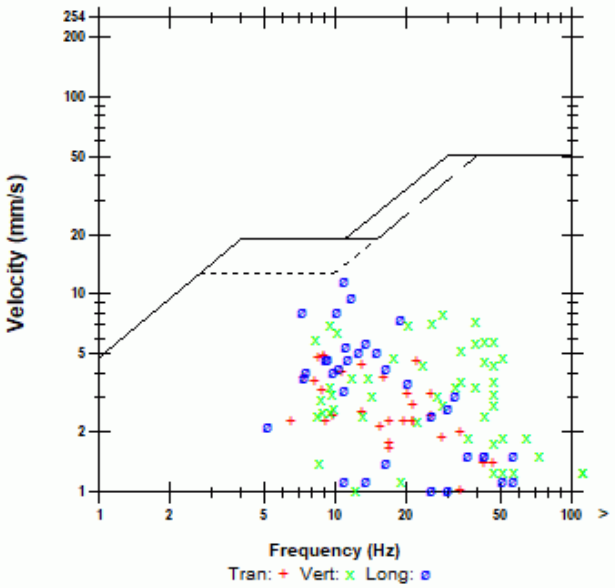
Combo Mode April 4, 2020 05:16:52
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

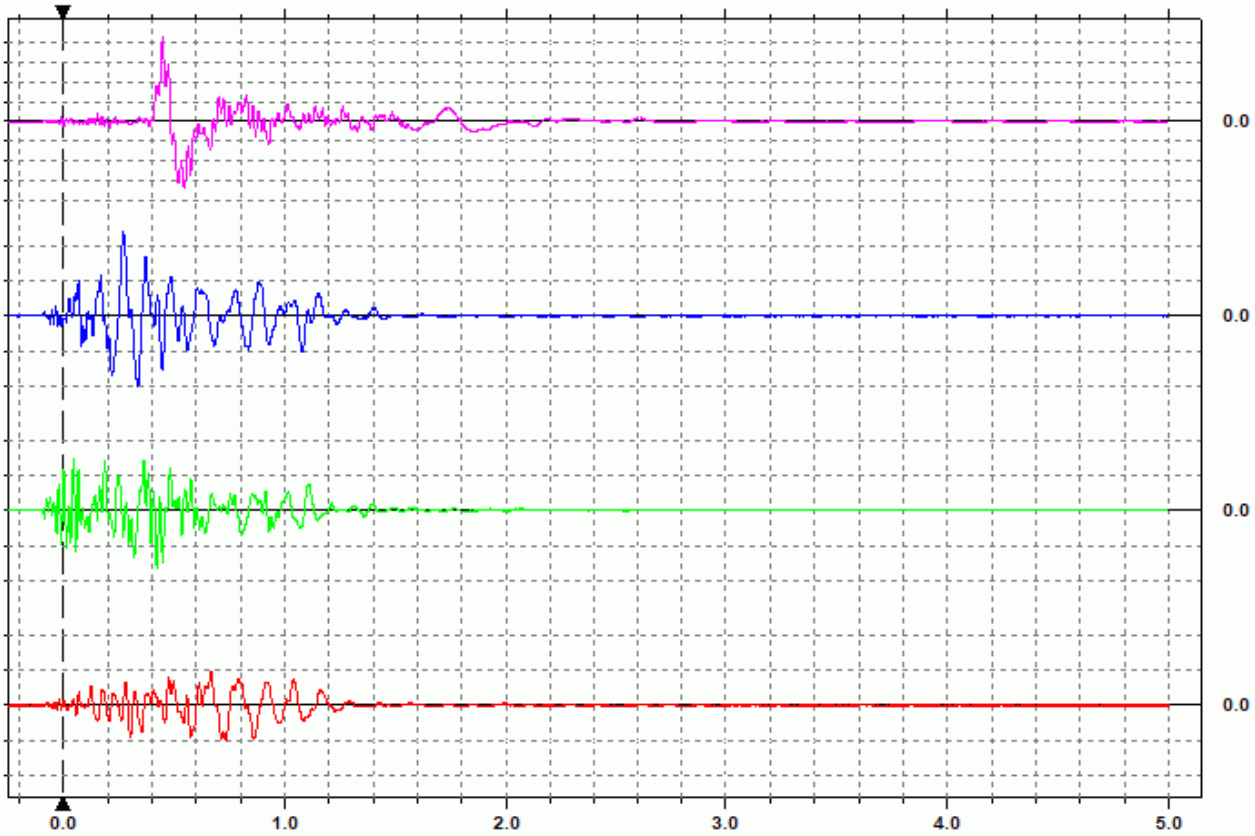
Microphone	Linear Weighting
PSPL	132.5 dB(L) at 0.448 sec.
ZC Freq	5.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	8.00	11.8	mm/s
ZC Freq	9.0	28	11	Hz
Time (Rel. to Trig)	0.734	0.423	0.270	sec
Peak Acceleration	0.0663	0.199	0.119	g
Peak Displacement	0.0940	0.0895	0.151	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.4 mm/s At 0.271 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:27 April 4, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IEFJ.330W
Job Number	8177		

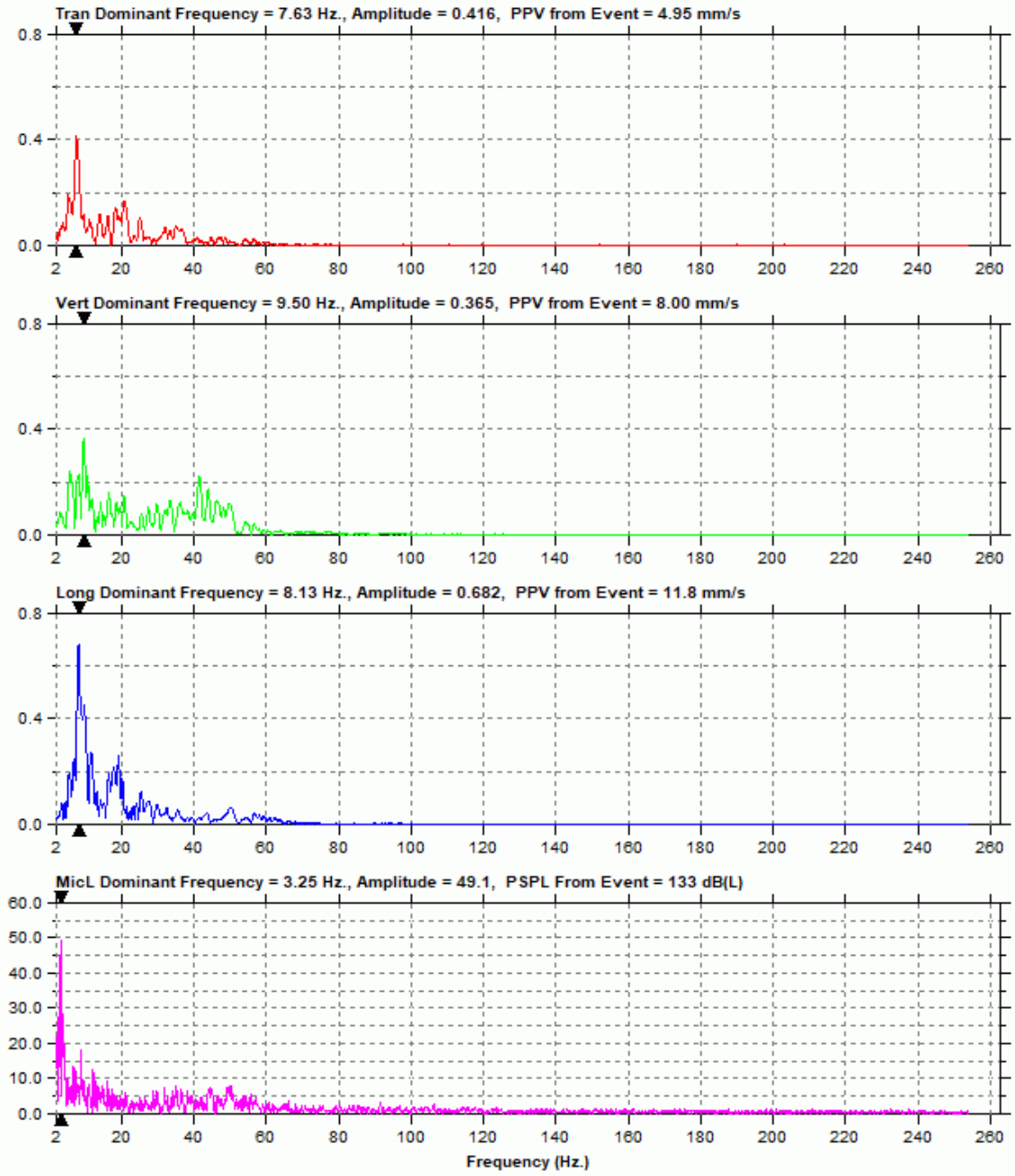
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 4, 2020 05:16:52
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:16:45 April 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IEY2.JX0W

Post Event Notes

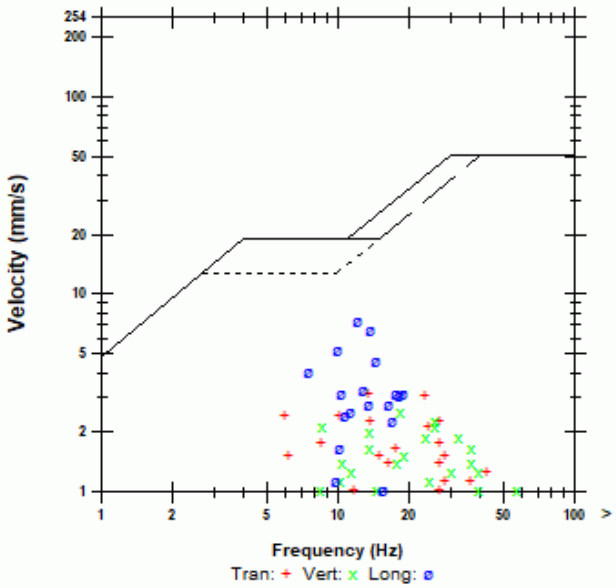
Extended Notes
Combo Mode April 14, 2020 05:17:22
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

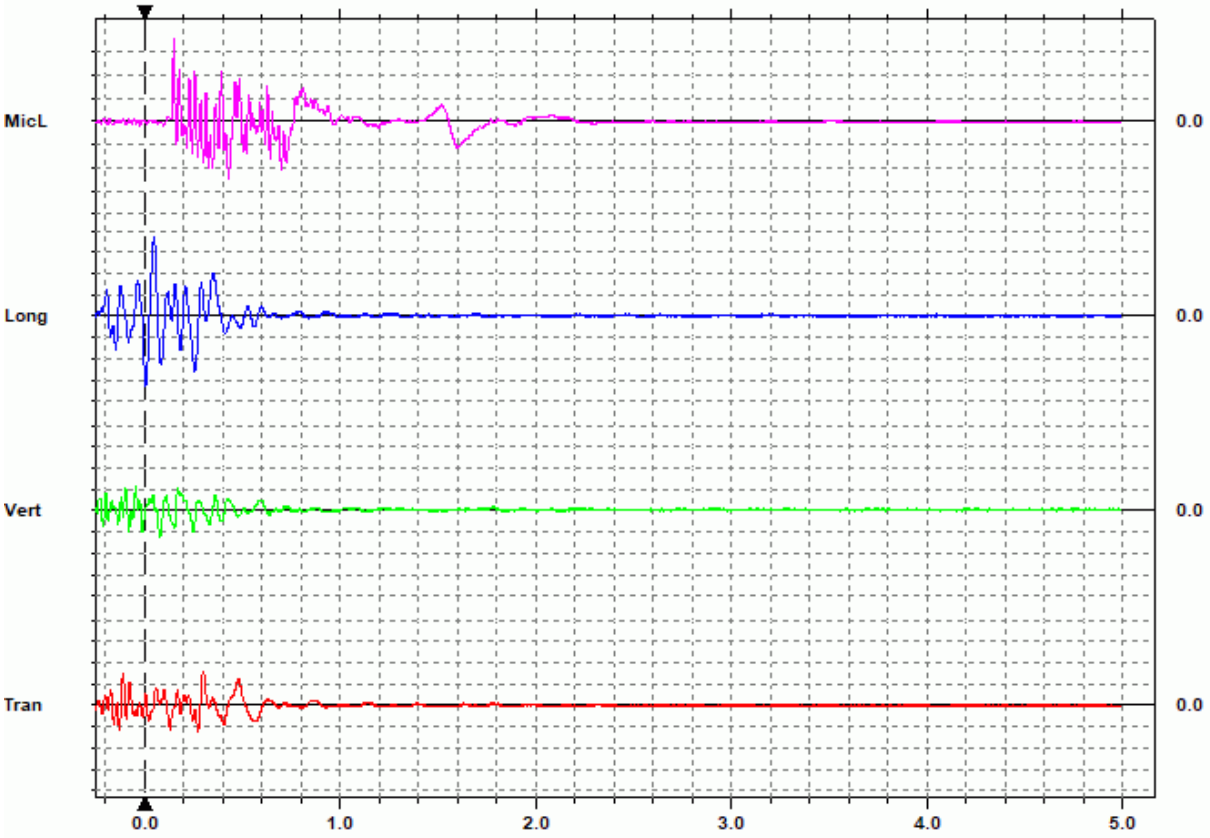
Microphone	Linear Weighting
PSPL	125.0 dB(L) at 0.149 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.17	2.54	7.37	mm/s
ZC Freq	13	18	12	Hz
Time (Rel. to Trig)	0.300	0.078	0.049	sec
Peak Acceleration	0.0530	0.0530	0.0663	g
Peak Displacement	0.0525	0.0383	0.0928	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.46 mm/s At 0.049 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:16:45 April 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IEY2.JX0W
Job Number	8177		

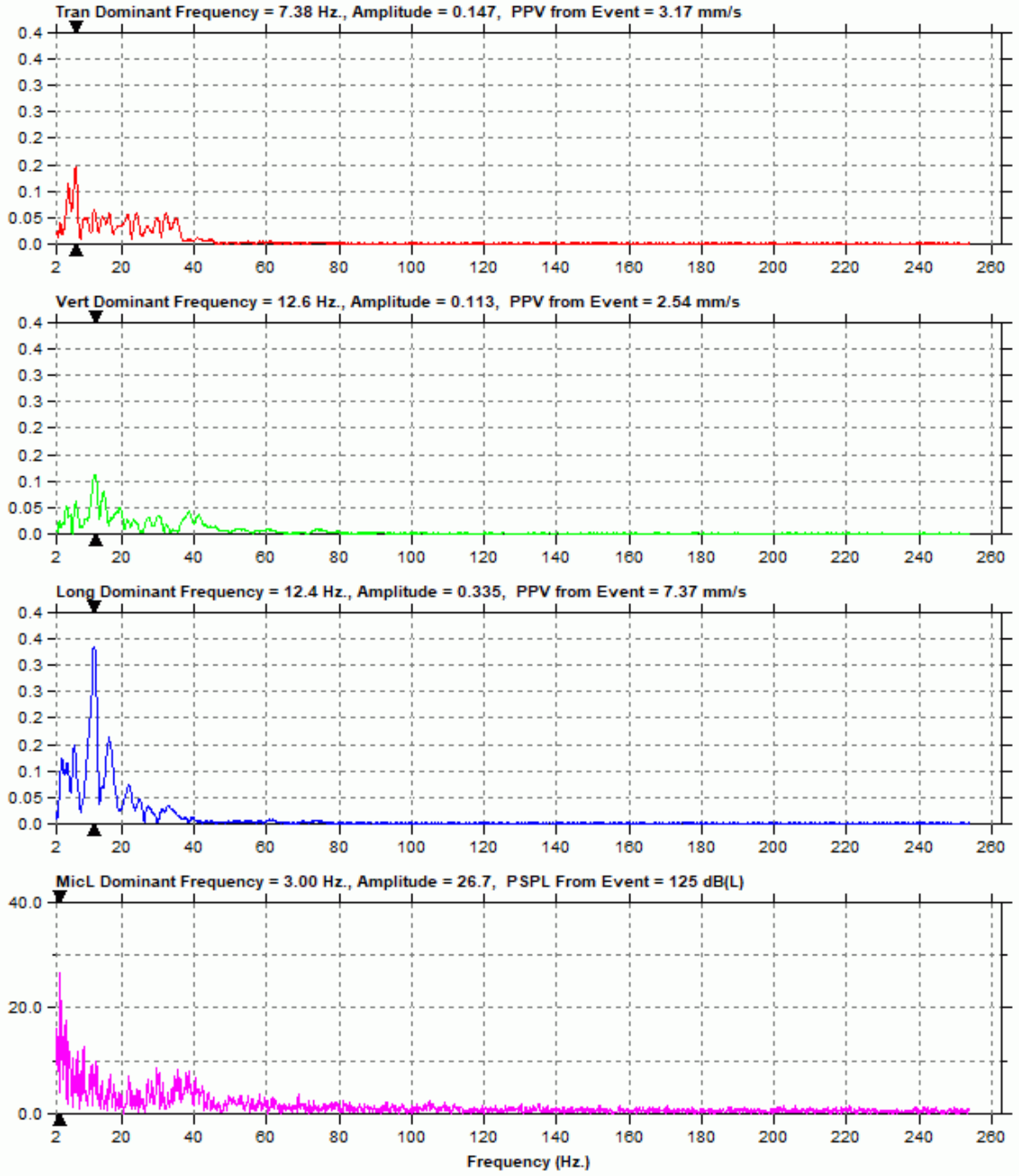
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 14, 2020 05:17:22
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:23 April 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFCV.6B0W

Post Event Notes

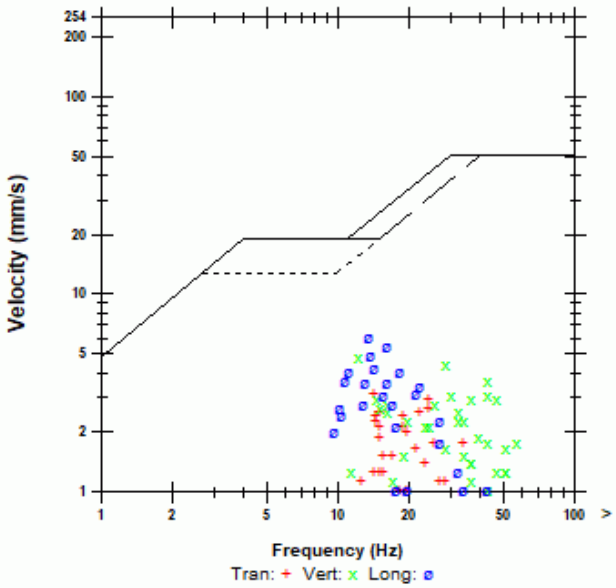
Extended Notes
Combo Mode April 22, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

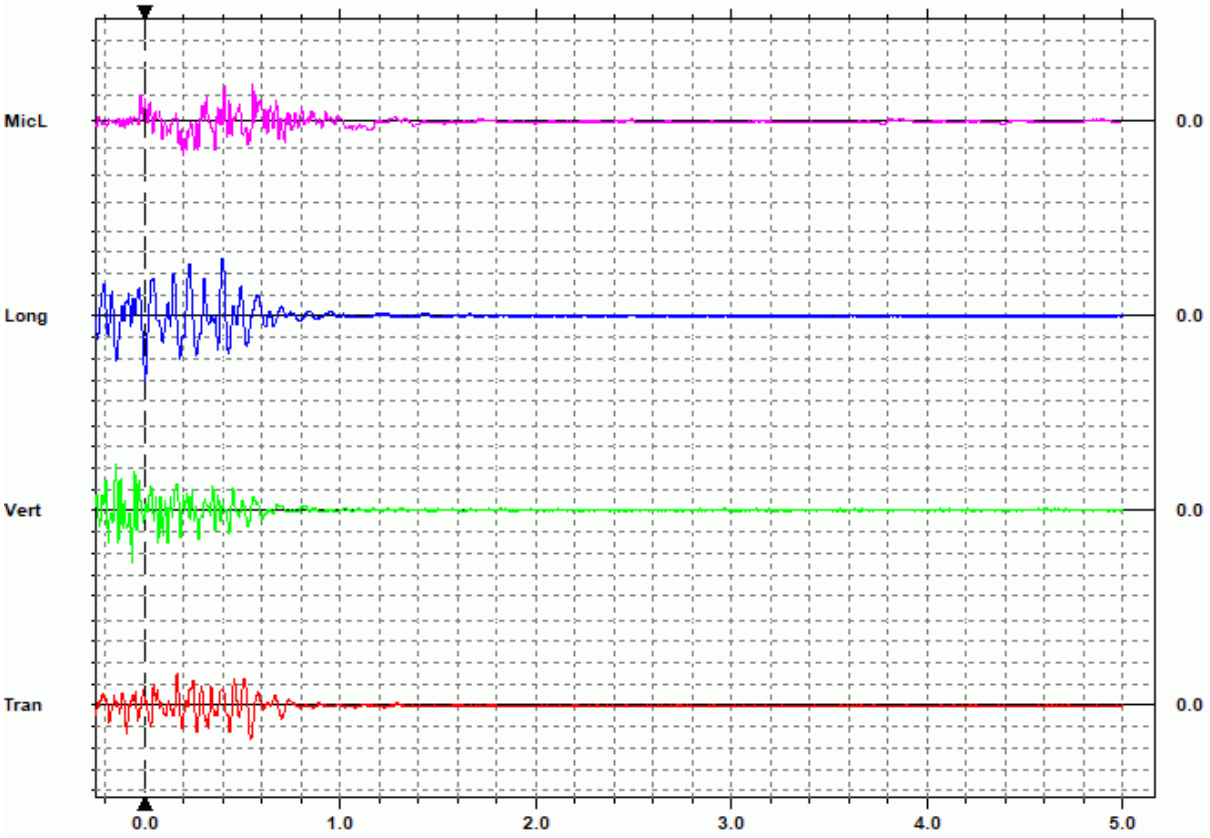
Microphone	Linear Weighting
PSPL	116.7 dB(L) at 0.555 sec.
ZC Freq	34 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.17	4.83	6.10	mm/s
ZC Freq	14	12	13	Hz
Time (Rel. to Trig)	0.543	-0.063	0.003	sec
Peak Acceleration	0.0530	0.106	0.0795	g
Peak Displacement	0.0355	0.0358	0.0605	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.13 mm/s At 0.005 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:23 April 22, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFCV.6B0W
Job Number	8177		

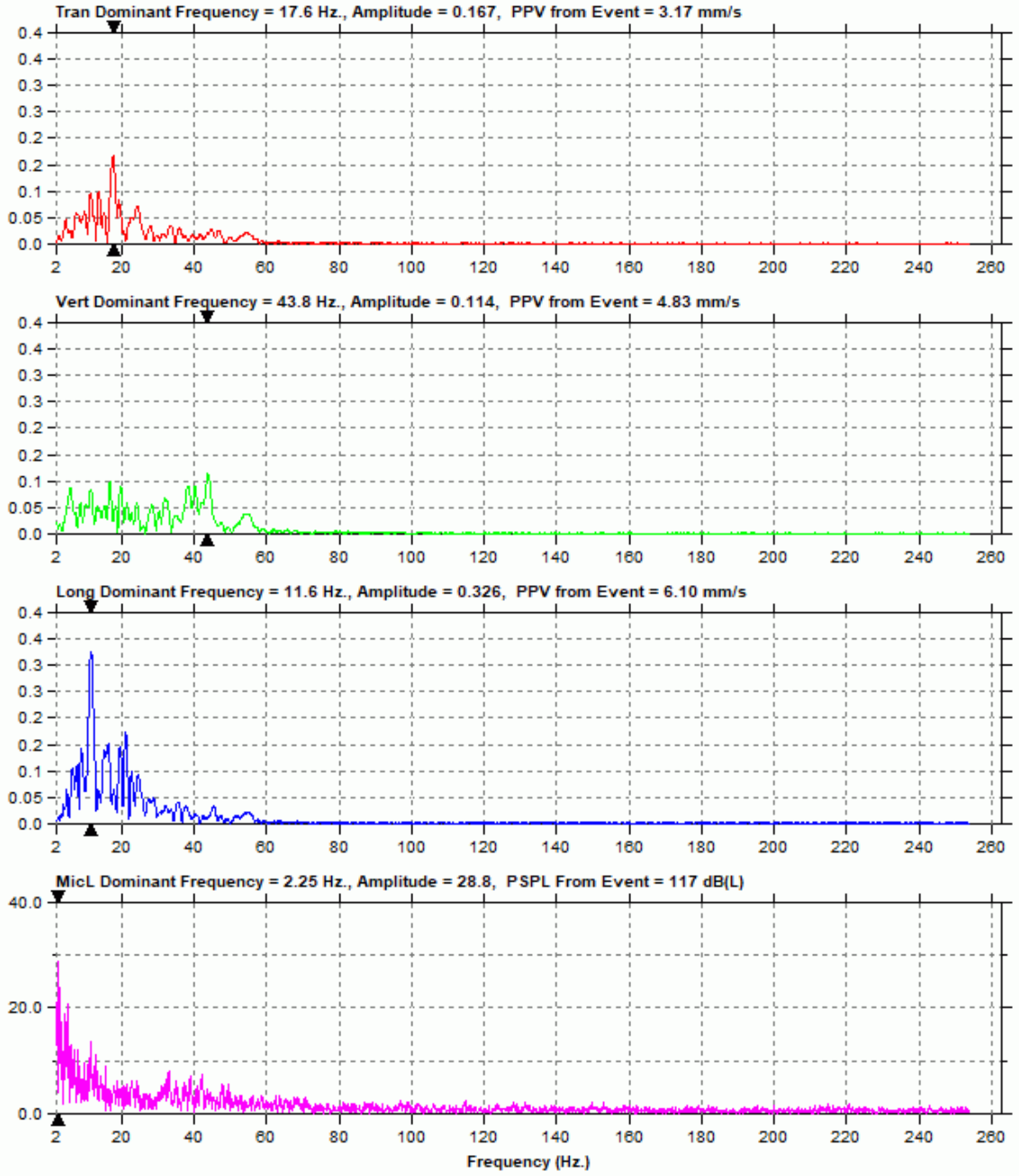
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 22, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:16 April 27, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFM4.BG0W

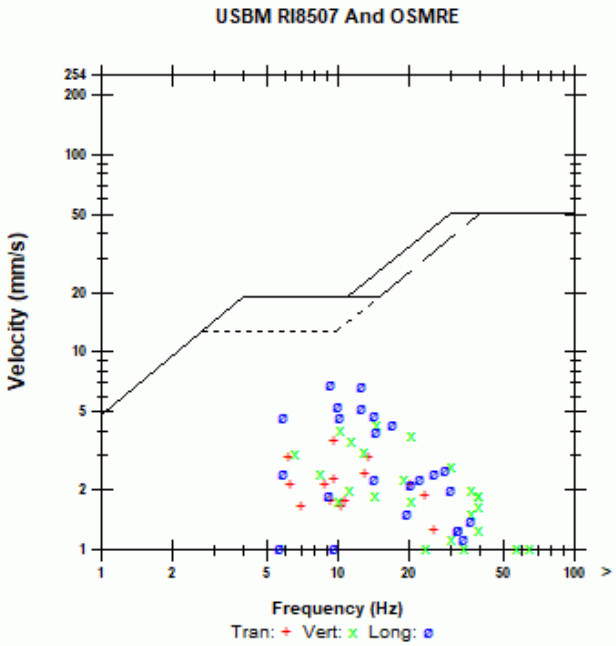
Post Event Notes

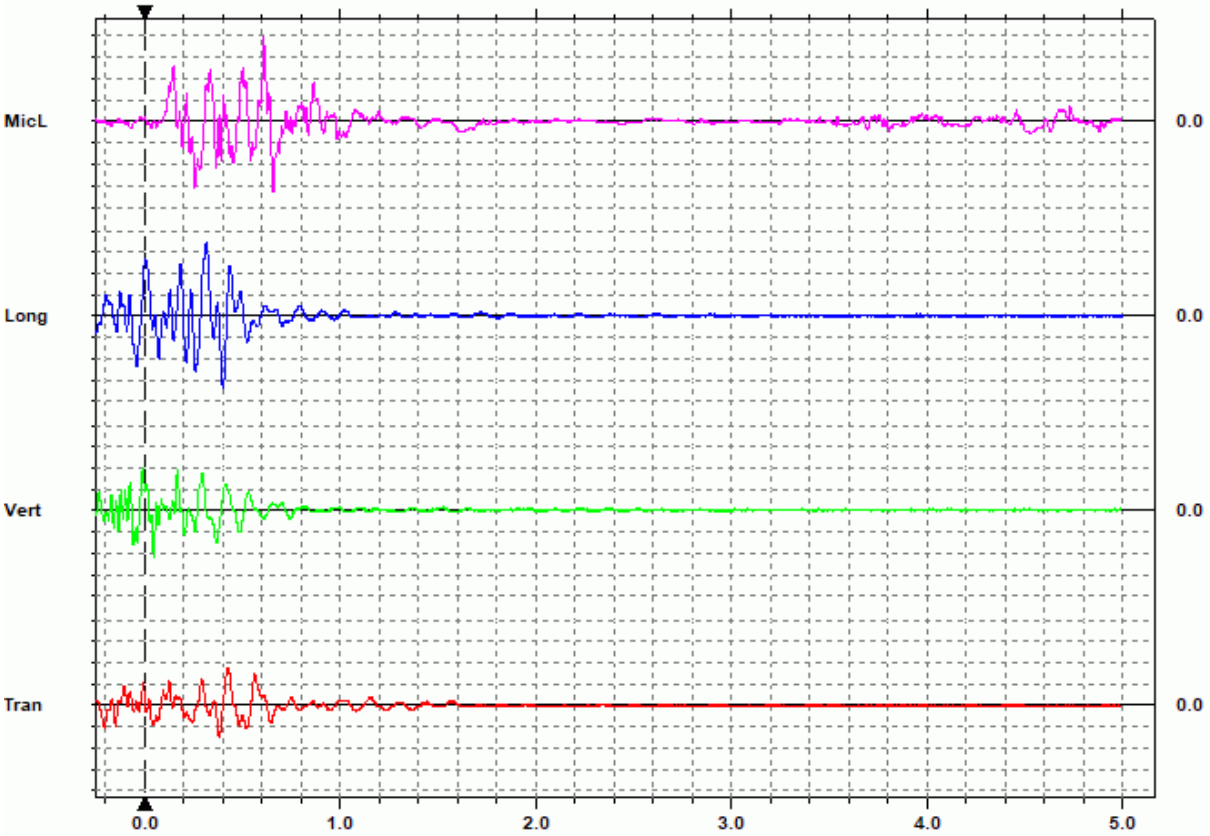
Extended Notes
Combo Mode April 27, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	125.7 dB(L) at 0.610 sec.
ZC Freq	7.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.56	4.32	6.86	mm/s
ZC Freq	9.7	15	9.3	Hz
Time (Rel. to Trig)	0.427	0.047	0.315	sec
Peak Acceleration	0.0398	0.0663	0.0663	g
Peak Displacement	0.0564	0.0533	0.114	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.97 mm/s At 0.403 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 27, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:16 April 27, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFM4.BG0W
Job Number	8177		

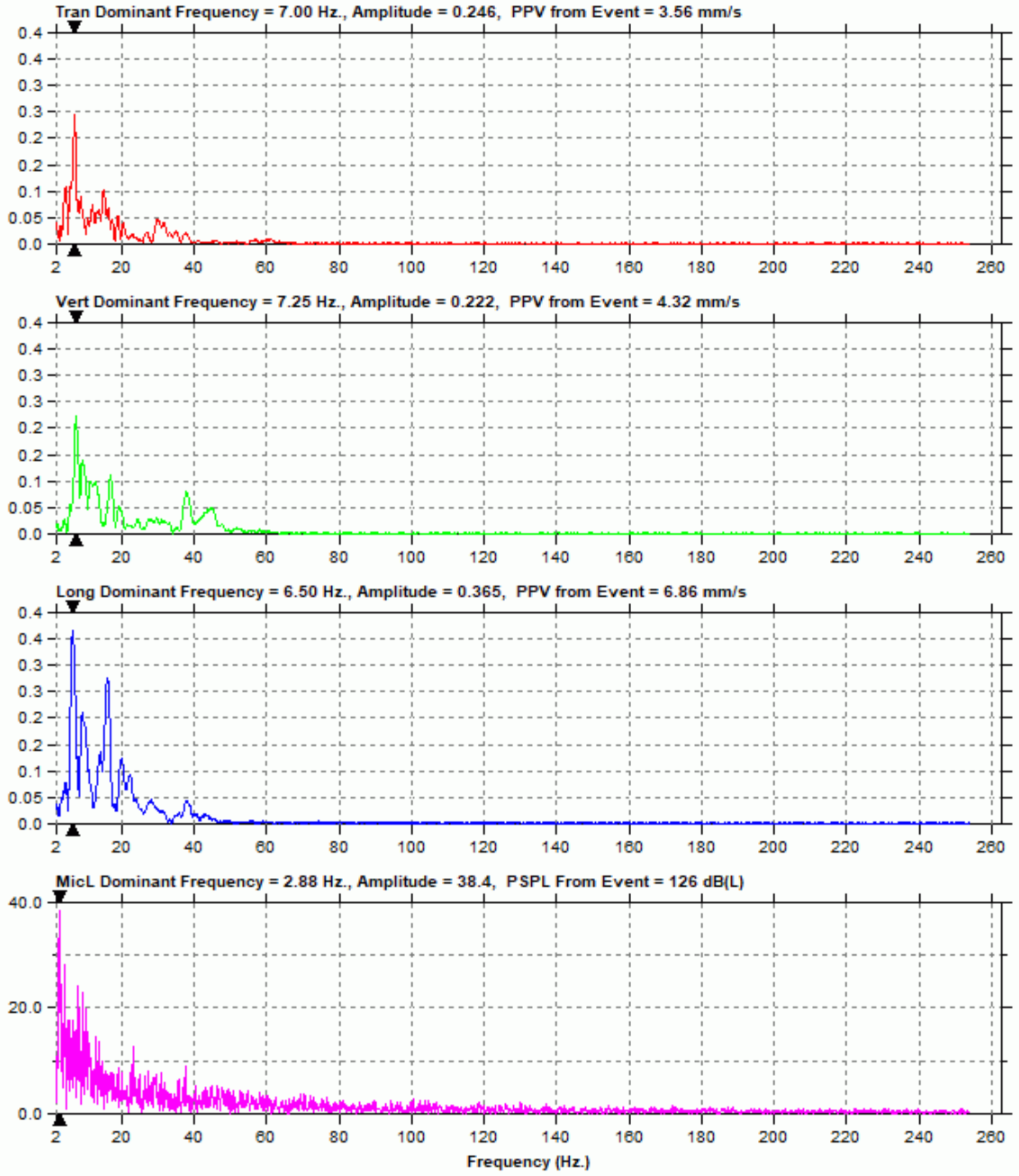
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 27, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:20 April 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFPT.U80W

Post Event Notes

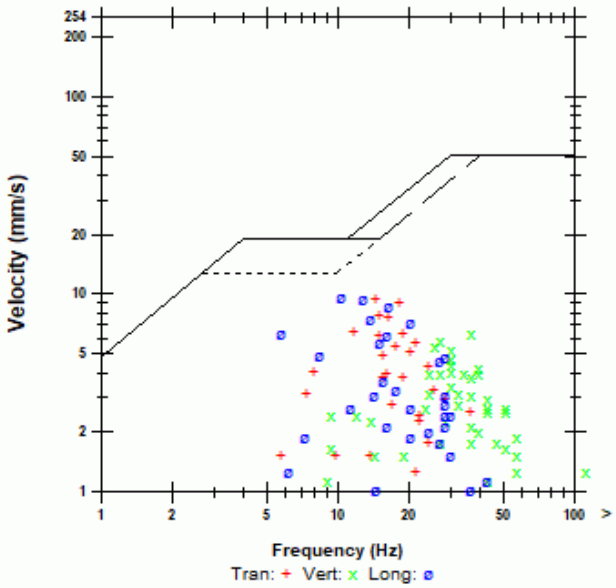
Extended Notes
Combo Mode April 29, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

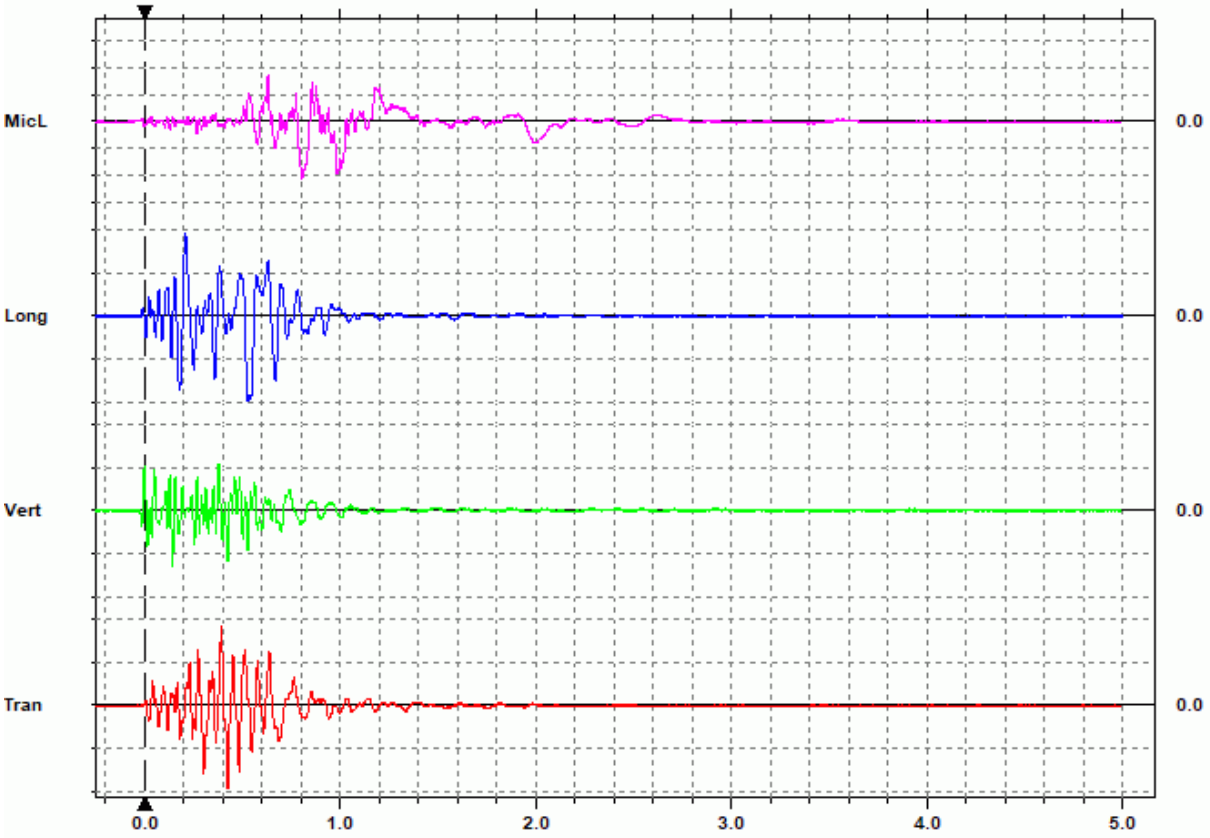
Microphone	Linear Weighting
PSPL	120.5 dB(L) at 0.806 sec.
ZC Freq	7.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.52	6.35	9.78	mm/s
ZC Freq	15	37	10	Hz
Time (Rel. to Trig)	0.427	0.145	0.528	sec
Peak Acceleration	0.133	0.133	0.106	g
Peak Displacement	0.0774	0.0388	0.172	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.2 mm/s At 0.427 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:20 April 29, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFPT.U80W
Job Number	8177		

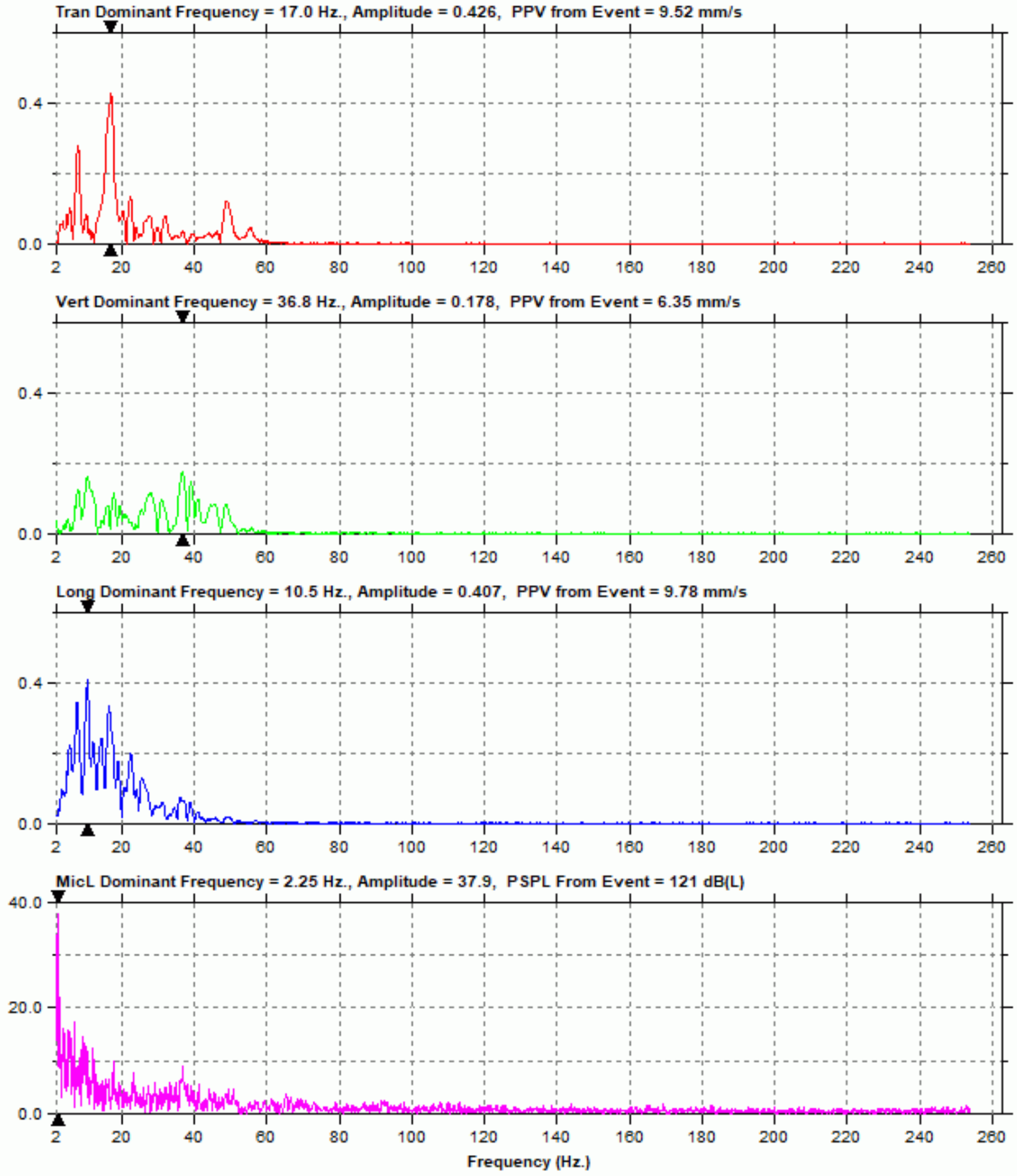
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 29, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:54:46 April 30, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFRO.7A0W

Post Event Notes

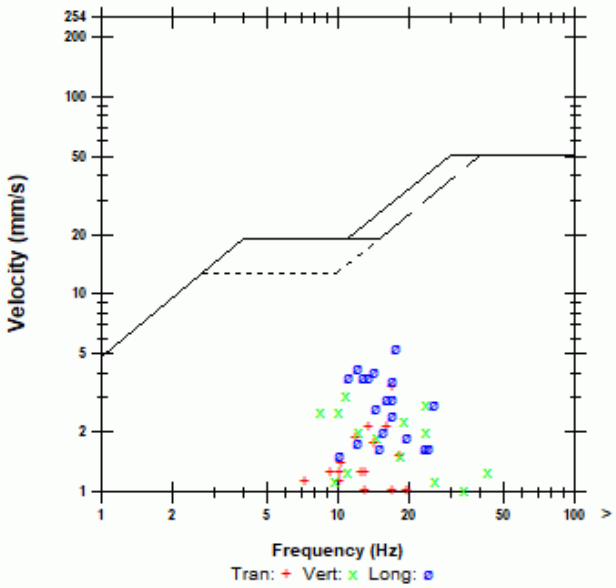
Extended Notes
Combo Mode April 30, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

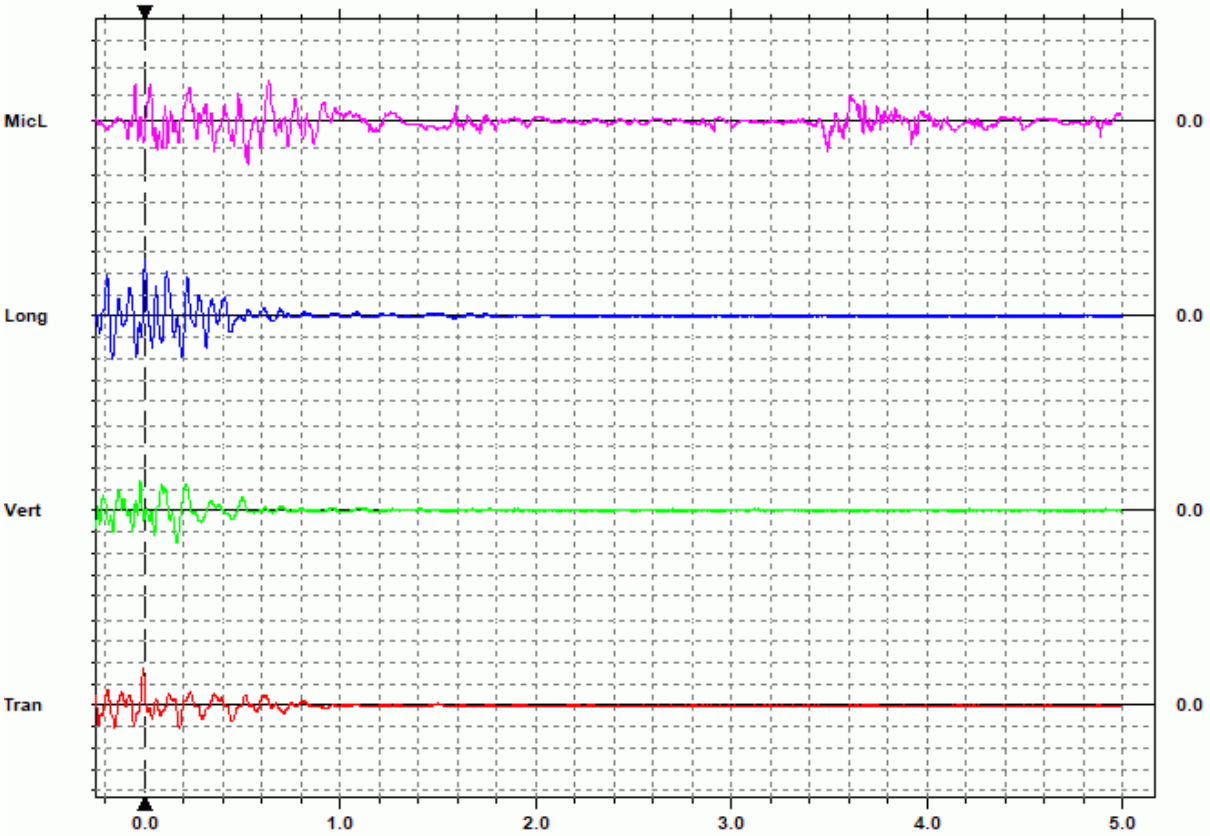
Microphone	Linear Weighting
PSPL	118.2 dB(L) at 0.530 sec.
ZC Freq	9.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.43	3.05	5.33	mm/s
ZC Freq	17	11	18	Hz
Time (Rel. to Trig)	-0.006	0.165	0.002	sec
Peak Acceleration	0.0398	0.0398	0.0663	g
Peak Displacement	0.0288	0.0419	0.0500	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.69 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 30, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:54:46 April 30, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFRO.7A0W
Job Number	8177		

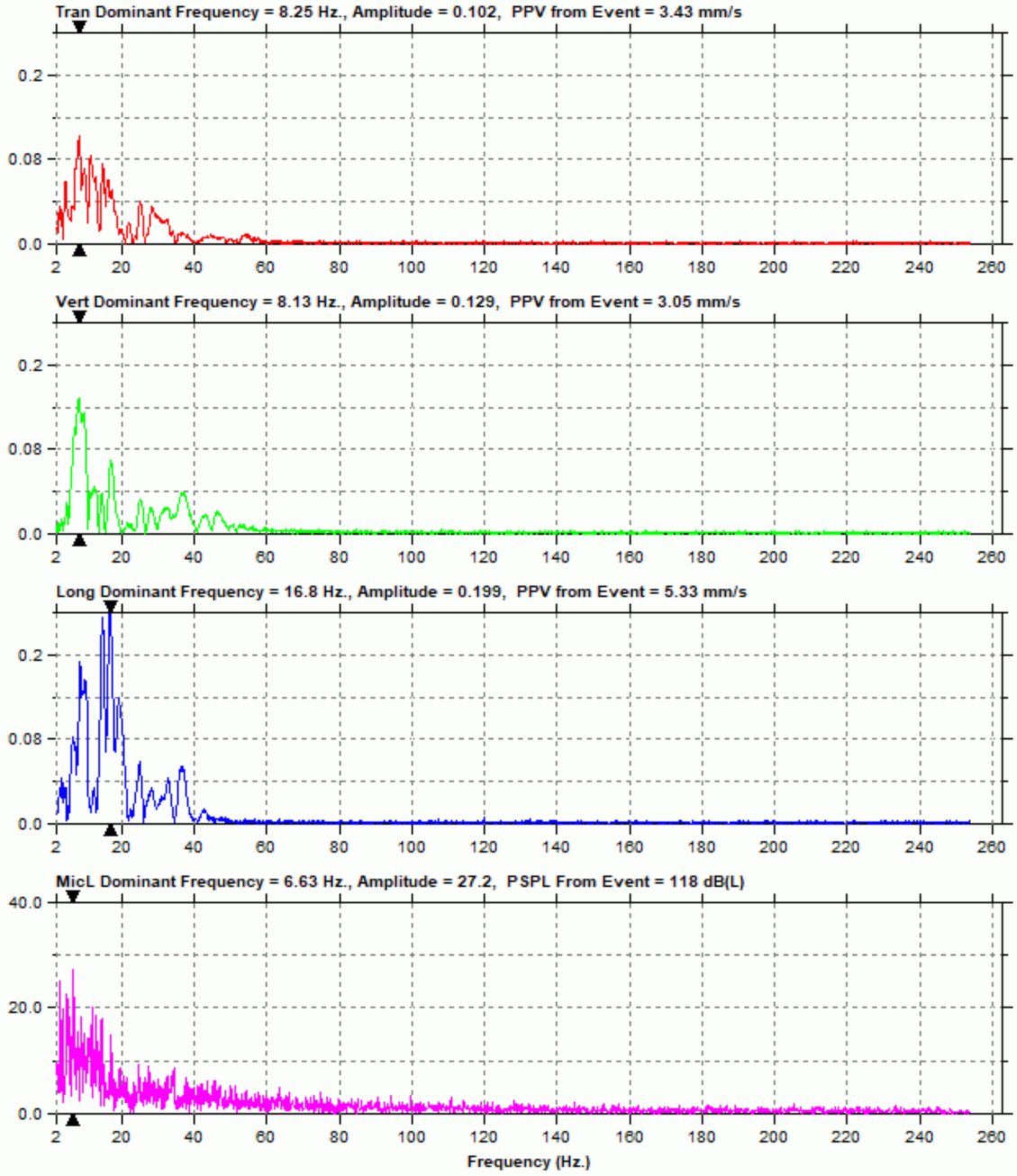
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 30, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 30, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:12 April 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IE9Y.W00W

Post Event Notes

Extended Notes

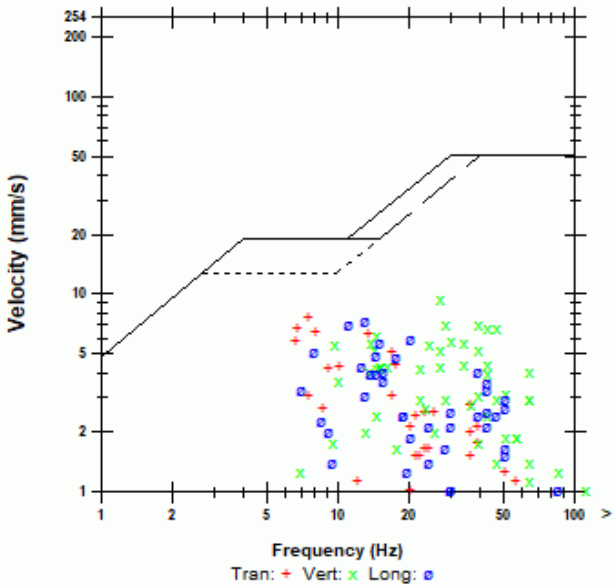
Combo Mode April 1, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

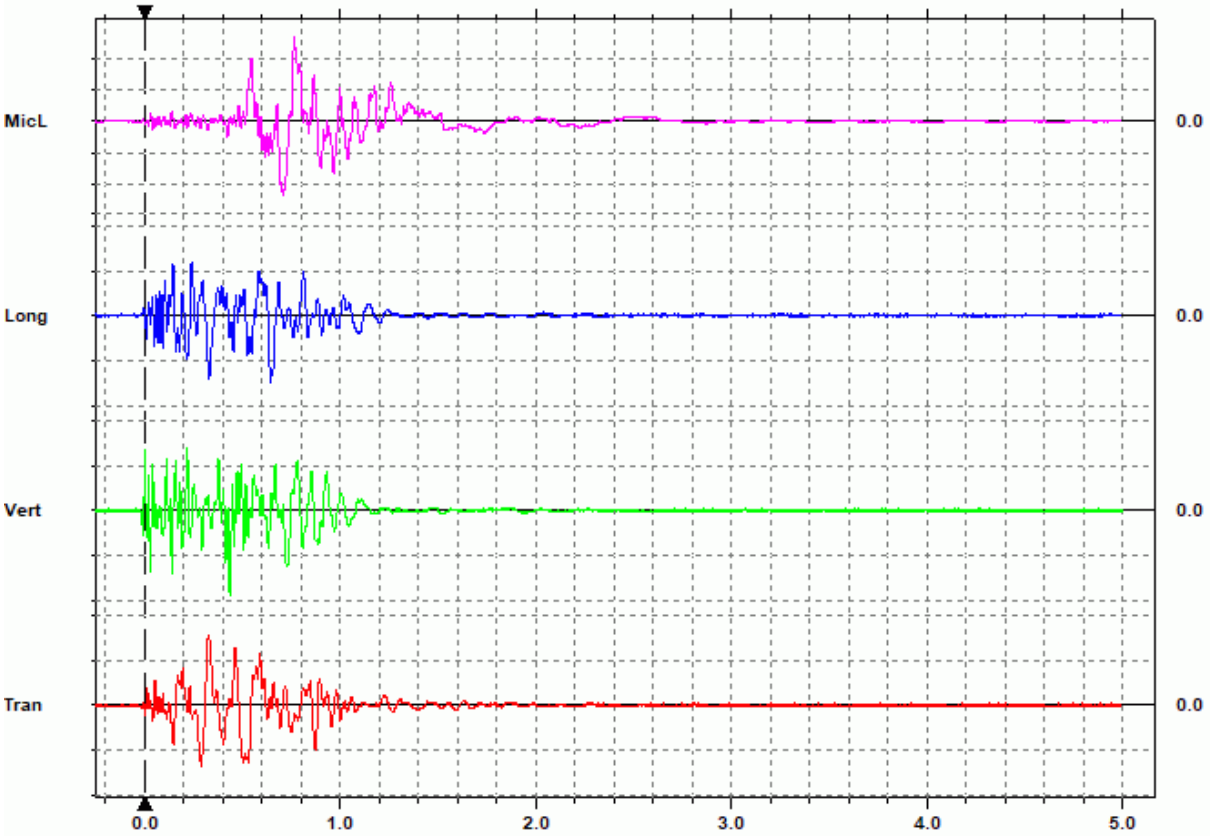
Microphone	Linear Weighting
PSPL	128.6 dB(L) at 0.765 sec.
ZC Freq	7.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.75	9.40	7.37	mm/s
ZC Freq	7.5	27	13	Hz
Time (Rel. to Trig)	0.325	0.437	0.646	sec
Peak Acceleration	0.0795	0.212	0.133	g
Peak Displacement	0.151	0.0784	0.0990	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.5 mm/s At 0.329 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:12 April 1, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IE9Y.W00W
Job Number	8177		

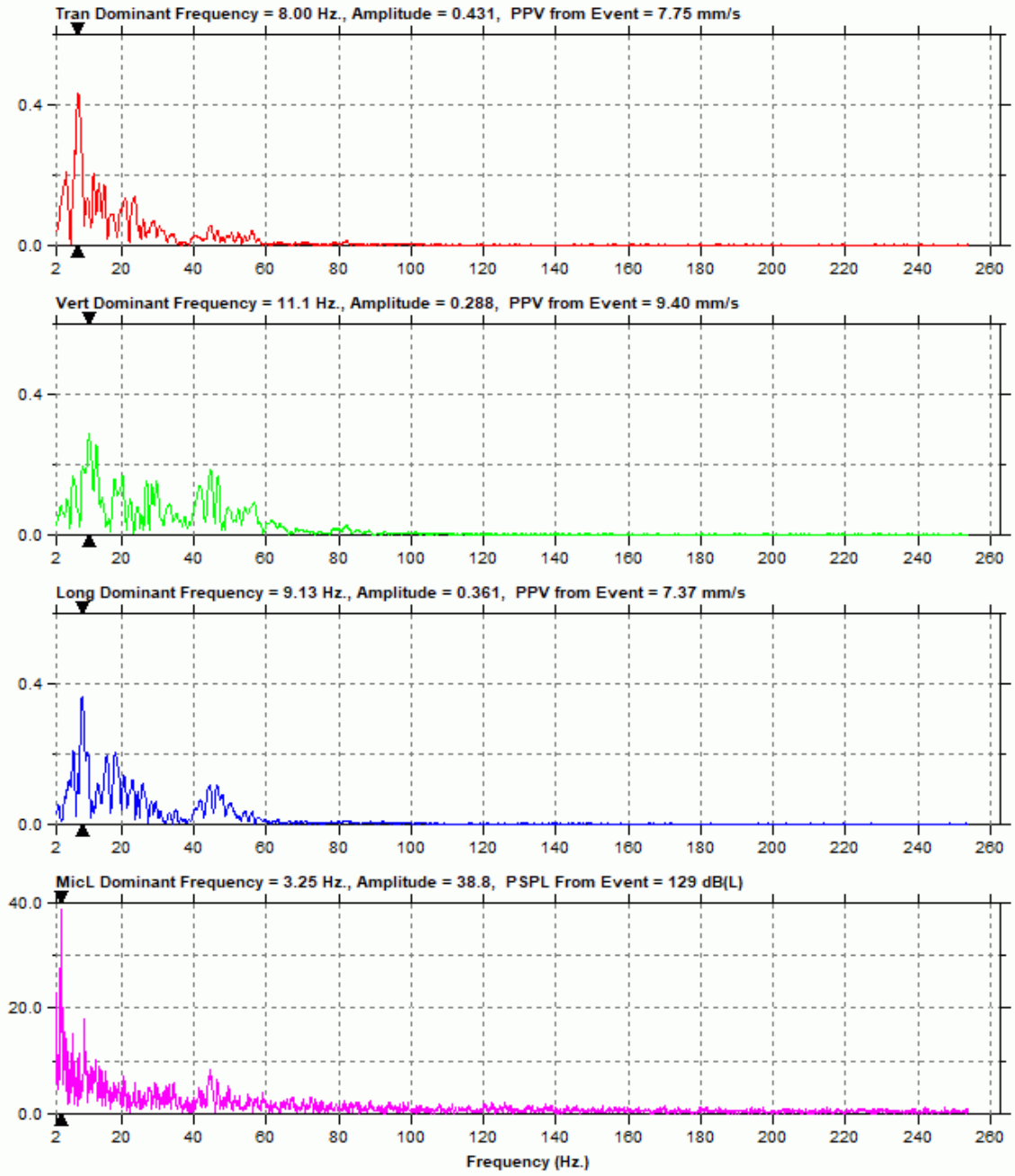
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 1, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:25 April 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IEBT.SP0W

Post Event Notes

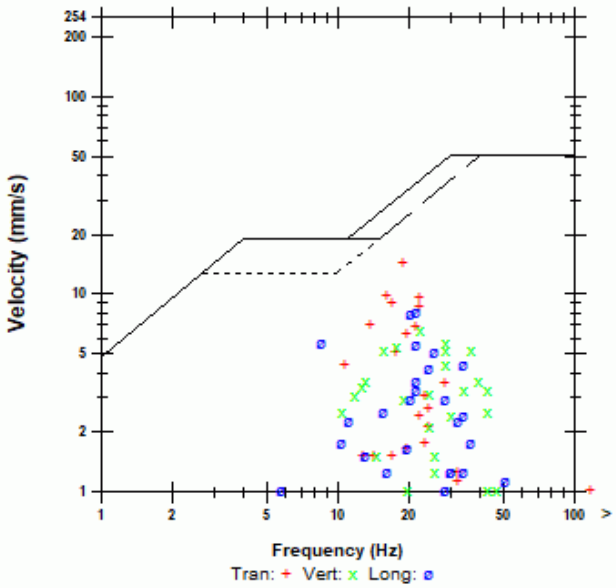
Extended Notes
Combo Mode April 2, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

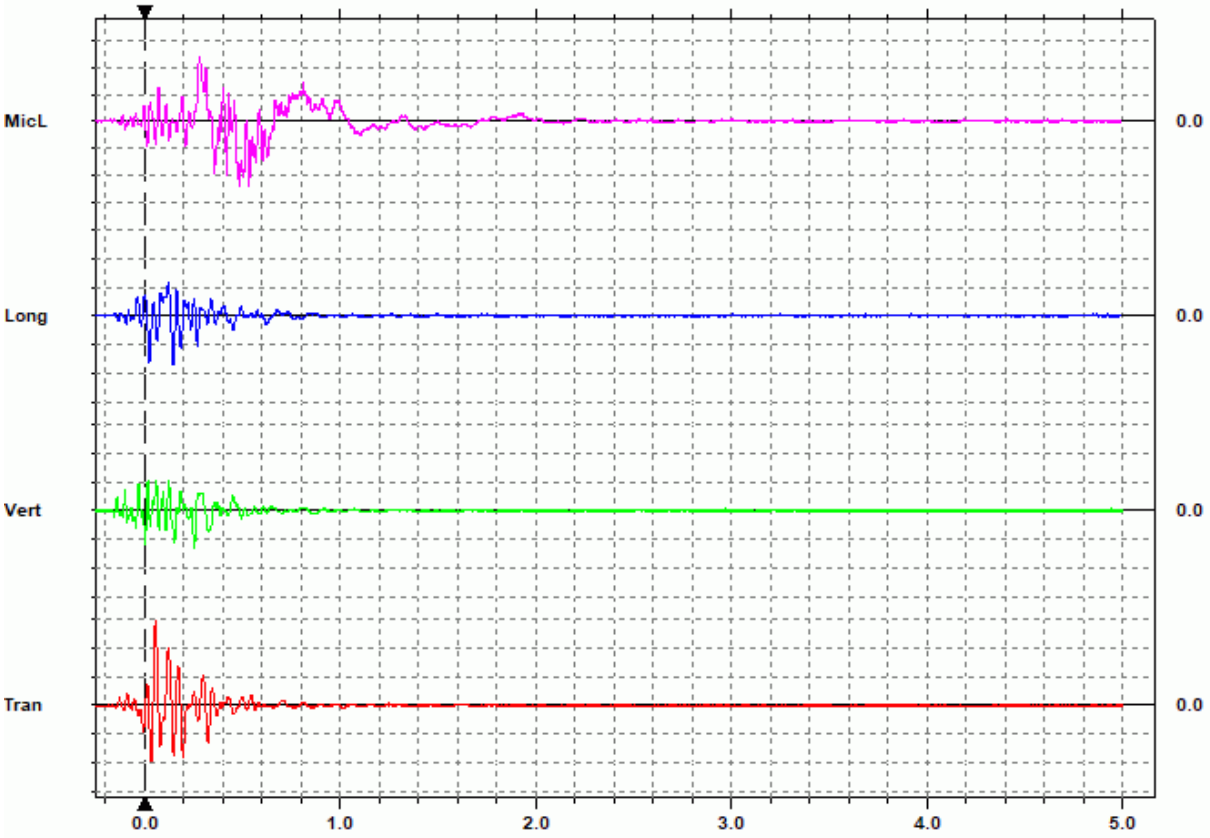
Microphone	Linear Weighting
PSPL	121.7 dB(L) at 0.280 sec.
ZC Freq	5.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	14.6	6.60	8.25	mm/s
ZC Freq	19	22	21	Hz
Time (Rel. to Trig)	0.055	0.253	0.146	sec
Peak Acceleration	0.199	0.133	0.119	g
Peak Displacement	0.120	0.0517	0.103	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 15.2 mm/s At 0.056 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:25 April 2, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IEBT.SP0W
Job Number	8177		

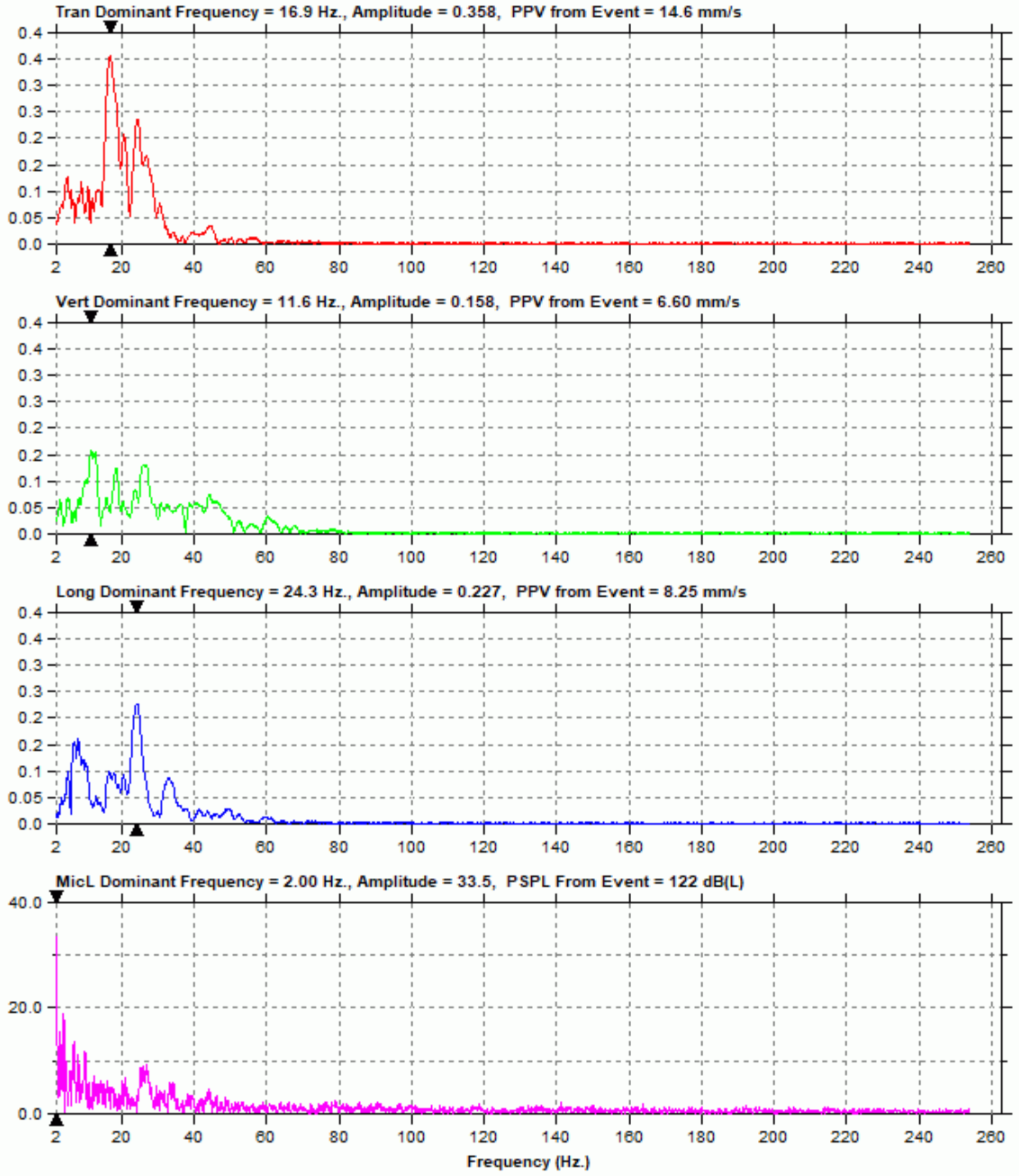
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 2, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:41 April 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IEFJ.3H0W

Post Event Notes

Extended Notes

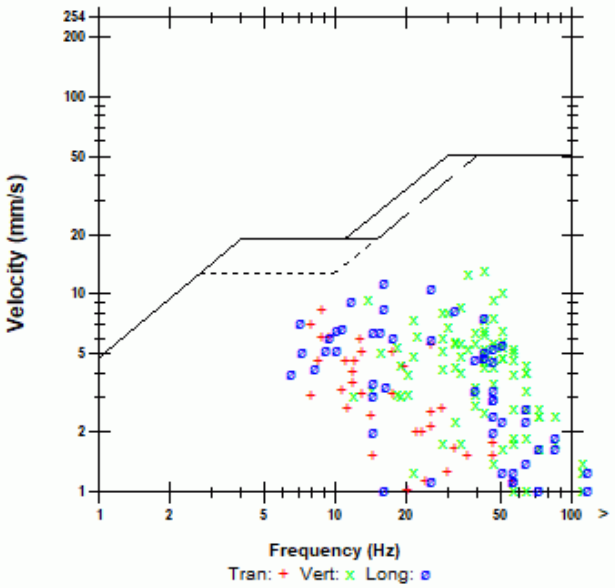
Combo Mode April 4, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

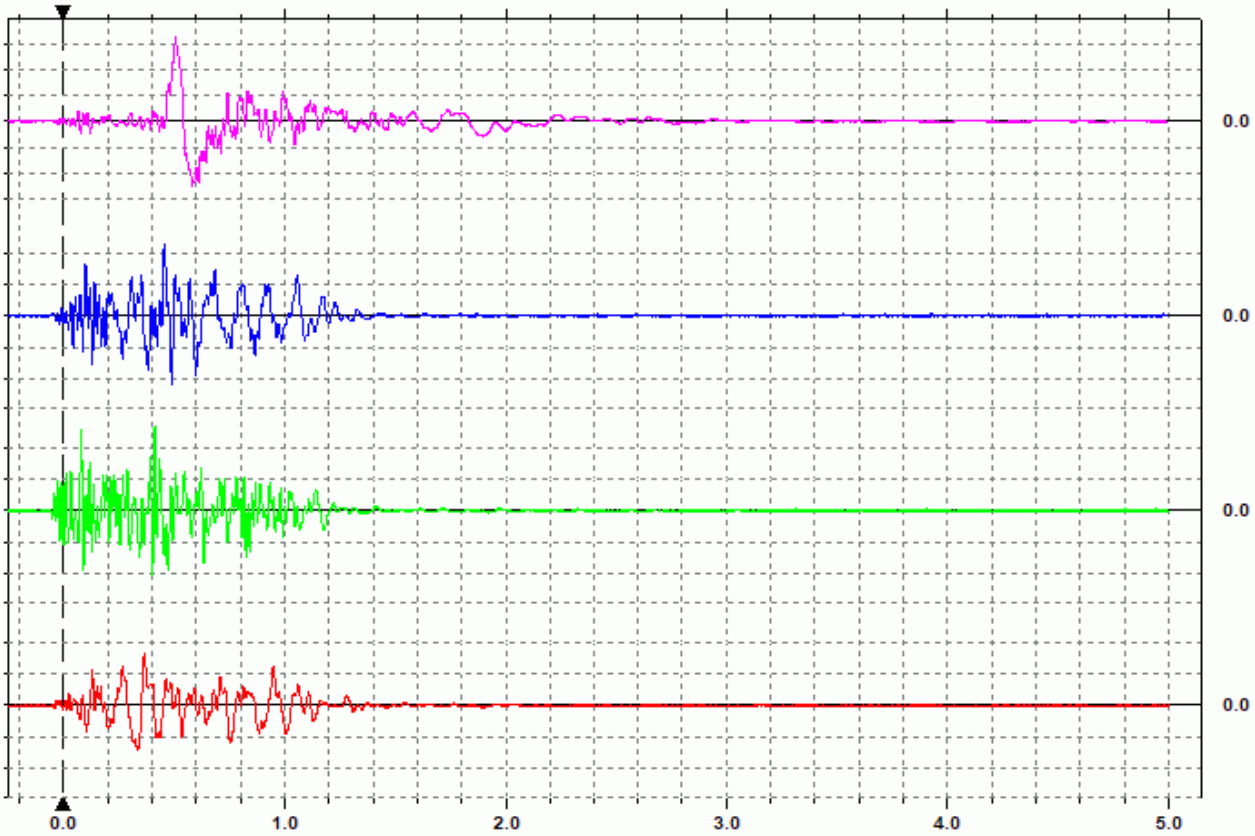
Microphone	Linear Weighting
PSPL	130.2 dB(L) at 0.506 sec.
ZC Freq	6.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.38	13.3	11.6	mm/s
ZC Freq	8.8	43	16	Hz
Time (Rel. to Trig)	0.365	0.413	0.455	sec
Peak Acceleration	0.119	0.358	0.199	g
Peak Displacement	0.142	0.0877	0.123	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.6 mm/s At 0.413 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: April 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:59:41 April 4, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IEFJ.3H0W
Job Number	8177		

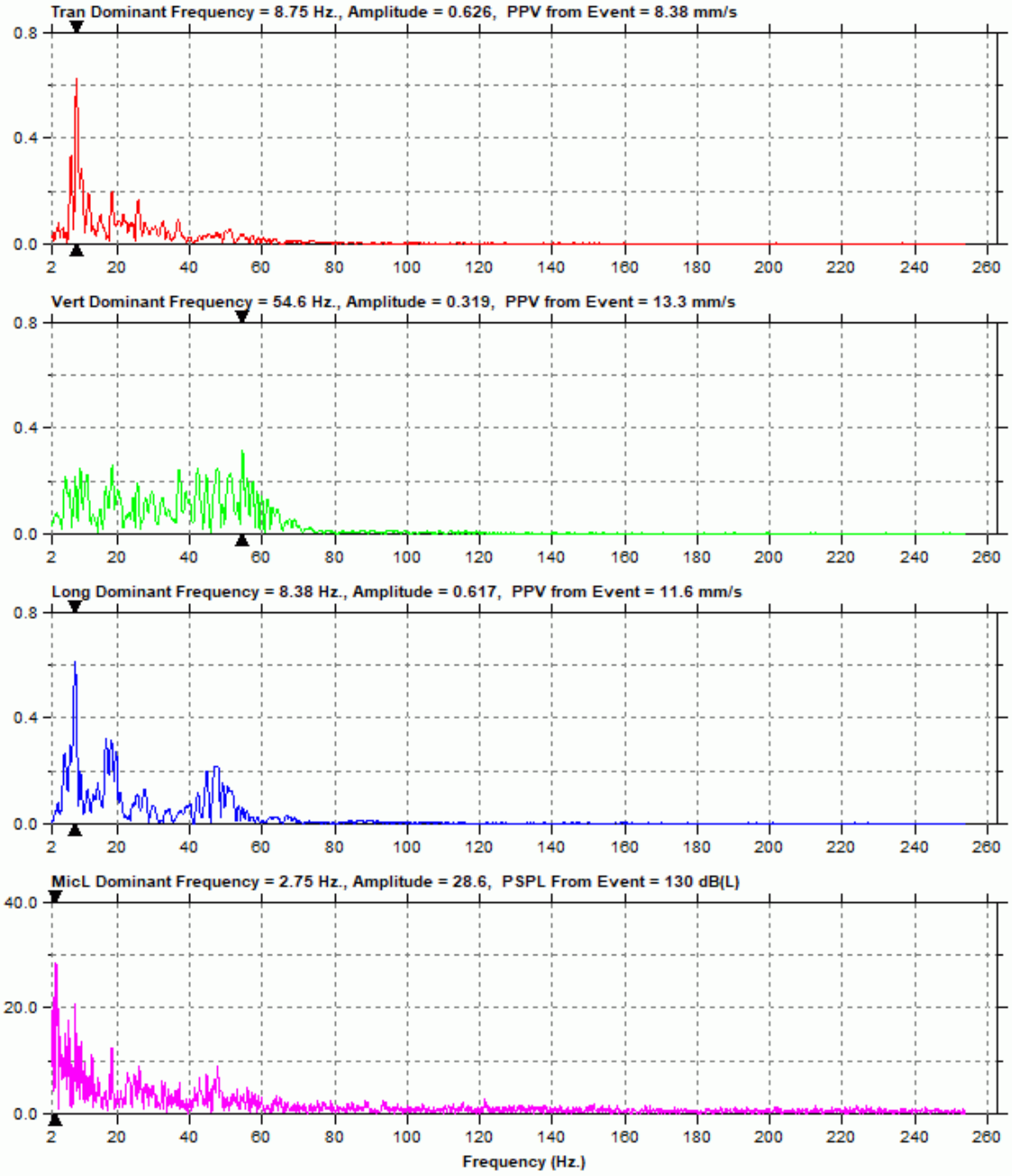
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 4, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:17:03 April 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IEY2.KF0W

Post Event Notes

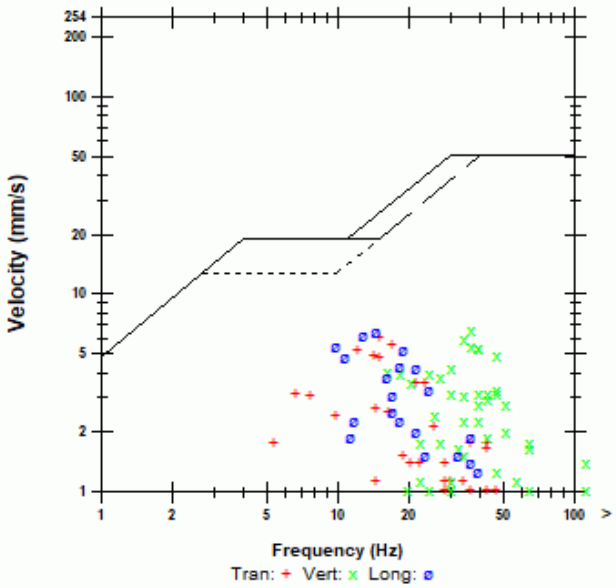
Extended Notes
Combo Mode April 14, 2020 05:16:50
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

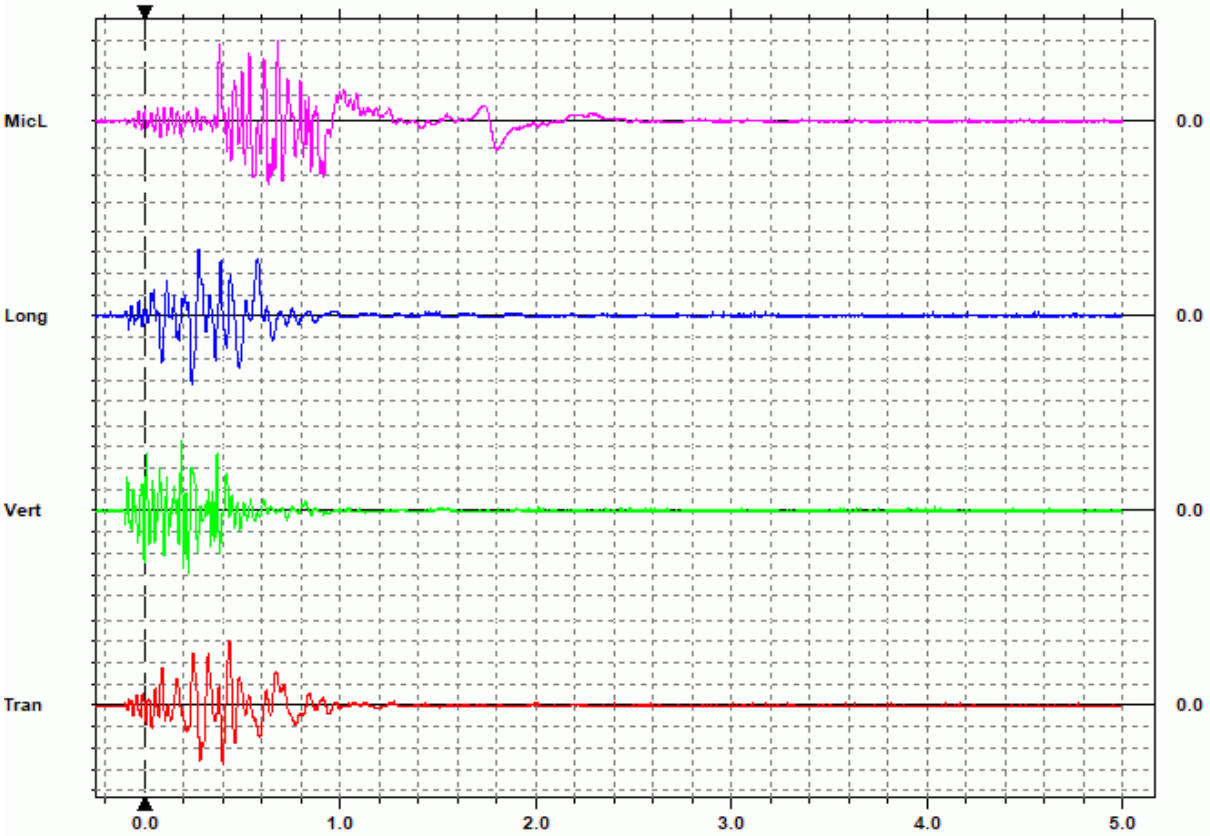
Microphone	Linear Weighting
PSPL	123.6 dB(L) at 0.683 sec.
ZC Freq	20 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	6.60	6.48	mm/s
ZC Freq	15	37	15	Hz
Time (Rel. to Trig)	0.434	0.189	0.243	sec
Peak Acceleration	0.0663	0.159	0.0795	g
Peak Displacement	0.0685	0.0479	0.0801	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.54 mm/s At 0.245 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:17:03 April 14, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IEY2.KF0W
Job Number	8177		

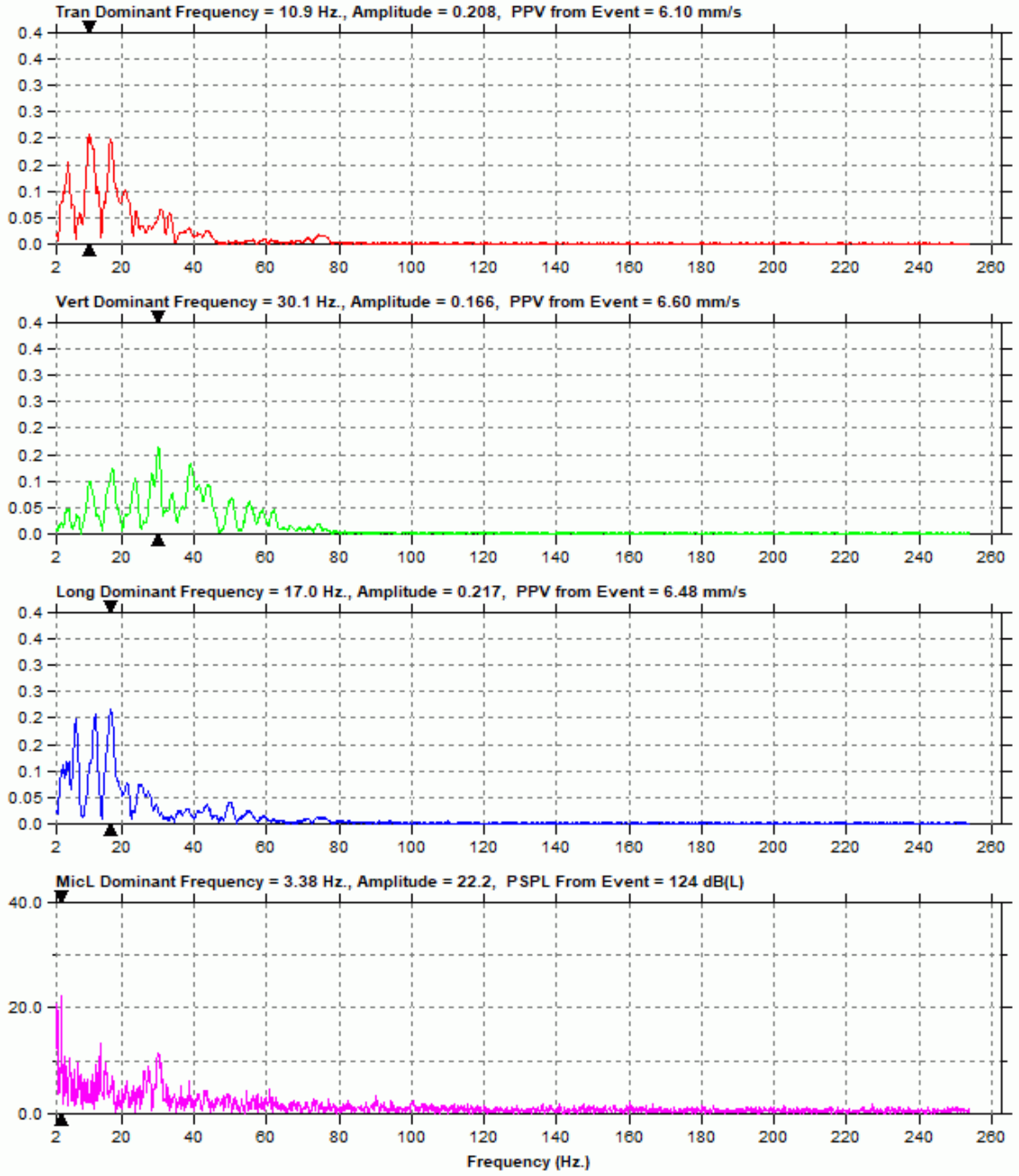
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 14, 2020 05:16:50
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:43 April 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IFCV.6V0W

Post Event Notes

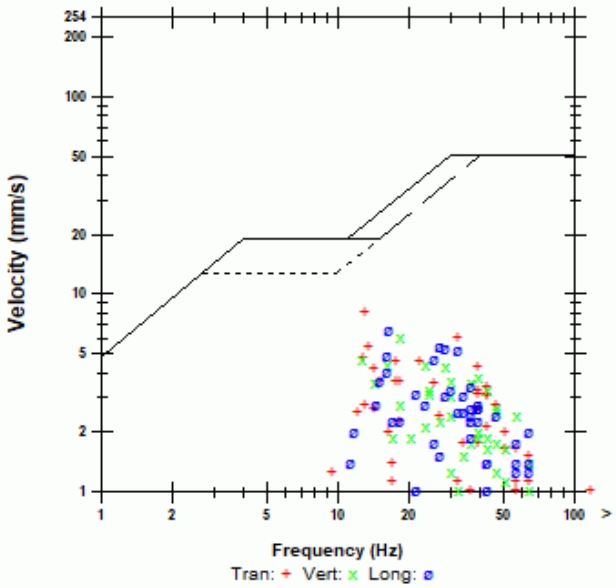
Extended Notes
Combo Mode April 22, 2020 05:17:36
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

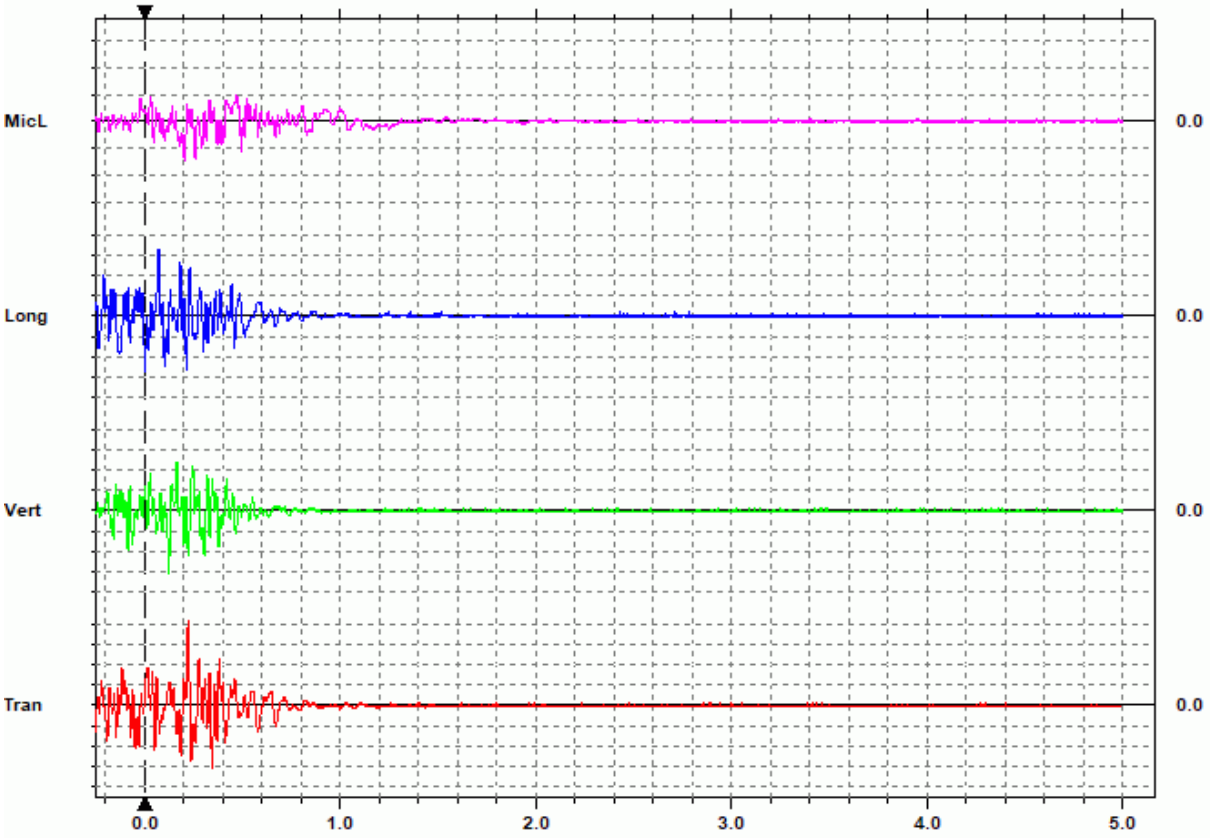
Microphone	Linear Weighting
PSPL	117.4 dB(L) at 0.204 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.25	6.10	6.60	mm/s
ZC Freq	13	18	17	Hz
Time (Rel. to Trig)	0.222	0.124	0.071	sec
Peak Acceleration	0.133	0.106	0.106	g
Peak Displacement	0.0634	0.0391	0.0453	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.28 mm/s At 0.222 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:43 April 22, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IFCV.6V0W
Job Number	8177		

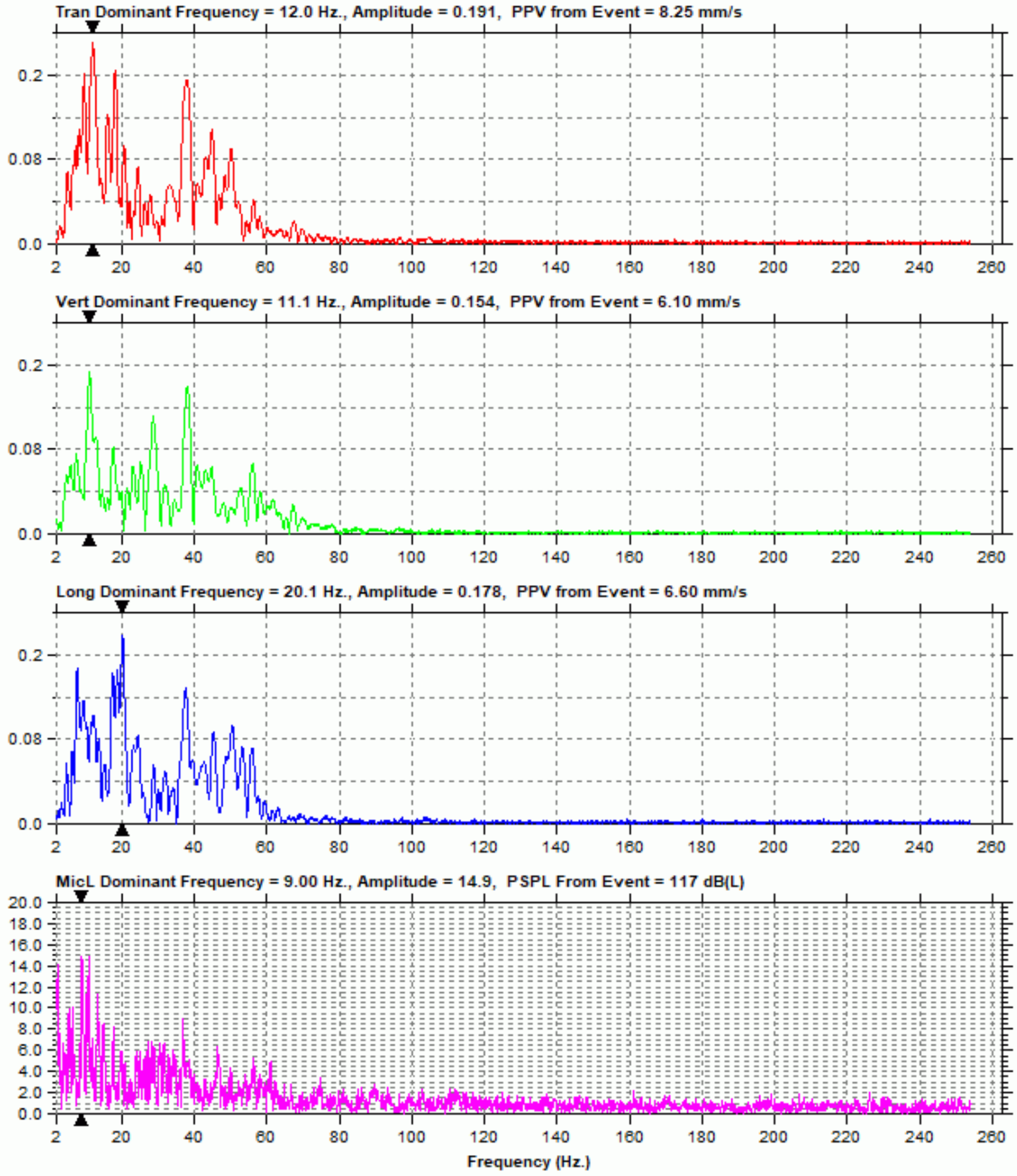
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 22, 2020 05:17:36
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:21 April 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IFNZ.4L0W

Post Event Notes

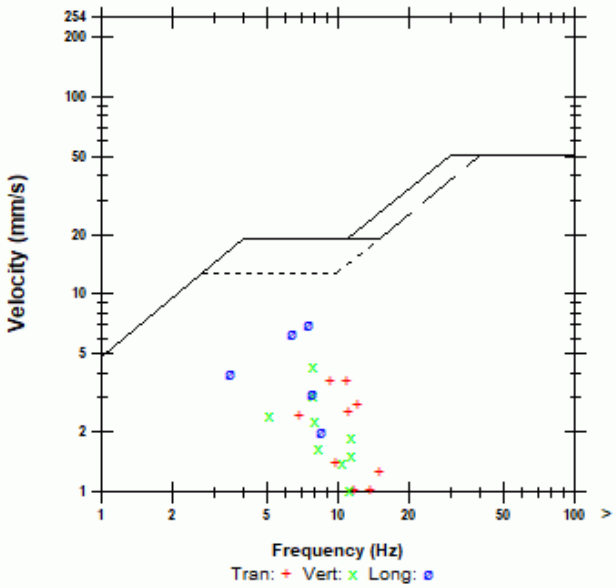
Extended Notes
Combo Mode April 28, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

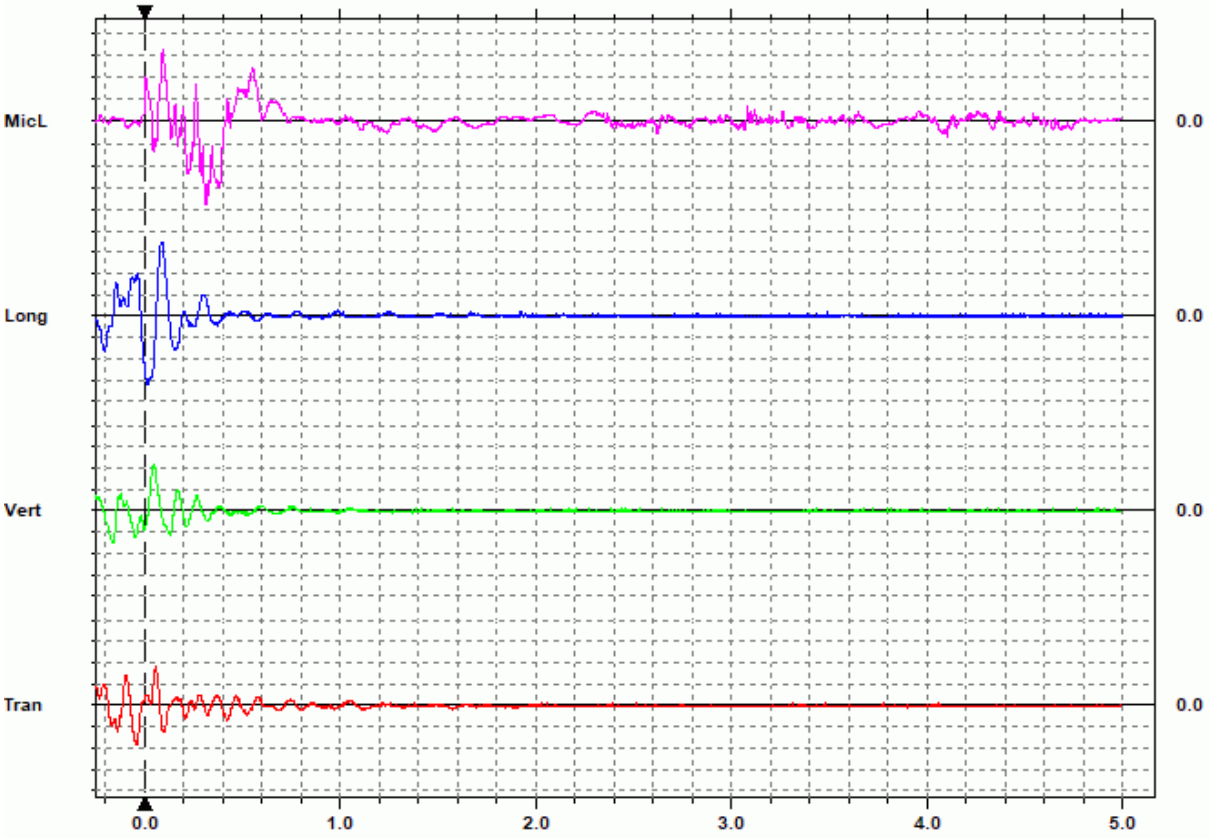
Microphone	Linear Weighting
PSPL	125.6 dB(L) at 0.313 sec.
ZC Freq	3.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.68	4.32	6.98	mm/s
ZC Freq	9.3	7.8	7.5	Hz
Time (Rel. to Trig)	-0.045	0.044	0.083	sec
Peak Acceleration	0.0398	0.0398	0.0530	g
Peak Displacement	0.0629	0.0794	0.176	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.38 mm/s At 0.089 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 28, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:00:21 April 28, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IFNZ.4L0W
Job Number	8177		

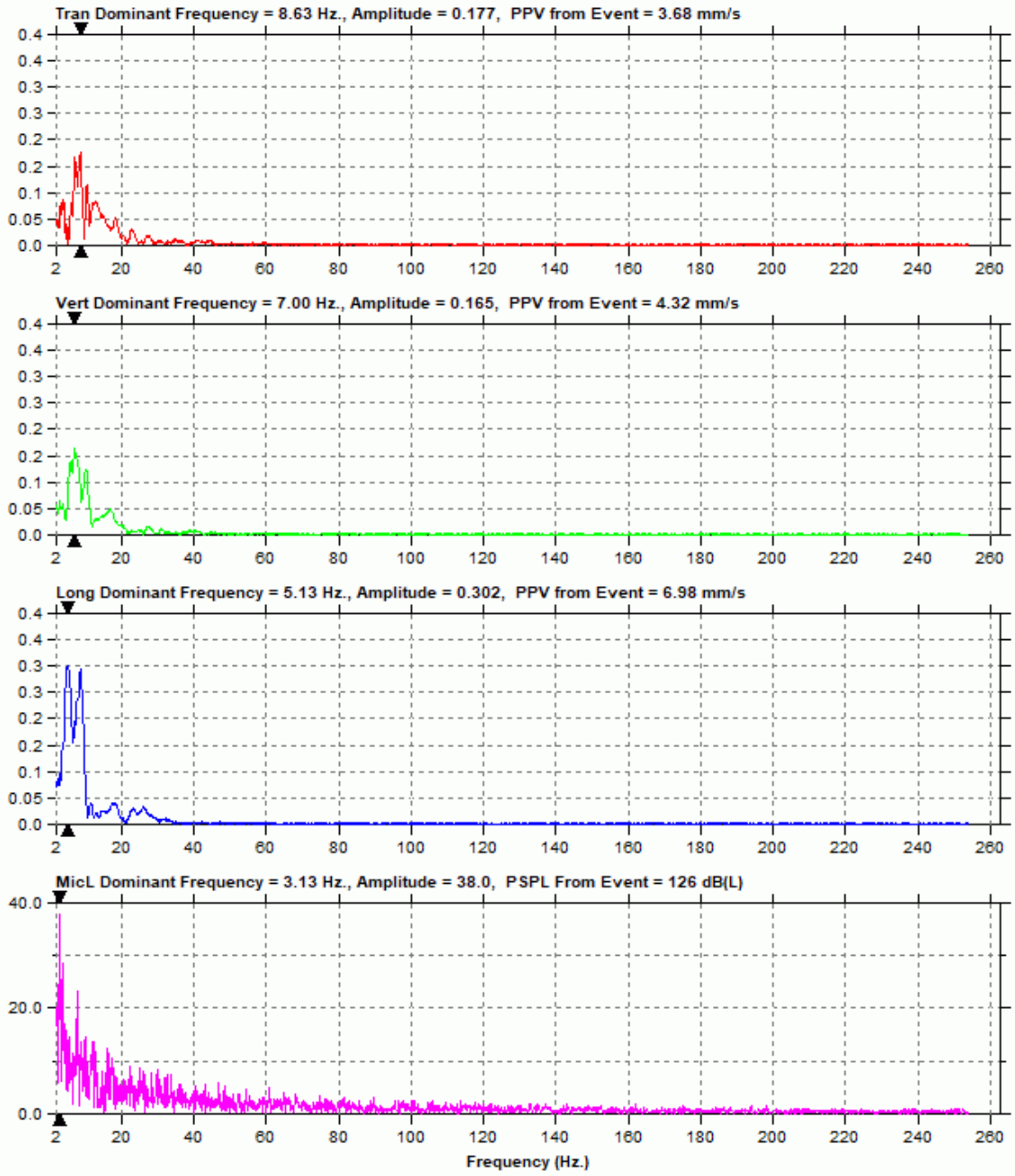
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 28, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:40 April 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IFPT.US0W

Post Event Notes

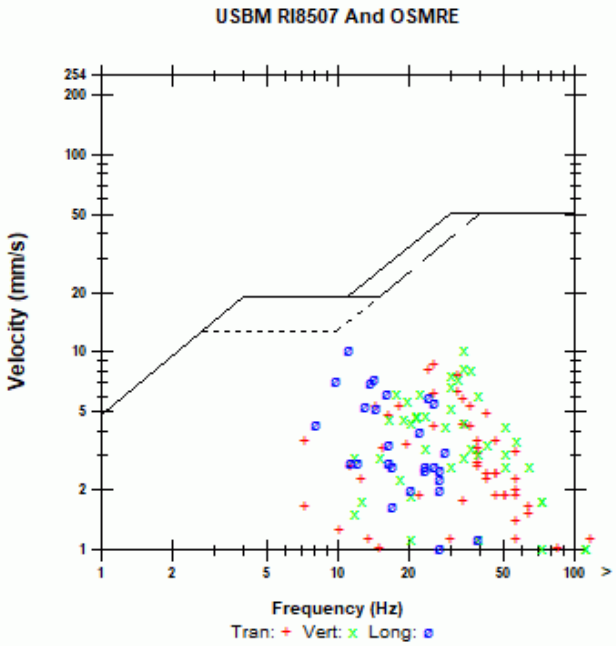
Extended Notes

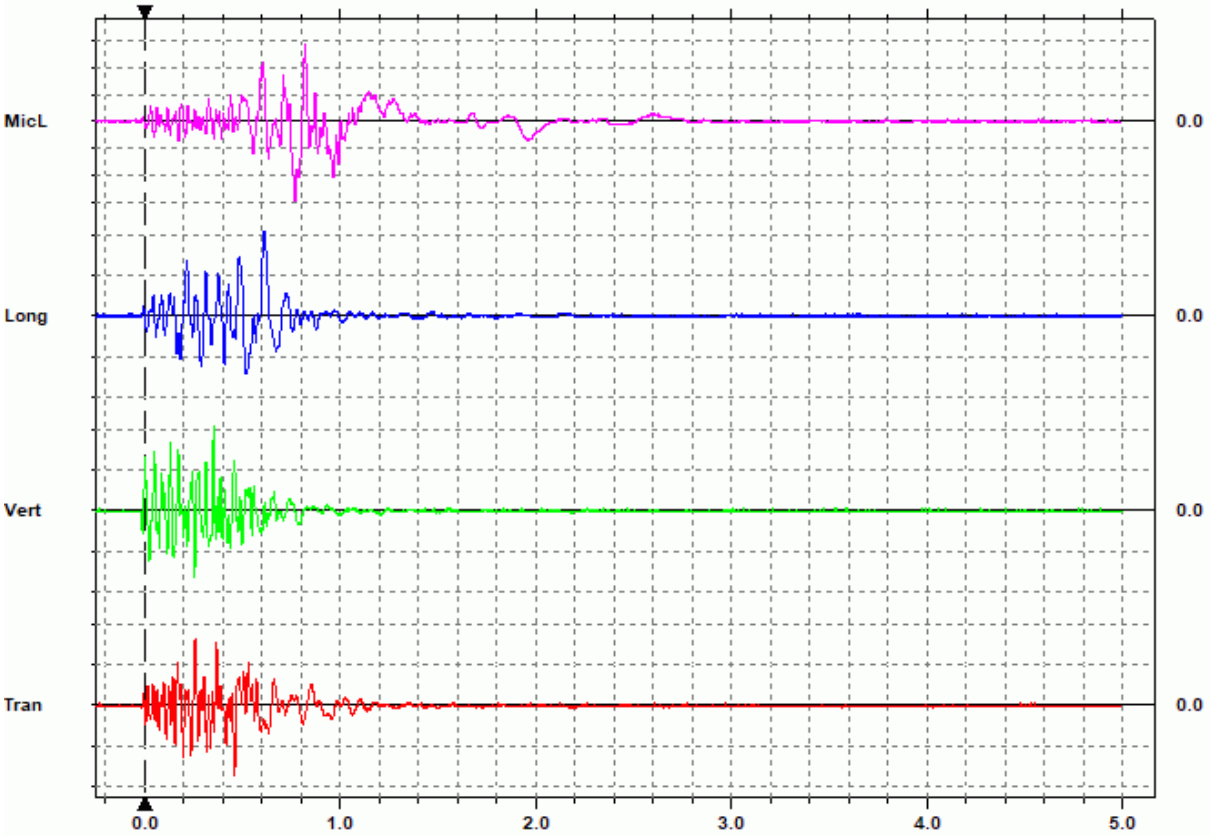
Combo Mode April 29, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	123.4 dB(L) at 0.770 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.64	10.4	10.4	mm/s
ZC Freq	26	34	11	Hz
Time (Rel. to Trig)	0.461	0.354	0.610	sec
Peak Acceleration	0.172	0.212	0.106	g
Peak Displacement	0.0794	0.0491	0.139	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.4 mm/s At 0.257 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:01:40 April 29, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IFPT.US0W
Job Number	8177		

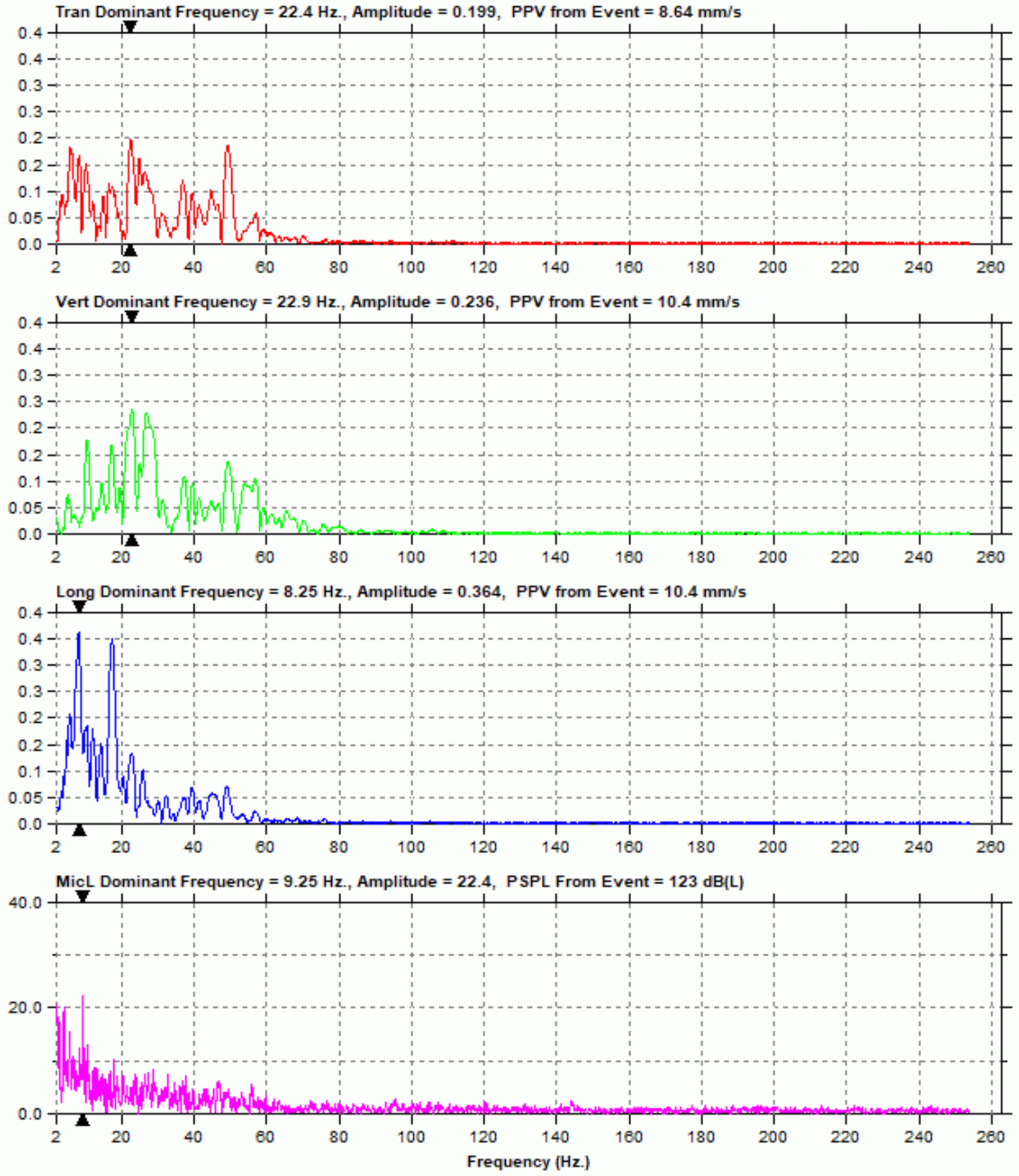
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 29, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:17:54 April 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IEY2.LU0W

Post Event Notes

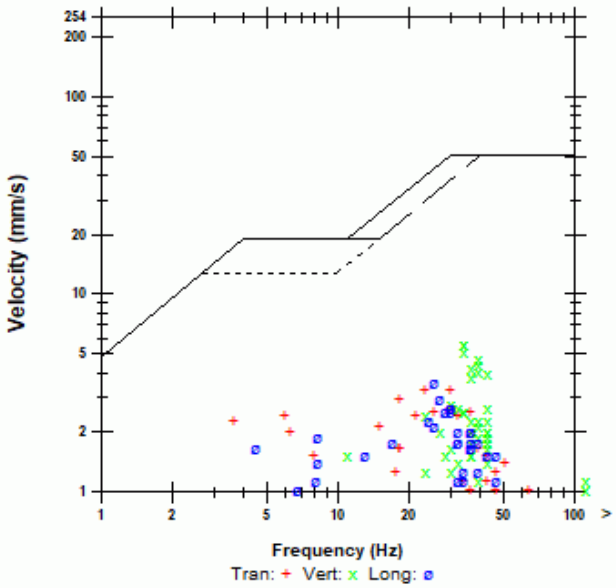
Extended Notes
Combo Mode April 14, 2020 05:19:23
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

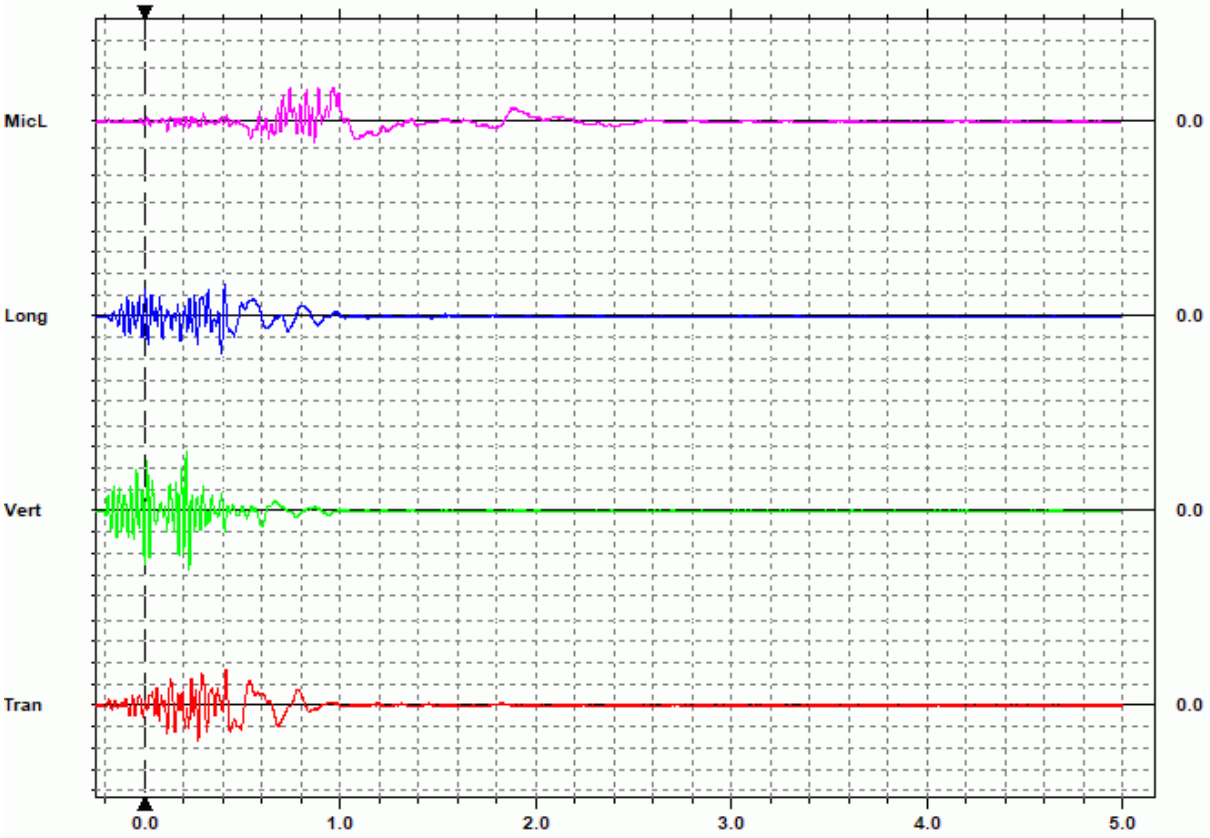
Microphone	Linear Weighting
PSPL	115.9 dB(L) at 0.744 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	5.59	3.56	mm/s
ZC Freq	30	34	26	Hz
Time (Rel. to Trig)	0.275	0.214	0.393	sec
Peak Acceleration	0.0663	0.133	0.0663	g
Peak Displacement	0.0764	0.0270	0.0631	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.10 mm/s At 0.229 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:17:54 April 14, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IEY2.LU0W
Job Number	8177		

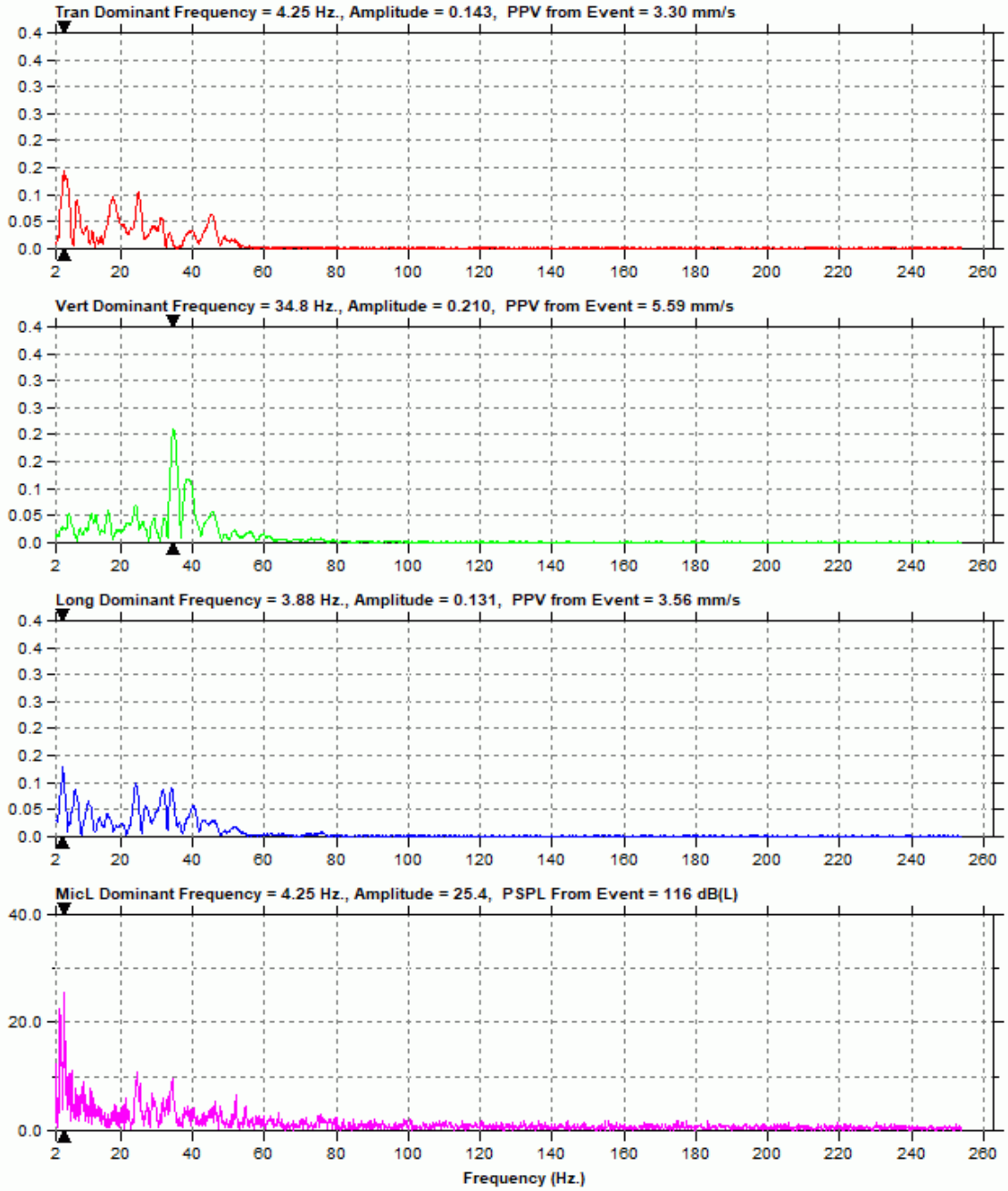
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 14, 2020 05:19:23
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:15:25 April 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IEZX.5P0W

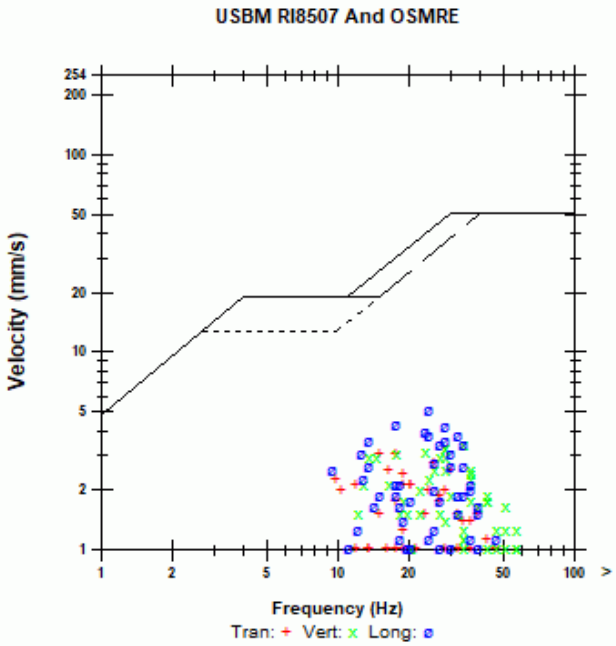
Post Event Notes

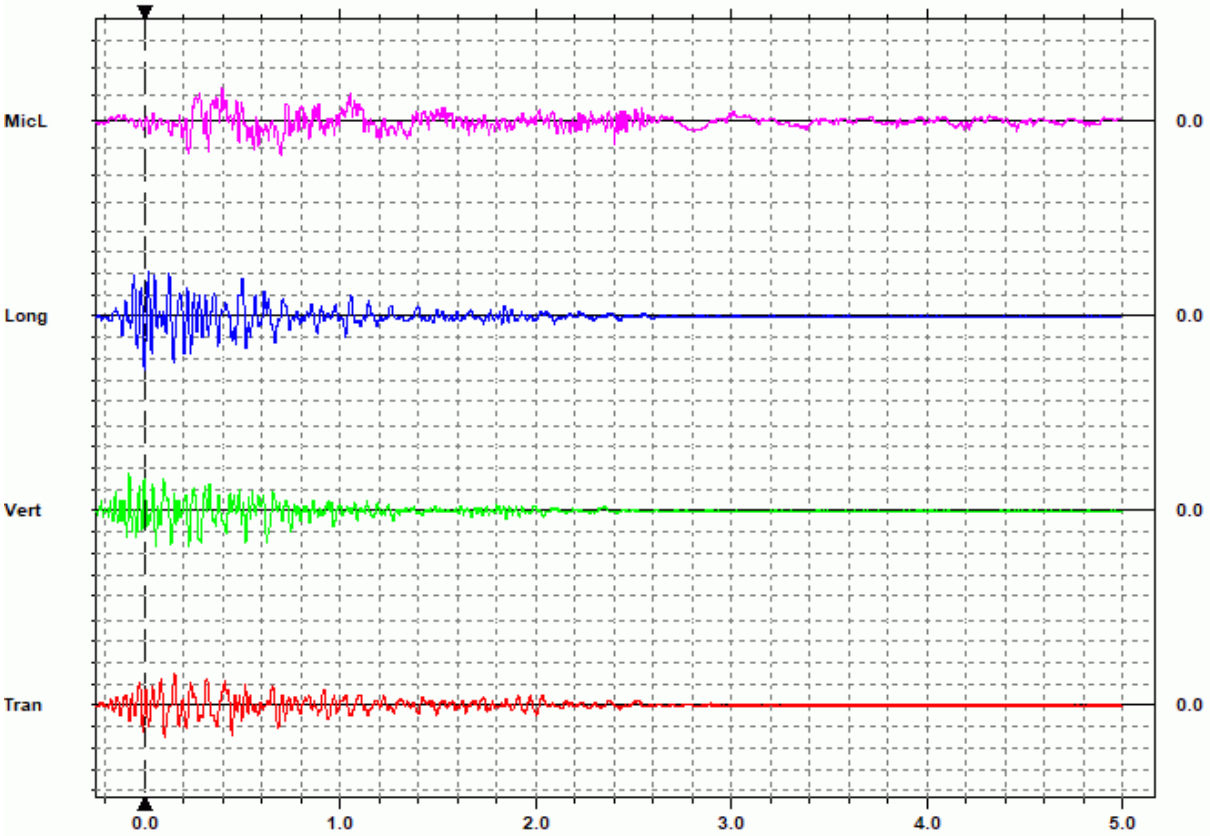
Extended Notes
Combo Mode April 15, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	116.1 dB(L) at 0.698 sec.
ZC Freq	8.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.05	3.43	5.08	mm/s
ZC Freq	15	34	24	Hz
Time (Rel. to Trig)	0.104	-0.077	0.001	sec
Peak Acceleration	0.0530	0.0928	0.0928	g
Peak Displacement	0.0322	0.0302	0.0396	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.87 mm/s At 0.001 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:15:25 April 15, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IEZX.5P0W
Job Number	8177		

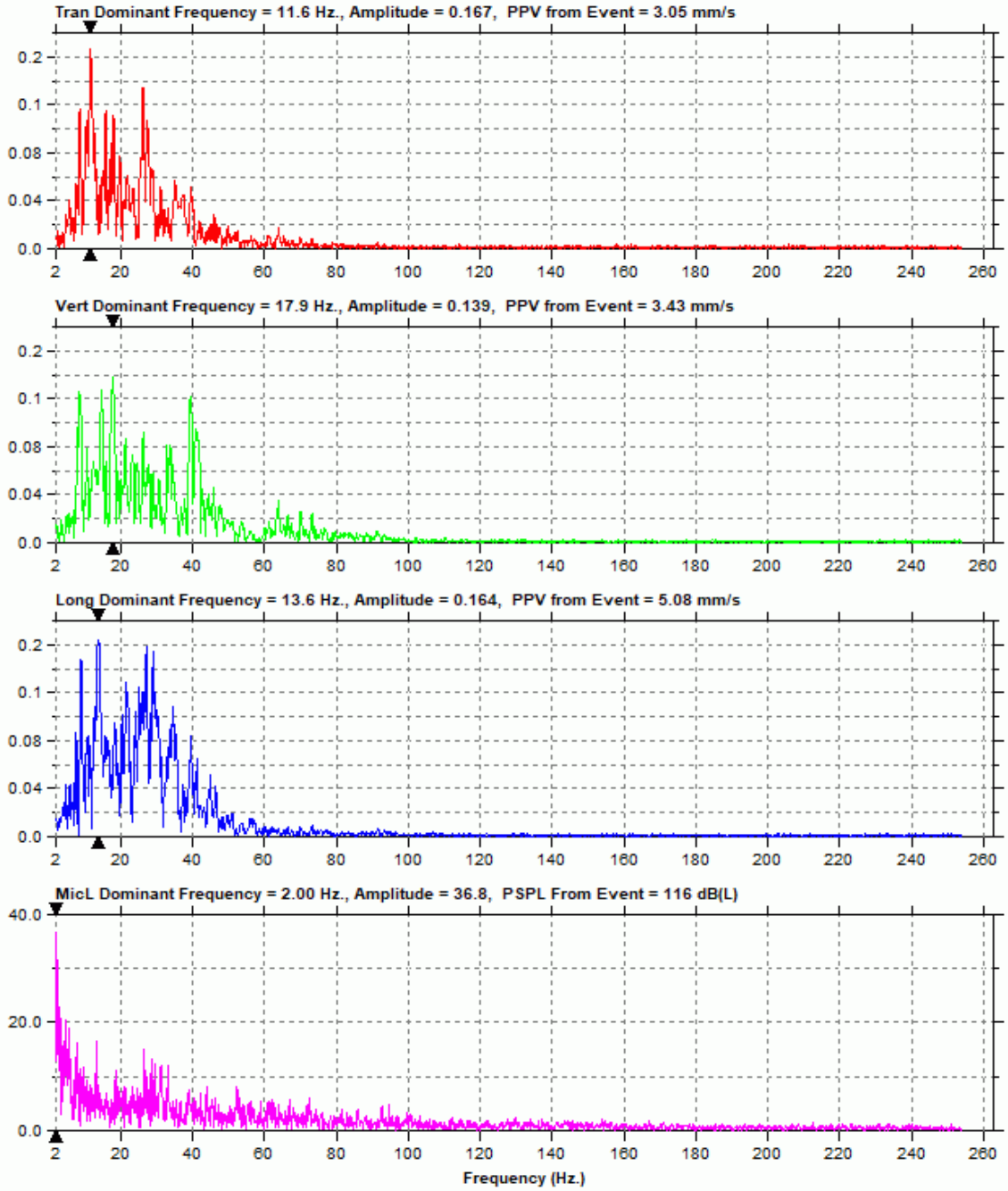
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 15, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:45 April 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFCV.8L0W

Post Event Notes

Extended Notes

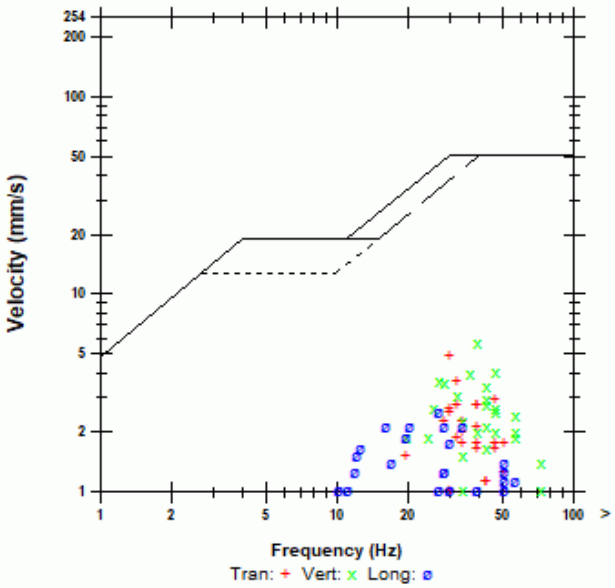
Combo Mode April 22, 2020 05:16:54
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

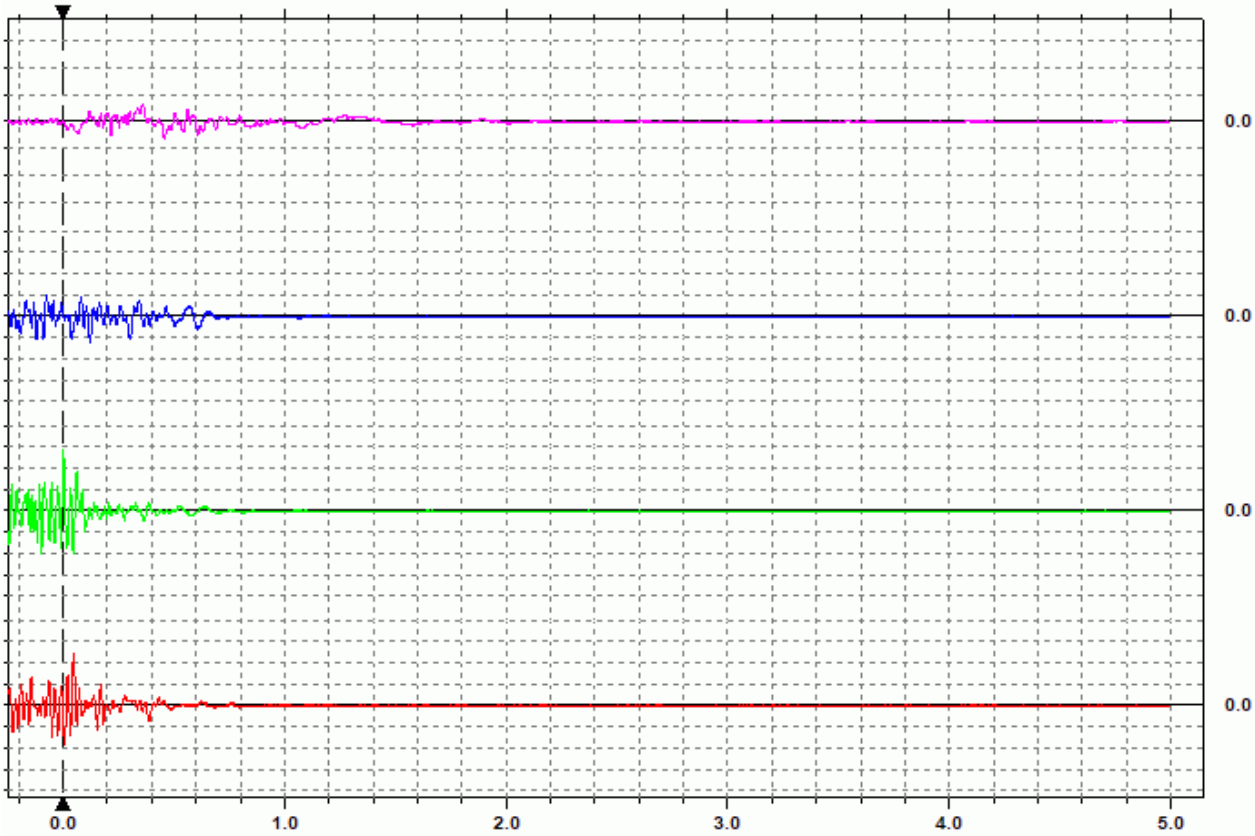
Microphone	Linear Weighting
PSPL	110.6 dB(L) at 0.456 sec.
ZC Freq	8.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	5.71	2.54	mm/s
ZC Freq	30	39	27	Hz
Time (Rel. to Trig)	0.047	0.002	0.123	sec
Peak Acceleration	0.0928	0.133	0.0530	g
Peak Displacement	0.0247	0.0223	0.0189	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.38 mm/s At 0.047 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:45 April 22, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFCV.8L0W
Job Number	8177		

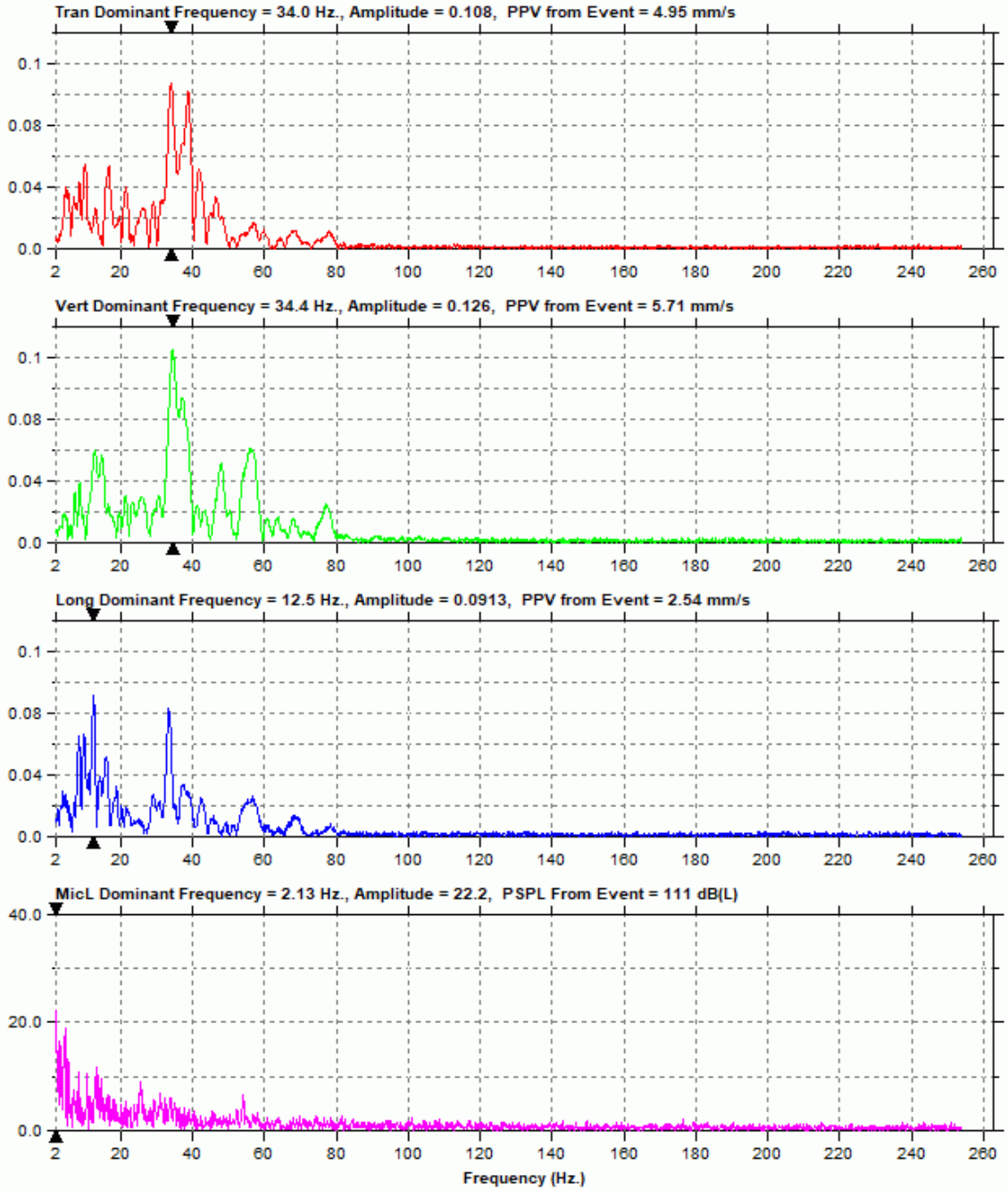
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 22, 2020 05:16:54
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:51 April 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFPT.WR0W

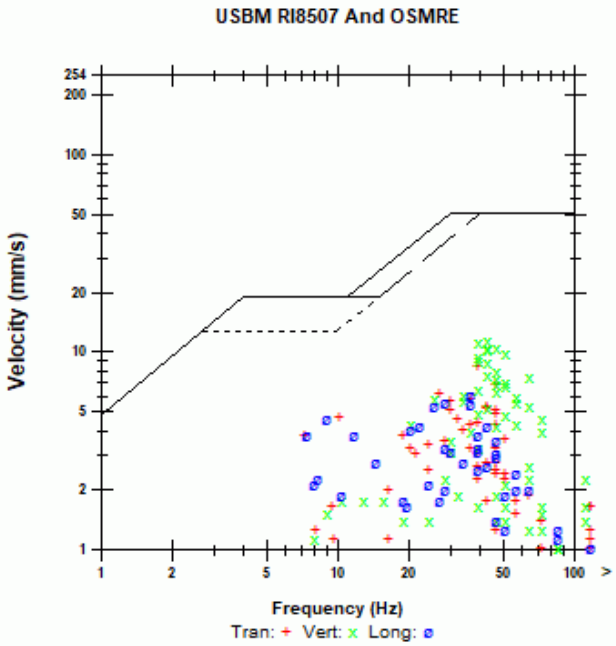
Post Event Notes

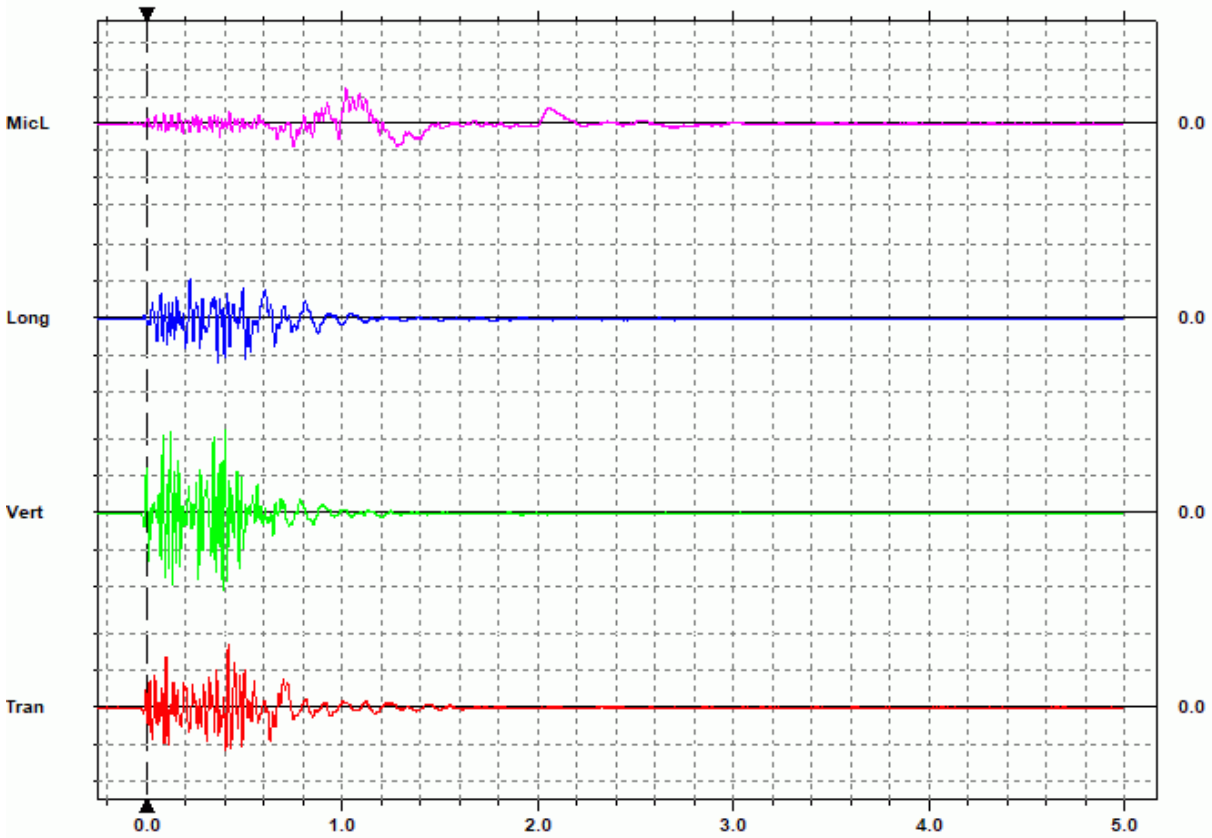
Extended Notes
Combo Mode April 29, 2020 05:19:16
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	116.4 dB(L) at 1.020 sec.
ZC Freq	3.0 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.51	11.4	6.10	mm/s
ZC Freq	39	43	37	Hz
Time (Rel. to Trig)	0.420	0.403	0.365	sec
Peak Acceleration	0.199	0.345	0.146	g
Peak Displacement	0.0738	0.0429	0.0662	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.9 mm/s At 0.403 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:51 April 29, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFPT.WR0W
Job Number	8177		

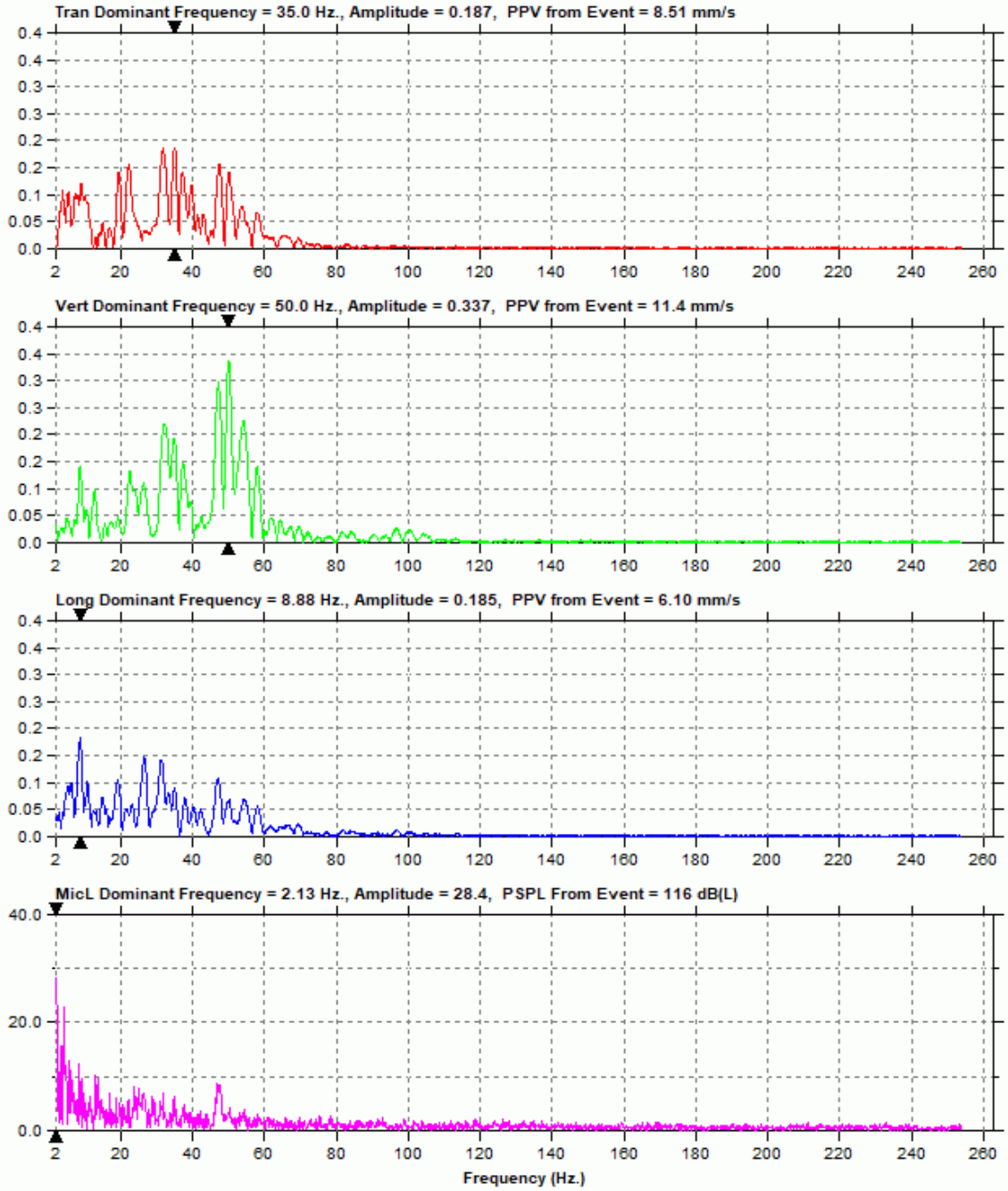
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 29, 2020 05:19:16
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:04:38 April 30, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFRO.NQ0W

Post Event Notes

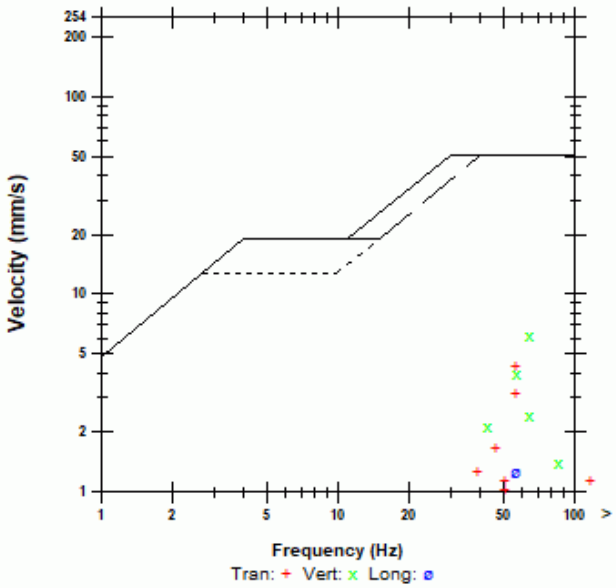
Extended Notes
Combo Mode April 30, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

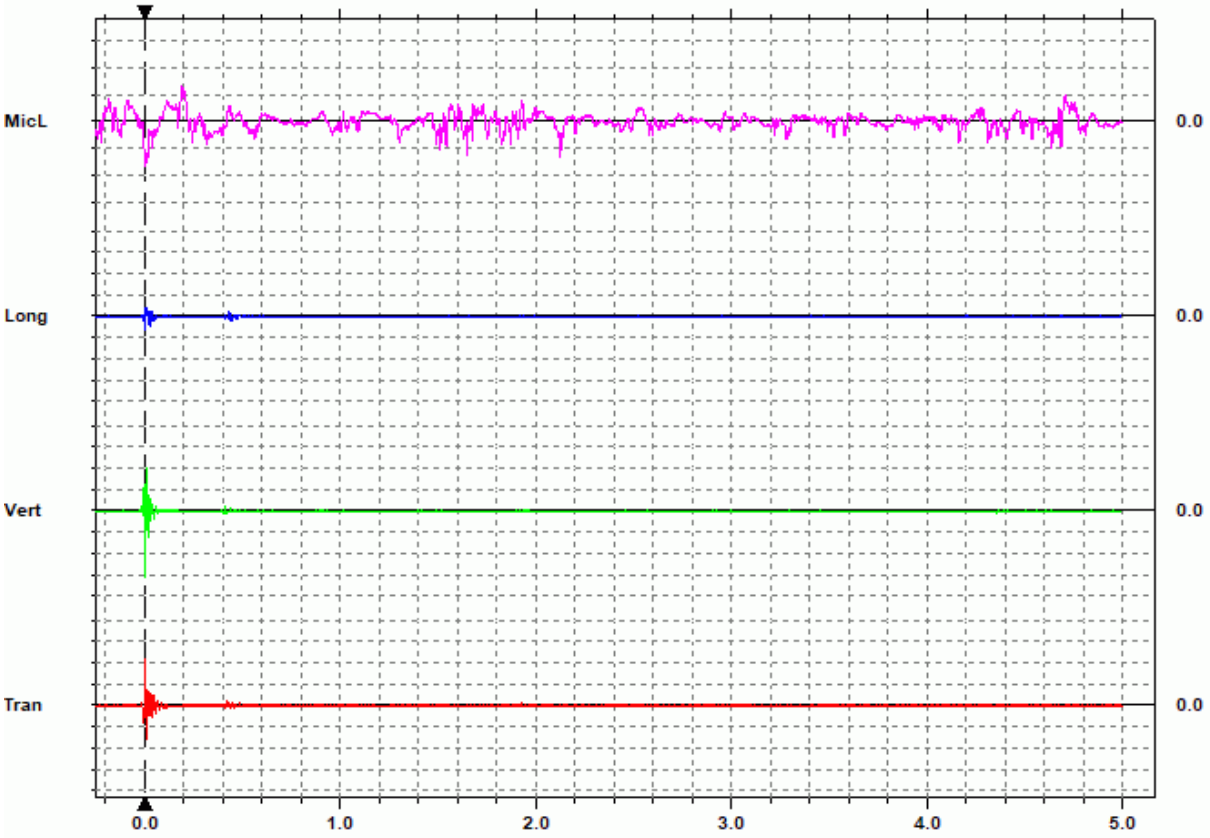
Microphone	Linear Weighting
PSPL	118.3 dB(L) at 0.002 sec.
ZC Freq	5.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.32	6.22	1.27	mm/s
ZC Freq	57	64	57	Hz
Time (Rel. to Trig)	0.004	0.001	0.000	sec
Peak Acceleration	0.146	0.225	0.0530	g
Peak Displacement	0.0123	0.0147	0.00329	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.02 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: April 30, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:04:38 April 30, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFRO.NQ0W
Job Number	8177		

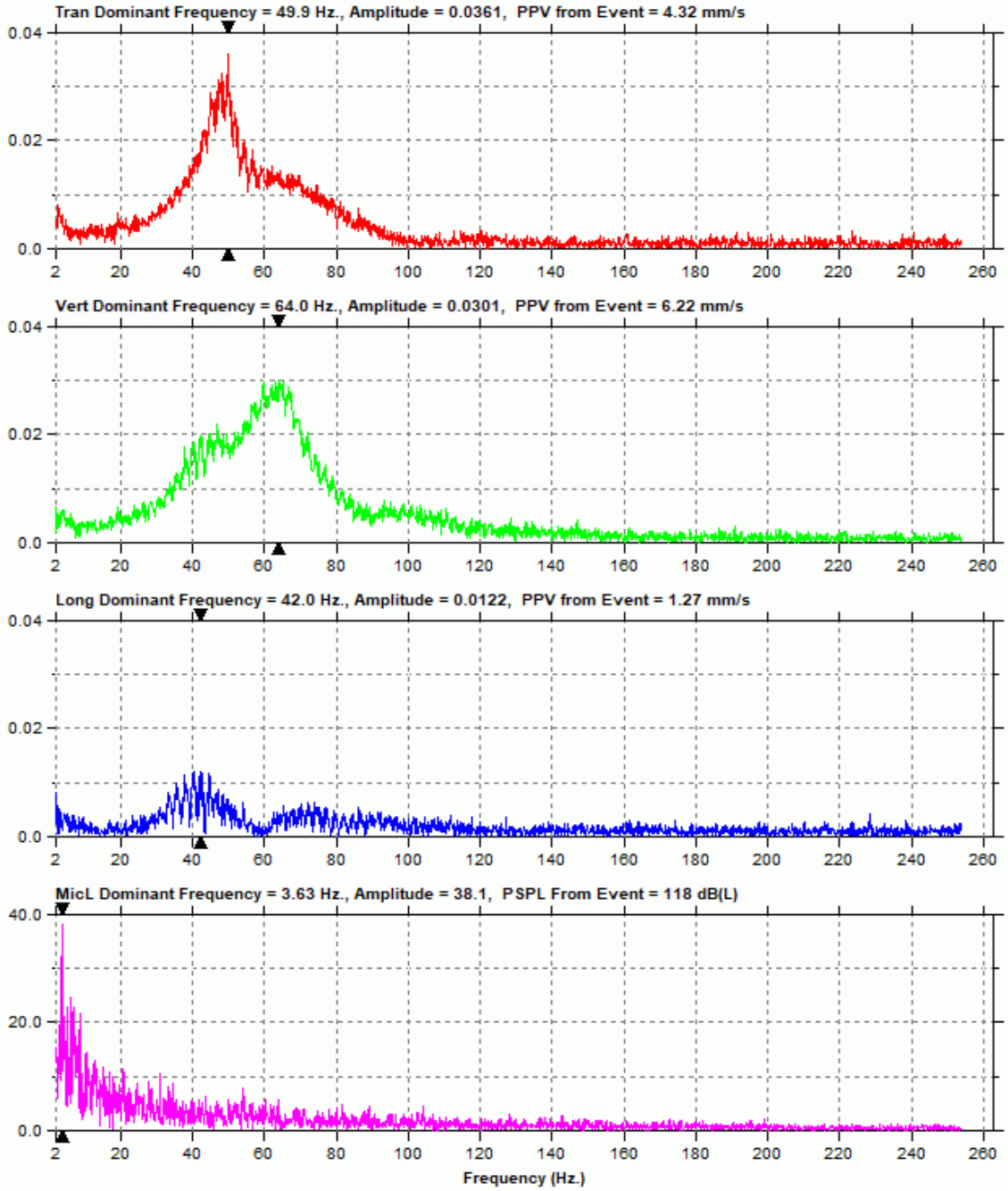
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode April 30, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: April 30, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																				
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
1-May-20	WCRR-96	16:00	10.20mm/s	121.1dB(L)	0.64mm/s	106.5dB(L)	10.30mm/s	115.2dB(L)	1.40mm/s	109.9dB(L)	6.73mm/s	120.1dB(L)	7.37mm/s	115.9dB(L)	2.67mm/s	115.2dB(L)	4.83mm/s	115.7dB(L)	1.91mm/s	119.2dB(L)
1-May-20	WCRR-97	16:02	2.54mm/s	114.6dB(L)	0.13mm/s	117.2dB(L)	4.57mm/s	118.5dB(L)	0.25mm/s	105.5dB(L)	3.30mm/s	119.3dB(L)	1.40mm/s	113.8dB(L)	0.76mm/s	111.2dB(L)	1.27mm/s	111.2dB(L)	0.76mm/s	106.0dB(L)
2-May-20	WCRR-98	16:00	7.62mm/s	121.9dB(L)	0.64mm/s	107.5dB(L)	8.13mm/s	119.9dB(L)	1.27mm/s	106.5dB(L)	6.35mm/s	121.7dB(L)	13.20mm/s	122.8dB(L)	4.19mm/s	113.8dB(L)	6.86mm/s	115.6dB(L)	2.67mm/s	107.5dB(L)
4-May-20	WCRR-99	16:05	4.57mm/s	119.2dB(L)	0.38mm/s	115.7dB(L)	4.70mm/s	116.4dB(L)	0.89mm/s	115.6dB(L)	4.06mm/s	117.6dB(L)	10.00mm/s	119.8dB(L)	4.19mm/s	123.6dB(L)	4.32mm/s	121.3dB(L)	1.78mm/s	121.9dB(L)
5-May-20	WCRR-100	15:35	2.29mm/s	116.7dB(L)	0.25mm/s	101.9dB(L)	2.16mm/s	114.8dB(L)	0.51mm/s	104.9dB(L)	1.40mm/s	115.6dB(L)	4.32mm/s	119.6dB(L)	1.40mm/s	113.3dB(L)	3.05mm/s	114.0dB(L)	0.89mm/s	106.0dB(L)
5-May-20	WCRR-100	15:45	3.94mm/s	116.7dB(L)	0.25mm/s	101.9dB(L)	3.05mm/s	113.8dB(L)	0.76mm/s	108.8dB(L)	2.79mm/s	114.2dB(L)	7.11mm/s	120.1dB(L)	2.67mm/s	114.4dB(L)	6.98mm/s	115.0dB(L)	2.16mm/s	109.9dB(L)
14-May-20	WCRR-101	16:06	1.27mm/s	118.2dB(L)	1.27mm/s	109.2dB(L)	6.35mm/s	117.5dB(L)	0.51mm/s	109.5dB(L)	3.05mm/s	115.9dB(L)	0.89mm/s	113.1dB(L)	0.51mm/s	114.8dB(L)	0.89mm/s	112.6dB(L)	0.64mm/s	109.9dB(L)
15-May-20	WCRR-102	15:32	2.03mm/s	117.4dB(L)	0.89mm/s	110.6dB(L)	10.90mm/s	118.2dB(L)	0.76mm/s	109.2dB(L)	4.06mm/s	118.5dB(L)	1.40mm/s	114.4dB(L)	1.02mm/s	113.8dB(L)	1.27mm/s	112.0dB(L)	1.02mm/s	109.5dB(L)
20-May-20	WCRR-103	16:10	2.16mm/s	108.0dB(L)	0.89mm/s	107.0dB(L)	6.48mm/s	121.2dB(L)	0.64mm/s	107.5dB(L)	4.57mm/s	117.6dB(L)	1.65mm/s	112.8dB(L)	1.02mm/s	113.3dB(L)	1.52mm/s	114.2dB(L)	1.02mm/s	111.5dB(L)
25-May-20	WCRR-104	15:25	2.79mm/s	119.8dB(L)	0.64mm/s	111.8dB(L)	5.21mm/s	124.5dB(L)	0.51mm/s	121.0dB(L)	3.81mm/s	123.2dB(L)	1.40mm/s	126.2dB(L)	0.89mm/s	114.0dB(L)	0.25mm/s	109.9dB(L)	1.27mm/s	110.6dB(L)
26-May-20	WCRR-105	15:30	2.67mm/s	120.8dB(L)	0.51mm/s	110.9dB(L)	8.25mm/s	124.9dB(L)	0.51mm/s	109.2dB(L)	4.83mm/s	121.5dB(L)	1.78mm/s	117.5dB(L)	0.76mm/s	116.3dB(L)	1.27mm/s	115.9dB(L)	1.02mm/s	112.3dB(L)
27-May-20	WCRR-106	16:05	3.56mm/s	129.7dB(L)	0.89mm/s	115.2dB(L)	11.30mm/s	131.2dB(L)	0.64mm/s	114.6dB(L)	5.08mm/s	131.7dB(L)	2.16mm/s	120.6dB(L)	1.02mm/s	118.8dB(L)	1.65mm/s	119.9dB(L)	1.40mm/s	119.0dB(L)
28-May-20	WCRR-107	16:17	1.52mm/s	112.6dB(L)	2.03mm/s	118.1dB(L)	5.84mm/s	114.0dB(L)	0.38mm/s	119.0dB(L)	2.41mm/s	114.4dB(L)	1.14mm/s	108.4dB(L)	0.64mm/s	106.0dB(L)	2.03mm/s	95.9dB(L)	1.65mm/s	94.0dB(L)
29-May-20	WCRR-108	16:10	1.40mm/s	110.9dB(L)	1.52mm/s	115.7dB(L)	8.76mm/s	113.1dB(L)	0.51mm/s	103.5dB(L)	2.79mm/s	112.6dB(L)	1.14mm/s	108.4dB(L)	0.89mm/s	107.5dB(L)	1.14mm/s	107.0dB(L)	1.27mm/s	102.8dB(L)
30-May-20	WCRR-109	16:03	5.08mm/s	119.0dB(L)	0.89mm/s	110.9dB(L)	Monitor offline		0.89mm/s	110.2dB(L)	4.95mm/s	121.8dB(L)	3.30mm/s	114.8dB(L)	1.40mm/s	117.4dB(L)	1.91mm/s	110.6dB(L)	1.27mm/s	108.4dB(L)

Permanent Monitoring Units								
Crestmont			90 Valley Ridge Heights NW		254 Crestridge Place SW		148 Valley Meadow Close NW	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP
13-May-20	CM-04	16:05	1.40mm/s	95.9dB(L)	1.40mm/s	114.0dB(L)	0.89mm/s	110.6dB(L)
19-May-20	CM-05	16:00	4.06mm/s	98.8dB(L)	0.89mm/s	109.2dB(L)	0.89mm/s	114.0dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Tran At 15:55:33 May 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IFTI.WL0W

Post Event Notes

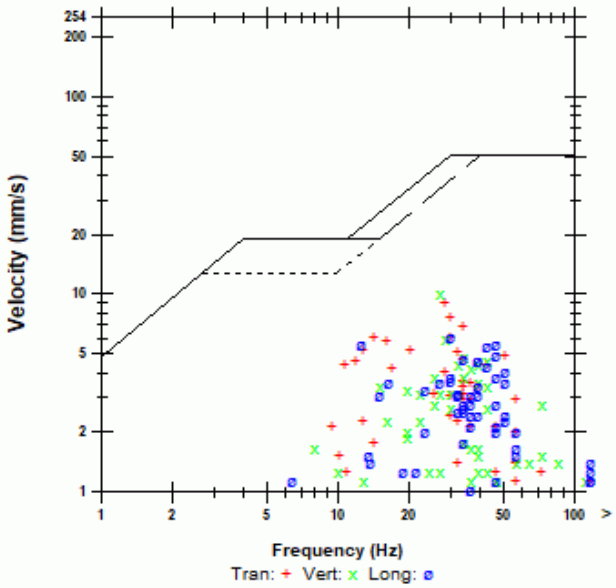
Extended Notes
Combo Mode May 1, 2020 05:16:50
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

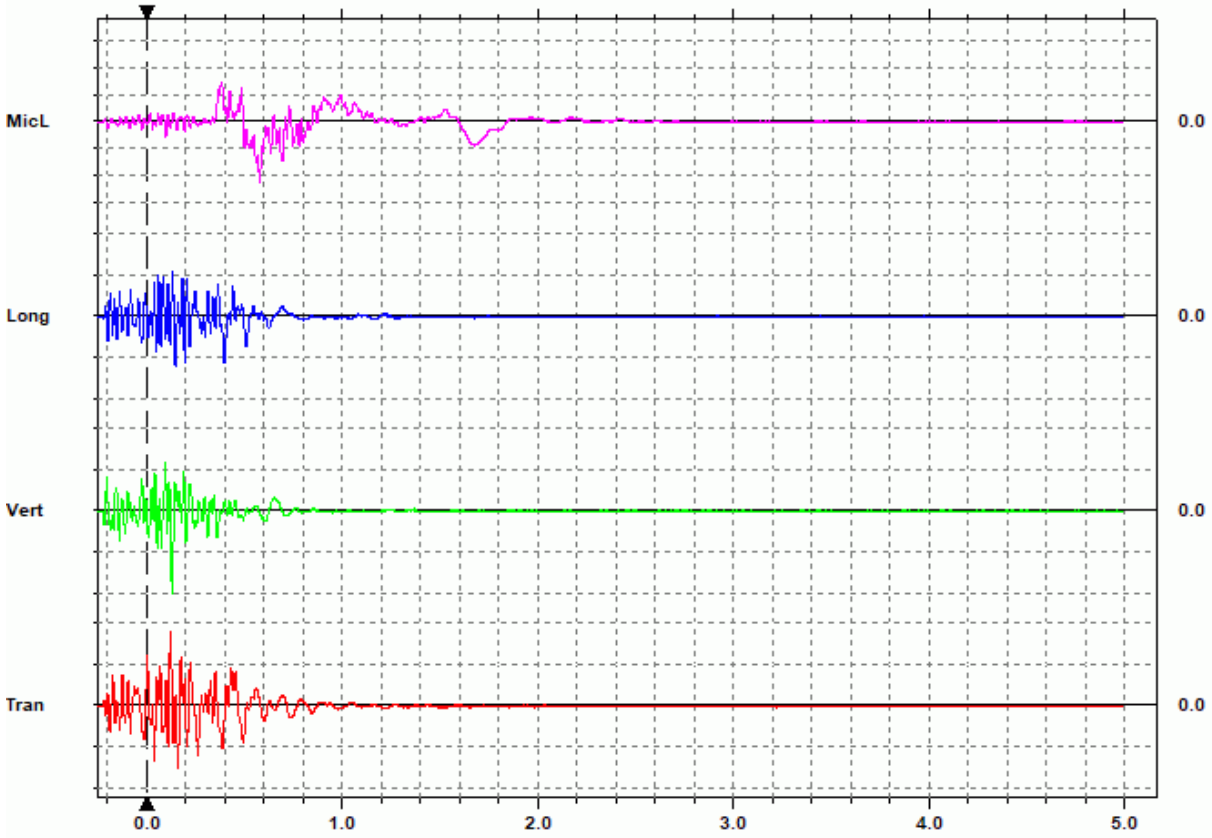
Microphone	Linear Weighting
PSPL	121.1 dB(L) at 0.578 sec.
ZC Freq	3.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.02	10.2	6.10	mm/s
ZC Freq	28	27	30	Hz
Time (Rel. to Trig)	0.122	0.130	0.146	sec
Peak Acceleration	0.186	0.172	0.172	g
Peak Displacement	0.0646	0.0543	0.0518	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.3 mm/s At 0.131 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:55:33 May 1, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IFTI.WL0W
Job Number	8177		

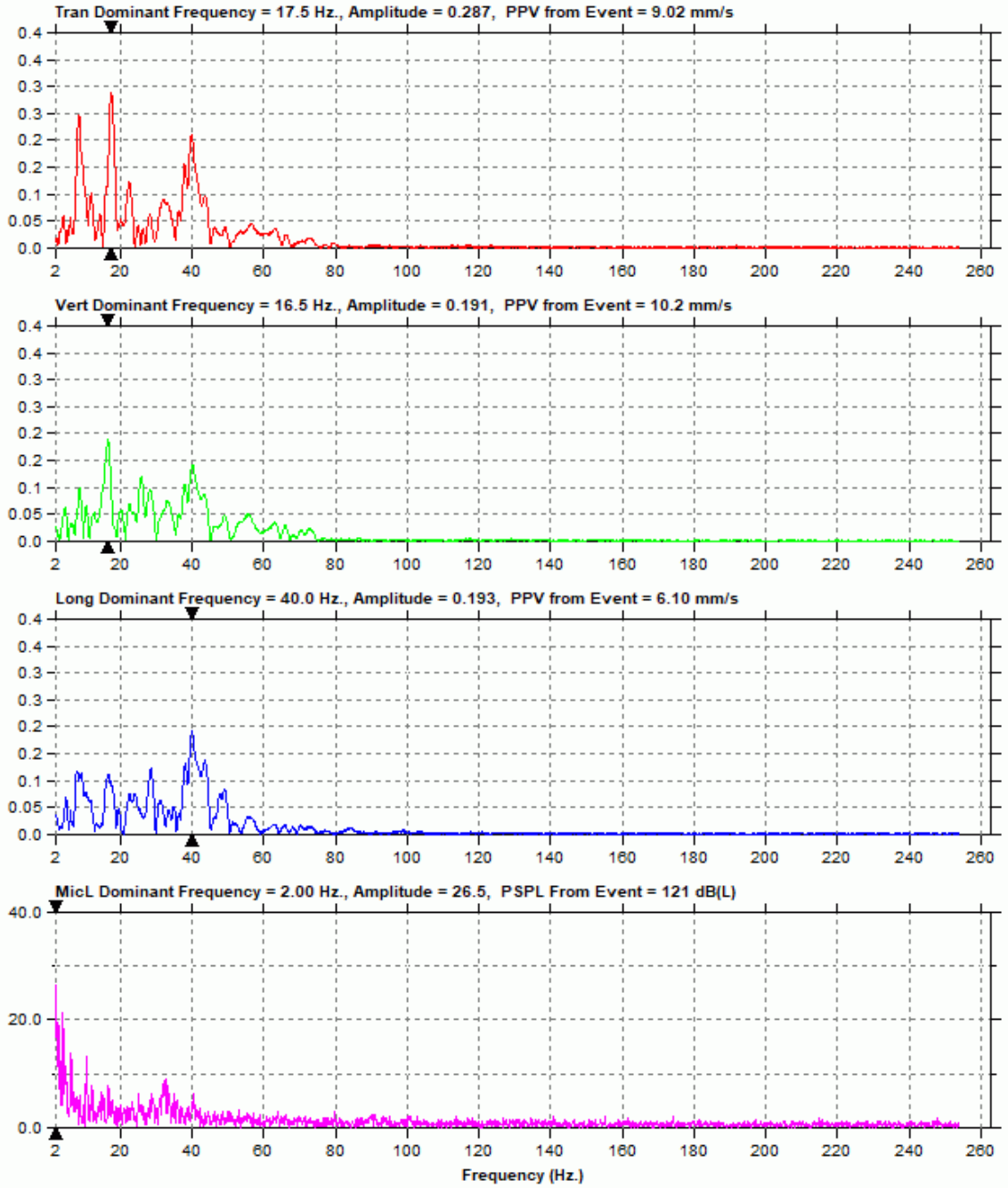
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 1, 2020 05:16:50
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:20 May 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IFVD.LW0W

Post Event Notes

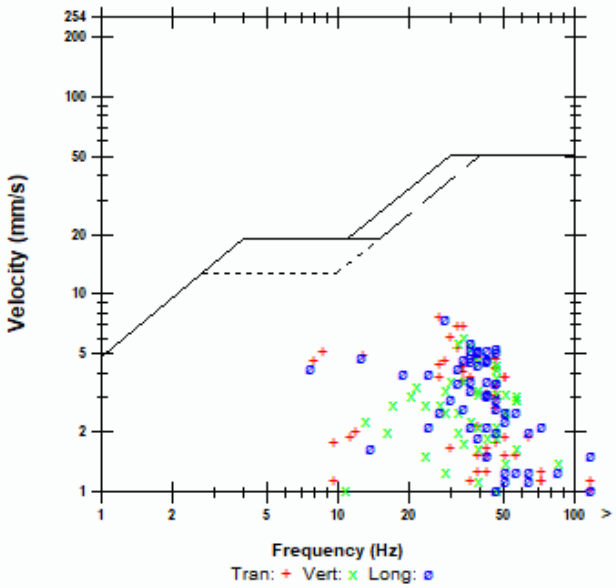
Extended Notes
Combo Mode May 2, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

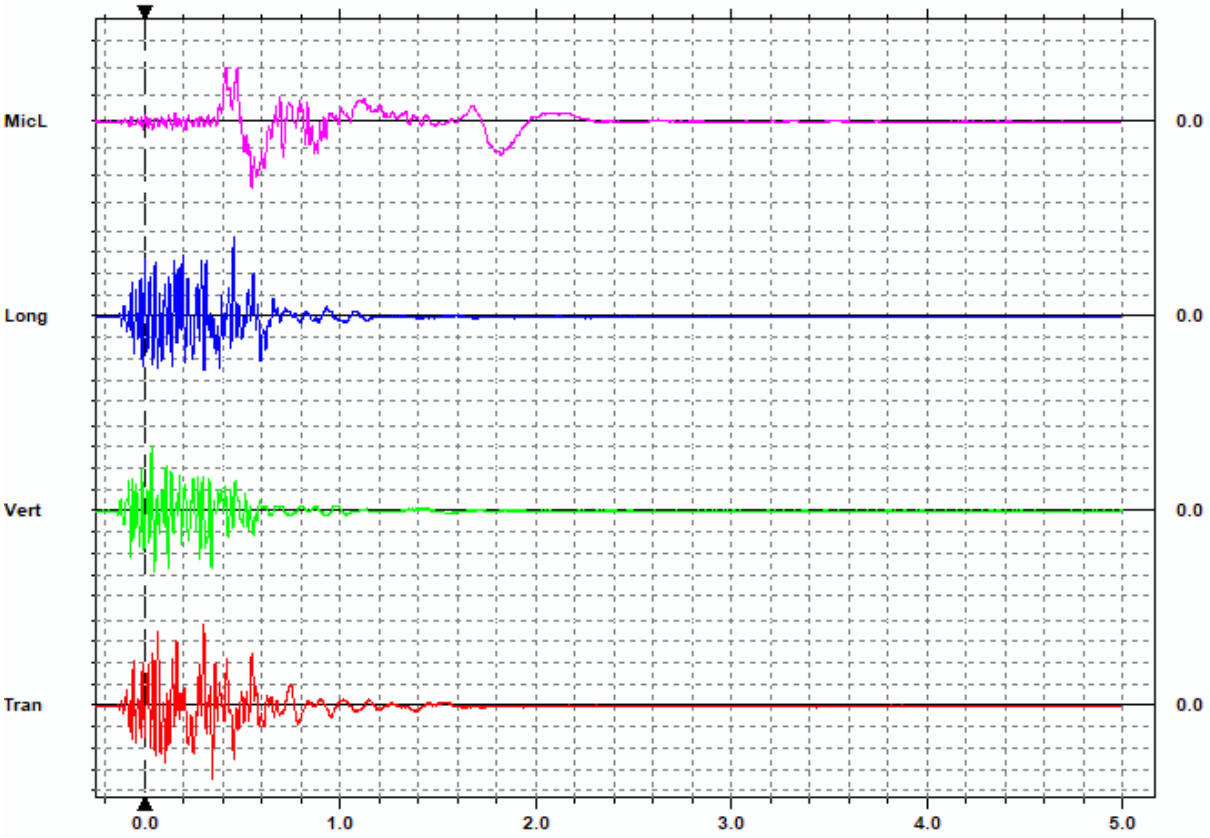
Microphone	Linear Weighting
PSPL	121.9 dB(L) at 0.547 sec.
ZC Freq	3.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.62	6.10	7.49	mm/s
ZC Freq	27	34	28	Hz
Time (Rel. to Trig)	0.303	0.035	0.455	sec
Peak Acceleration	0.172	0.159	0.172	g
Peak Displacement	0.0750	0.0286	0.0615	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.18 mm/s At 0.303 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:56:20 May 2, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IFVD.LW0W
Job Number	8177		

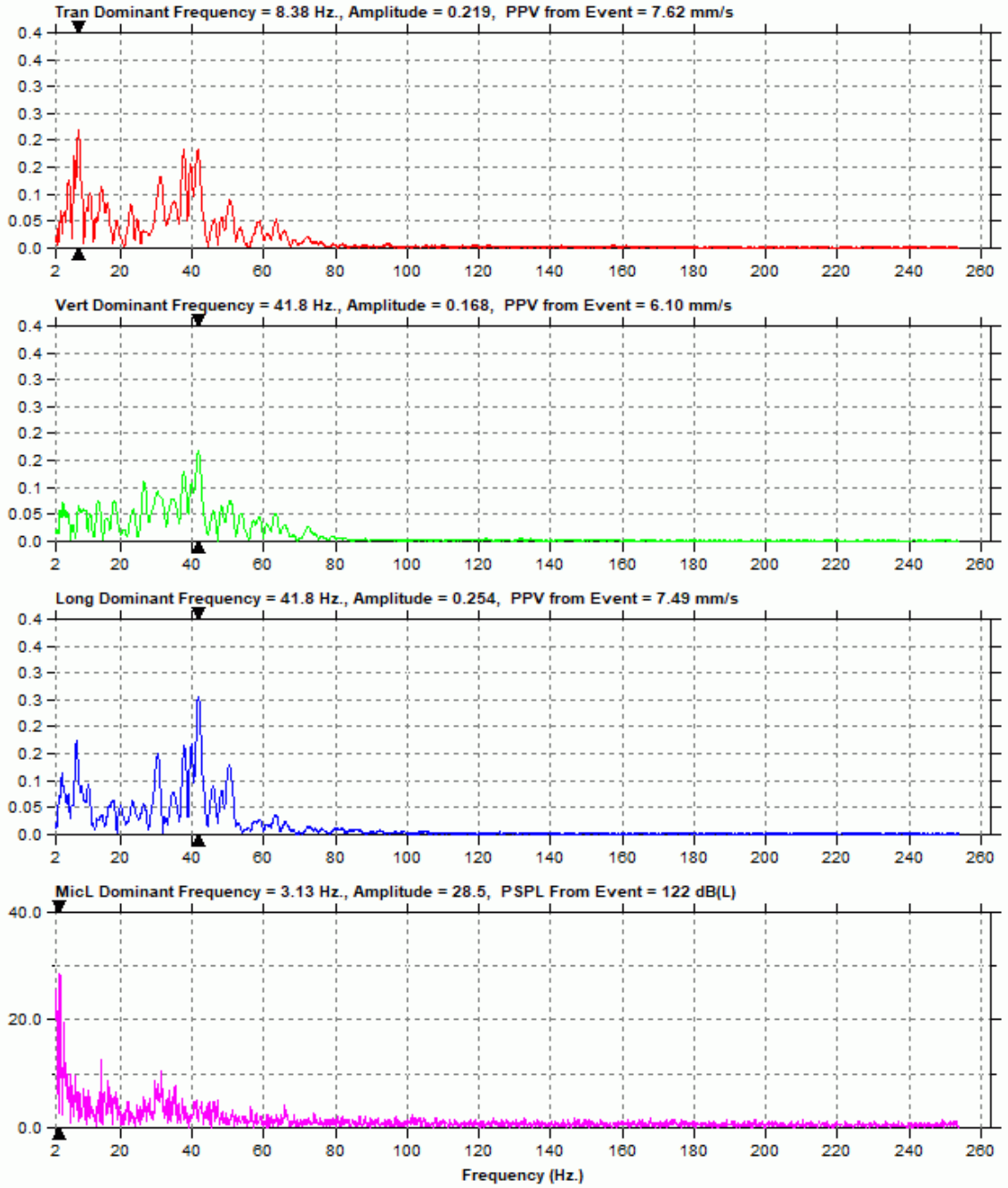
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 2, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:57:01 May 30, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IHB8.B10W

Post Event Notes

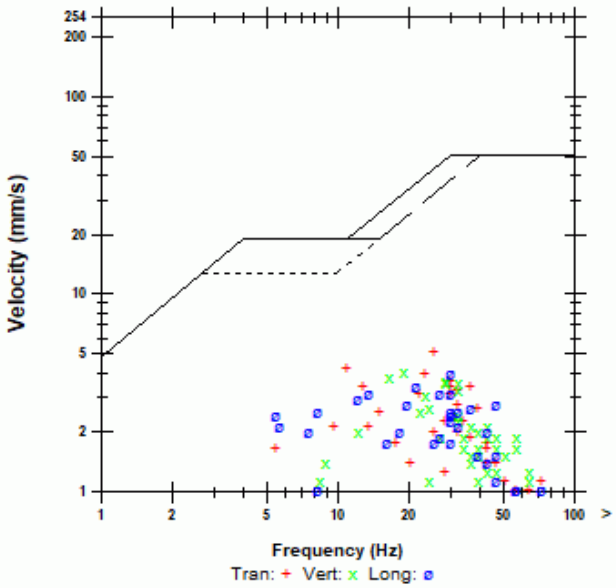
Extended Notes
Combo Mode May 30, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

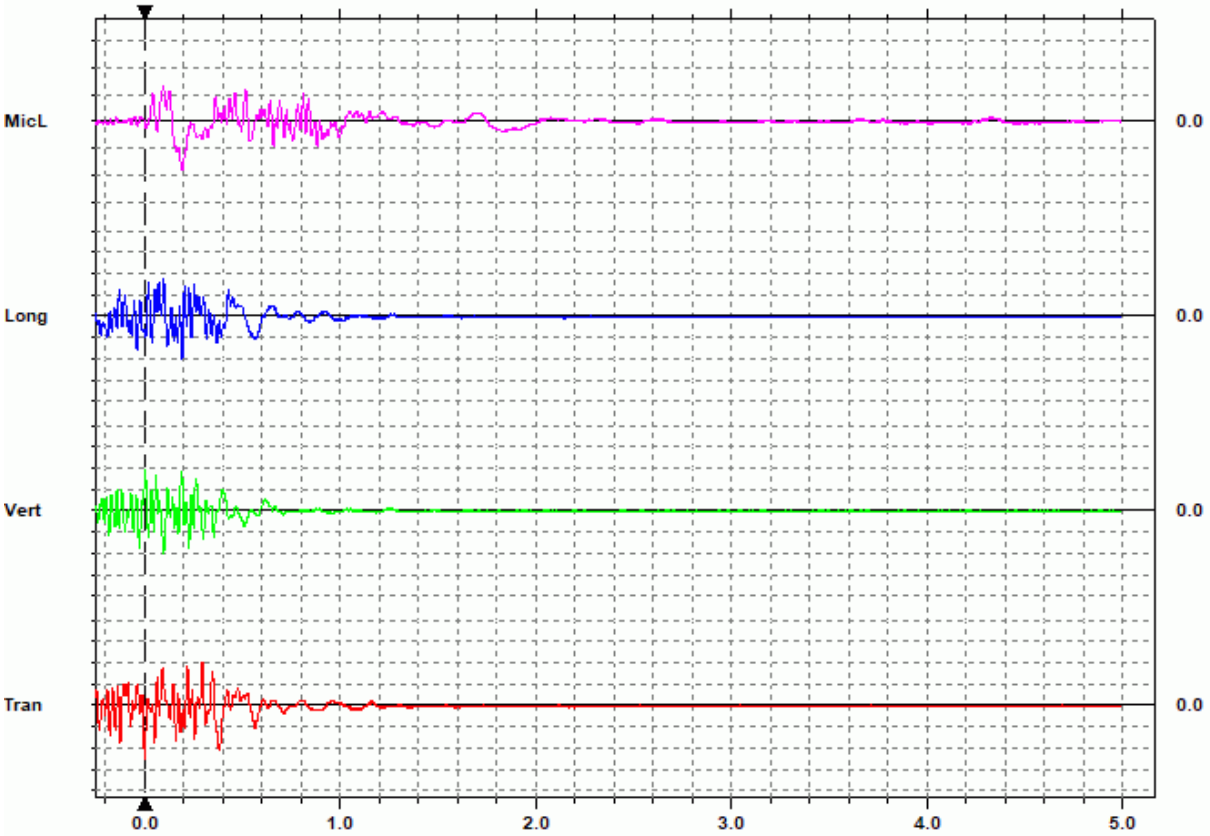
Microphone	Linear Weighting
PSPL	119.0 dB(L) at 0.192 sec.
ZC Freq	2.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	4.06	3.94	mm/s
ZC Freq	26	19	30	Hz
Time (Rel. to Trig)	0.001	0.097	0.191	sec
Peak Acceleration	0.0795	0.0795	0.0928	g
Peak Displacement	0.0574	0.0317	0.0584	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.49 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 30, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:57:01 May 30, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IHB8.B10W
Job Number	8177		

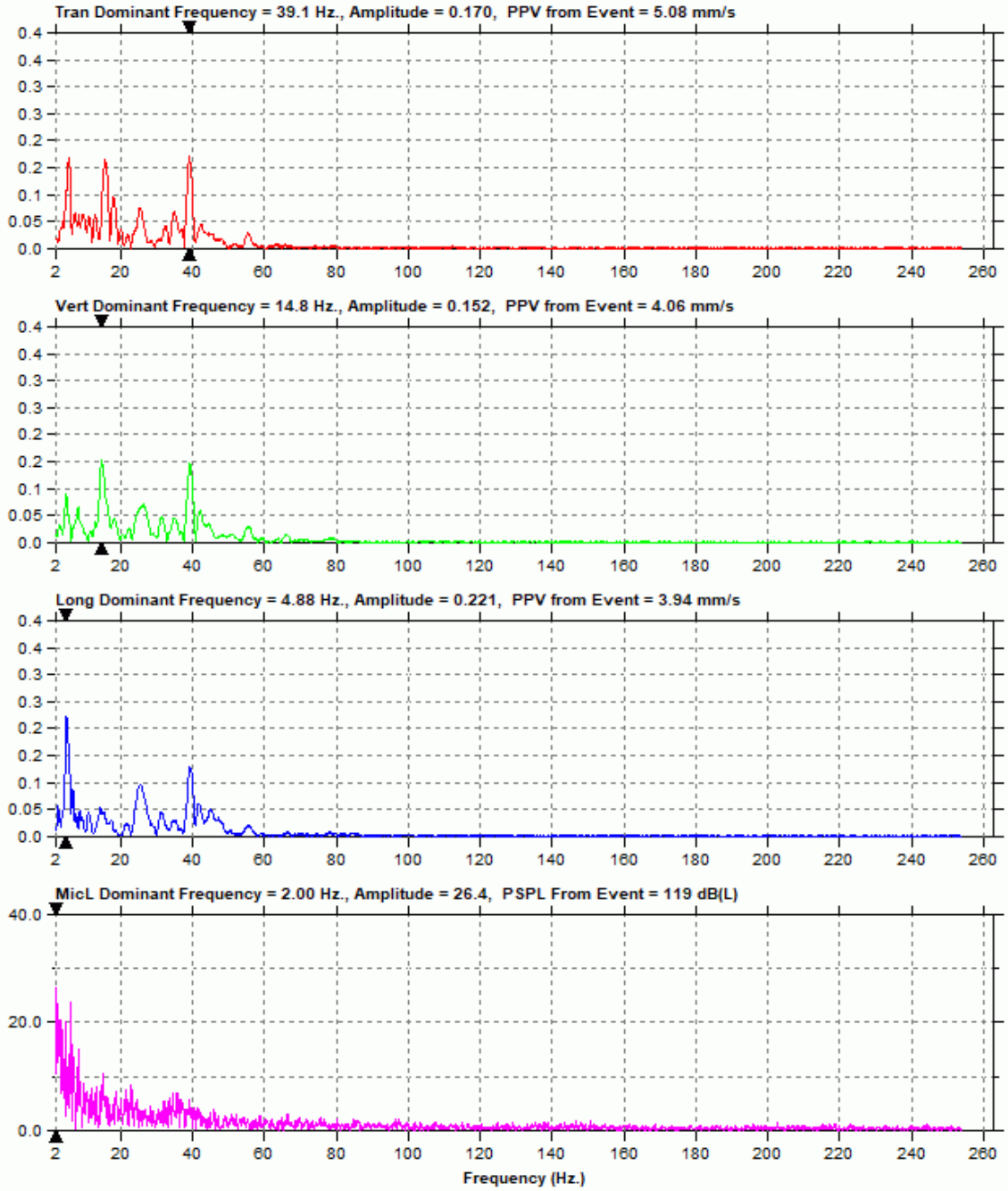
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 30, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 30, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:11 May 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFTI.UB0W

Post Event Notes

Extended Notes

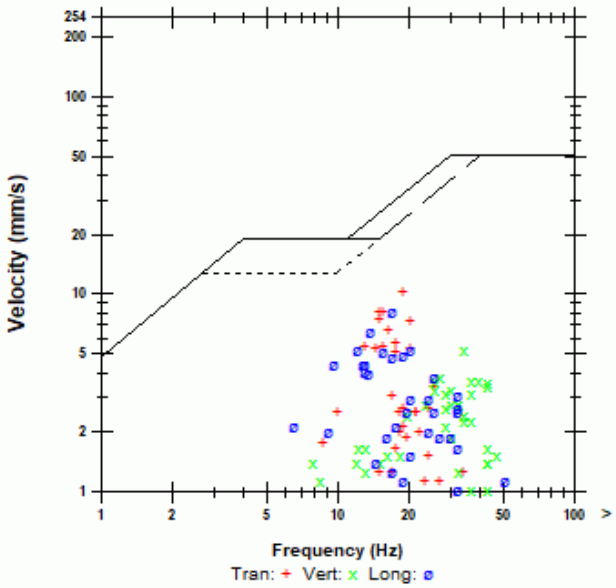
Combo Mode May 1, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

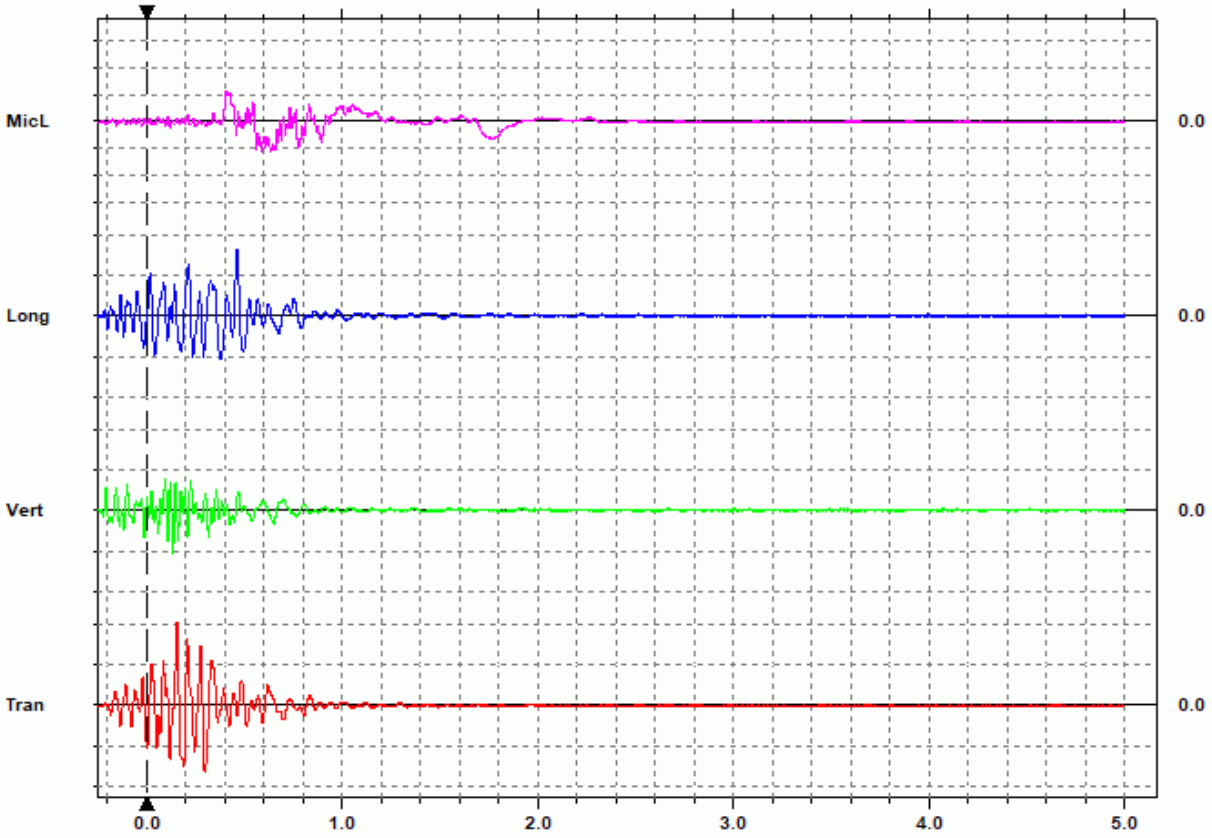
Microphone	Linear Weighting
PSPL	115.2 dB(L) at 0.407 sec.
ZC Freq	7.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	10.3	5.21	8.25	mm/s
ZC Freq	19	34	17	Hz
Time (Rel. to Trig)	0.155	0.134	0.462	sec
Peak Acceleration	0.159	0.106	0.0928	g
Peak Displacement	0.0917	0.0280	0.0791	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.5 mm/s At 0.156 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:11 May 1, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFTI.UB0W
Job Number	8177		

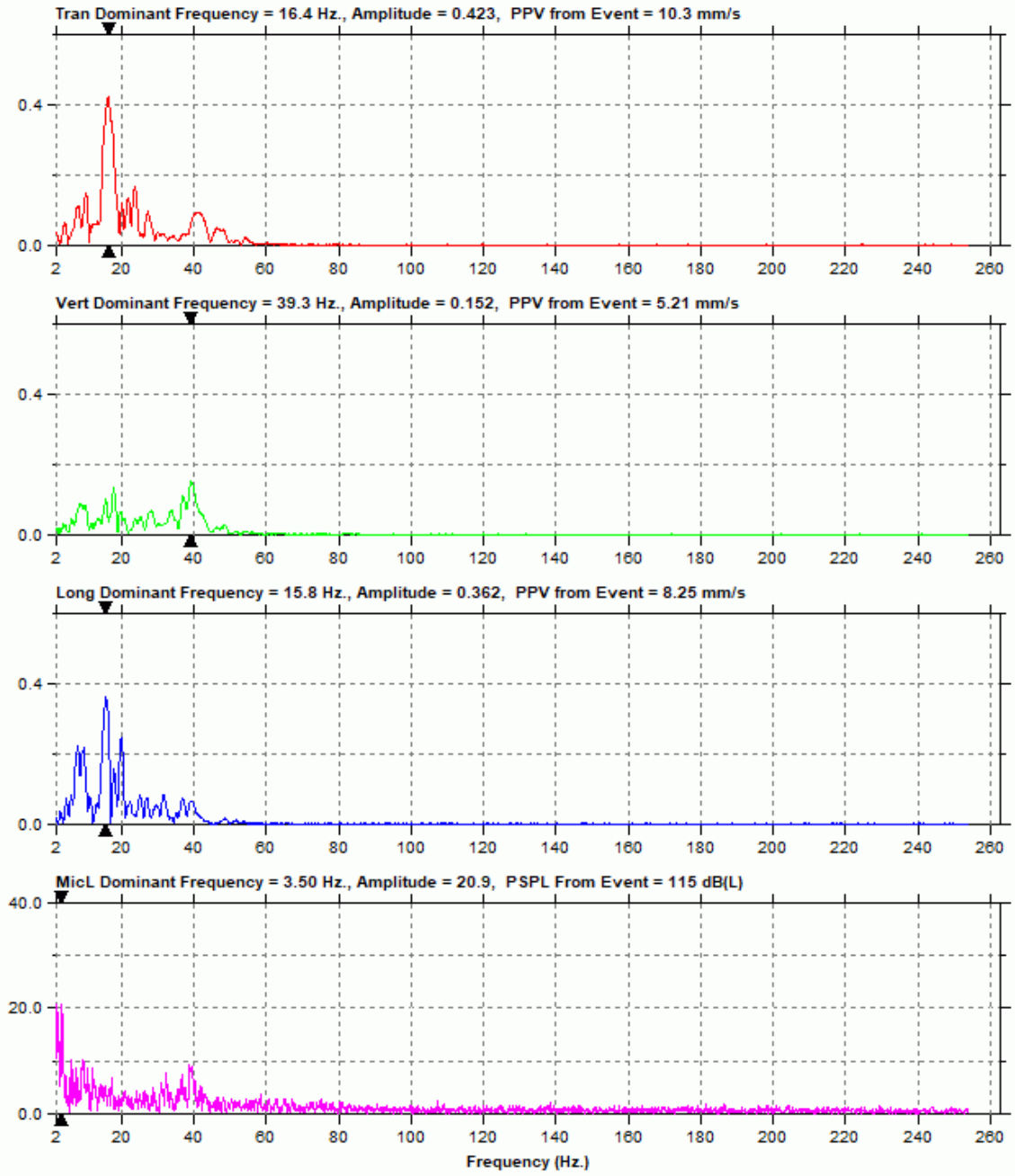
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 1, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:58 May 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IFVD.JM0W

Post Event Notes

Extended Notes

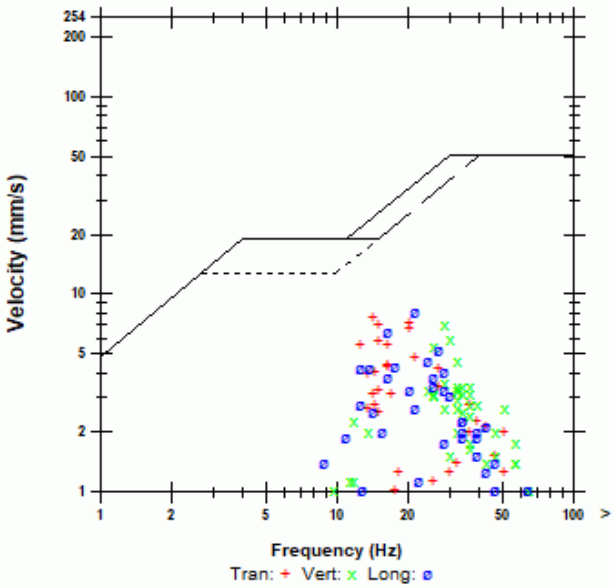
Combo Mode May 2, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

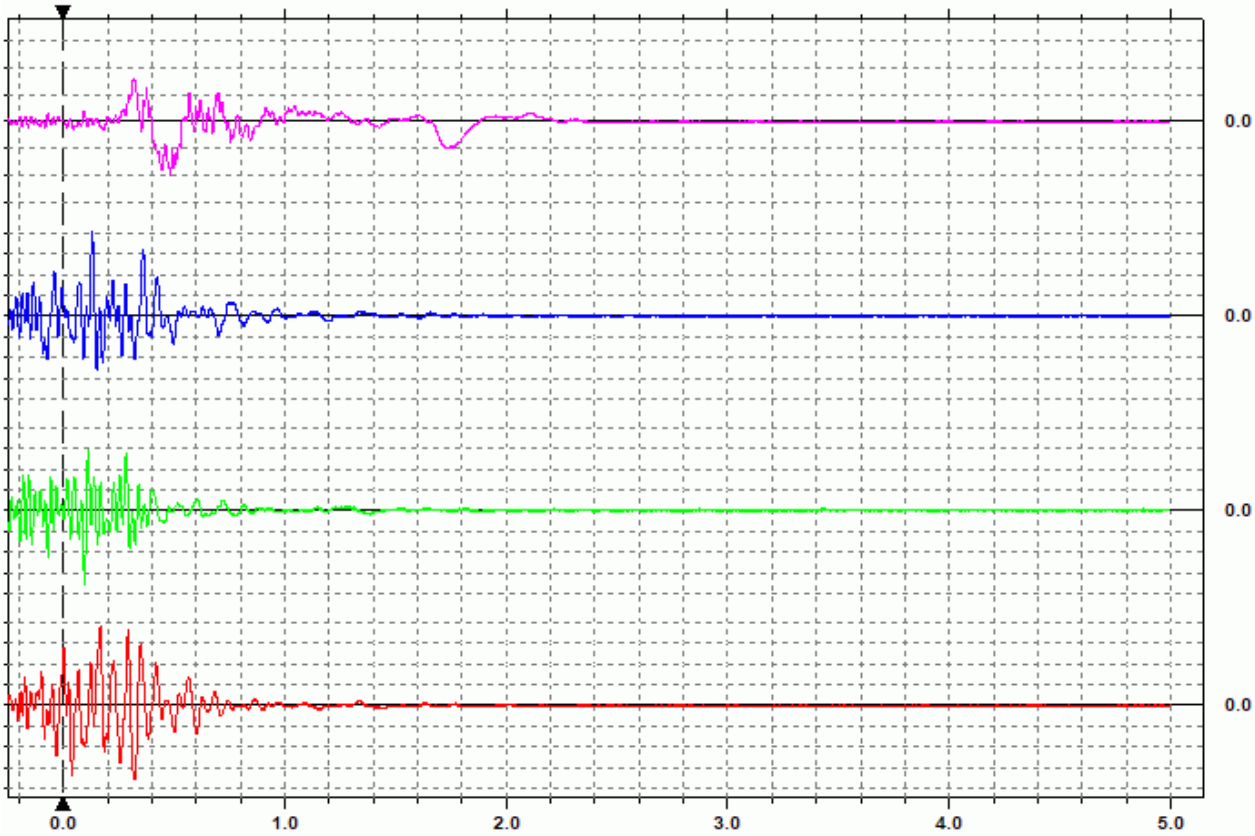
Microphone	Linear Weighting
PSPL	119.9 dB(L) at 0.484 sec.
ZC Freq	3.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.62	7.11	8.13	mm/s
ZC Freq	14	28	21	Hz
Time (Rel. to Trig)	0.167	0.097	0.131	sec
Peak Acceleration	0.119	0.146	0.106	g
Peak Displacement	0.0824	0.0378	0.0590	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.76 mm/s At 0.322 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:54:58 May 2, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IFVD.JM0W
Job Number	8177		

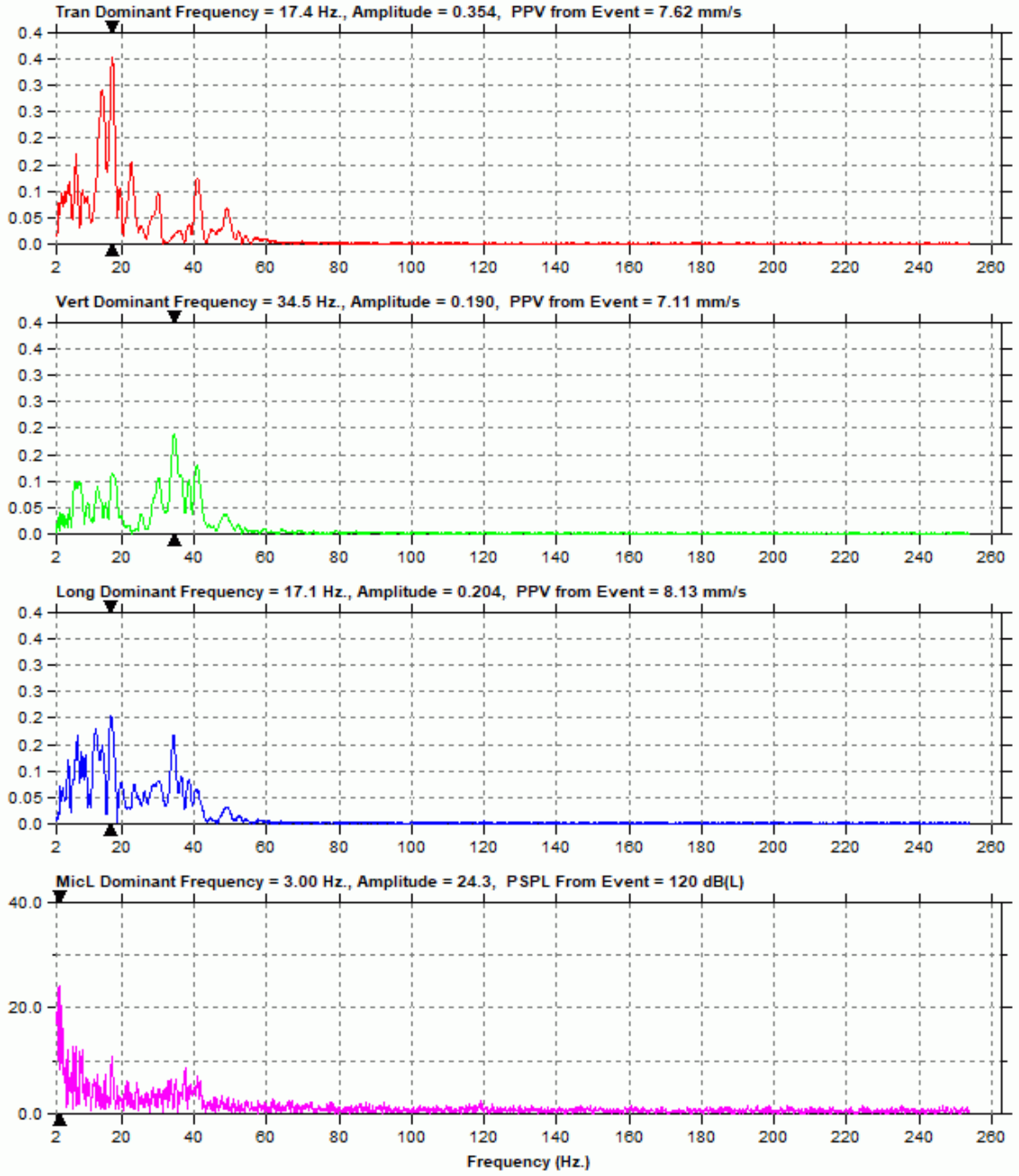
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 2, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:41 May 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IGHL.RH0W

Post Event Notes

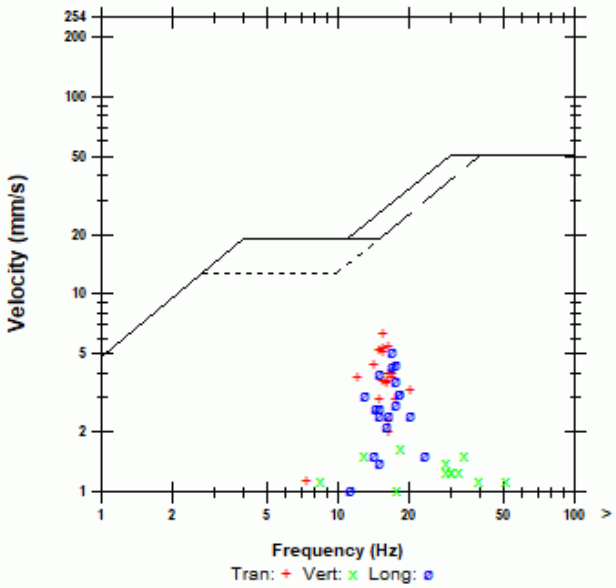
Extended Notes
Combo Mode May 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

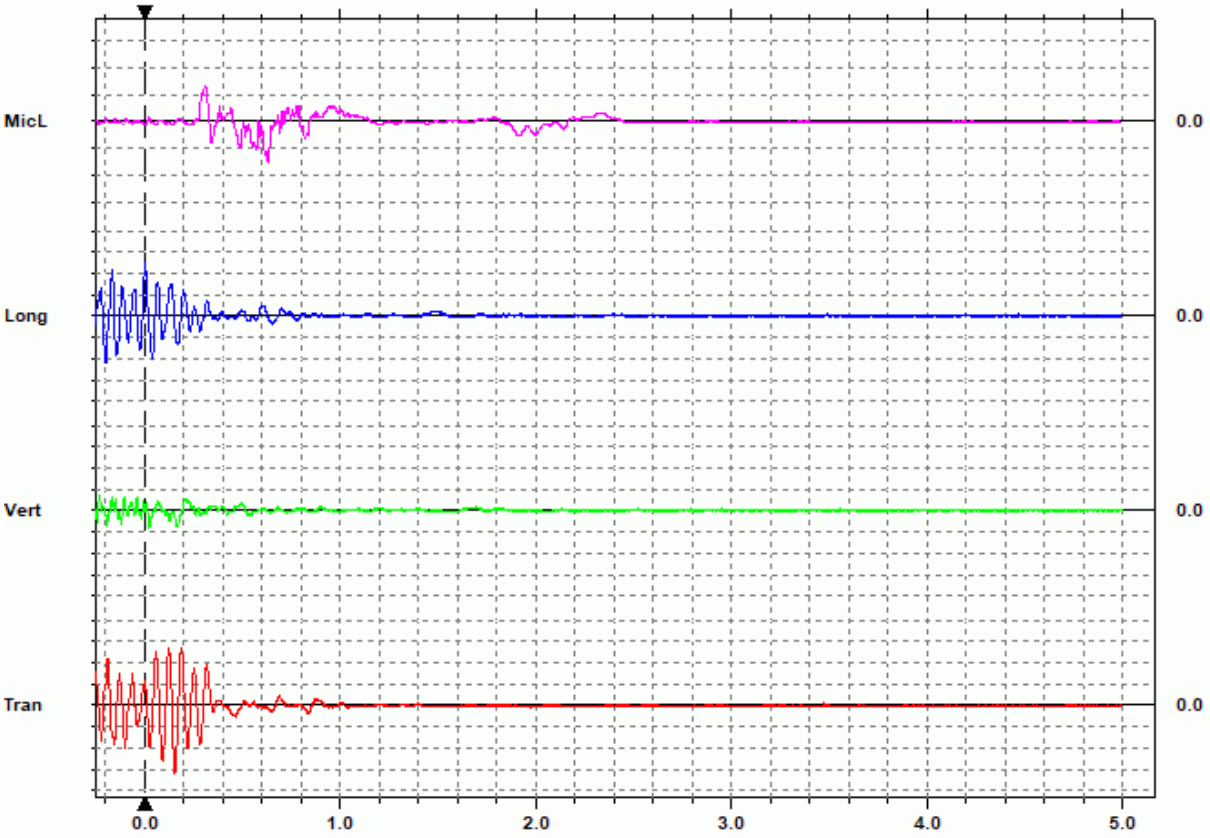
Microphone	Linear Weighting
PSPL	117.5 dB(L) at 0.630 sec.
ZC Freq	6.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	1.65	5.08	mm/s
ZC Freq	16	18	17	Hz
Time (Rel. to Trig)	0.154	0.021	0.001	sec
Peak Acceleration	0.0795	0.0398	0.0663	g
Peak Displacement	0.0645	0.0195	0.0427	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.48 mm/s At 0.154 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:41 May 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IGHL.RH0W
Job Number	8177		

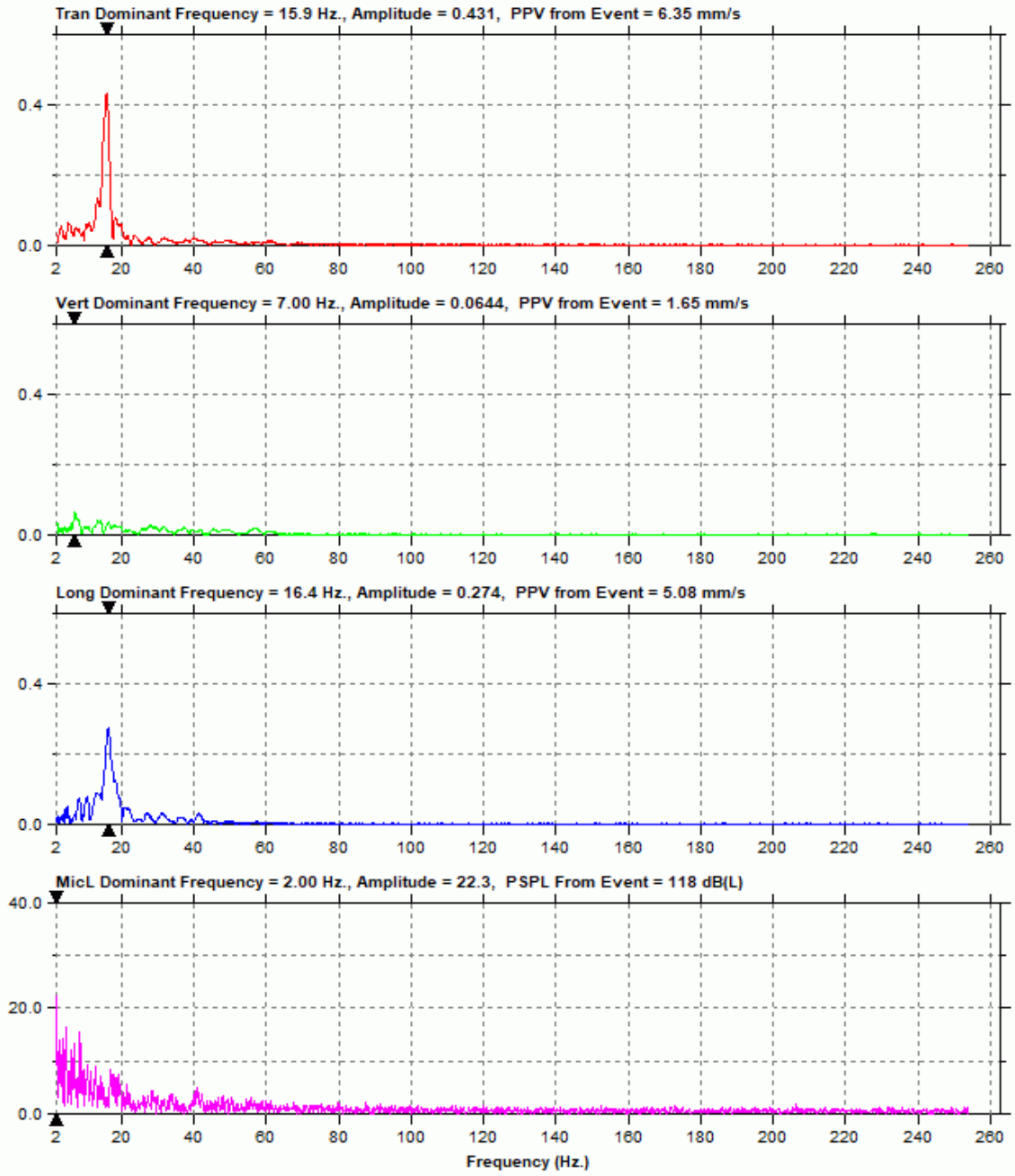
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



EXPLOTECH

Date/Time	Long At 15:26:33 May 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IGJE.W90W

Post Event Notes

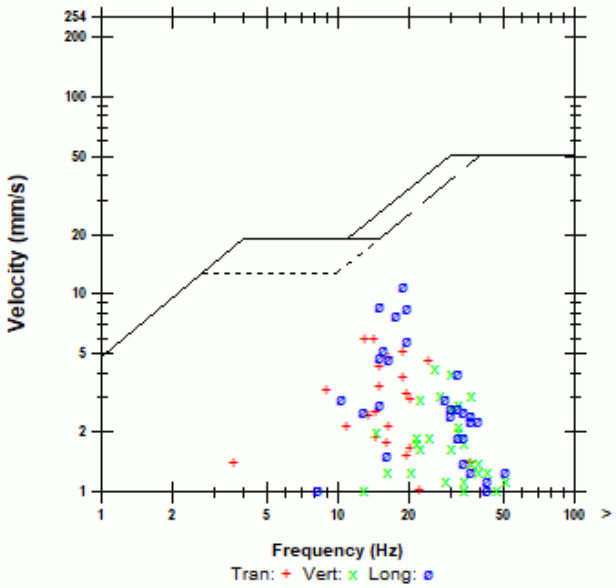
Extended Notes
Combo Mode May 15, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

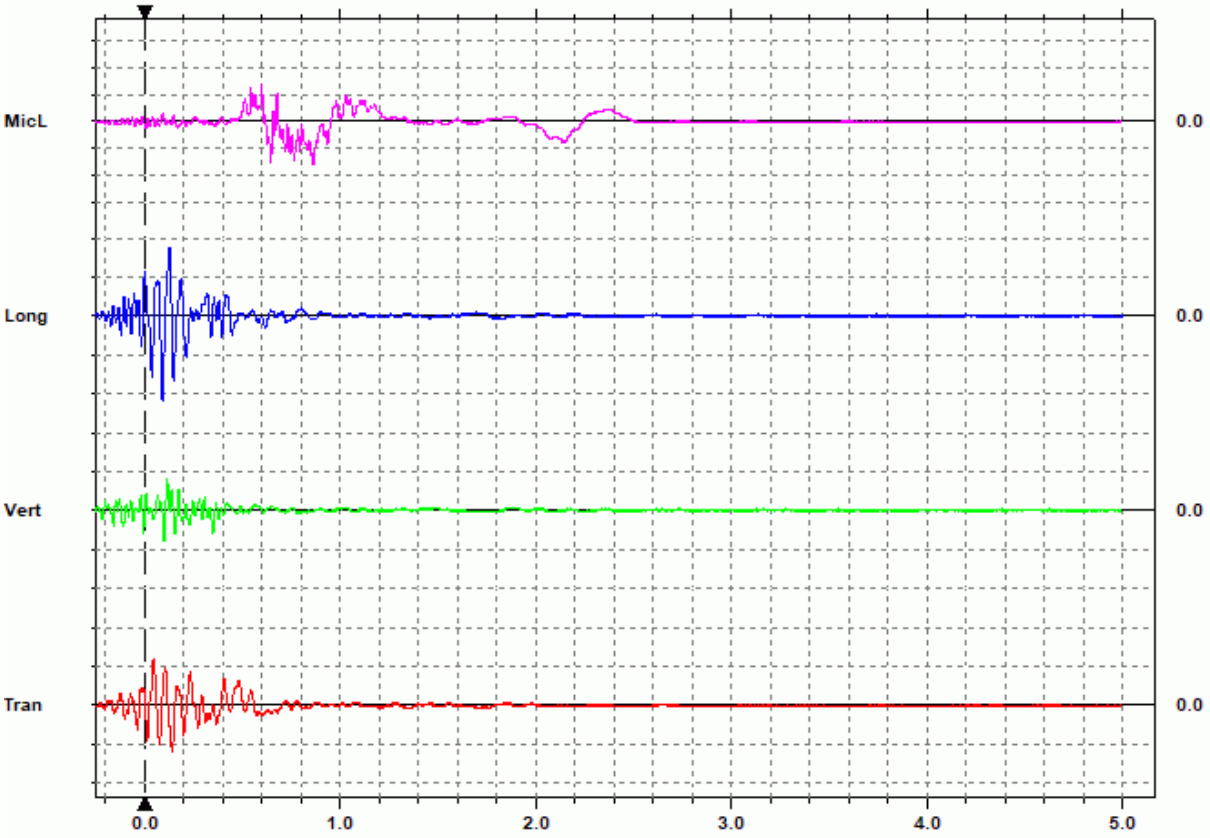
Microphone	Linear Weighting
PSPL	118.2 dB(L) at 0.865 sec.
ZC Freq	1.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.97	4.19	10.9	mm/s
ZC Freq	13	26	19	Hz
Time (Rel. to Trig)	0.047	0.117	0.093	sec
Peak Acceleration	0.0663	0.0795	0.146	g
Peak Displacement	0.0626	0.0244	0.0877	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.1 mm/s At 0.094 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:26:33 May 15, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IGJE.W90W
Job Number	8177		

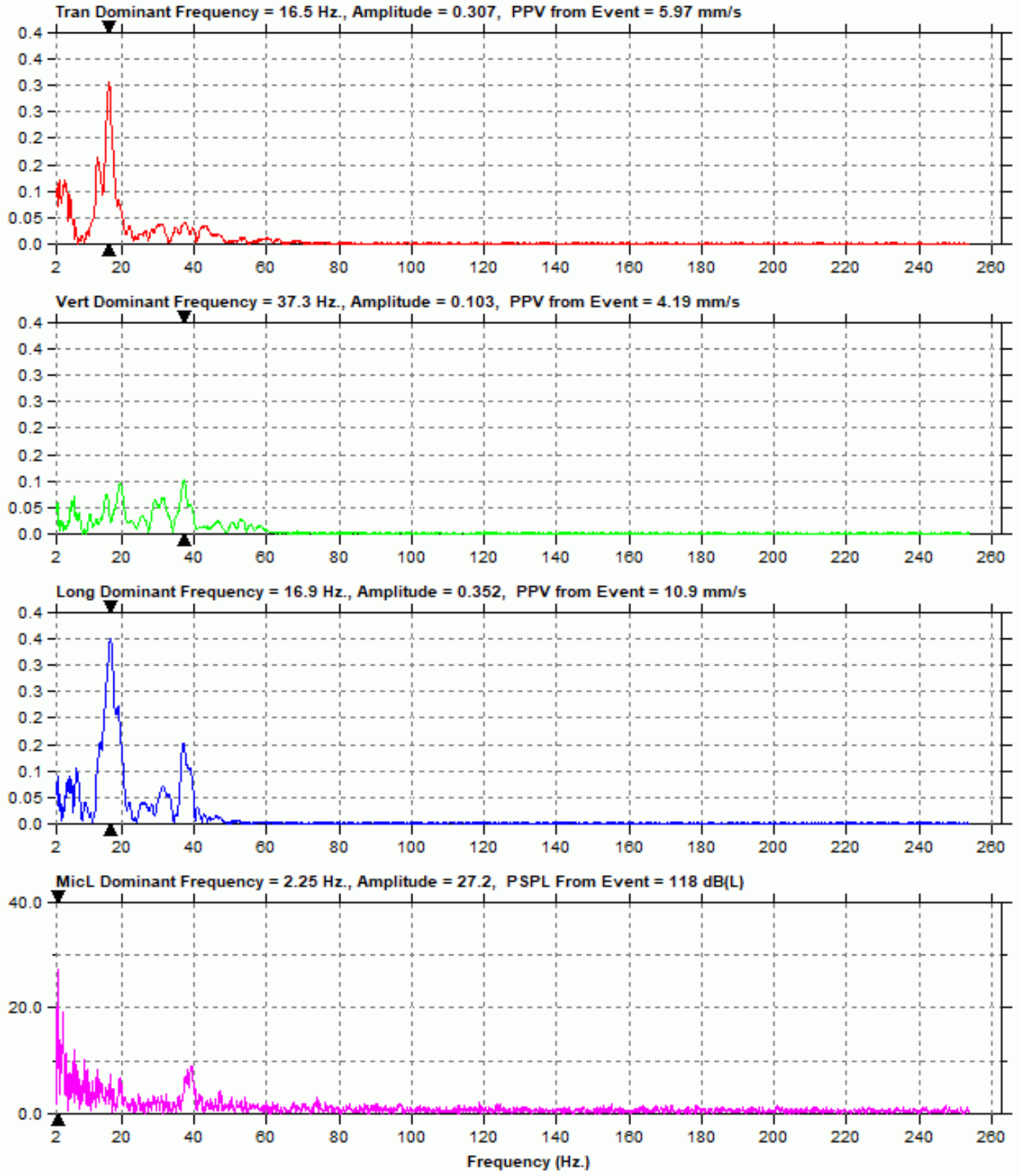
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 15, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:26 May 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IGSP.UE0W

Post Event Notes

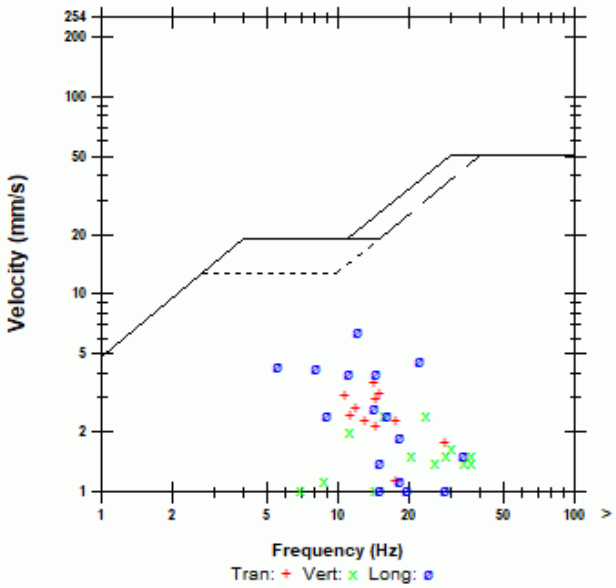
Extended Notes
Combo Mode May 20, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

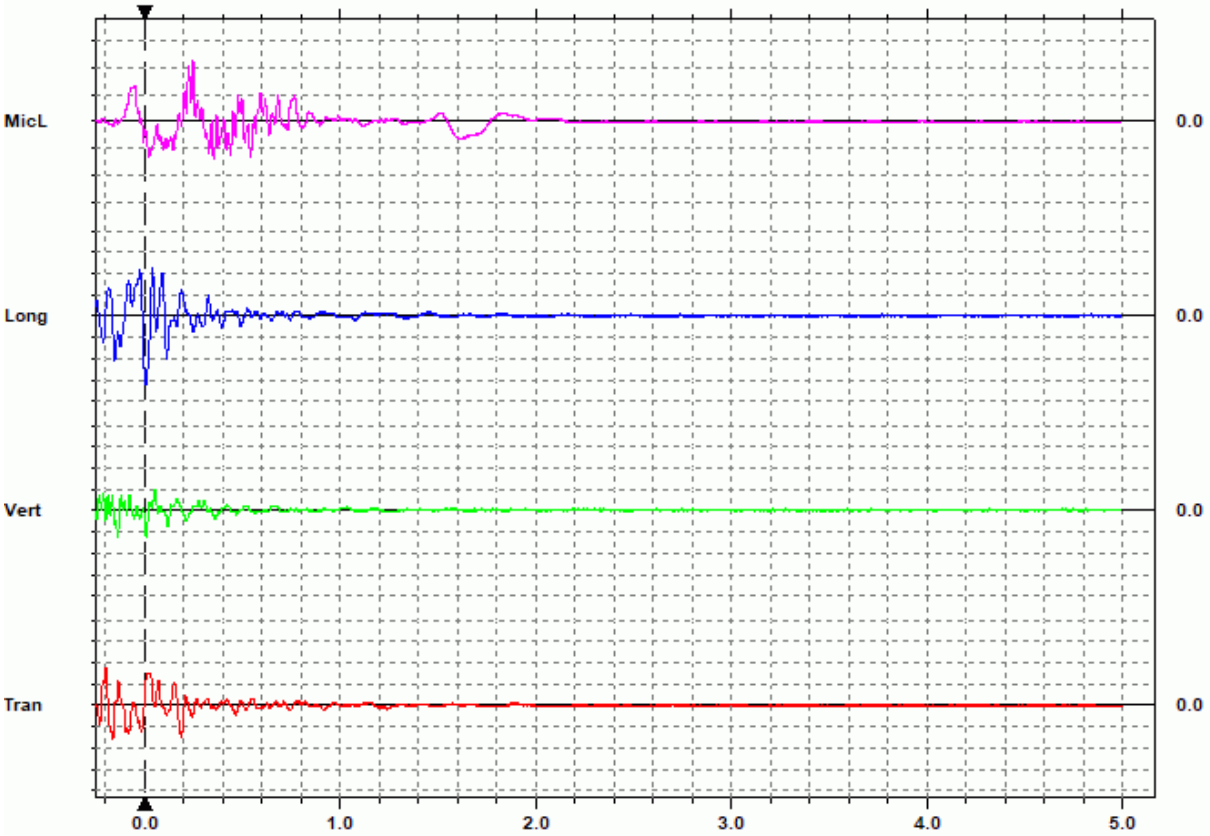
Microphone	Linear Weighting
PSPL	121.2 dB(L) at 0.250 sec.
ZC Freq	4.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.56	2.41	6.48	mm/s
ZC Freq	14	16	12	Hz
Time (Rel. to Trig)	-0.197	-0.136	0.006	sec
Peak Acceleration	0.0530	0.0530	0.0663	g
Peak Displacement	0.0532	0.0220	0.110	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.32 mm/s At 0.009 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:01:26 May 20, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IGSP.UE0W
Job Number	8177		

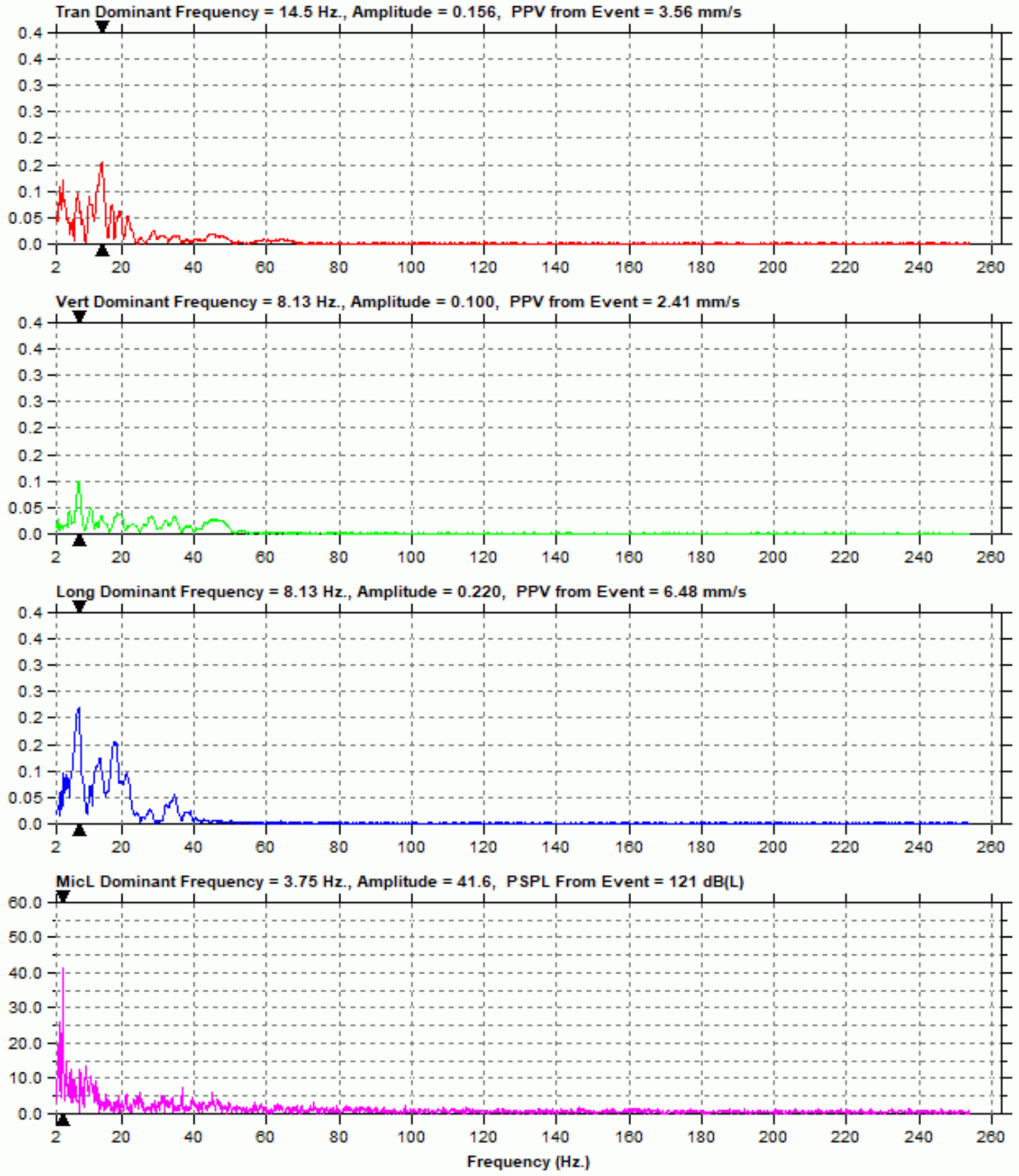
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 20, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:17:09 May 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IH1X.4L0W

Post Event Notes

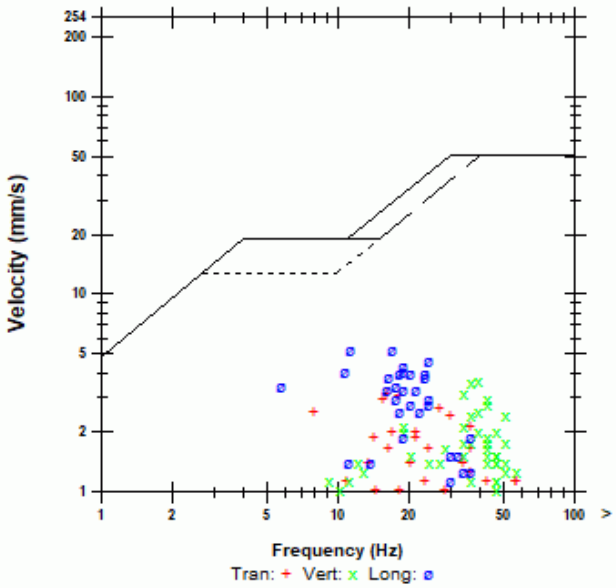
Extended Notes
Combo Mode May 25, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

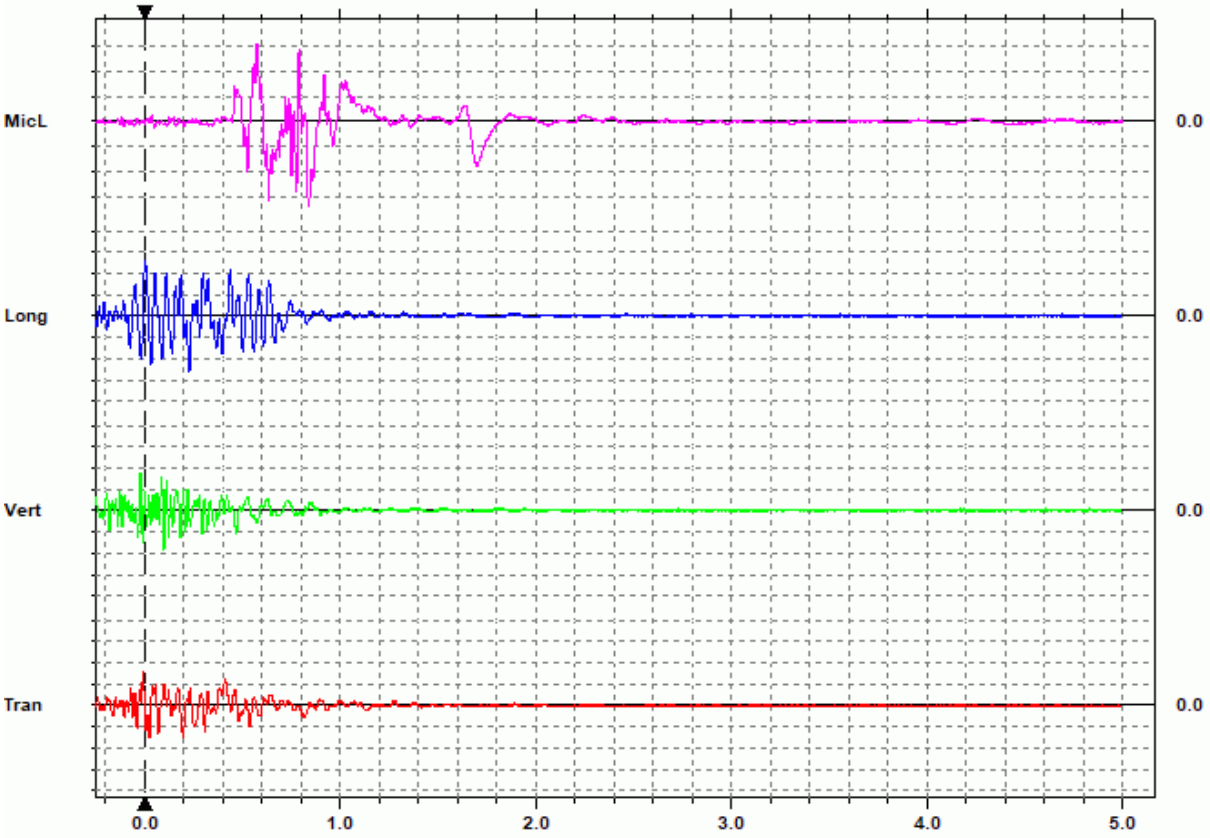
Microphone	Linear Weighting
PSPL	124.5 dB(L) at 0.838 sec.
ZC Freq	8.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.17	3.68	5.21	mm/s
ZC Freq	16	39	17	Hz
Time (Rel. to Trig)	-0.008	0.100	0.002	sec
Peak Acceleration	0.0663	0.0928	0.0928	g
Peak Displacement	0.0437	0.0178	0.0629	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.61 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:17:09 May 25, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IH1X.4L0W
Job Number	8177		

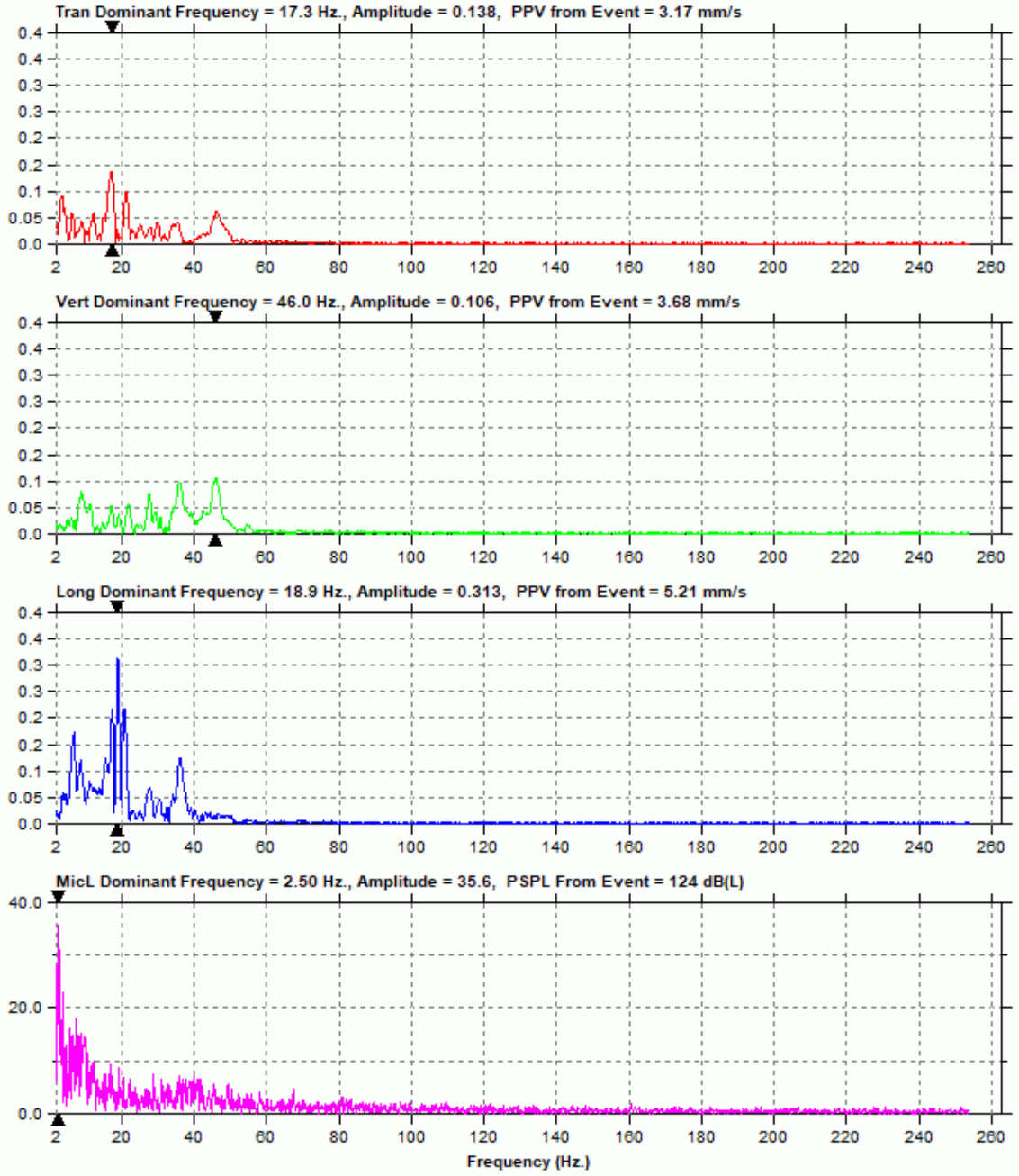
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 25, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:22:42 May 26, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IH3S.1U0W

Post Event Notes

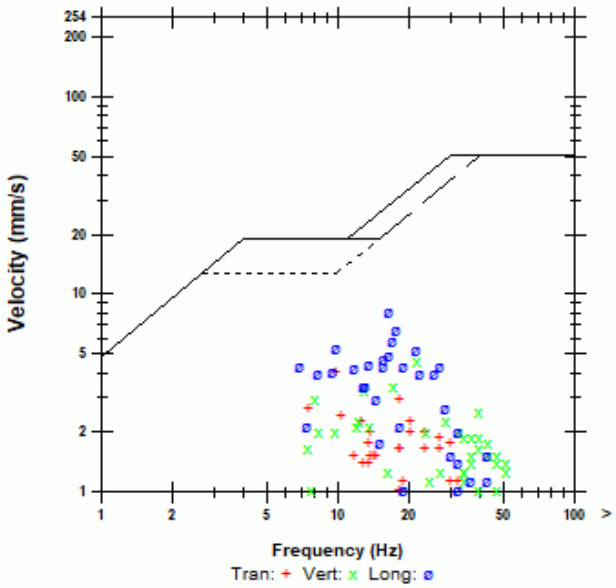
Extended Notes
Combo Mode May 26, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

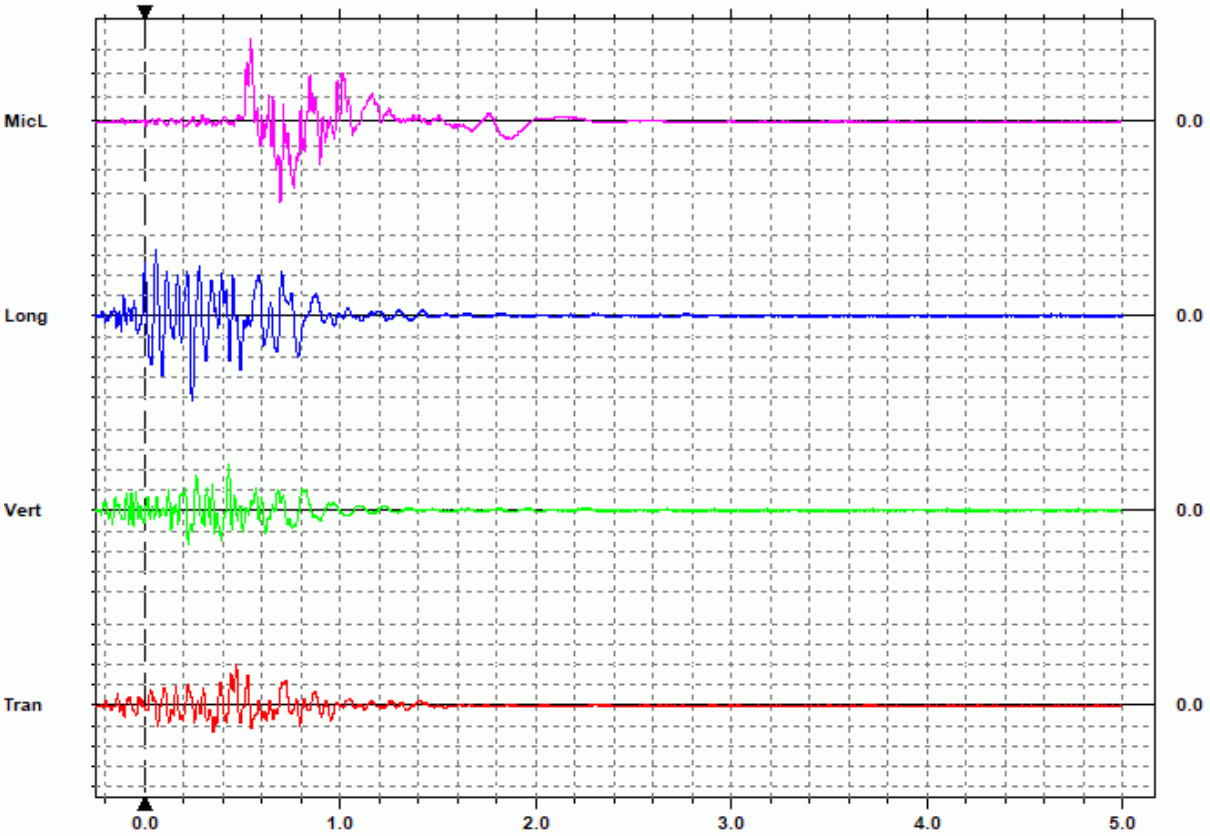
Microphone	Linear Weighting
PSPL	124.9 dB(L) at 0.543 sec.
ZC Freq	5.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.06	4.57	8.25	mm/s
ZC Freq	9.8	21	17	Hz
Time (Rel. to Trig)	0.469	0.430	0.242	sec
Peak Acceleration	0.0530	0.0663	0.0928	g
Peak Displacement	0.0557	0.0430	0.0742	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.53 mm/s At 0.242 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 26, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:22:42 May 26, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IH3S.1U0W
Job Number	8177		

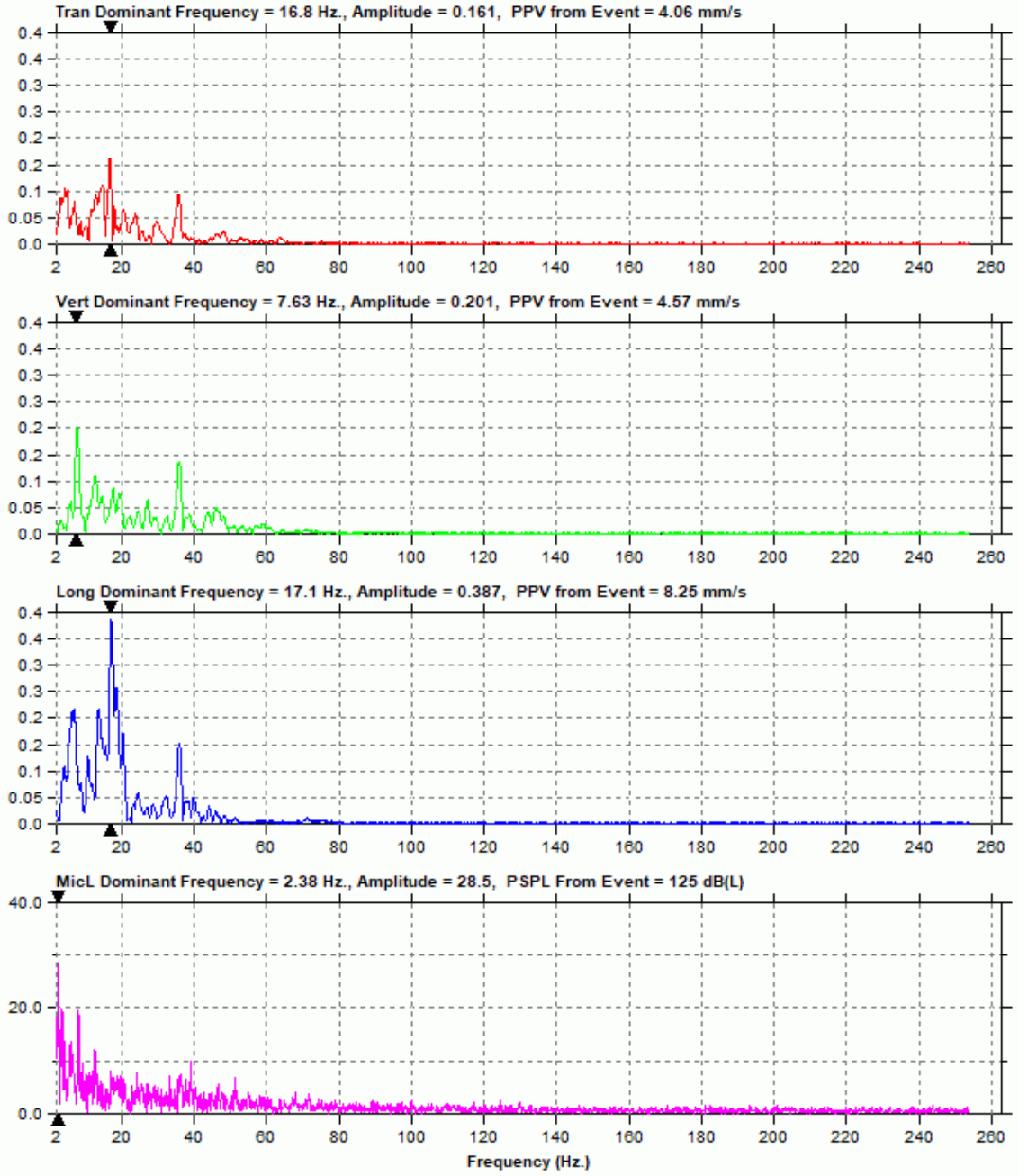
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 26, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 26, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:00 May 27, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IH5O.B00W

Post Event Notes

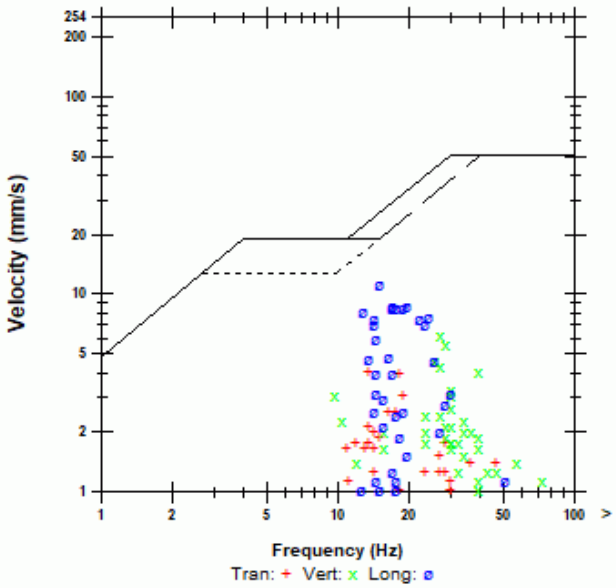
Extended Notes
Combo Mode May 27, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

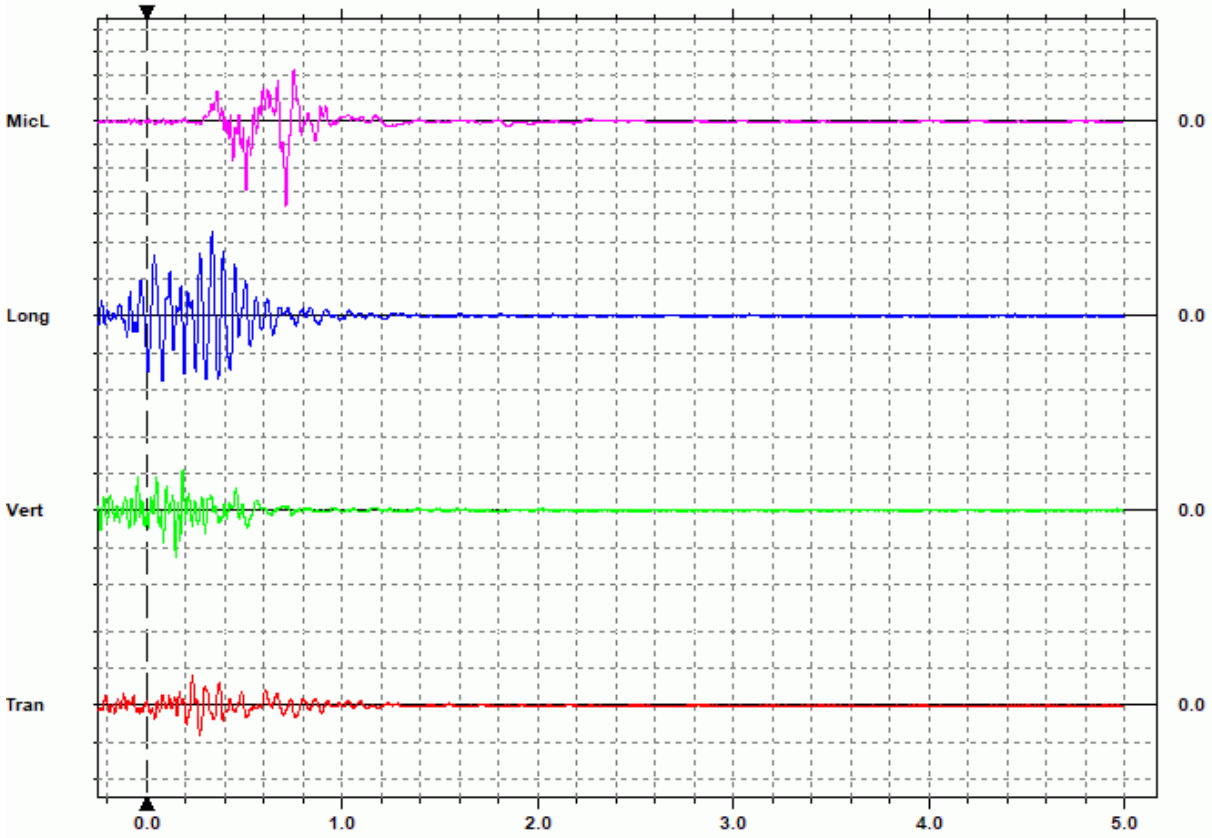
Microphone	Linear Weighting
PSPL	131.2 dB(L) at 0.715 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.06	6.22	11.3	mm/s
ZC Freq	13	27	15	Hz
Time (Rel. to Trig)	0.235	0.149	0.336	sec
Peak Acceleration	0.0663	0.119	0.119	g
Peak Displacement	0.0353	0.0332	0.113	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.5 mm/s At 0.336 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: May 27, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:57:00 May 27, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IH5O.B00W
Job Number	8177		

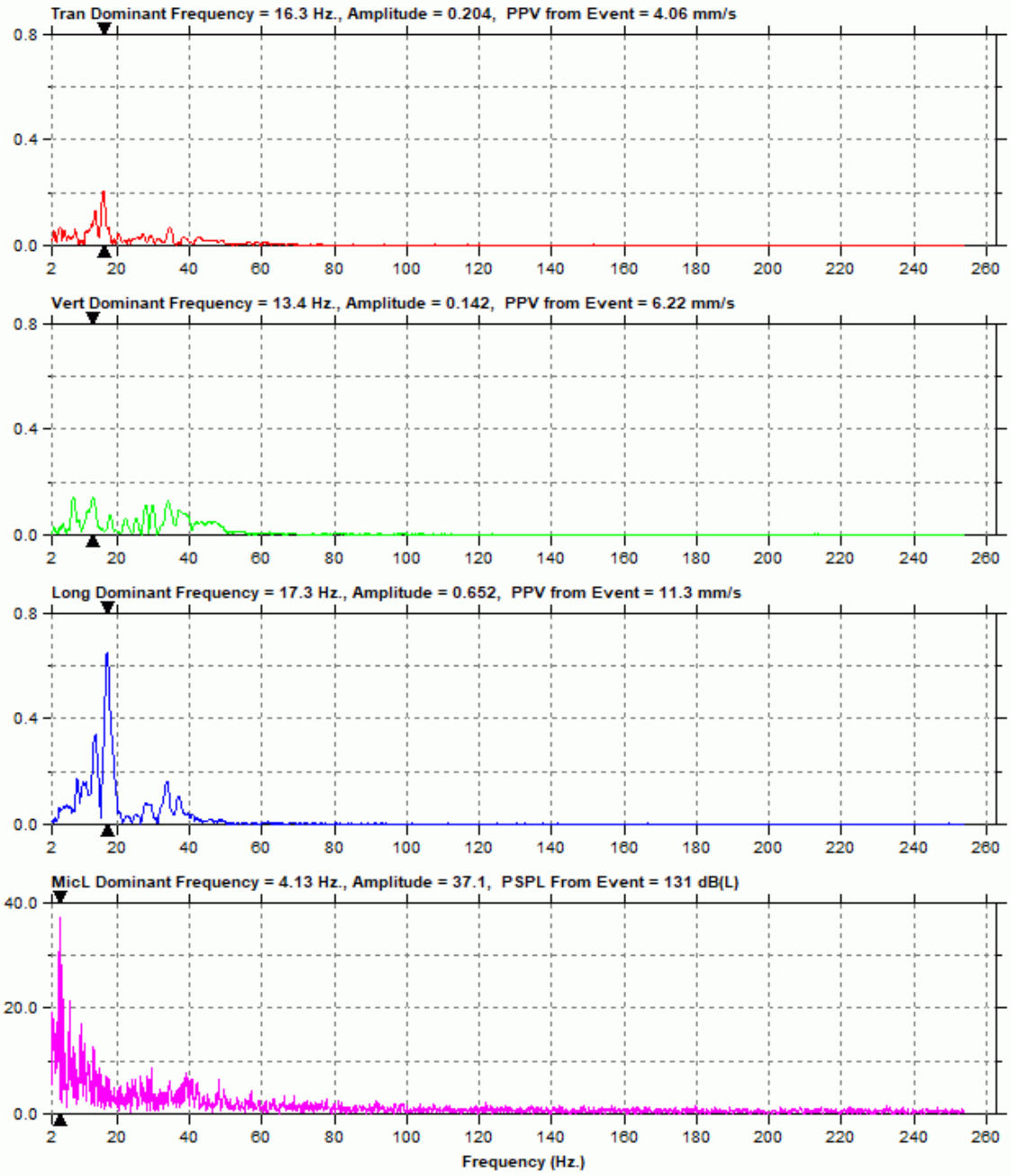
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 27, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:09:00 May 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IH7J.J00W

Post Event Notes

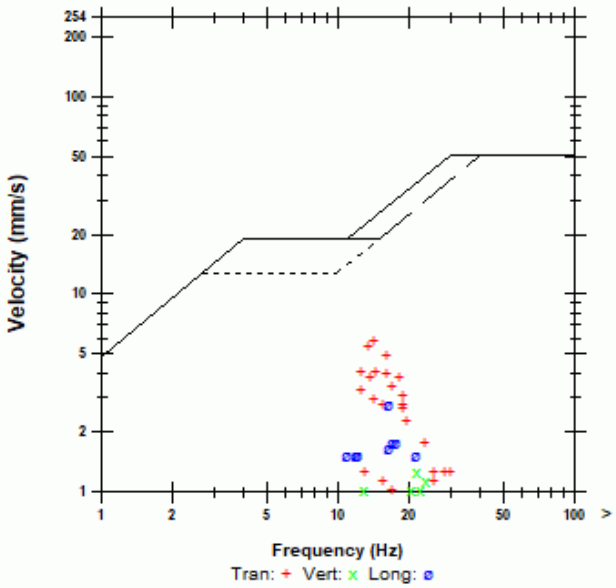
Extended Notes
Combo Mode May 28, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

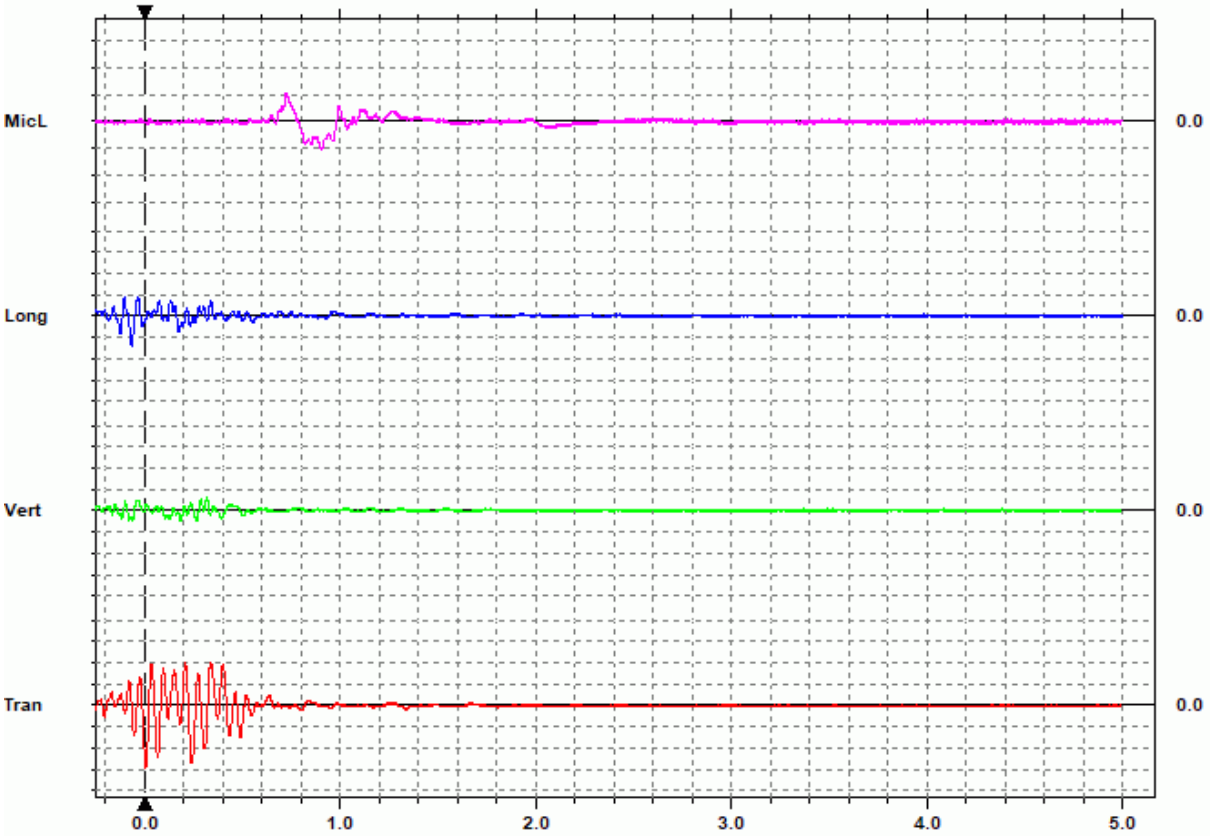
Microphone	Linear Weighting
PSPL	114.6 dB(L) at 0.725 sec.
ZC Freq	4.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.84	1.27	2.79	mm/s
ZC Freq	14	21	17	Hz
Time (Rel. to Trig)	0.006	0.317	-0.067	sec
Peak Acceleration	0.0663	0.0265	0.0398	g
Peak Displacement	0.0646	0.0141	0.0254	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.88 mm/s At 0.006 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 28, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:09:00 May 28, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IH7J.J00W
Job Number	8177		

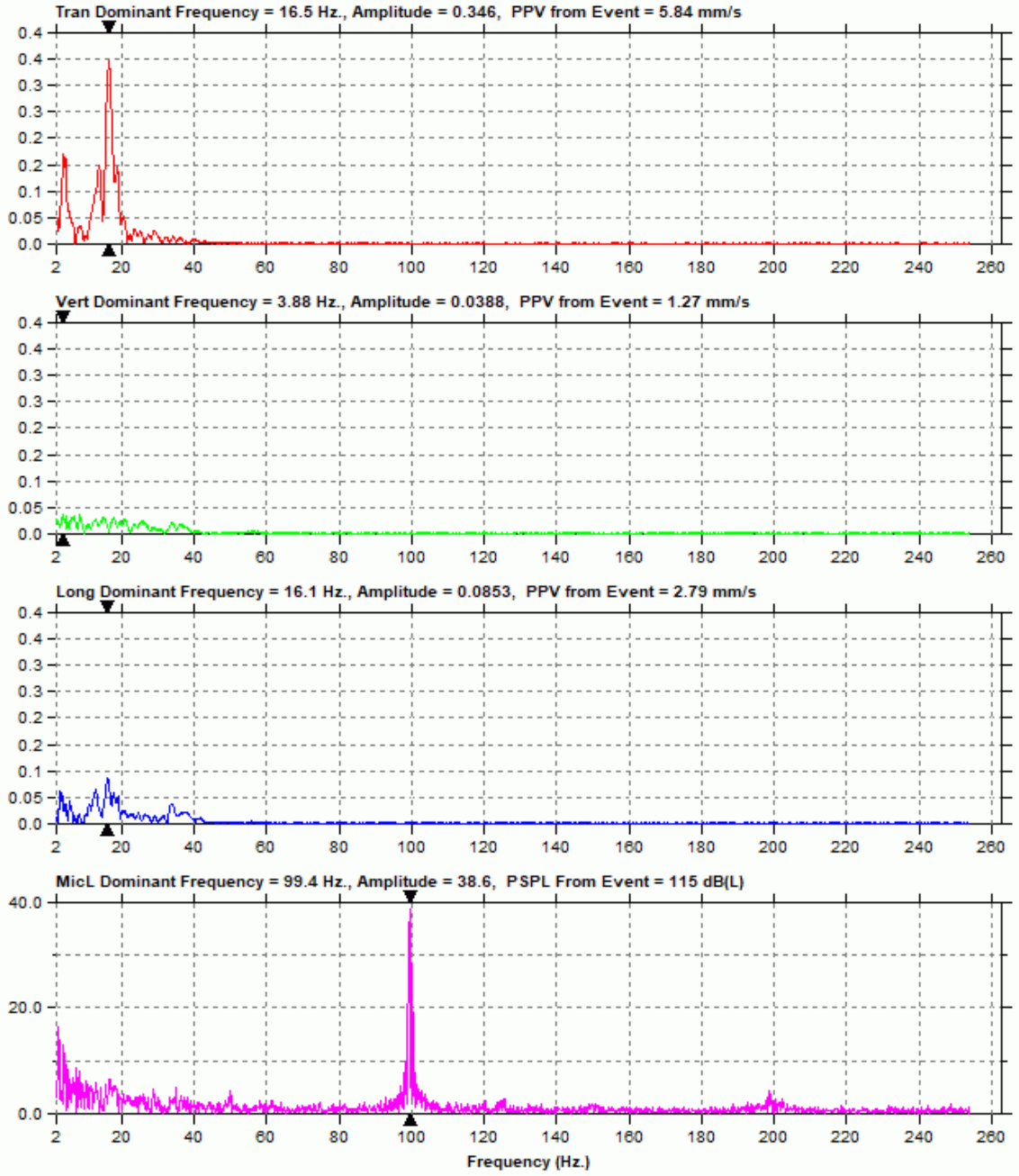
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 28, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:31 May 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IH9D.W70W

Post Event Notes

Extended Notes

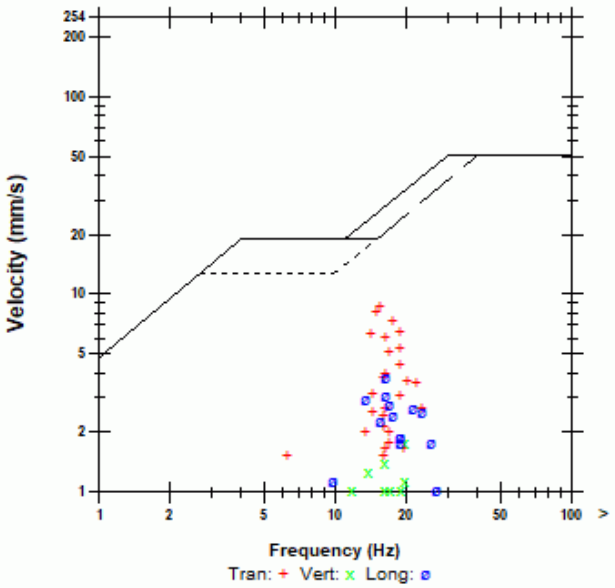
Combo Mode May 29, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

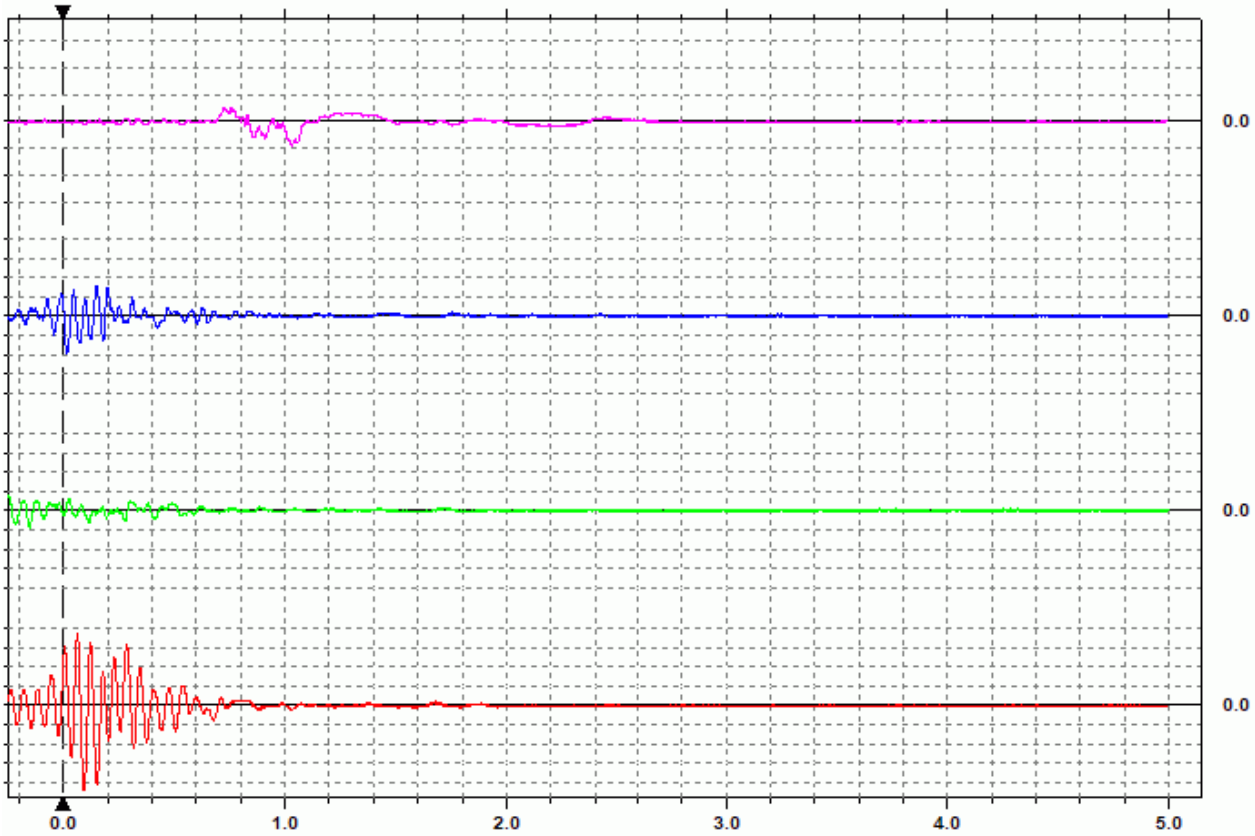
Microphone	Linear Weighting
PSPL	113.1 dB(L) at 1.029 sec.
ZC Freq	3.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.76	1.78	3.81	mm/s
ZC Freq	16	20	17	Hz
Time (Rel. to Trig)	0.091	-0.155	0.016	sec
Peak Acceleration	0.0928	0.0265	0.0530	g
Peak Displacement	0.0917	0.0167	0.0365	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.89 mm/s At 0.093 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:31 May 29, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IH9D.W70W
Job Number	8177		

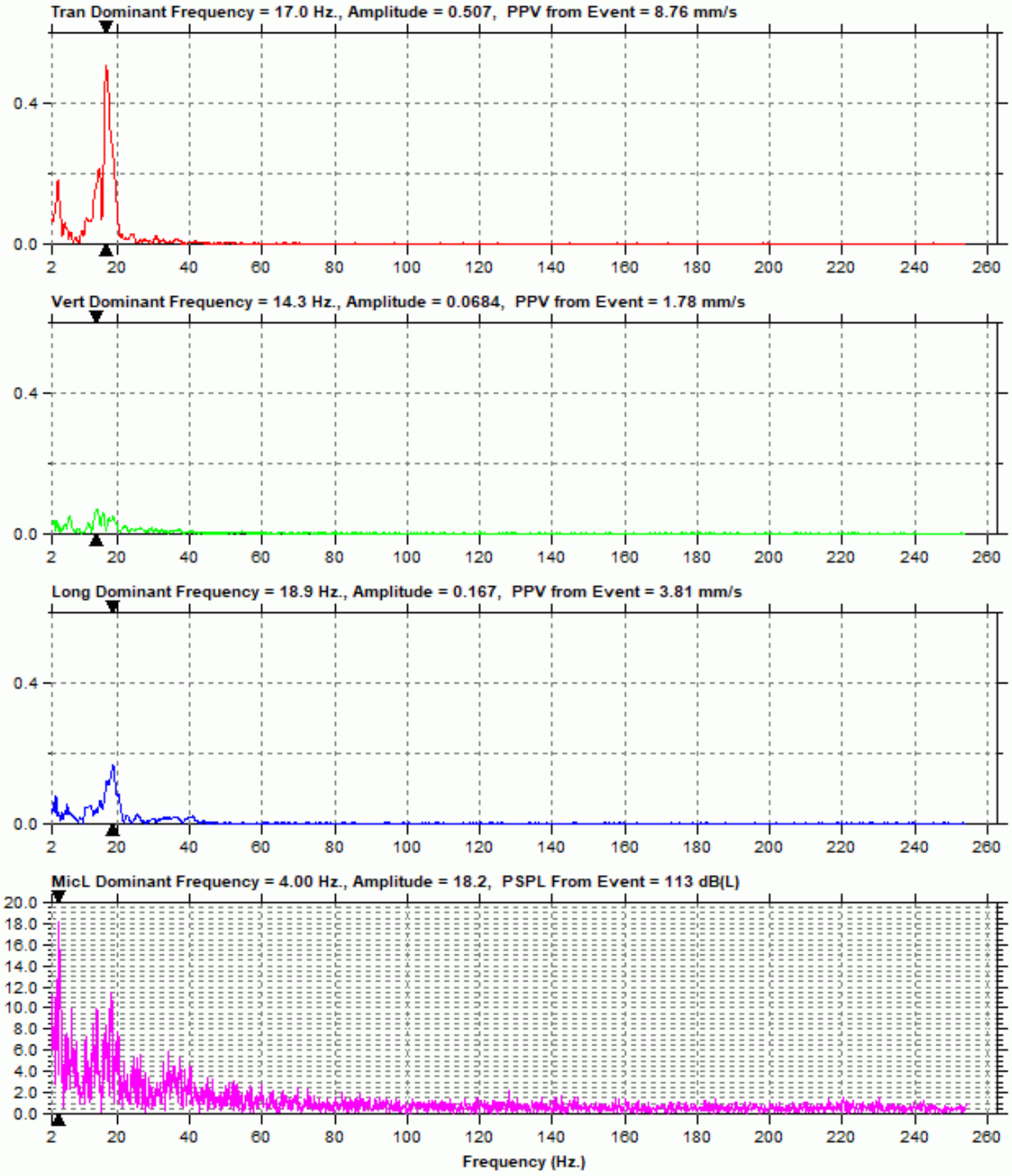
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 29, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



EXPLOTECH

Date/Time	Vert At 15:54:33 May 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IFTI.UX0W

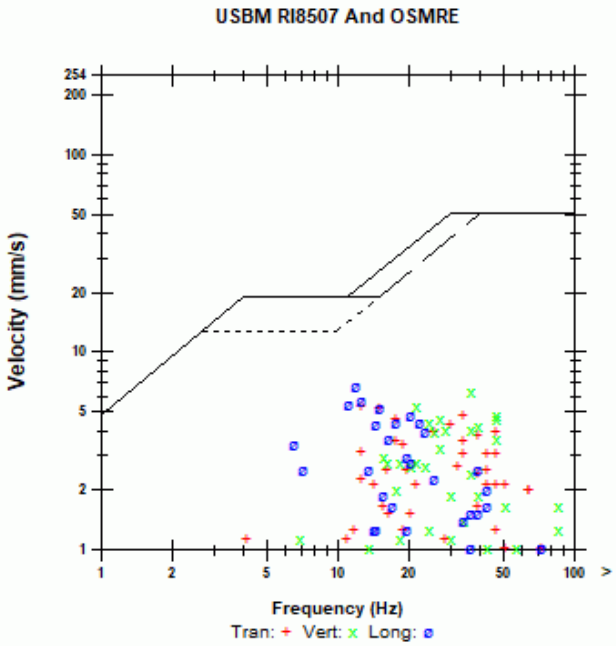
Post Event Notes

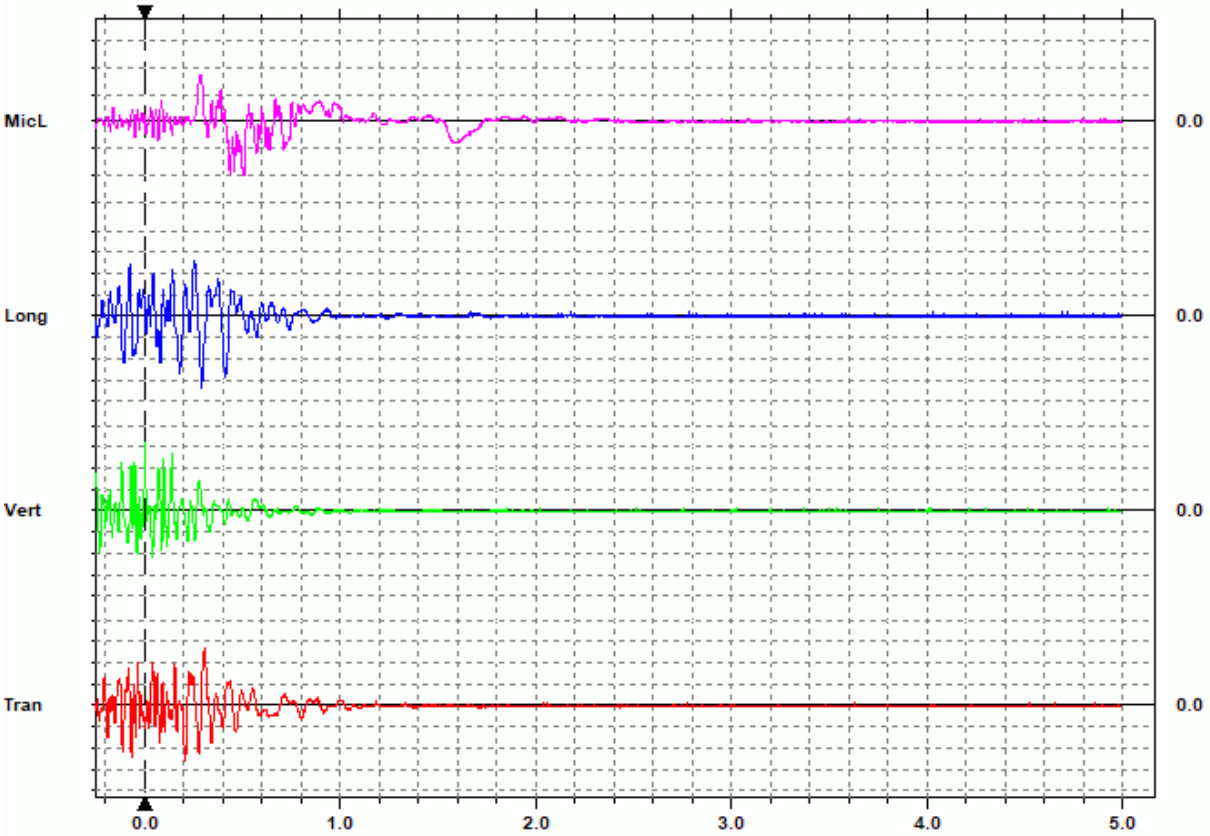
Extended Notes
Combo Mode May 1, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	120.1 dB(L) at 0.509 sec.
ZC Freq	4.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	6.35	6.73	mm/s
ZC Freq	12	37	12	Hz
Time (Rel. to Trig)	0.308	0.002	0.291	sec
Peak Acceleration	0.106	0.146	0.106	g
Peak Displacement	0.0566	0.0298	0.0762	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.11 mm/s At 0.293 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:54:33 May 1, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IFTI.UX0W
Job Number	8177		

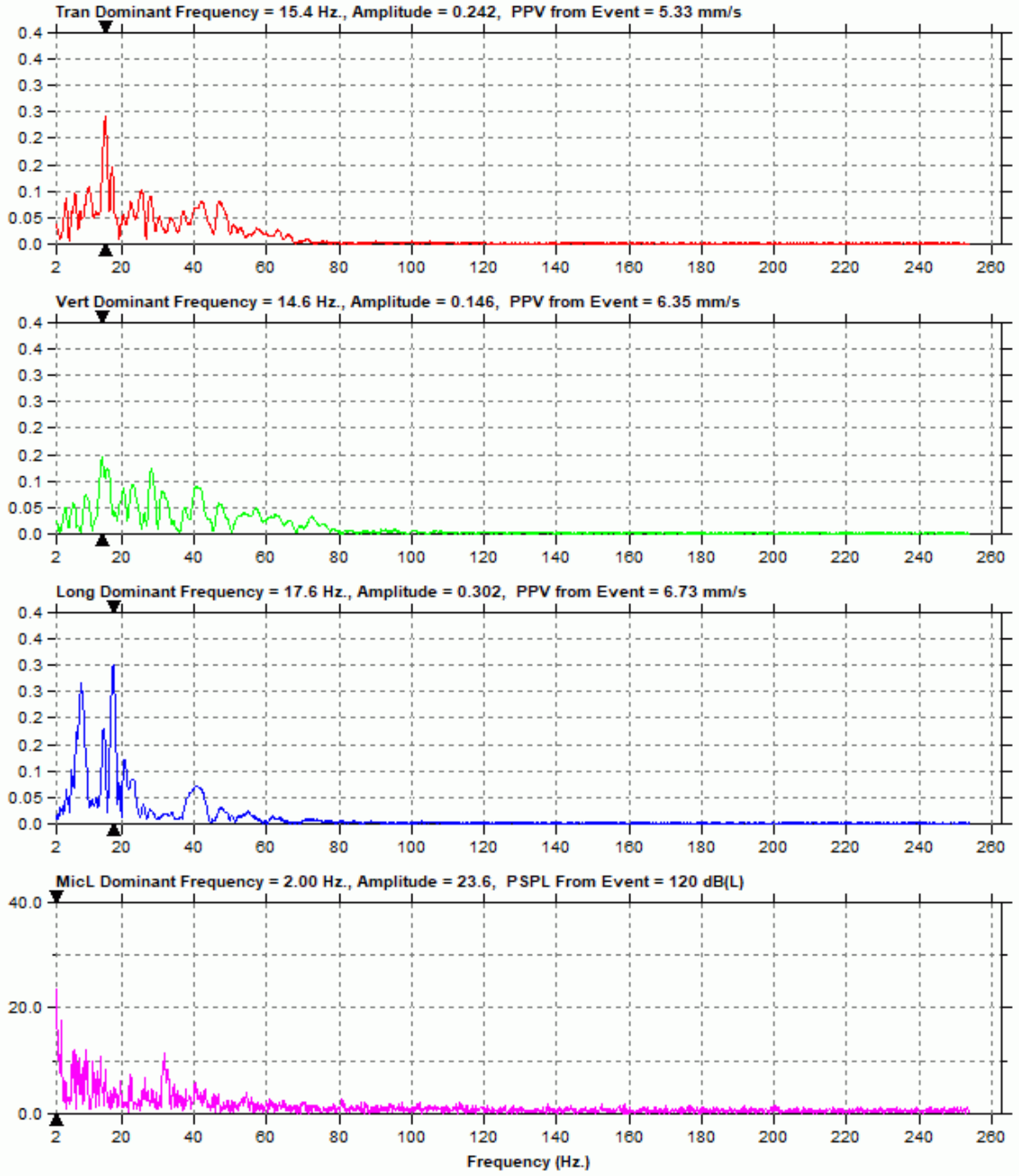
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 1, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:19 May 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IFVD.K70W

Post Event Notes

Extended Notes

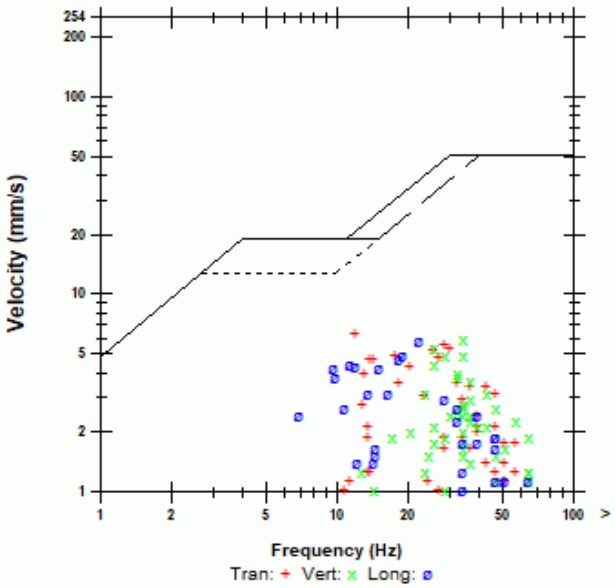
Combo Mode May 2, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

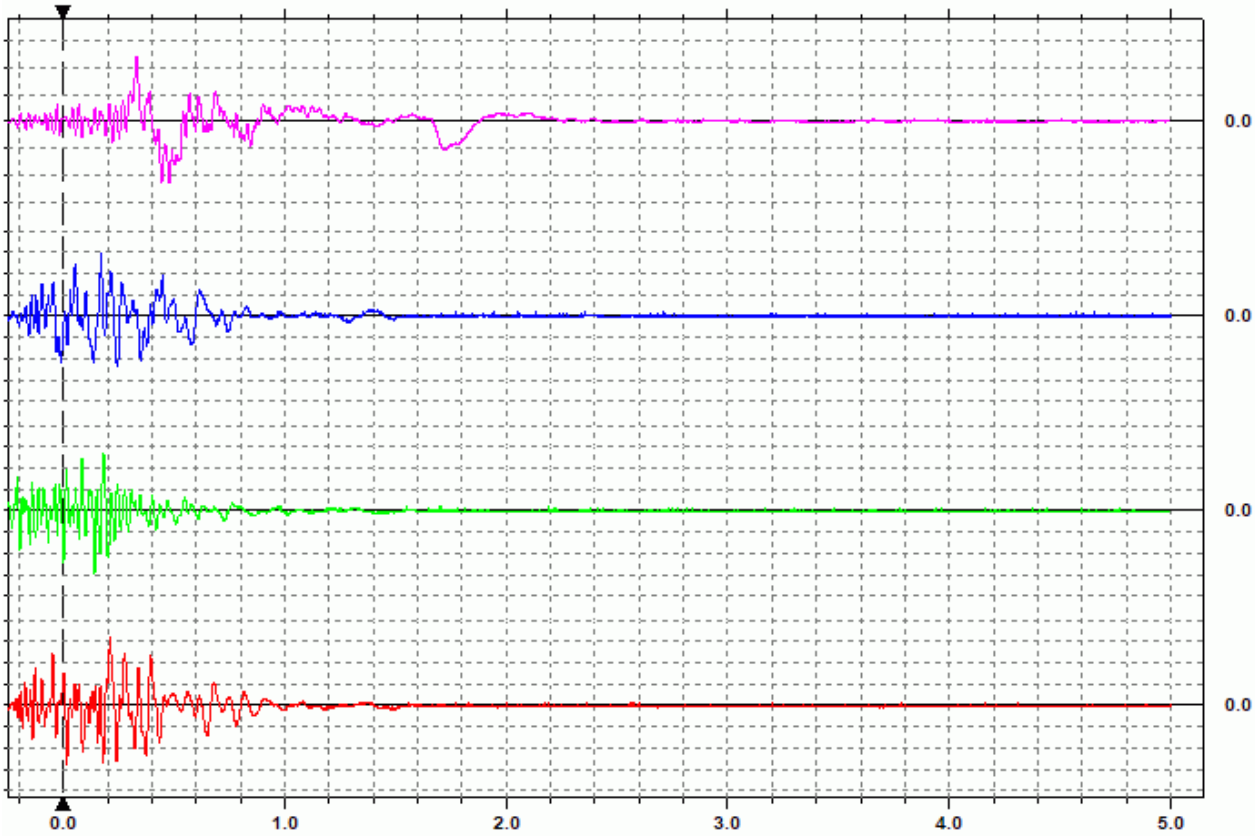
Microphone	Linear Weighting
PSPL	121.7 dB(L) at 0.329 sec.
ZC Freq	7.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	5.97	5.84	mm/s
ZC Freq	12	34	22	Hz
Time (Rel. to Trig)	0.211	0.142	0.171	sec
Peak Acceleration	0.119	0.146	0.0928	g
Peak Displacement	0.0669	0.0337	0.0594	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.55 mm/s At 0.181 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:19 May 2, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IFVD.K70W
Job Number	8177		

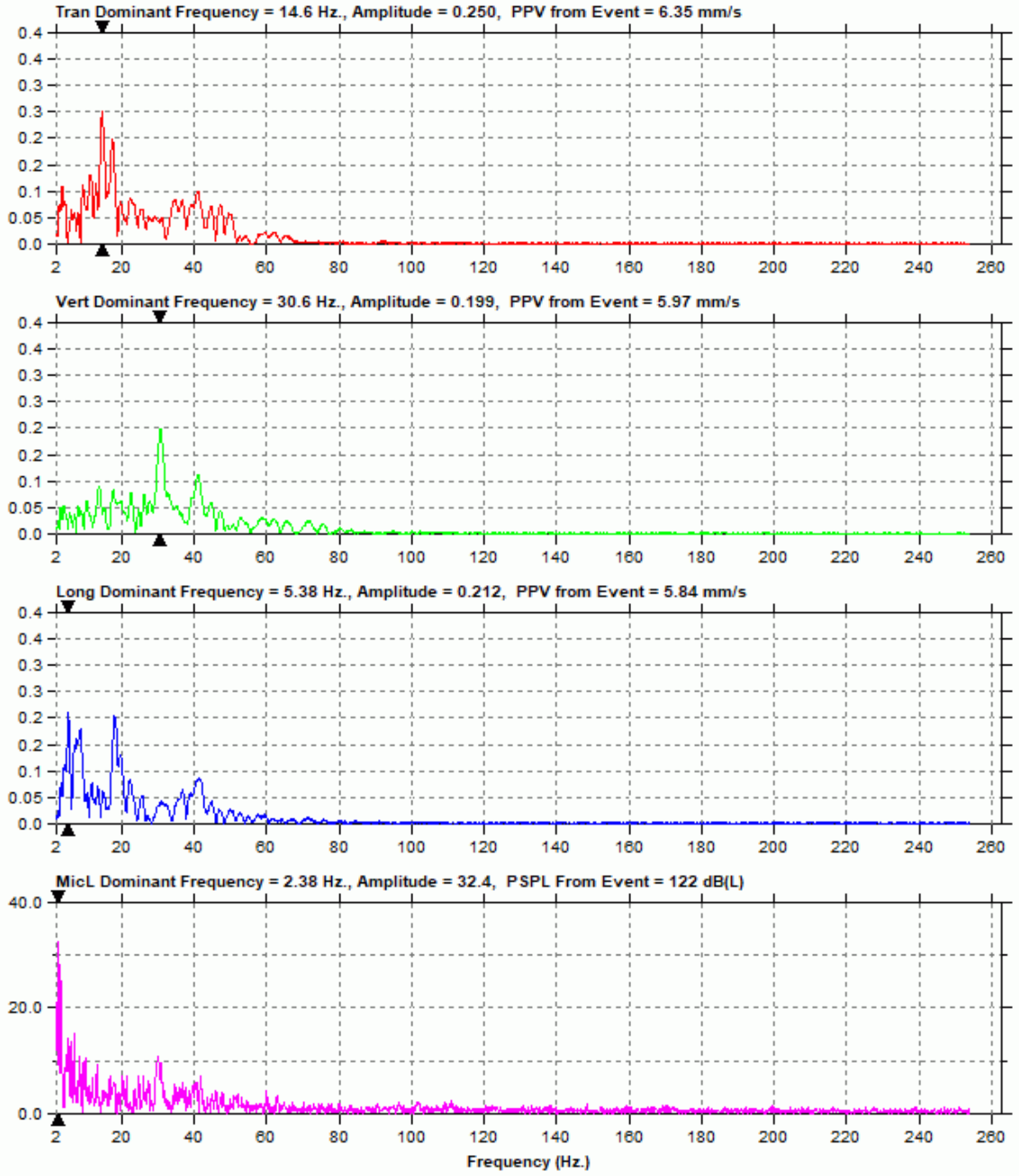
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 2, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:27 May 27, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IH5O.BR0W

Post Event Notes

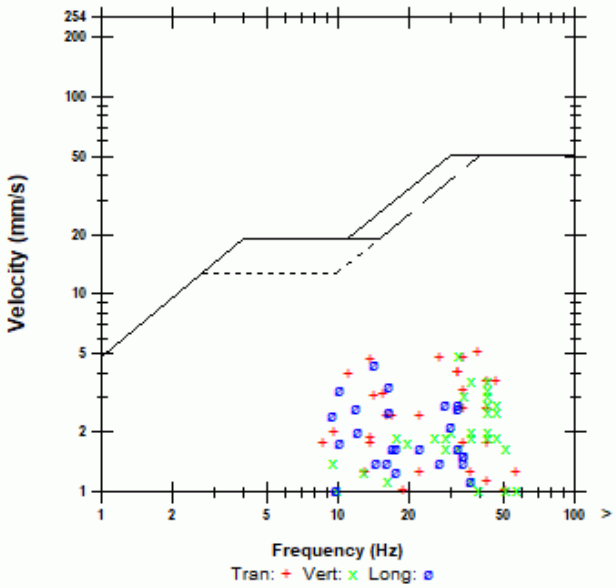
Extended Notes
Combo Mode May 27, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

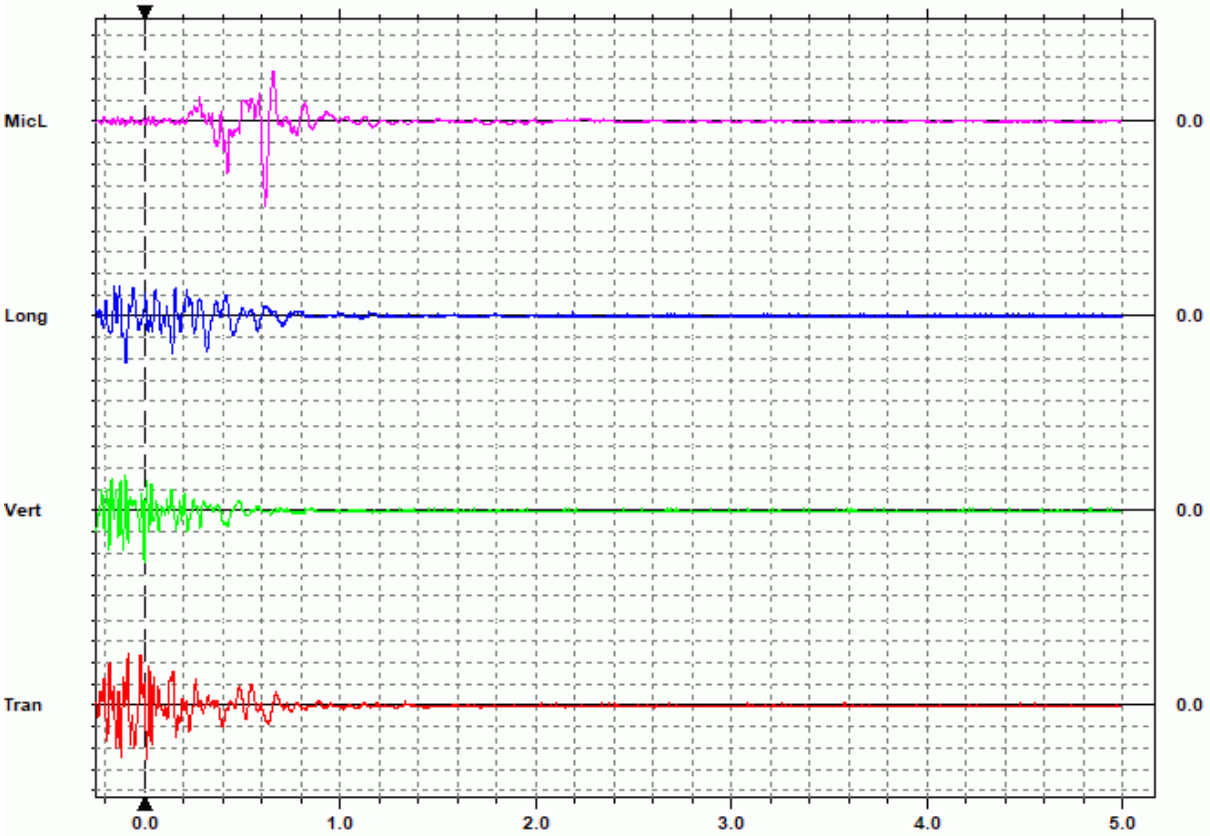
Microphone	Linear Weighting
PSPL	131.7 dB(L) at 0.618 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	4.95	4.44	mm/s
ZC Freq	39	32	14	Hz
Time (Rel. to Trig)	0.013	0.000	-0.095	sec
Peak Acceleration	0.133	0.119	0.0663	g
Peak Displacement	0.0526	0.0267	0.0428	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.74 mm/s At 0.013 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: May 27, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:27 May 27, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IH5O.BR0W
Job Number	8177		

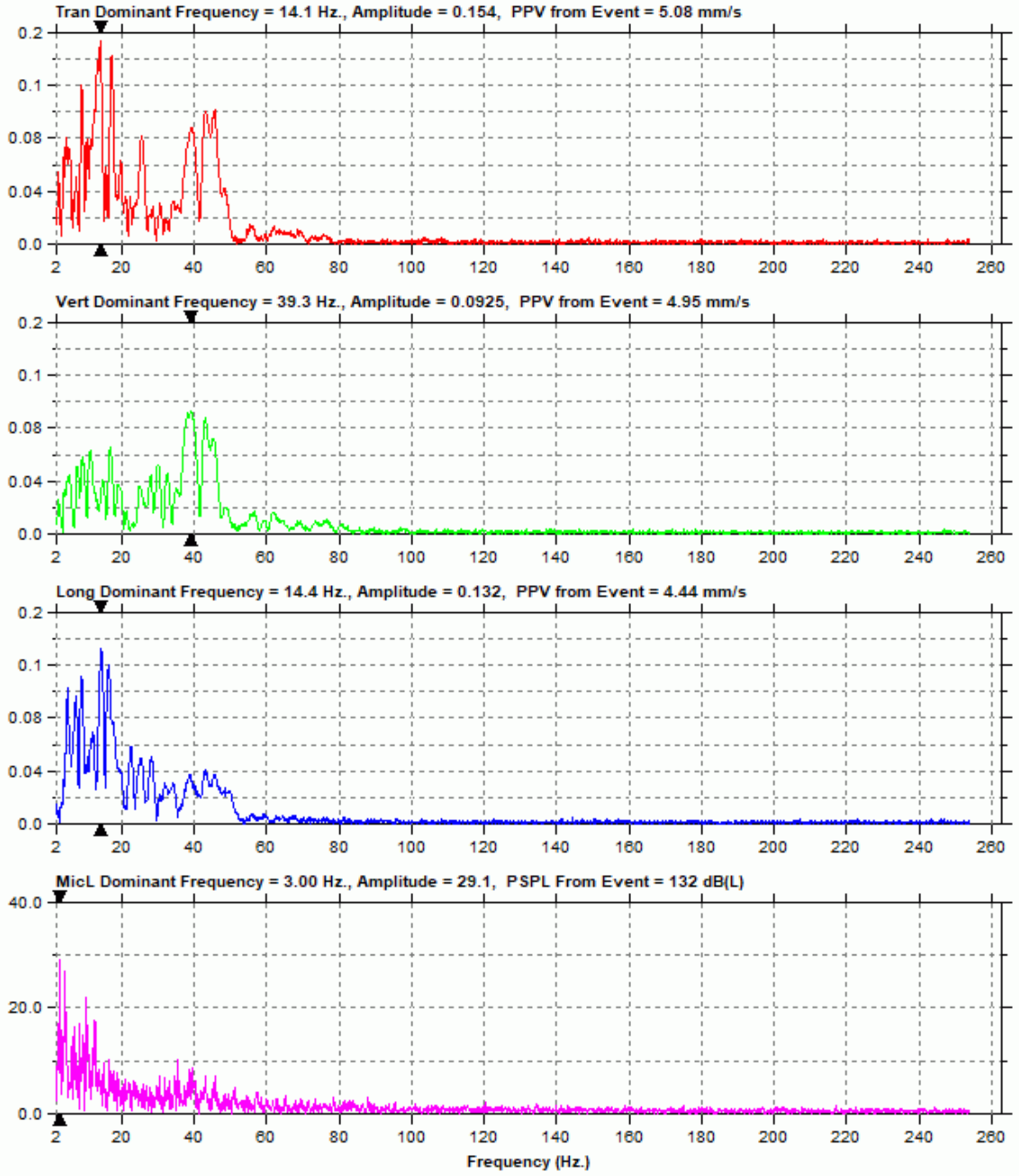
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 27, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:46 May 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFTI.WY0W

Post Event Notes

Extended Notes

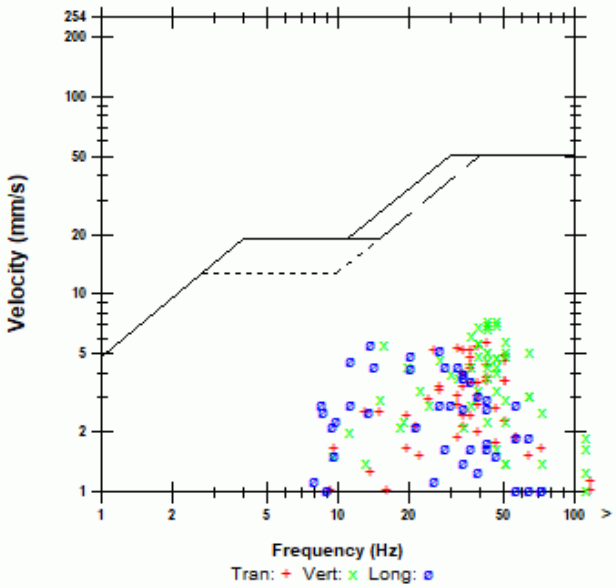
Combo Mode May 1, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

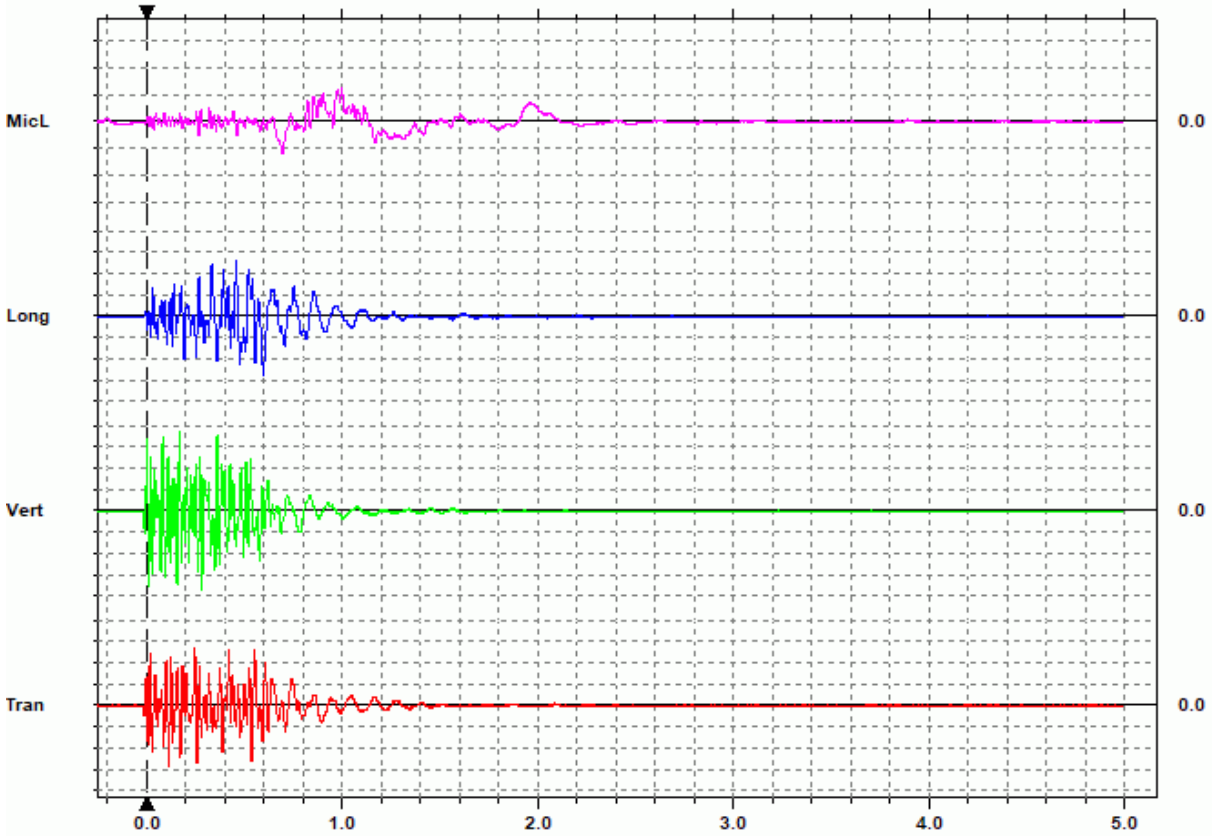
Microphone	Linear Weighting
PSPL	115.9 dB(L) at 0.999 sec.
ZC Freq	3.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.71	7.37	5.59	mm/s
ZC Freq	43	43	14	Hz
Time (Rel. to Trig)	0.114	0.169	0.597	sec
Peak Acceleration	0.159	0.239	0.119	g
Peak Displacement	0.0308	0.0426	0.0568	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.37 mm/s At 0.361 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:46 May 1, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFTI.WY0W
Job Number	8177		

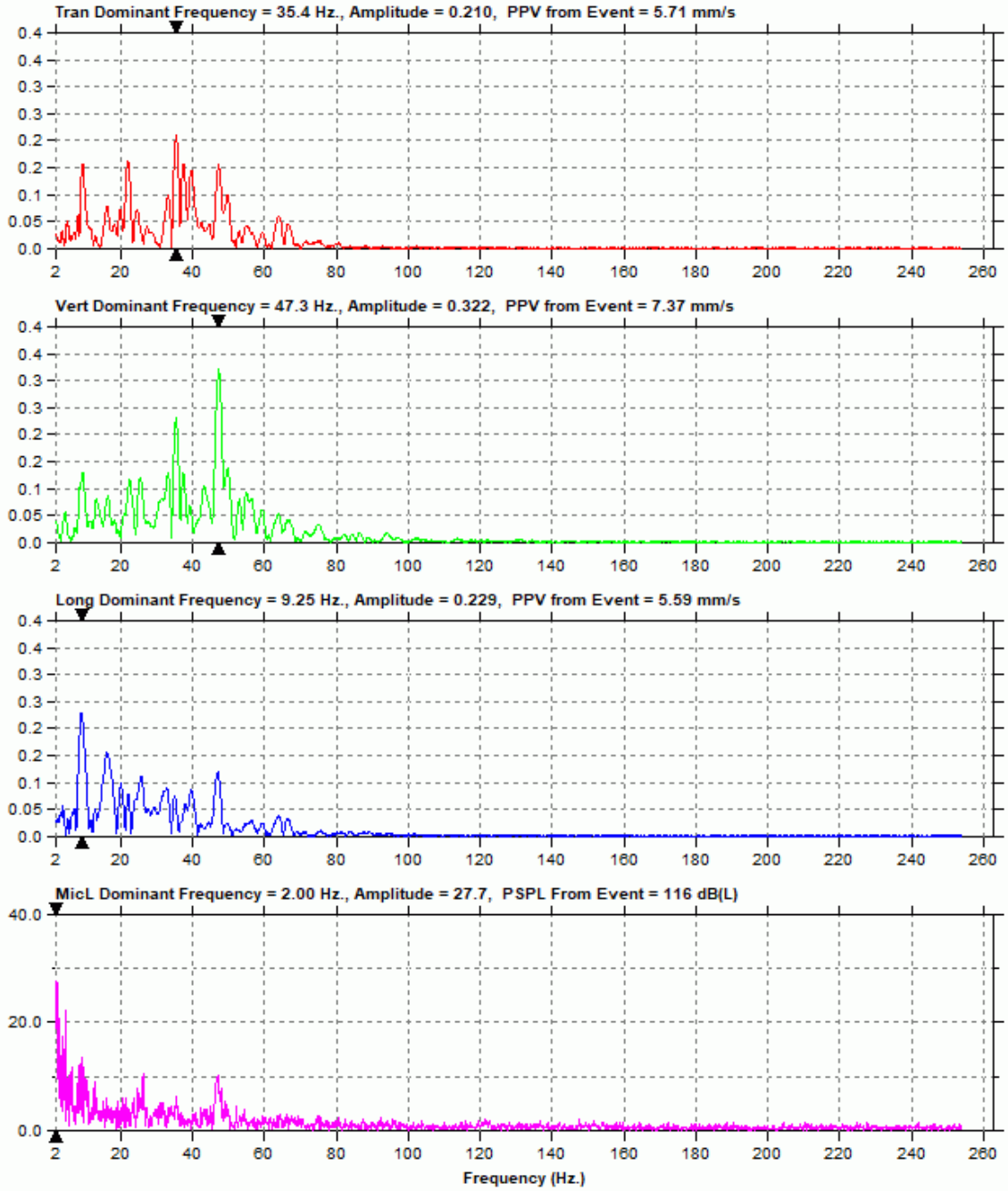
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 1, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:34 May 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFVD.MA0W

Post Event Notes

Extended Notes

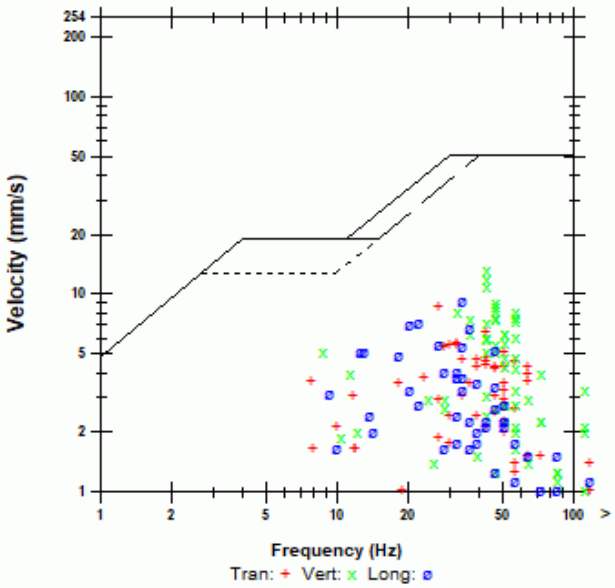
Combo Mode May 2, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

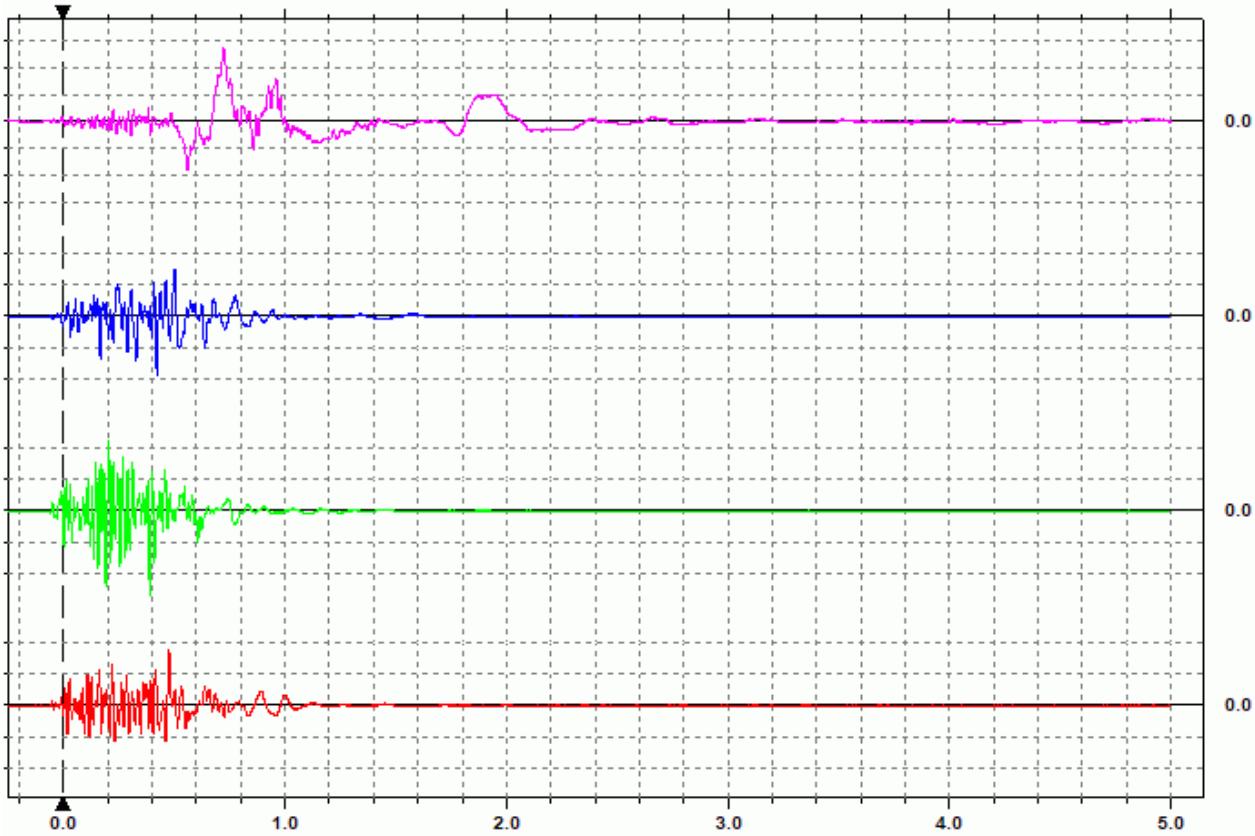
Microphone	Linear Weighting
PSPL	122.8 dB(L) at 0.722 sec.
ZC Freq	4.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.64	13.2	9.27	mm/s
ZC Freq	27	43	34	Hz
Time (Rel. to Trig)	0.476	0.389	0.422	sec
Peak Acceleration	0.172	0.345	0.186	g
Peak Displacement	0.0506	0.0562	0.0692	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.4 mm/s At 0.389 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:34 May 2, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFVD.MA0W
Job Number	8177		

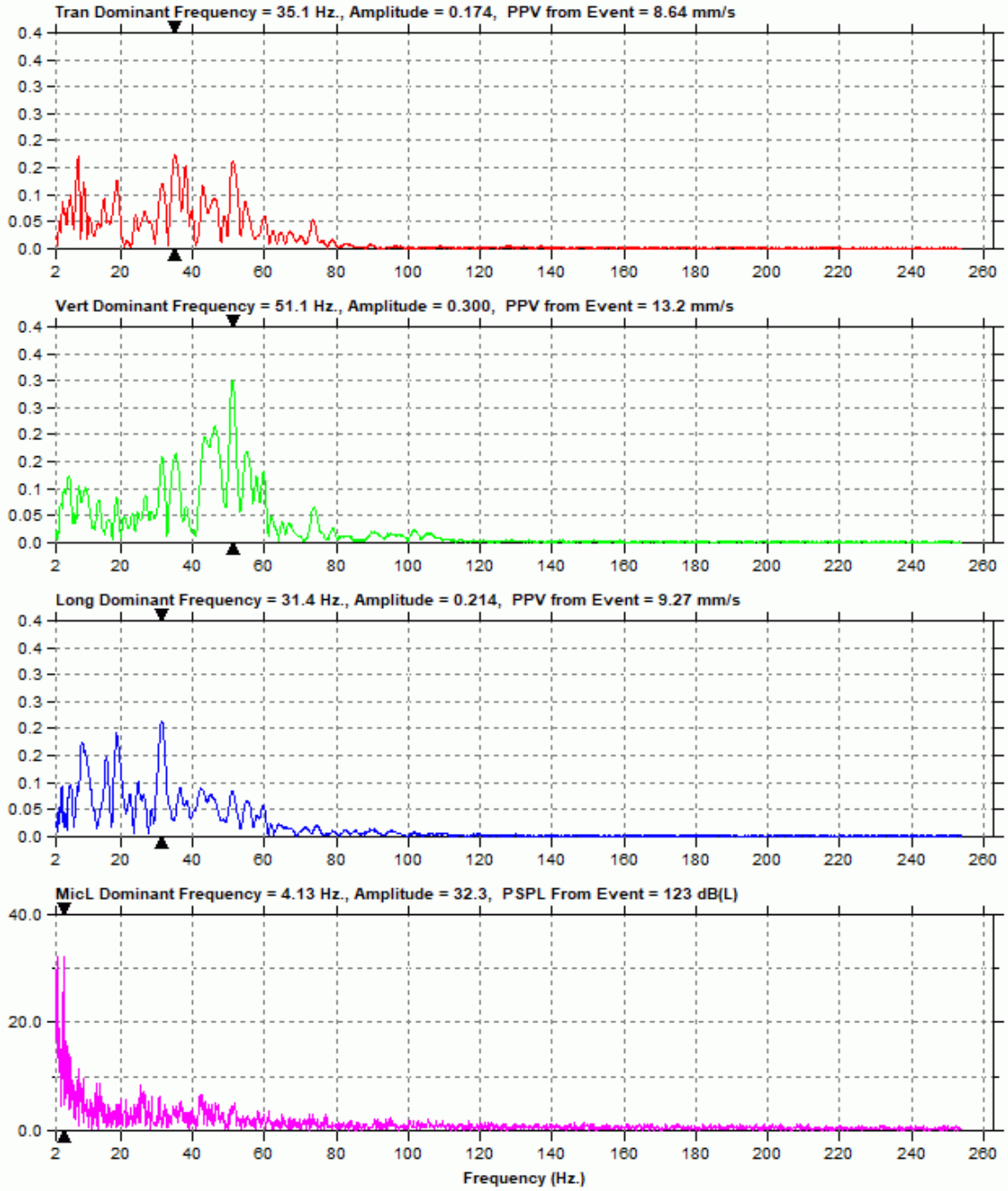
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 2, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:12 May 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IFZ3.4C0W

Post Event Notes

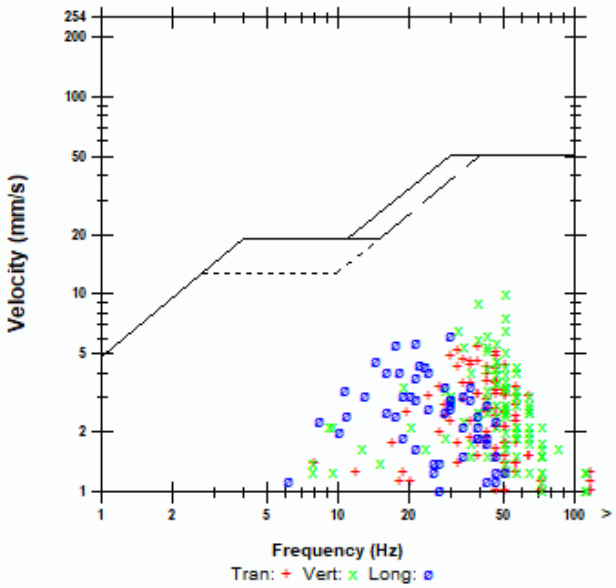
Extended Notes
Combo Mode May 4, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

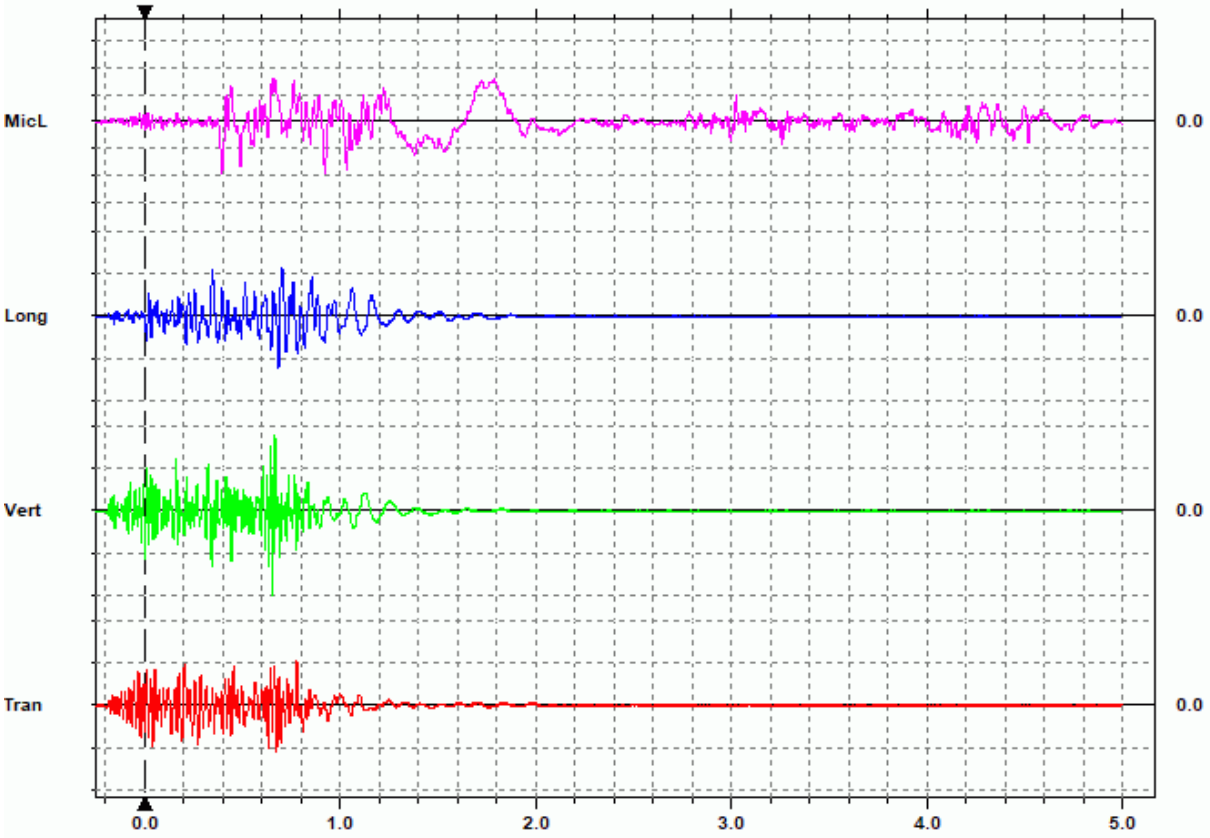
Microphone	Linear Weighting
PSPL	119.8 dB(L) at 0.922 sec.
ZC Freq	15 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.46	10.0	6.22	mm/s
ZC Freq	39	51	30	Hz
Time (Rel. to Trig)	0.675	0.654	0.684	sec
Peak Acceleration	0.159	0.305	0.119	g
Peak Displacement	0.0265	0.0389	0.0482	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.4 mm/s At 0.654 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:12 May 4, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IFZ3.4C0W
Job Number	8177		

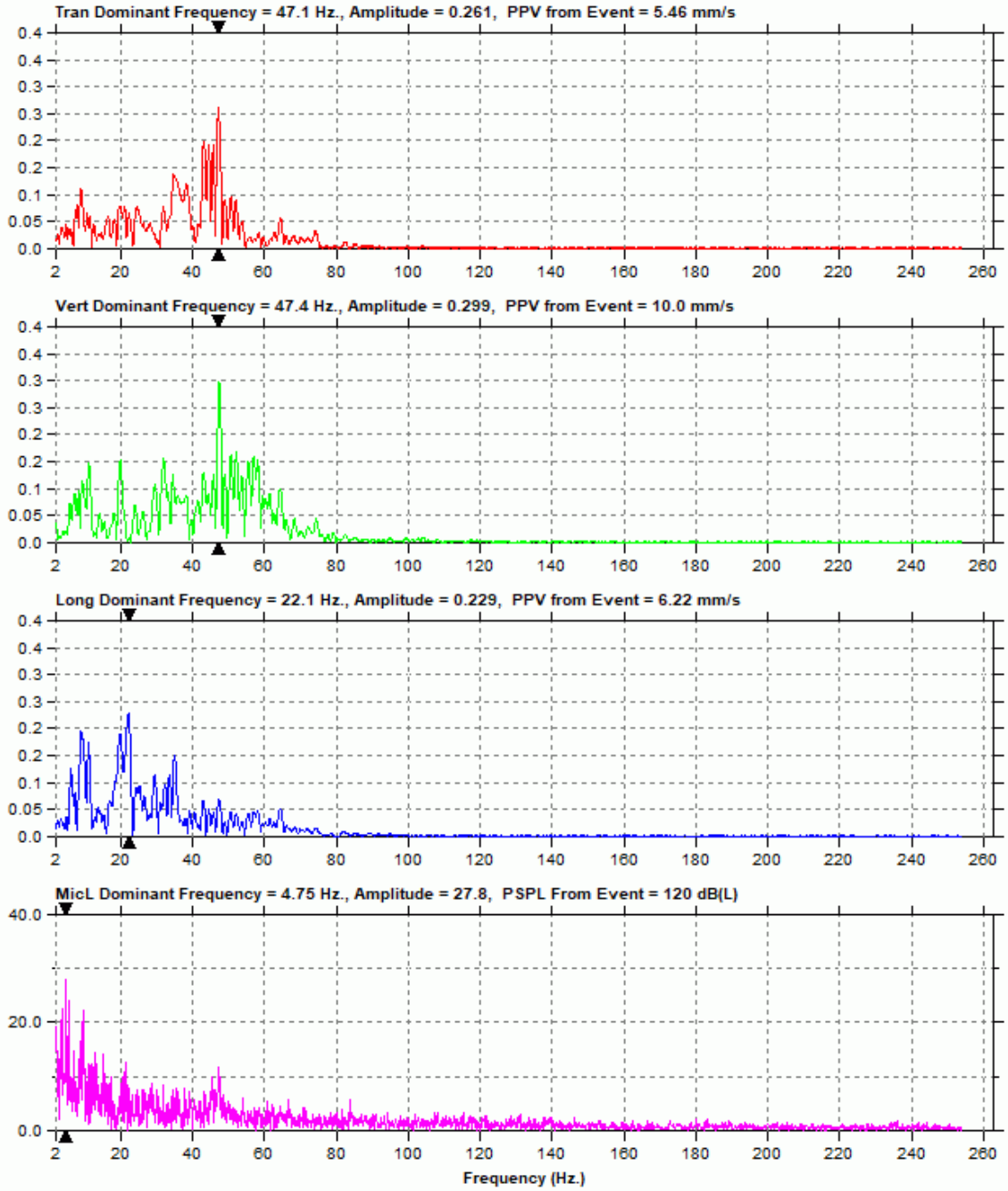
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 4, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:41:40 May 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.5 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IG0W.XG0W

Post Event Notes

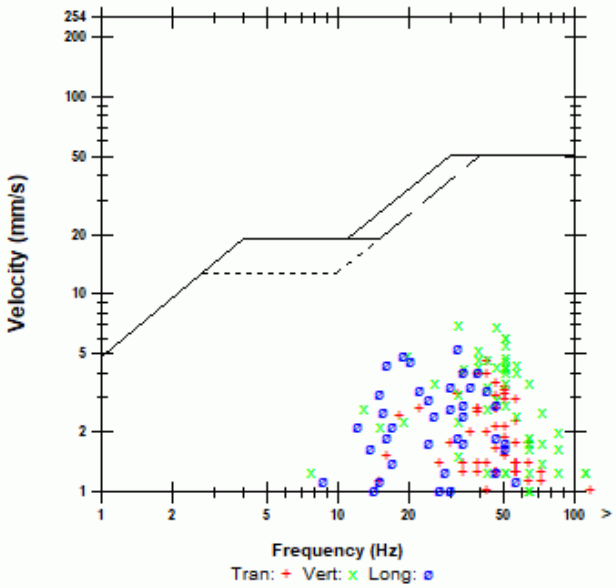
Extended Notes
Combo Mode May 5, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

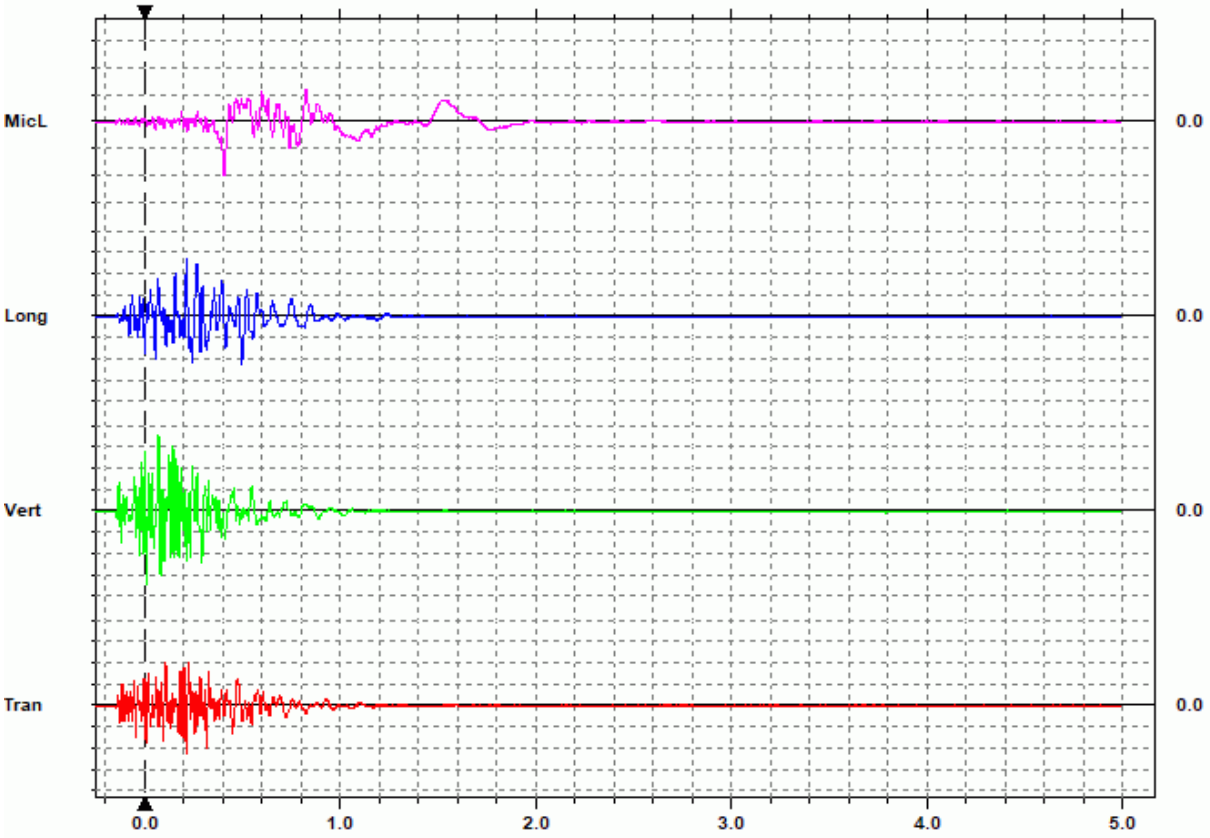
Microphone	Linear Weighting
PSPL	120.1 dB(L) at 0.408 sec.
ZC Freq	6.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.57	7.11	5.33	mm/s
ZC Freq	43	32	32	Hz
Time (Rel. to Trig)	0.215	0.072	0.216	sec
Peak Acceleration	0.119	0.199	0.133	g
Peak Displacement	0.0218	0.0319	0.0396	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.38 mm/s At 0.216 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:41:40 May 5, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.5 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IG0W.XG0W
Job Number	8177		

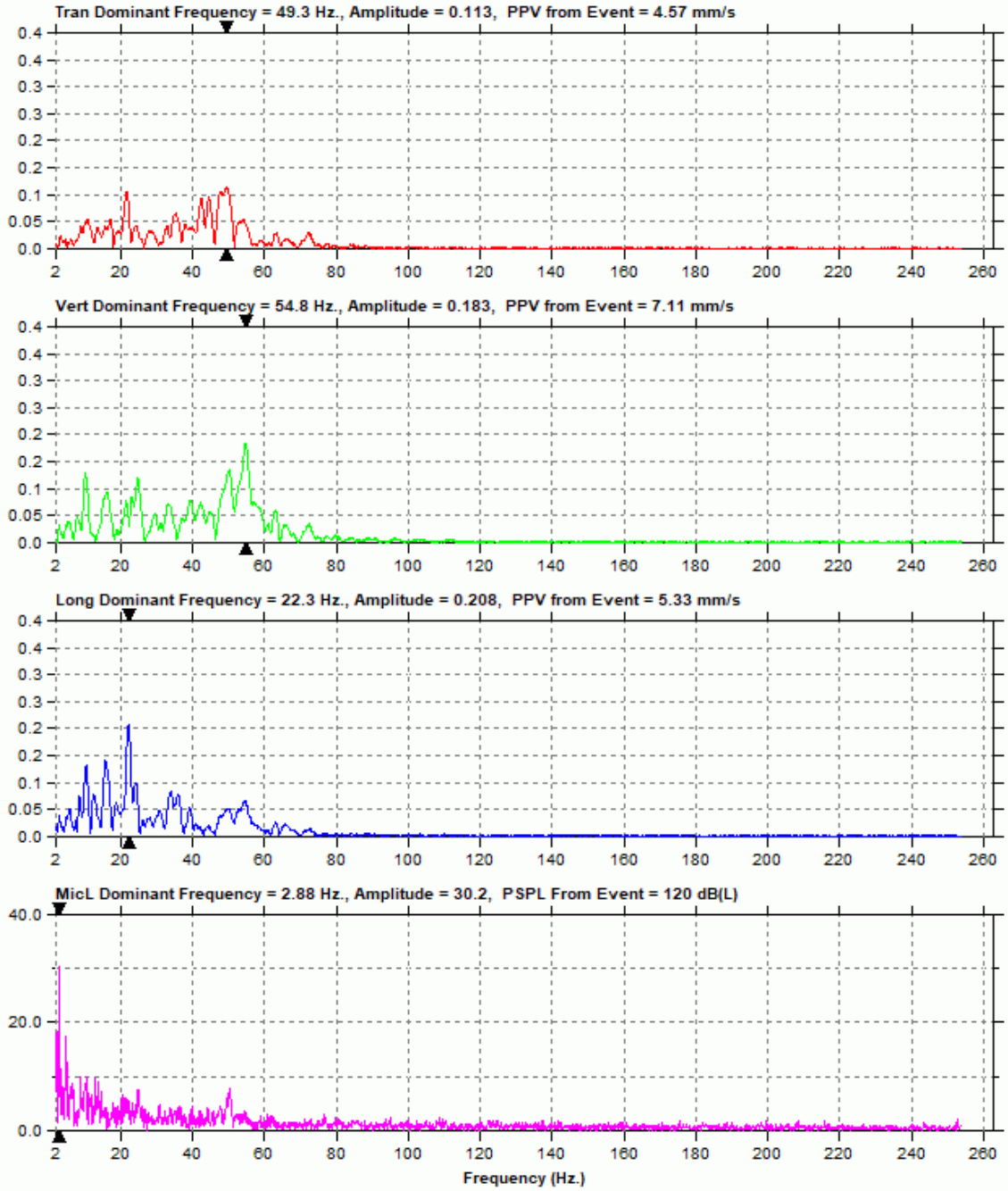
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 5, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:50 May 2, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IFVD.MQ0W

Post Event Notes

Extended Notes

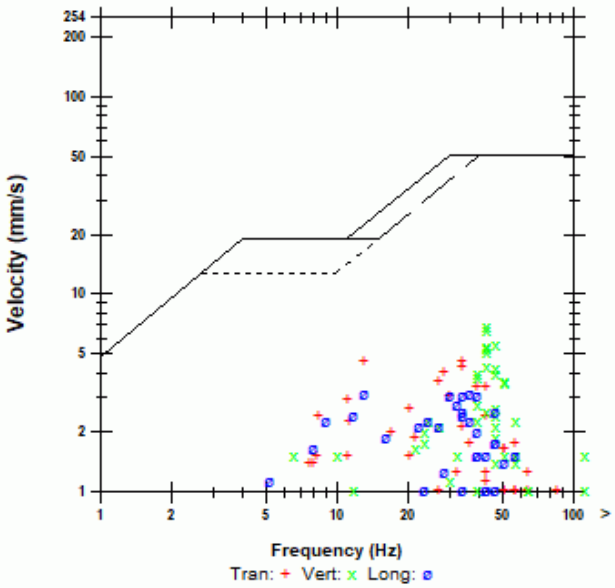
Combo Mode May 2, 2020 05:16:50
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

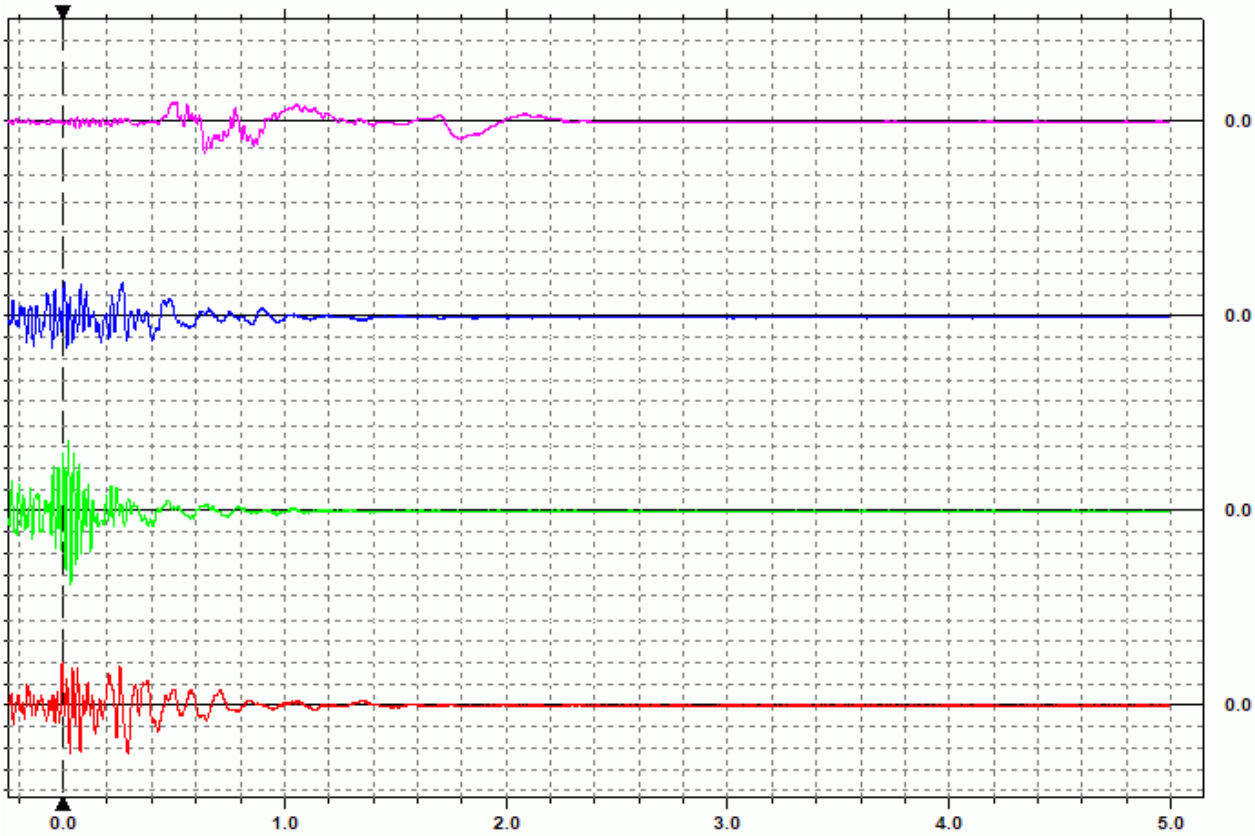
Microphone	Linear Weighting
PSPL	115.6 dB(L) at 0.639 sec.
ZC Freq	3.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.57	6.86	3.17	mm/s
ZC Freq	34	43	37	Hz
Time (Rel. to Trig)	0.030	0.036	0.005	sec
Peak Acceleration	0.106	0.172	0.106	g
Peak Displacement	0.0526	0.0346	0.0377	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.10 mm/s At 0.035 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 2, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:56:50 May 2, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IFVD.MQ0W
Job Number	8177		

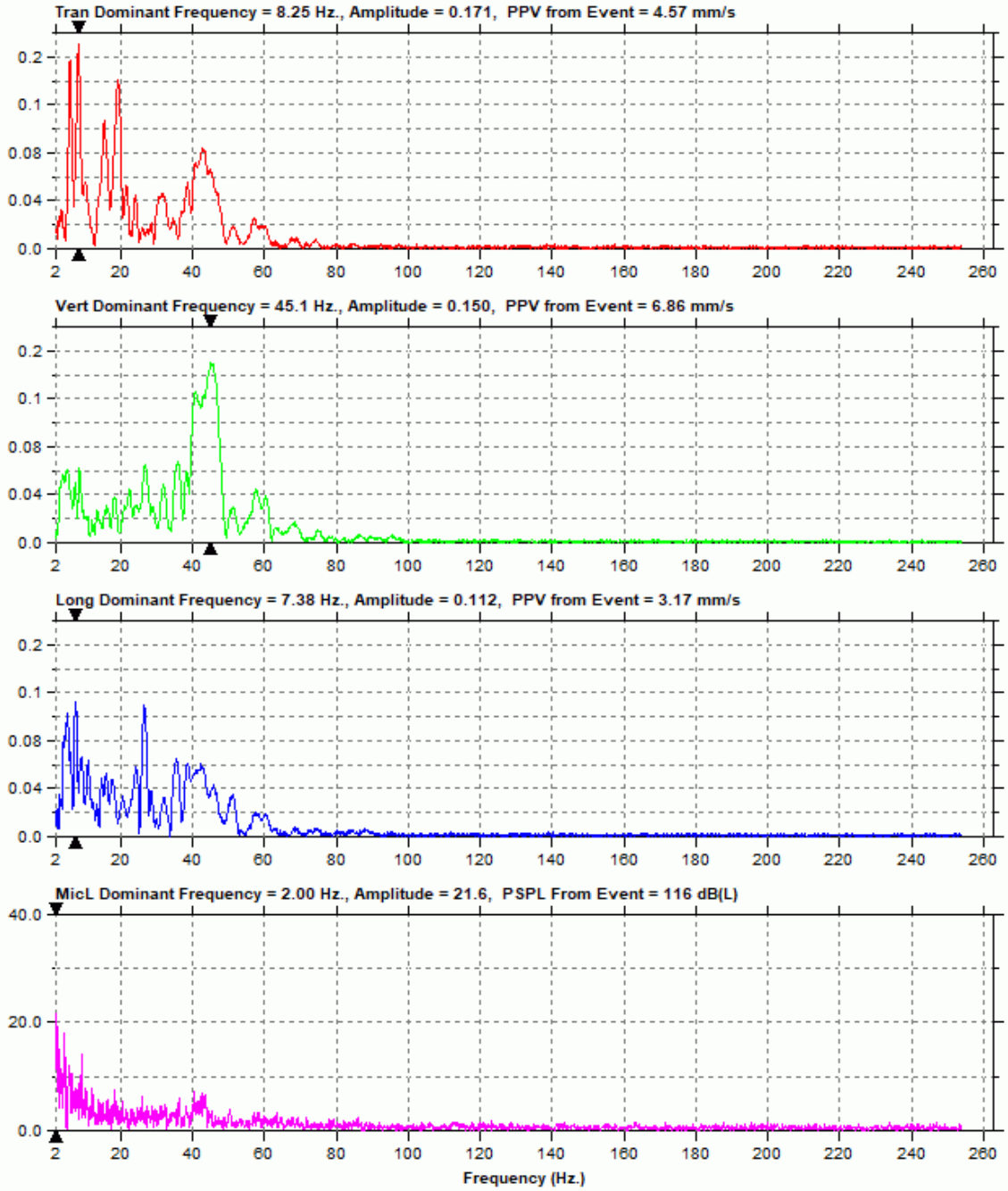
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 2, 2020 05:16:50
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 2, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:41:57 May 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IG0W.XX0W

Post Event Notes

Extended Notes

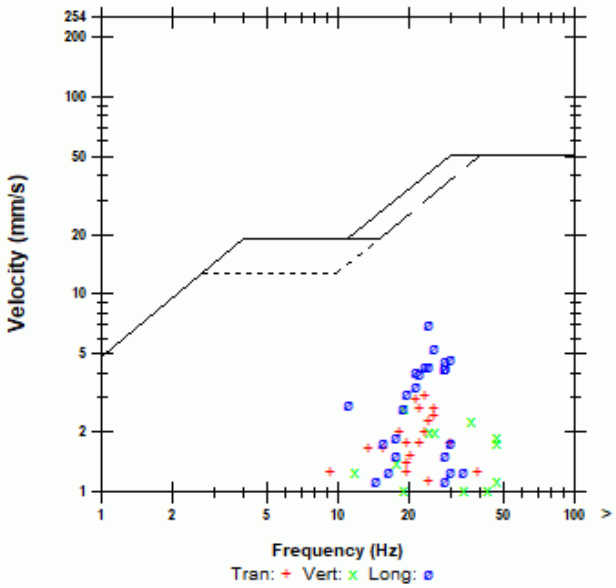
Combo Mode May 5, 2020 05:16:48
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

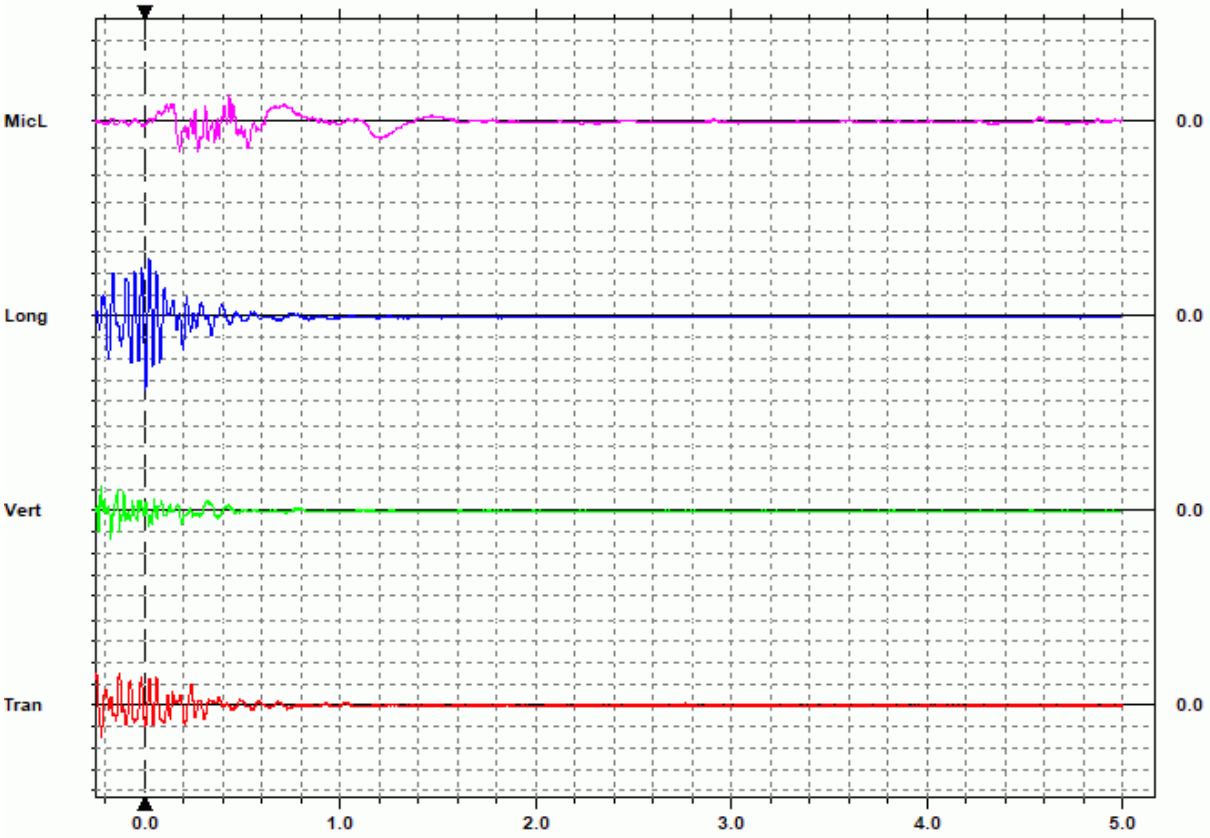
Microphone	Linear Weighting
PSPL	115.0 dB(L) at 0.178 sec.
ZC Freq	6.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.05	2.67	6.98	mm/s
ZC Freq	23	19	24	Hz
Time (Rel. to Trig)	-0.131	-0.174	0.003	sec
Peak Acceleration	0.0530	0.0663	0.119	g
Peak Displacement	0.0224	0.0172	0.0459	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.30 mm/s At 0.005 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: May 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:41:57 May 5, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IG0W.XX0W
Job Number	8177		

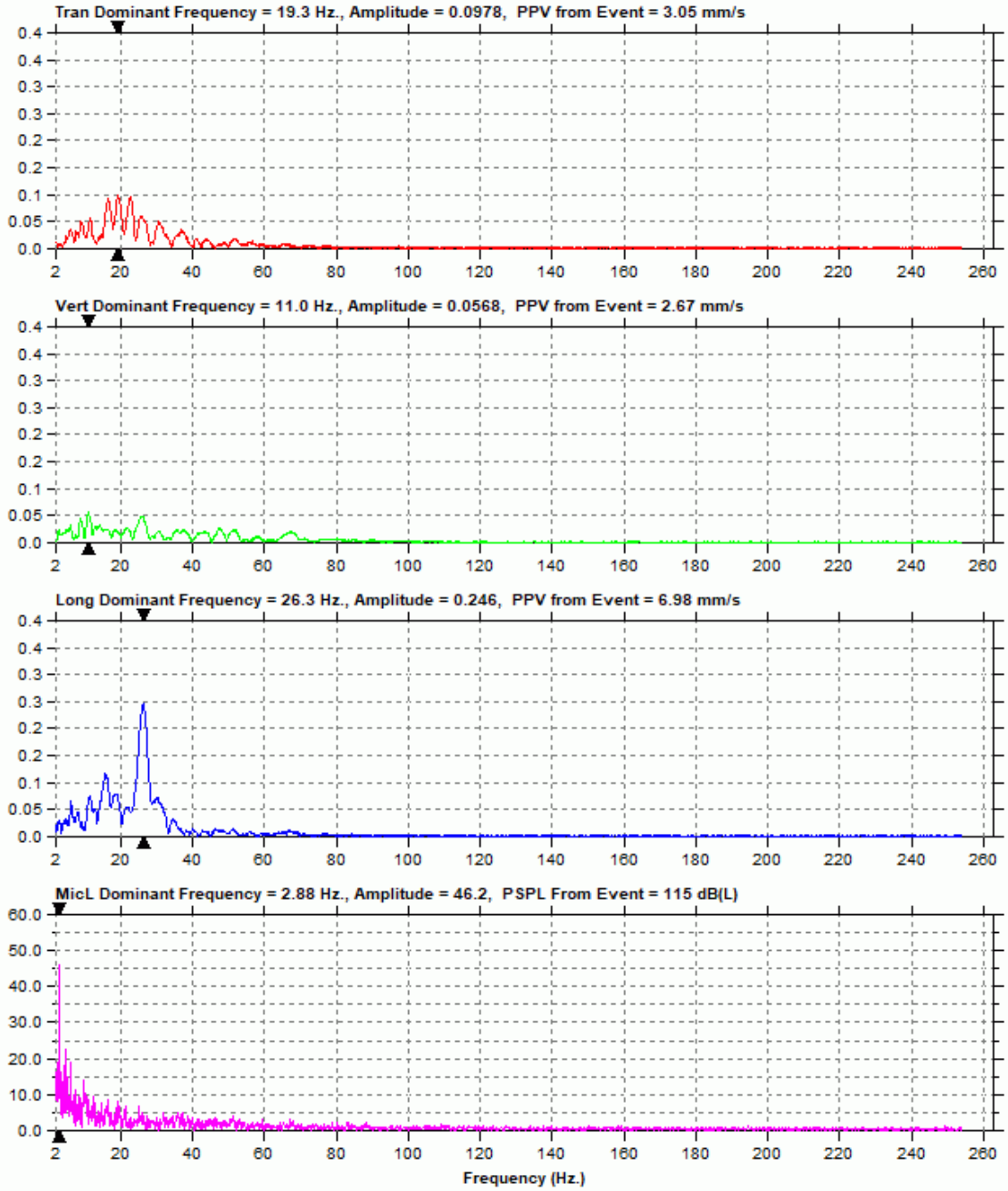
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode May 5, 2020 05:16:48
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: May 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																				
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		120 Cougarstone Common SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
1-Jun-20	WCRR-110	18:00	4.19mm/s	124.7dB(L)	0.64mm/s	118.8dB(L)	7.24mm/s	120.6dB(L)	0.76mm/s	130.3dB(L)	5.33mm/s	121.7dB(L)	5.08mm/s	118.2dB(L)	1.14mm/s	120.2dB(L)	2.16mm/s	119.4dB(L)	1.40mm/s	121.2dB(L)
2-Jun-20	WCRR-111	18:20	1.52mm/s	109.5dB(L)	3.30mm/s	117.9dB(L)	4.19mm/s	113.8dB(L)	0.38mm/s	107.0dB(L)	1.65mm/s	110.9dB(L)	0.89mm/s	116.9dB(L)	0.51mm/s	104.2dB(L)	0.64mm/s	102.8dB(L)	0.76mm/s	104.2dB(L)
3-Jun-20	WCRR-112	16:08	7.24mm/s	116.6dB(L)	1.52mm/s	110.2dB(L)	7.49mm/s	118.8dB(L)	1.02mm/s	124.0dB(L)	5.21mm/s	119.7dB(L)	7.87mm/s	117.8dB(L)	1.52mm/s	118.7dB(L)	2.41mm/s	116.9dB(L)	1.78mm/s	111.2dB(L)
3-Jun-20	WCRR-113	16:09	0.25mm/s	114.8dB(L)	0.13mm/s	111.8dB(L)	0.25mm/s	111.2dB(L)	0.25mm/s	115.9dB(L)	0.38mm/s	120.3dB(L)	0.25mm/s	122.9dB(L)	0.13mm/s	115.6dB(L)	0.25mm/s	111.5dB(L)	1.52mm/s	111.2dB(L)
5-Jun-20	WCRR-114	15:58	5.08mm/s	121.5dB(L)	0.51mm/s	111.5dB(L)	5.71mm/s	123.1dB(L)	1.14mm/s	120.4dB(L)	3.56mm/s	122.7dB(L)	5.08mm/s	116.9dB(L)	2.03mm/s	104.9dB(L)	3.30mm/s	117.8dB(L)	2.03mm/s	109.9dB(L)
6-Jun-20	WCRR-115	15:32	3.30mm/s	118.5dB(L)	2.54mm/s	101.9dB(L)	4.19mm/s	114.8dB(L)	1.02mm/s	109.2dB(L)	3.05mm/s	117.9dB(L)	5.46mm/s	119.9dB(L)	2.41mm/s	116.7dB(L)	3.30mm/s	120.2dB(L)	2.29mm/s	111.2dB(L)
8-Jun-20	WCRR-116	15:35	2.79mm/s	116.3dB(L)	0.38mm/s	108.0dB(L)	6.73mm/s	115.7dB(L)	0.89mm/s	108.0dB(L)	2.79mm/s	114.8dB(L)	5.84mm/s	119.7dB(L)	Removed from property as per owners request		4.19mm/s	116.1dB(L)	3.94mm/s	110.2dB(L)
9-Jun-20	WCRR-117	16:00	2.67mm/s	119.6dB(L)	0.89mm/s	109.2dB(L)	3.18mm/s	116.4dB(L)	1.27mm/s	119.8dB(L)	2.16mm/s	118.5dB(L)	6.10mm/s	121.0dB(L)	Removed from property as per owners request		6.48mm/s	120.6dB(L)	4.70mm/s	115.7dB(L)
10-Jun-20	WCRR-118	16:00	1.78mm/s	115.4dB(L)	0.25mm/s	103.5dB(L)	2.16mm/s	114.8dB(L)	1.14mm/s	110.6dB(L)	1.14mm/s	117.1dB(L)	4.45mm/s	123.4dB(L)	Removed from property as per owners request		6.35mm/s	120.3dB(L)	4.19mm/s	114.4dB(L)
12-Jun-20	WCRR-119	15:27	2.67mm/s	114.2dB(L)	0.25mm/s	104.2dB(L)	3.18mm/s	114.4dB(L)	1.02mm/s	104.9dB(L)	2.29mm/s	114.8dB(L)	7.24mm/s	120.0dB(L)	Removed from property as per owners request		4.83mm/s	115.9dB(L)	3.94mm/s	109.2dB(L)
13-Jun-20	WCRR-120	16:05	2.79mm/s	122.4dB(L)	0.76mm/s	107.0dB(L)	7.37mm/s	128.3dB(L)	0.64mm/s	120.6dB(L)	4.83mm/s	124.5dB(L)	2.67mm/s	119.4dB(L)	Removed from property as per owners request		1.52mm/s	119.7dB(L)	0.89mm/s	115.2dB(L)
15-Jun-20	WCRR-121	16:02	2.16mm/s	128.4dB(L)	0.25mm/s	115.0dB(L)	2.67mm/s	117.6dB(L)	1.91mm/s	130.4dB(L)	1.78mm/s	122.4dB(L)	6.35mm/s	119.7dB(L)	Removed from property as per owners request		10.00mm/s	121.8dB(L)	4.20mm/s	116.9dB(L)
16-Jun-20	WCRR-122 WCRR-123	13:05	5.33mm/s	119.0dB(L)	0.76mm/s	106.0dB(L)	7.11mm/s	122.3dB(L)	0.89mm/s	106.5dB(L)	5.84mm/s	121.6dB(L)	6.98mm/s	118.7dB(L)	Removed from property as per owners request		5.46mm/s	117.6dB(L)	2.29mm/s	110.6dB(L)

Permanent Monitoring Units								
Crestmont			90 Valley Ridge Heights NW		254 Crestridge Place SW		148 Valley Meadow Close NW	
4-Jun-20	CM-06	13:00	0.89mm/s	95.9dB(L)	0.51mm/s	101.0dB(L)	0.76mm/s	108.4dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Vert At 16:00:16 June 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IHIN.4G0W

Post Event Notes

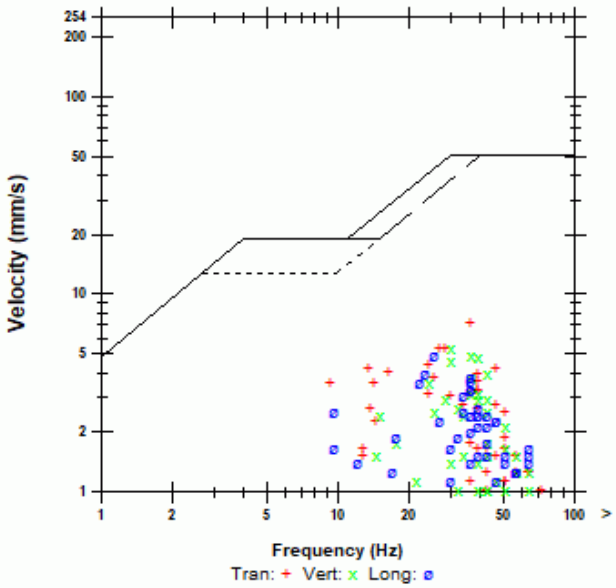
Extended Notes
Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

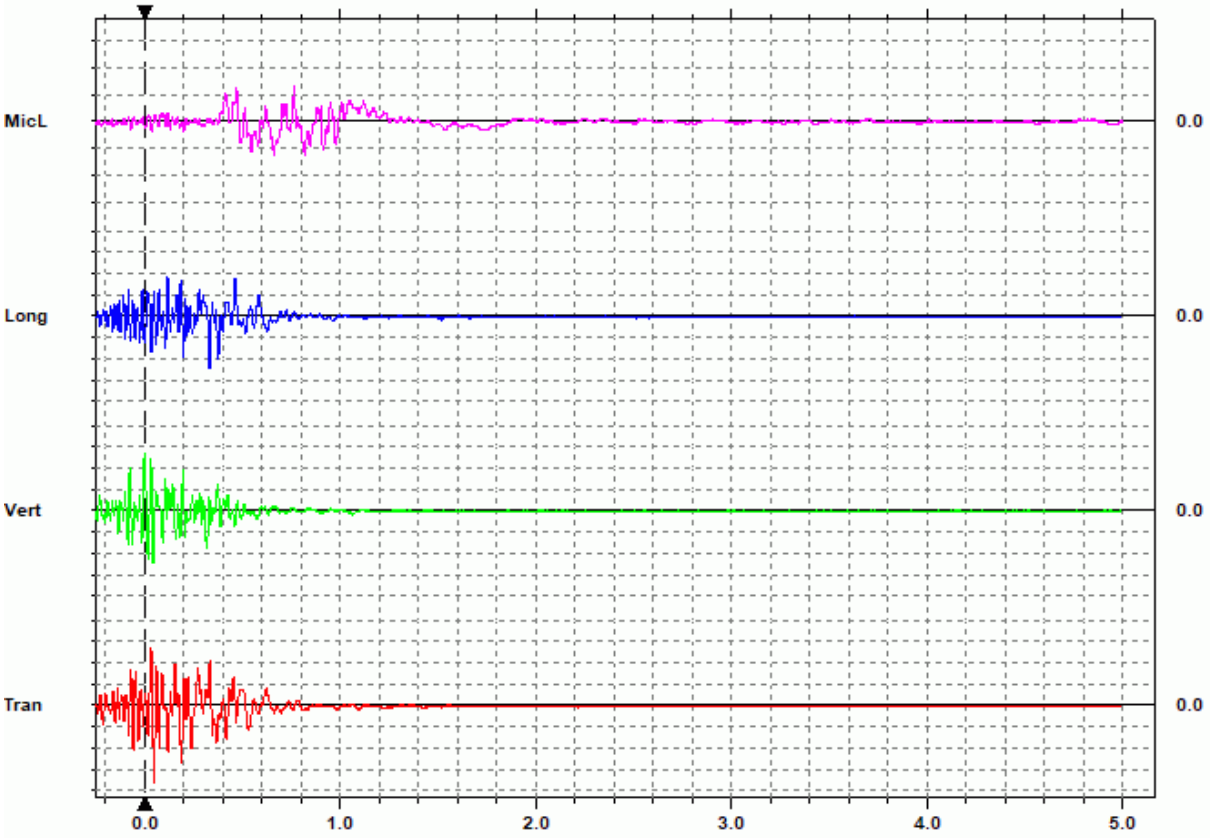
Microphone	Linear Weighting
PSPL	116.6 dB(L) at 0.768 sec.
ZC Freq	23 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.24	5.33	4.95	mm/s
ZC Freq	37	30	26	Hz
Time (Rel. to Trig)	0.050	0.001	0.335	sec
Peak Acceleration	0.146	0.133	0.106	g
Peak Displacement	0.0478	0.0285	0.0300	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.58 mm/s At 0.050 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:00:16 June 3, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IHIN.4G0W
Job Number	8177		

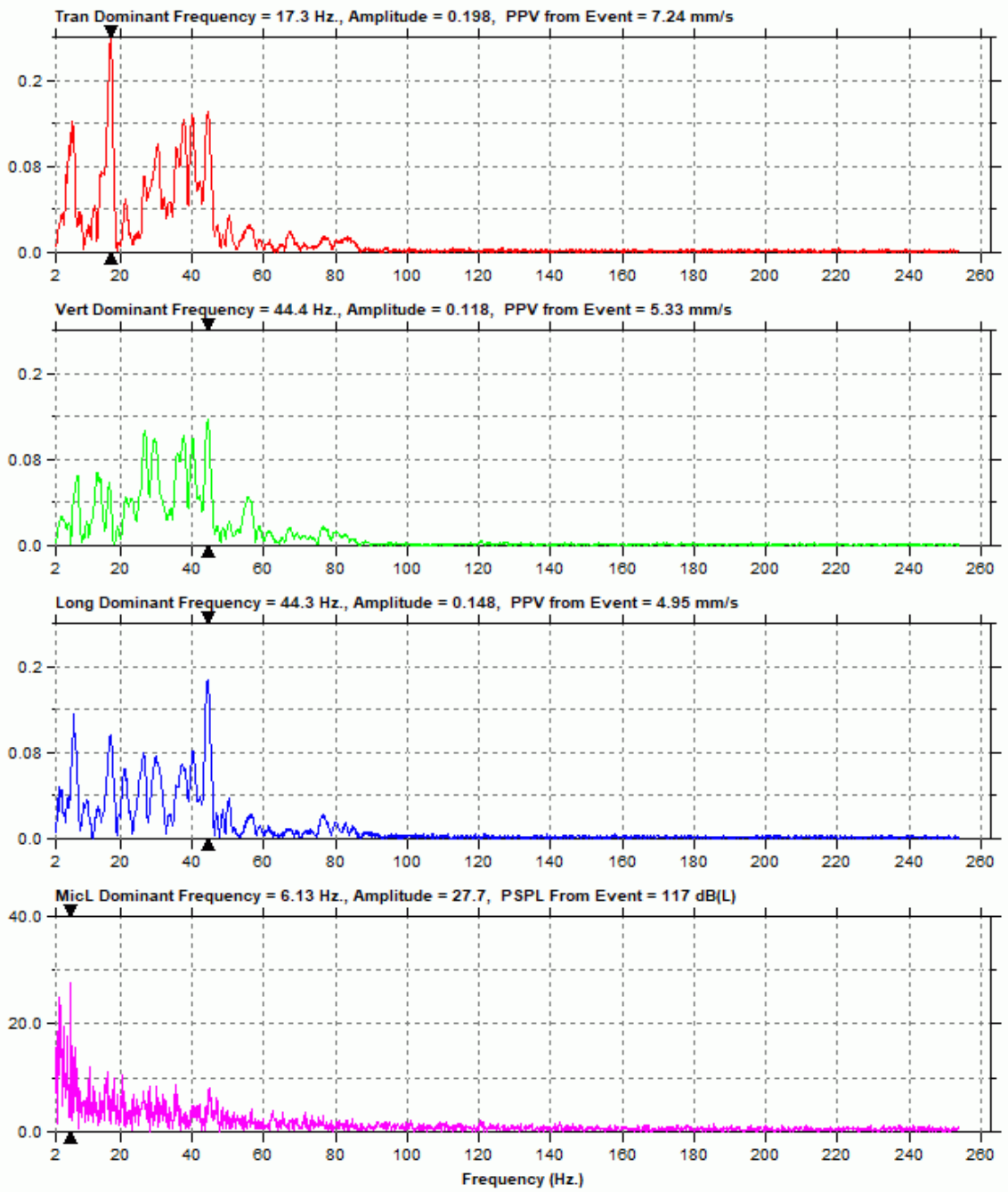
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:50:24 June 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IHMC.000W

Post Event Notes

Extended Notes

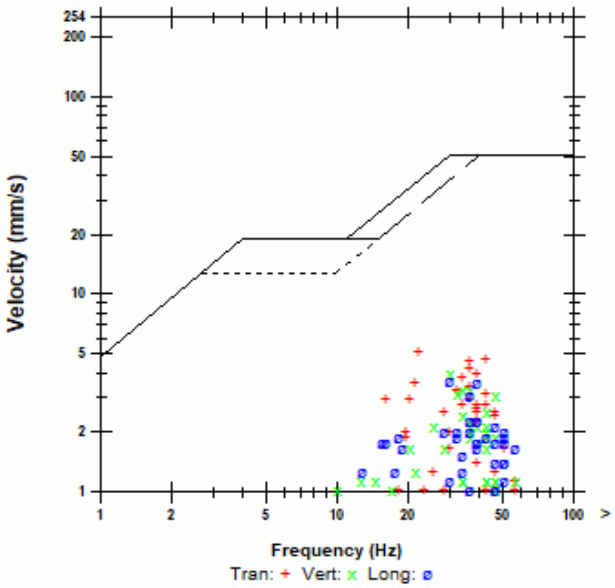
Combo Mode June 5, 2020 05:16:49
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

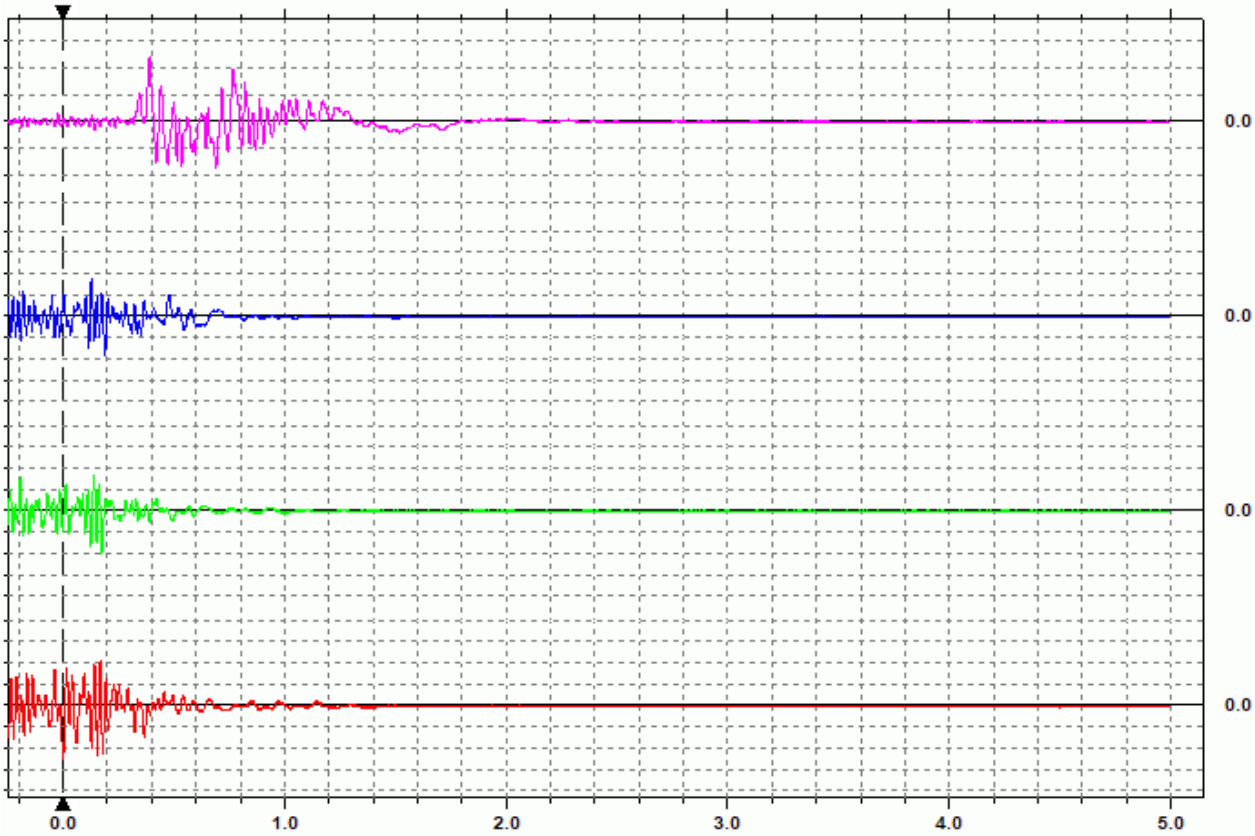
Microphone	Linear Weighting
PSPL	121.5 dB(L) at 0.390 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	3.94	3.68	mm/s
ZC Freq	22	30	30	Hz
Time (Rel. to Trig)	0.001	0.175	0.189	sec
Peak Acceleration	0.133	0.0928	0.106	g
Peak Displacement	0.0312	0.0207	0.0252	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.88 mm/s At 0.128 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:50:24 June 5, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IHMC.000W
Job Number	8177		

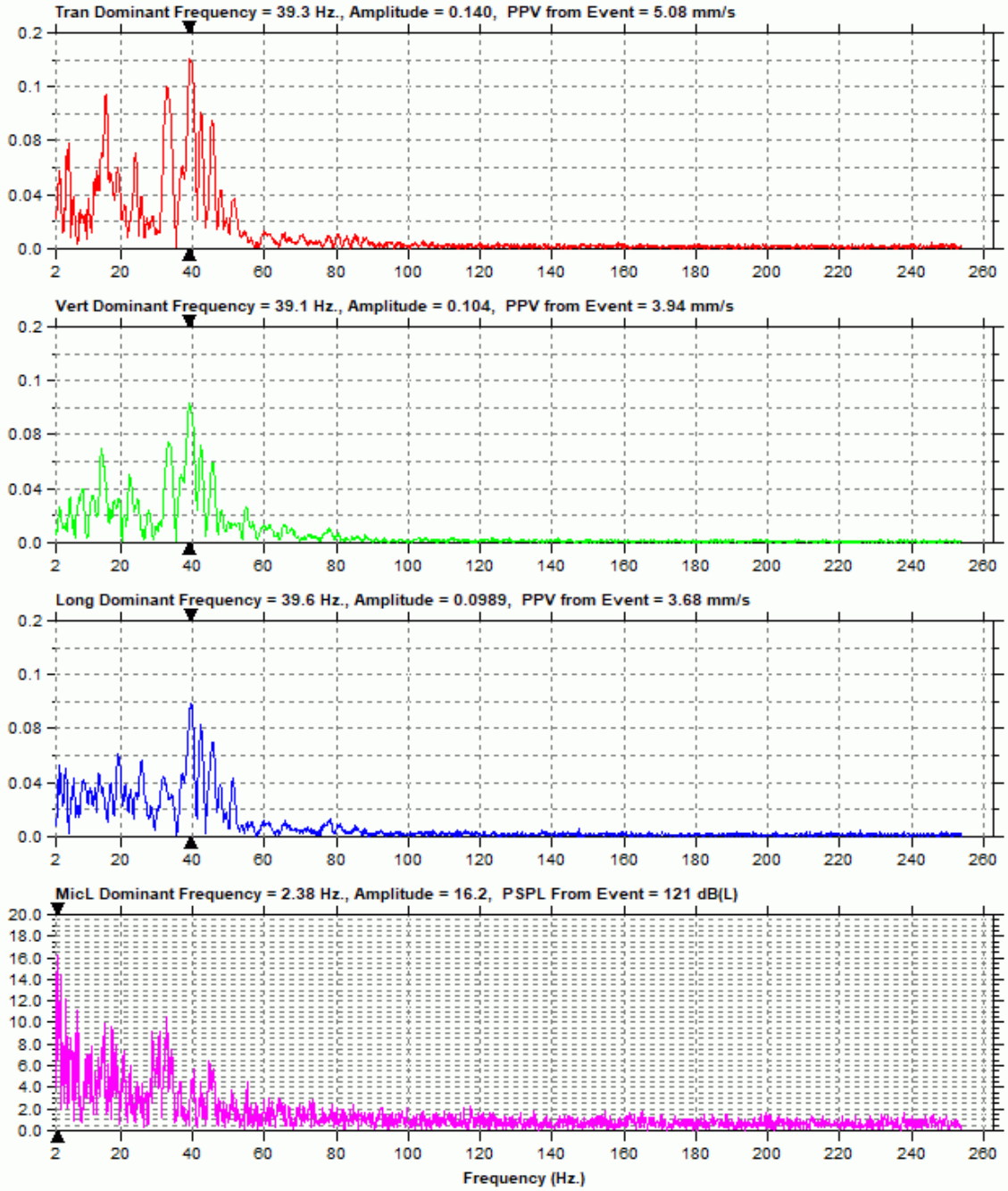
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 5, 2020 05:16:49
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 12:57:17 June 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408II6H.BH0W

Post Event Notes

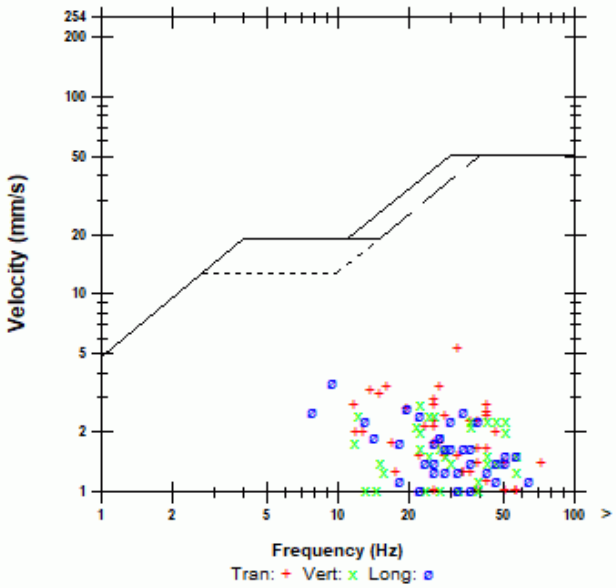
Extended Notes
Combo Mode June 16, 2020 05:16:46
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

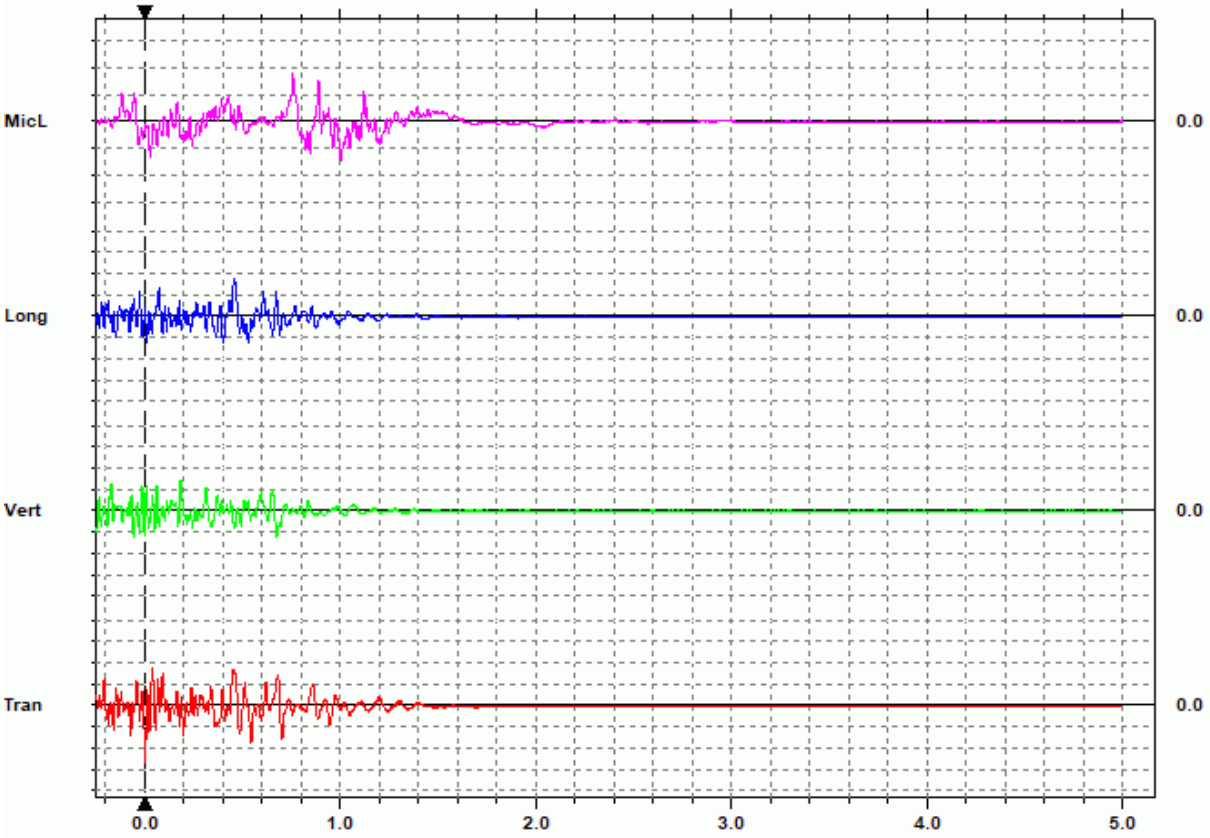
Microphone	Linear Weighting
PSPL	119.0 dB(L) at 0.758 sec.
ZC Freq	4.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	2.79	3.56	mm/s
ZC Freq	32	22	9.5	Hz
Time (Rel. to Trig)	0.001	0.182	0.457	sec
Peak Acceleration	0.106	0.0795	0.0663	g
Peak Displacement	0.0416	0.0296	0.0440	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.54 mm/s At 0.001 sec.

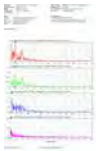
USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation



EXPLOTECH

Date/Time	Long At 17:51:03 June 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IHF2.X30W

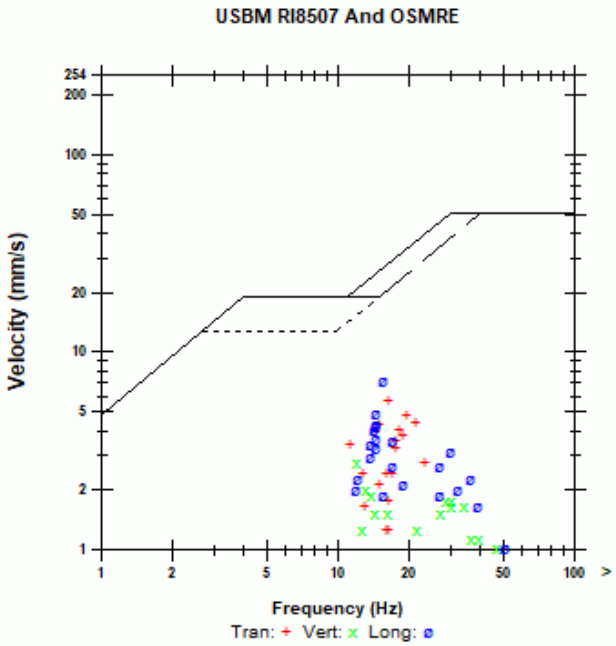
Post Event Notes

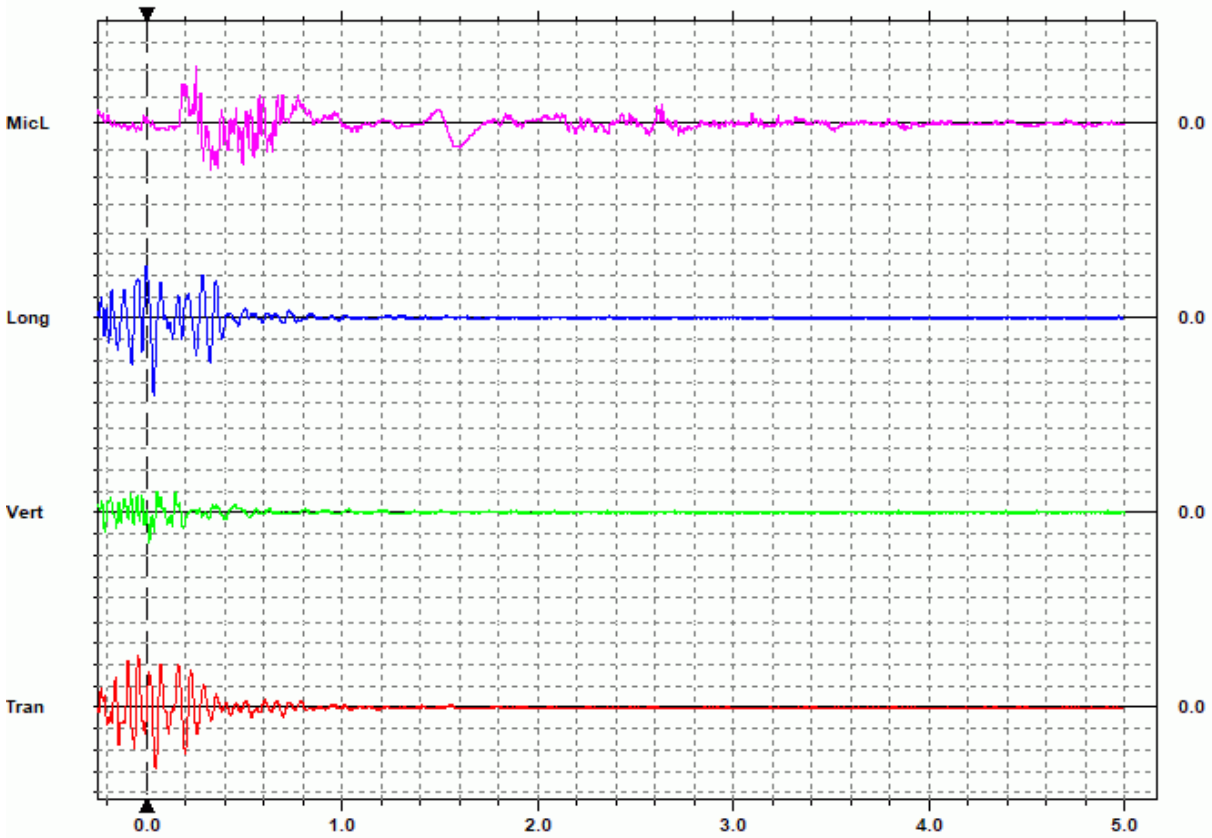
Extended Notes
Combo Mode June 1, 2020 11:54:12
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	120.6 dB(L) at 0.254 sec.
ZC Freq	5.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.71	2.79	7.24	mm/s
ZC Freq	17	12	16	Hz
Time (Rel. to Trig)	0.048	0.015	0.038	sec
Peak Acceleration	0.0928	0.0398	0.0663	g
Peak Displacement	0.0583	0.0280	0.0665	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.71 mm/s At 0.041 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:51:03 June 1, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IHF2.X30W
Job Number	8177		

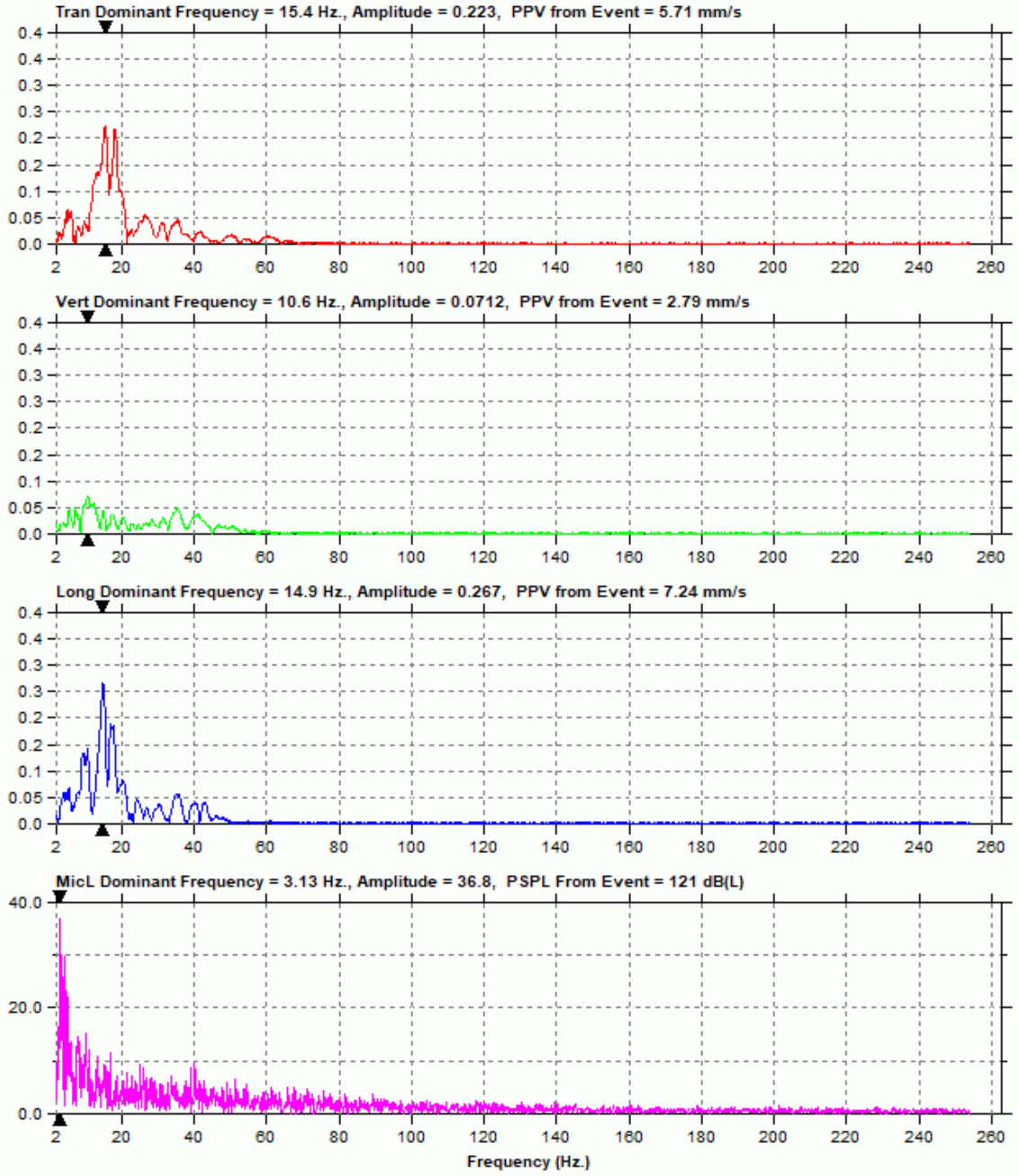
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 1, 2020 11:54:12
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:23 June 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IHIN.1B0W

Post Event Notes

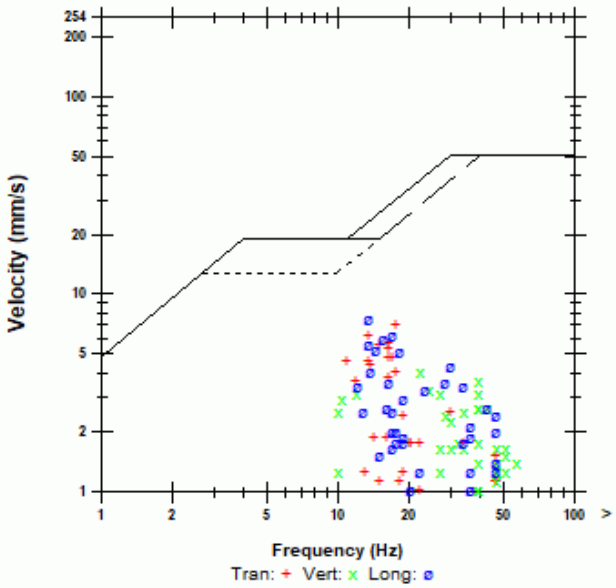
Extended Notes
Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

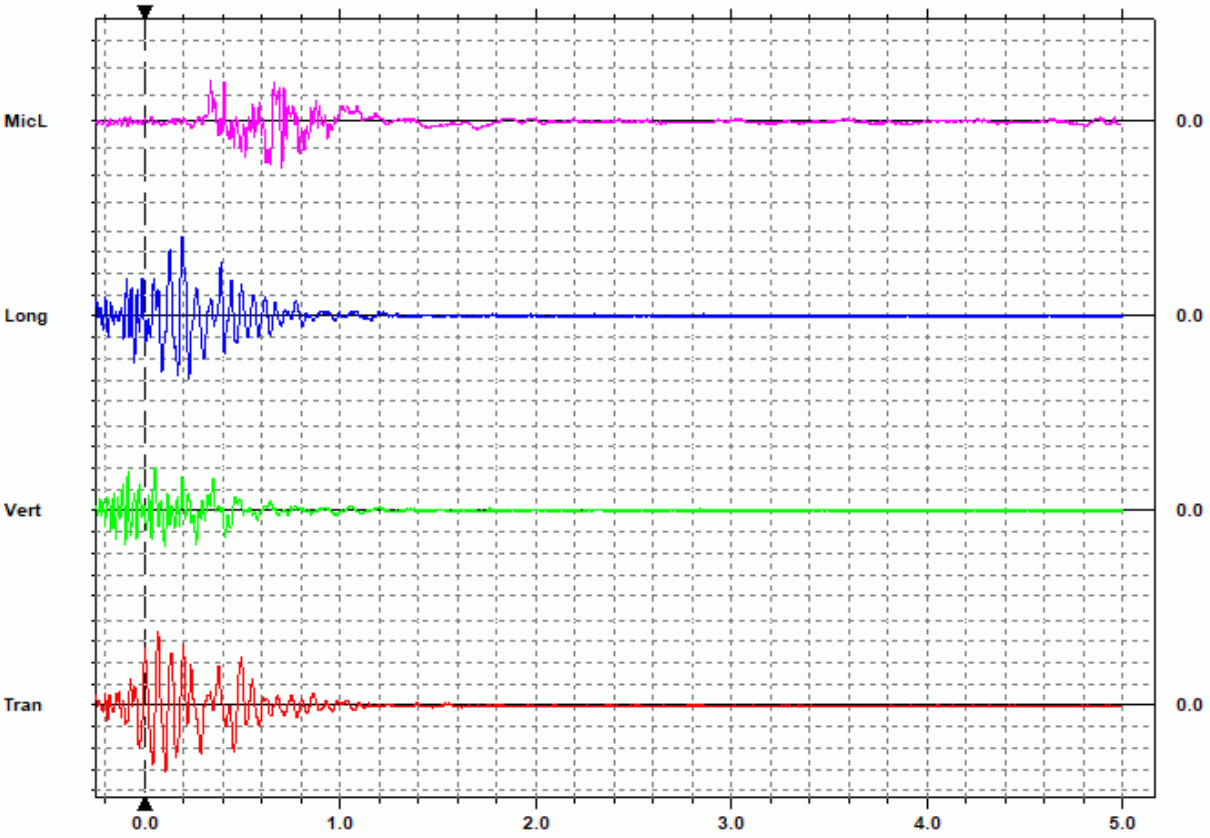
Microphone	Linear Weighting
PSPL	118.6 dB(L) at 0.702 sec.
ZC Freq	32 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.98	4.06	7.49	mm/s
ZC Freq	18	22	13	Hz
Time (Rel. to Trig)	0.068	0.051	0.191	sec
Peak Acceleration	0.0795	0.0928	0.106	g
Peak Displacement	0.0615	0.0327	0.0836	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.08 mm/s At 0.194 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:23 June 3, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IHIN.1B0W
Job Number	8177		

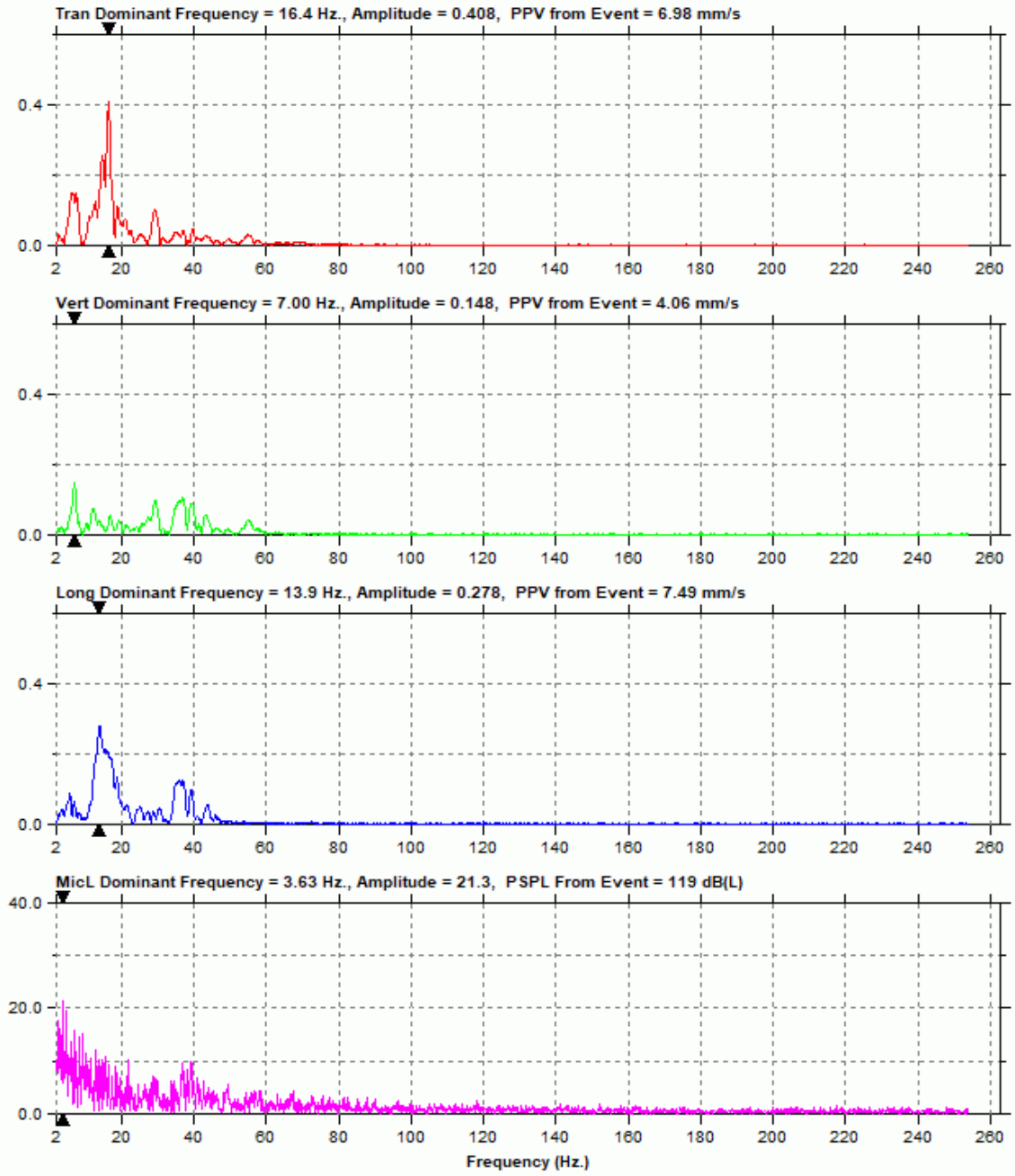
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:48:29 June 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IHMB.WT0W

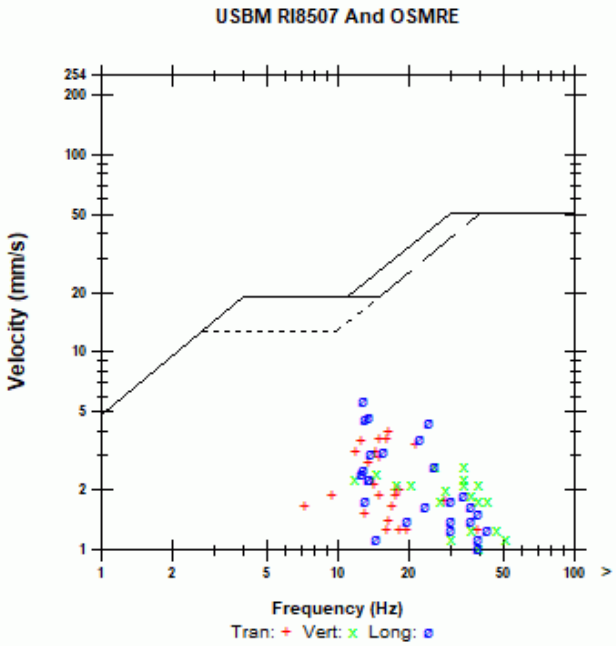
Post Event Notes

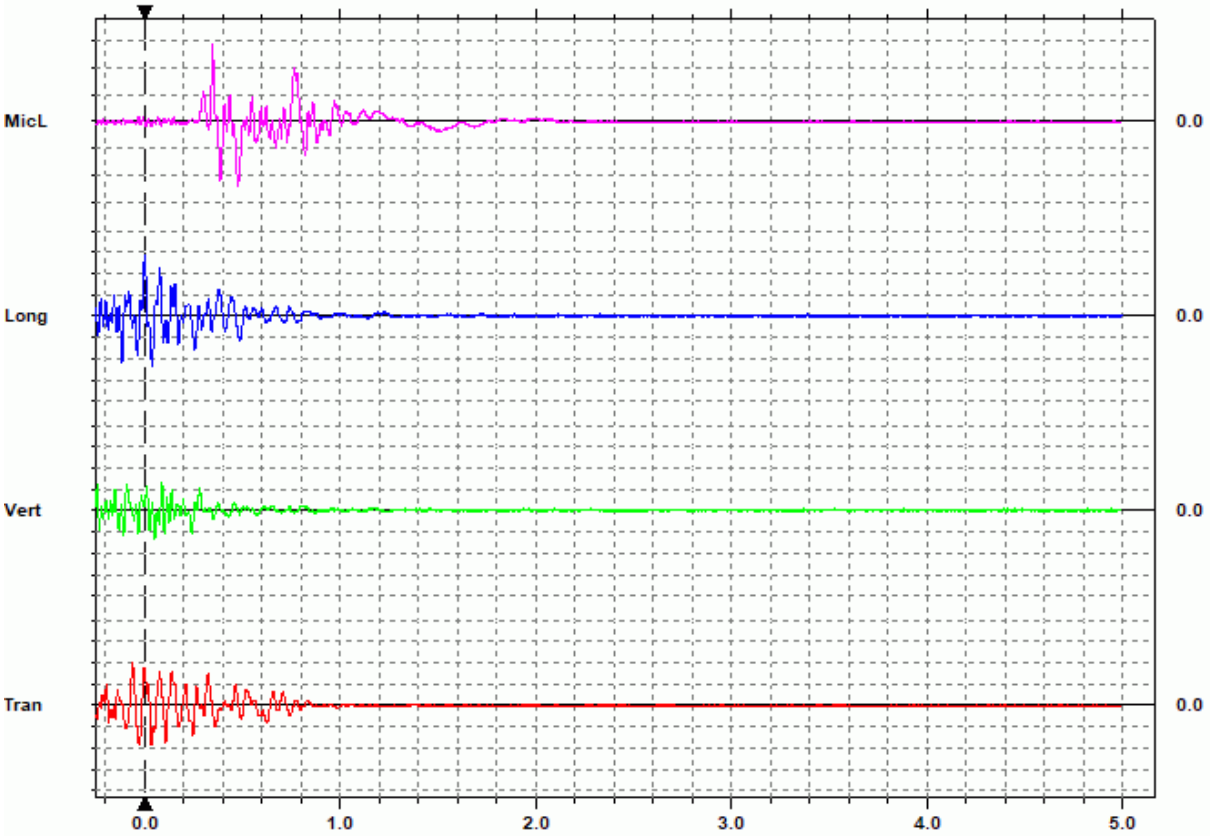
Extended Notes
Combo Mode June 5, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	123.1 dB(L) at 0.350 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.94	2.67	5.71	mm/s
ZC Freq	17	26	13	Hz
Time (Rel. to Trig)	-0.059	0.054	0.003	sec
Peak Acceleration	0.0663	0.0663	0.0795	g
Peak Displacement	0.0396	0.0234	0.0479	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.75 mm/s At 0.003 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:48:29 June 5, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IHMB.WT0W
Job Number	8177		

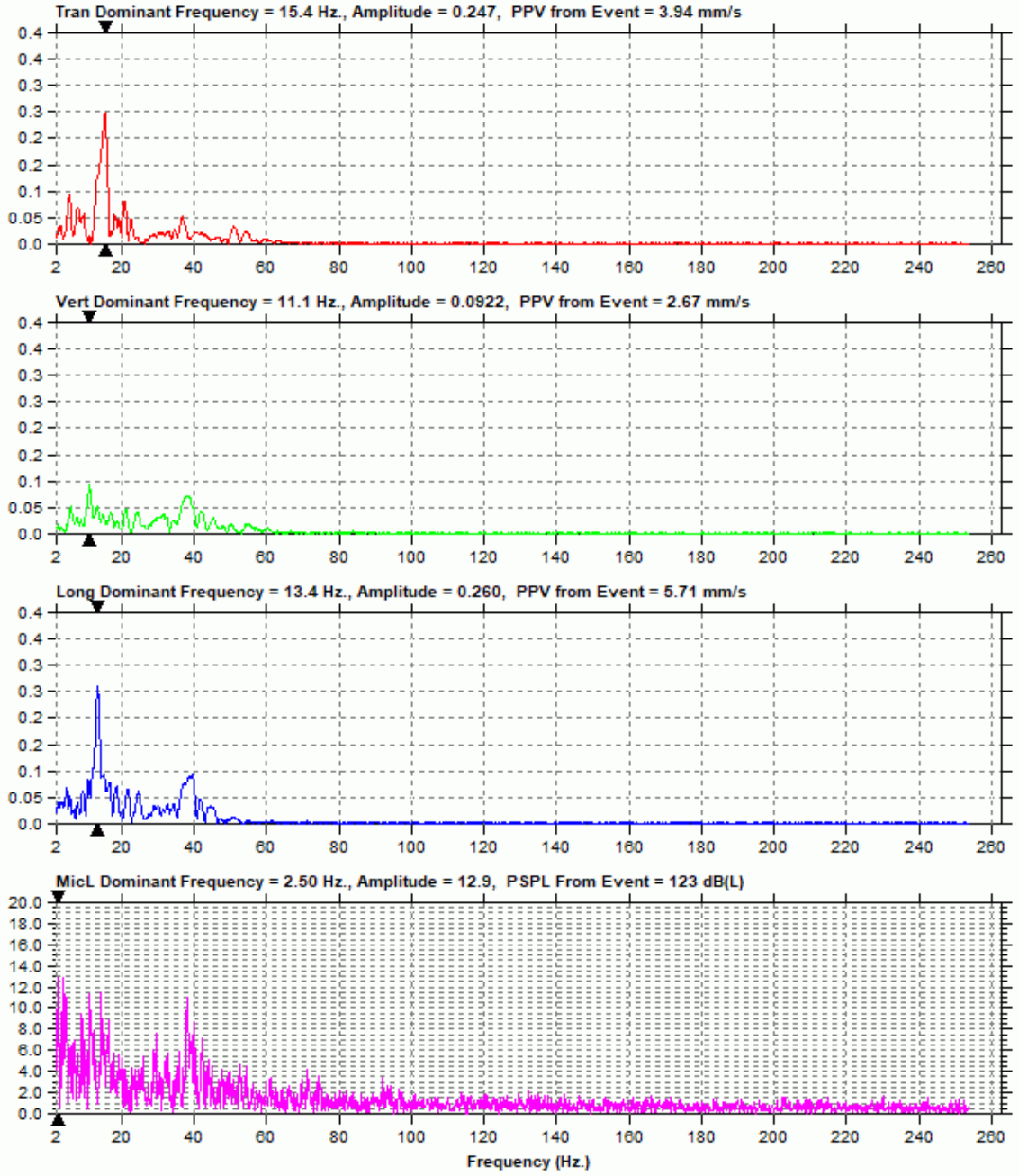
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 5, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:26:11 June 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IHRU.VN0W

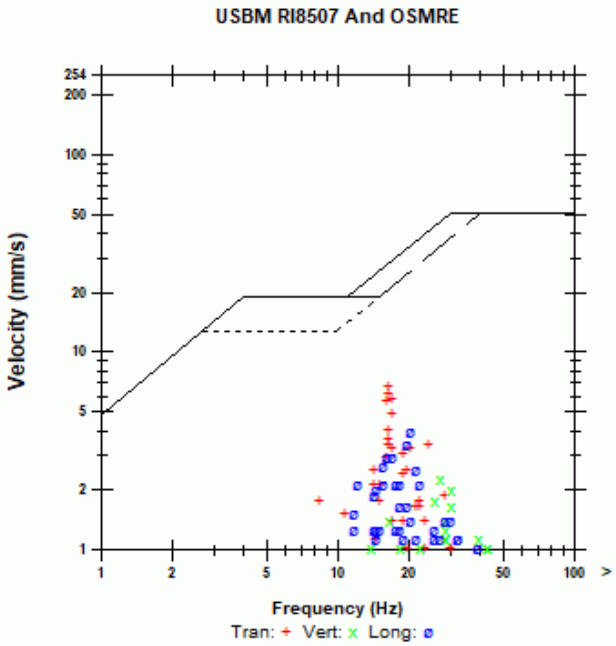
Post Event Notes

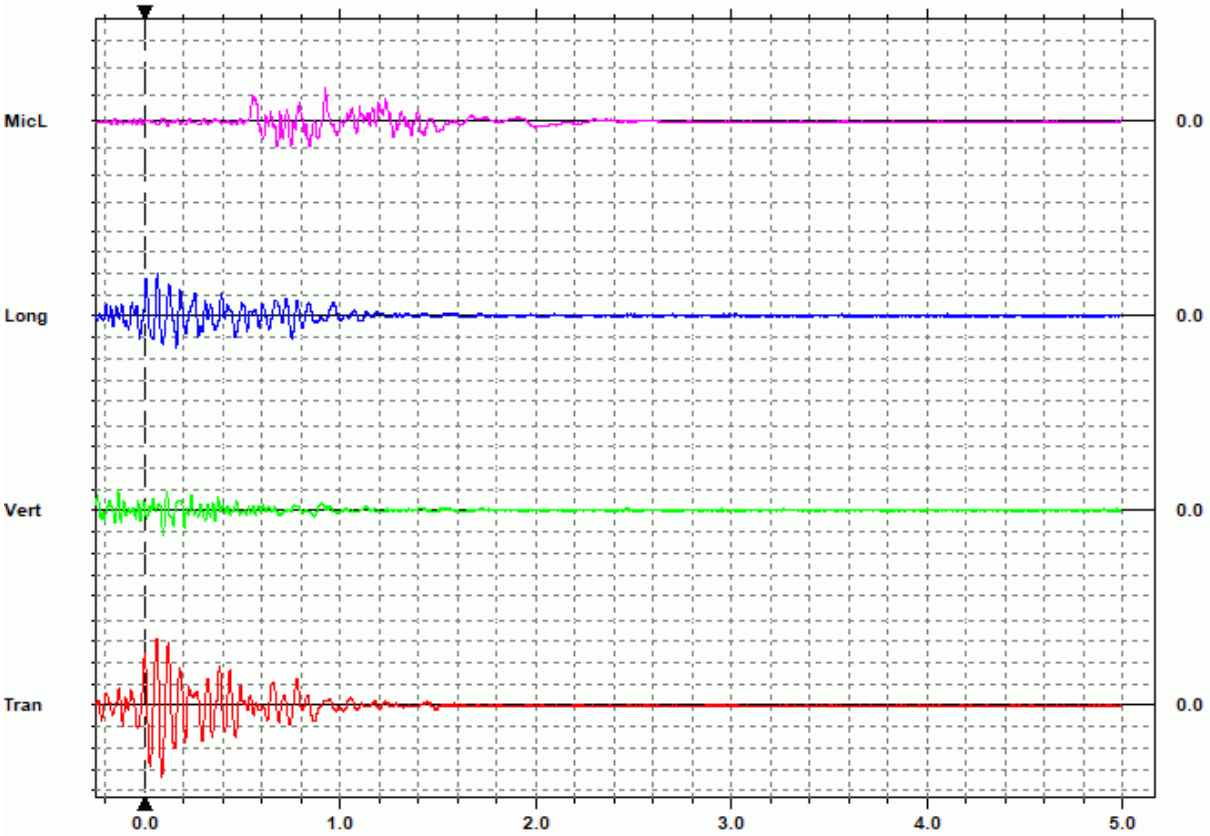
Extended Notes
Combo Mode June 8, 2020 05:16:54
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	115.7 dB(L) at 0.924 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.73	2.29	3.94	mm/s
ZC Freq	17	27	20	Hz
Time (Rel. to Trig)	0.087	0.093	0.064	sec
Peak Acceleration	0.0928	0.0398	0.0530	g
Peak Displacement	0.0652	0.0140	0.0285	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.24 mm/s At 0.063 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:26:11 June 8, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IHRU.VN0W
Job Number	8177		

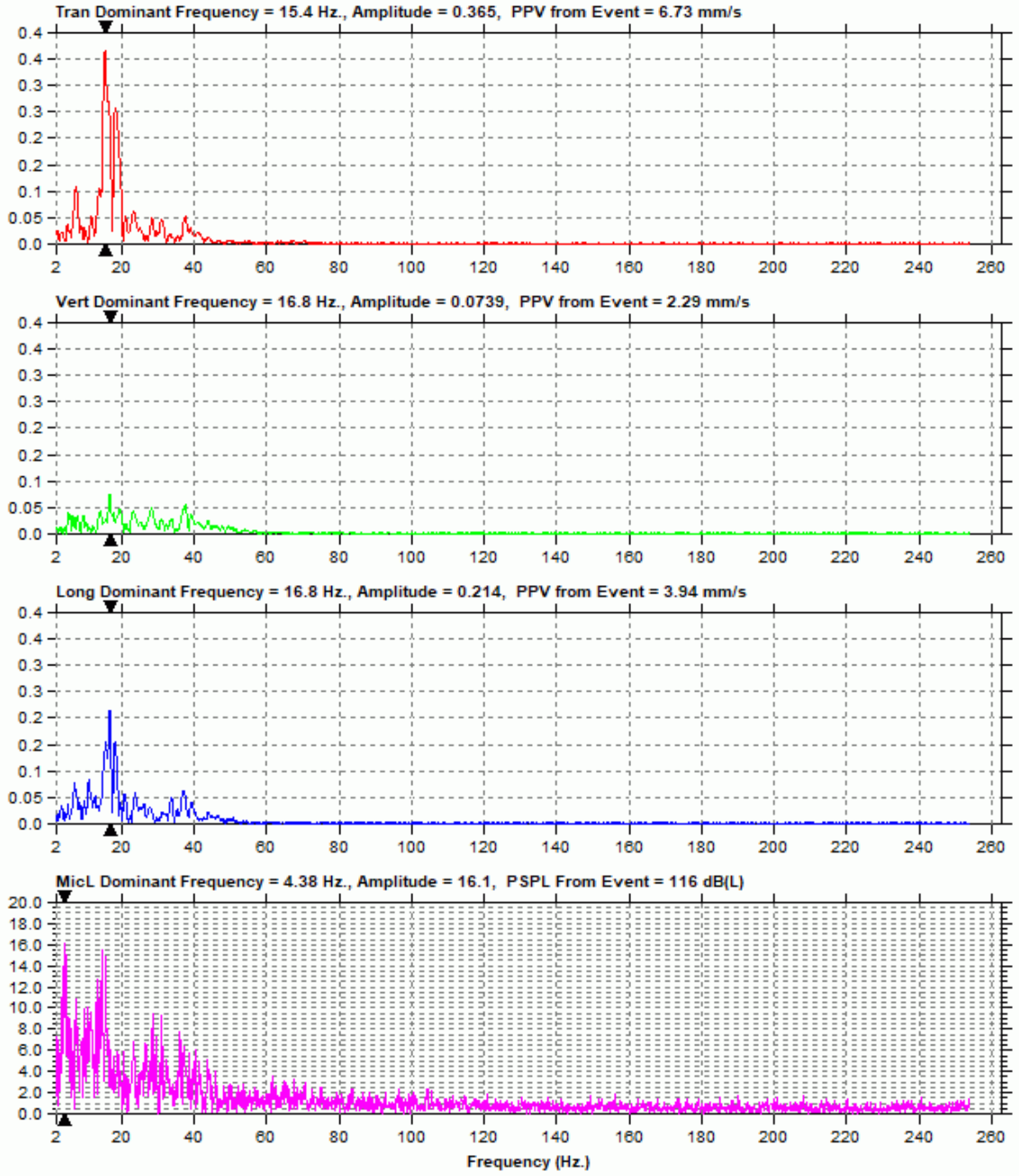
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 8, 2020 05:16:54
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Date/Time	Long At 15:54:44 June 13, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251II15.J80W

Post Event Notes

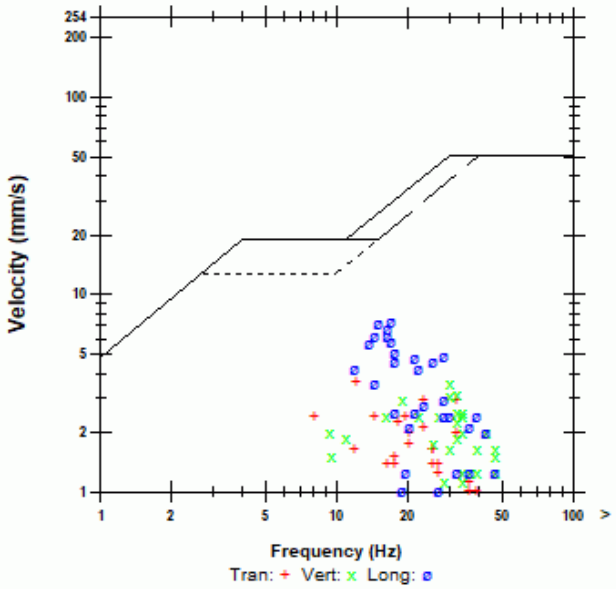
Extended Notes
Combo Mode June 13, 2020 05:17:06
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

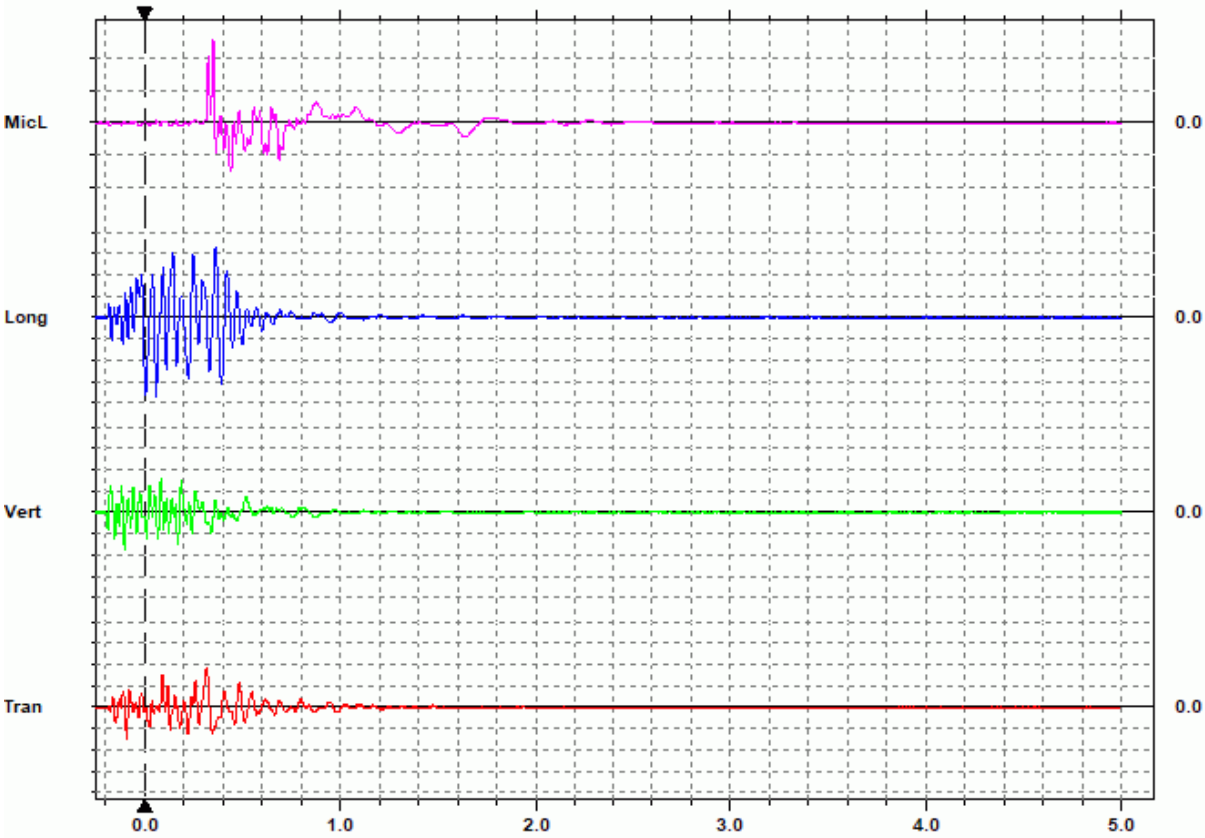
Microphone	Linear Weighting
PSPL	128.3 dB(L) at 0.352 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.68	3.56	7.37	mm/s
ZC Freq	12	30	17	Hz
Time (Rel. to Trig)	0.315	-0.102	0.060	sec
Peak Acceleration	0.0530	0.0663	0.106	g
Peak Displacement	0.0437	0.0252	0.0705	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.39 mm/s At 0.060 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: June 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 12:55:14 June 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251II6H.820W

Post Event Notes

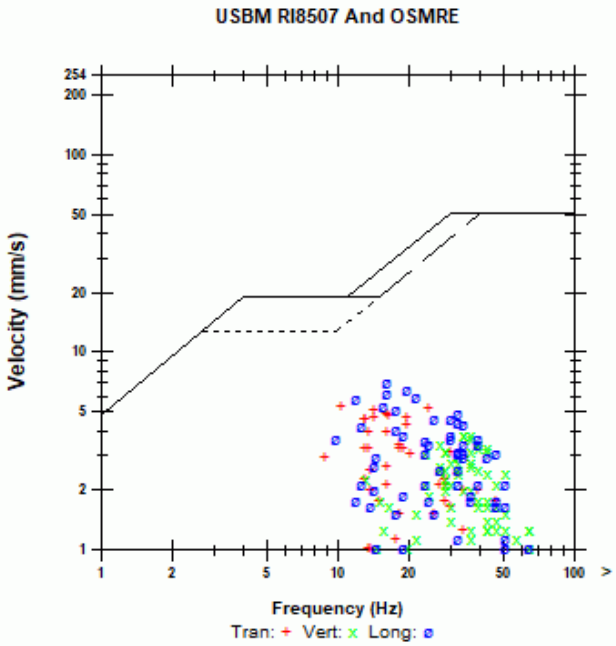
Extended Notes

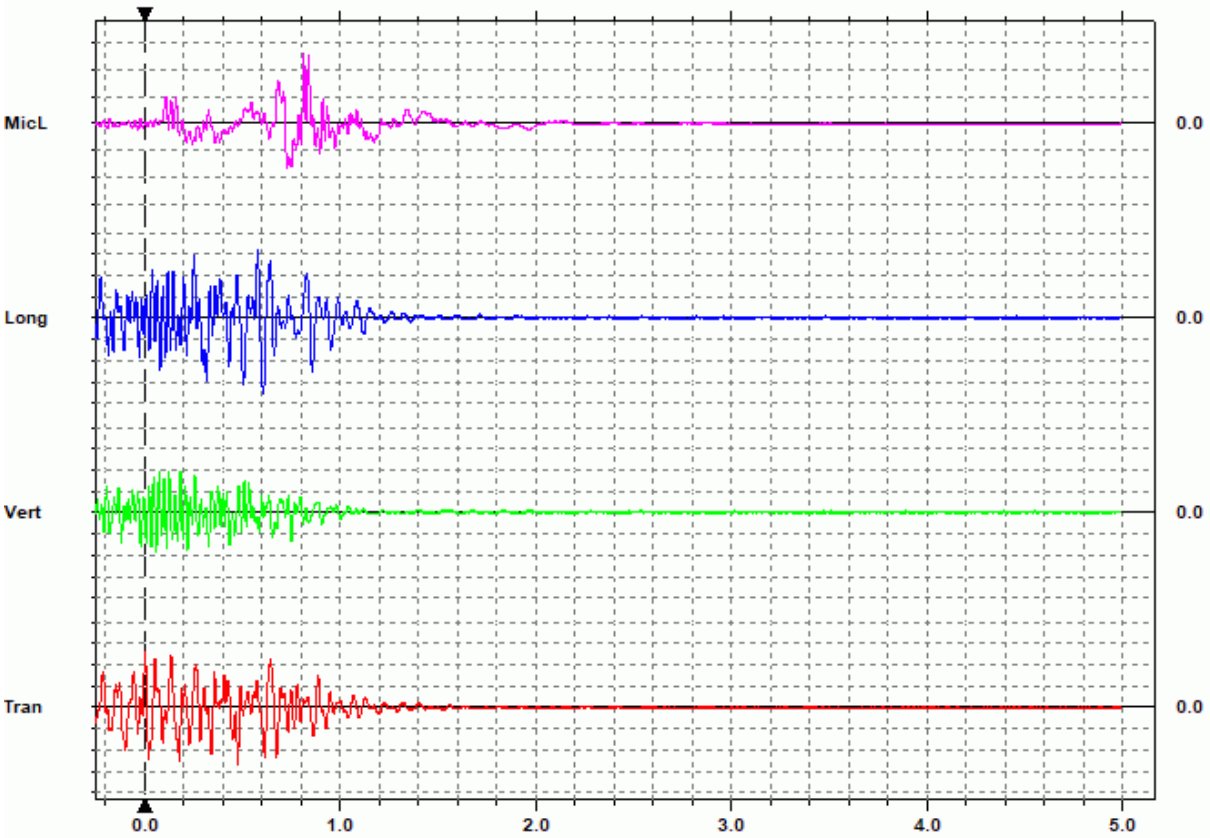
Combo Mode June 16, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	122.3 dB(L) at 0.813 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	3.81	7.11	mm/s
ZC Freq	10	37	16	Hz
Time (Rel. to Trig)	0.476	0.074	0.605	sec
Peak Acceleration	0.106	0.0928	0.106	g
Peak Displacement	0.0565	0.0261	0.0753	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.96 mm/s At 0.608 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 12:55:14 June 16, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251II6H.820W
Job Number	8177		

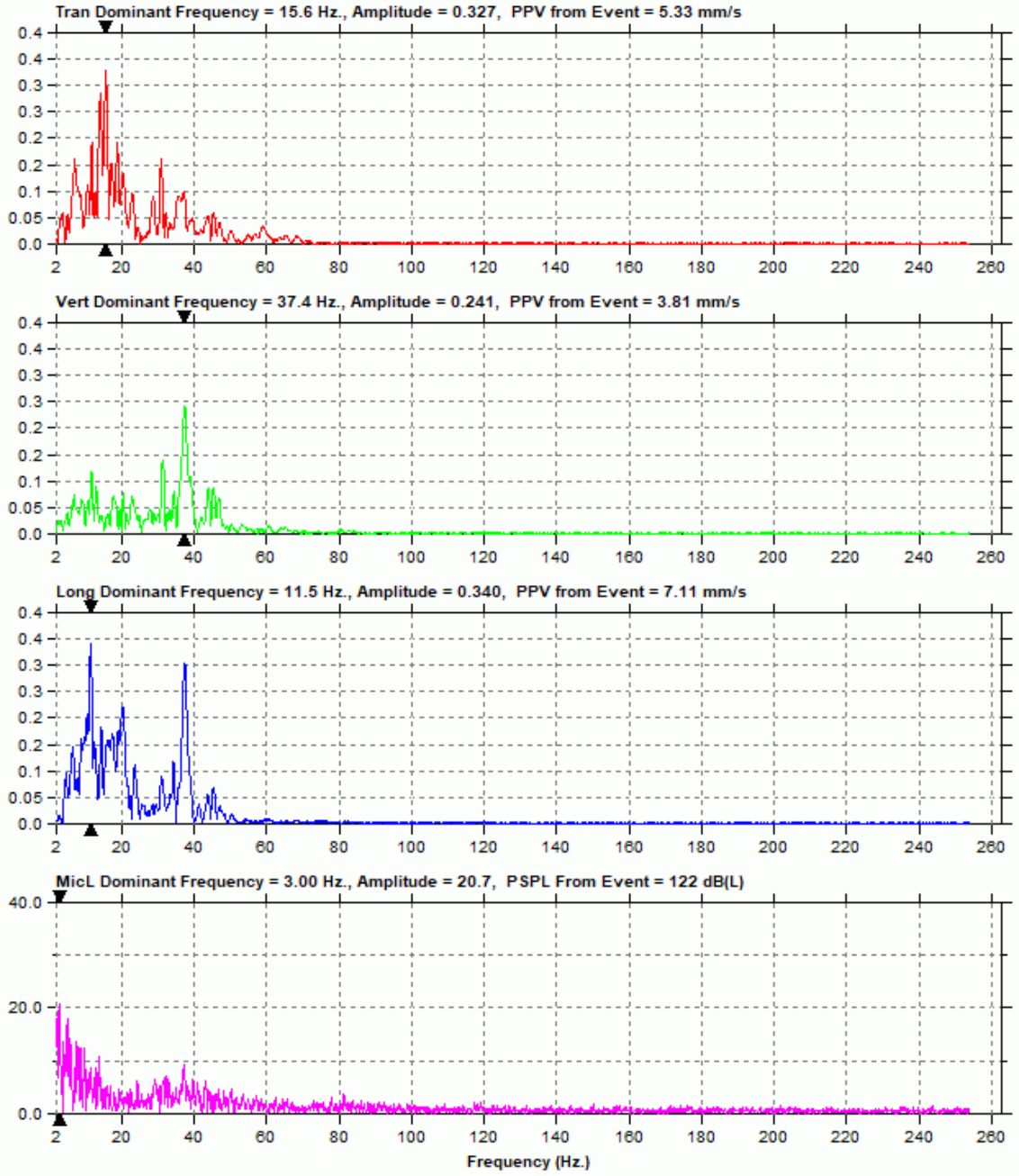
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 16, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:51:30 June 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IHF2.XU0W

Post Event Notes

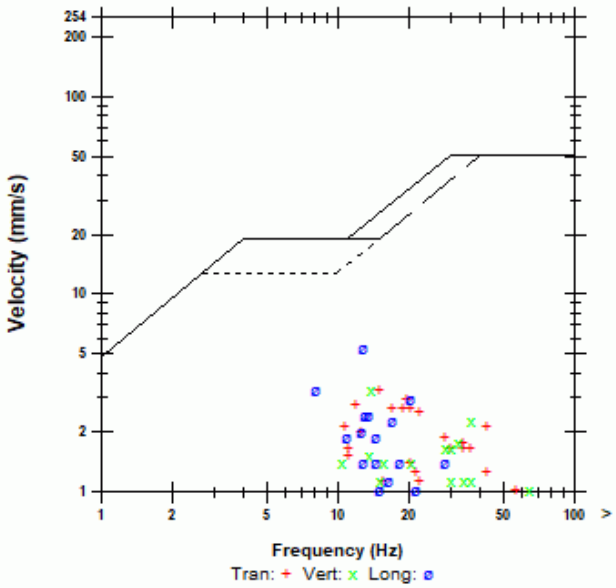
Extended Notes
Combo Mode June 1, 2020 05:16:50
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

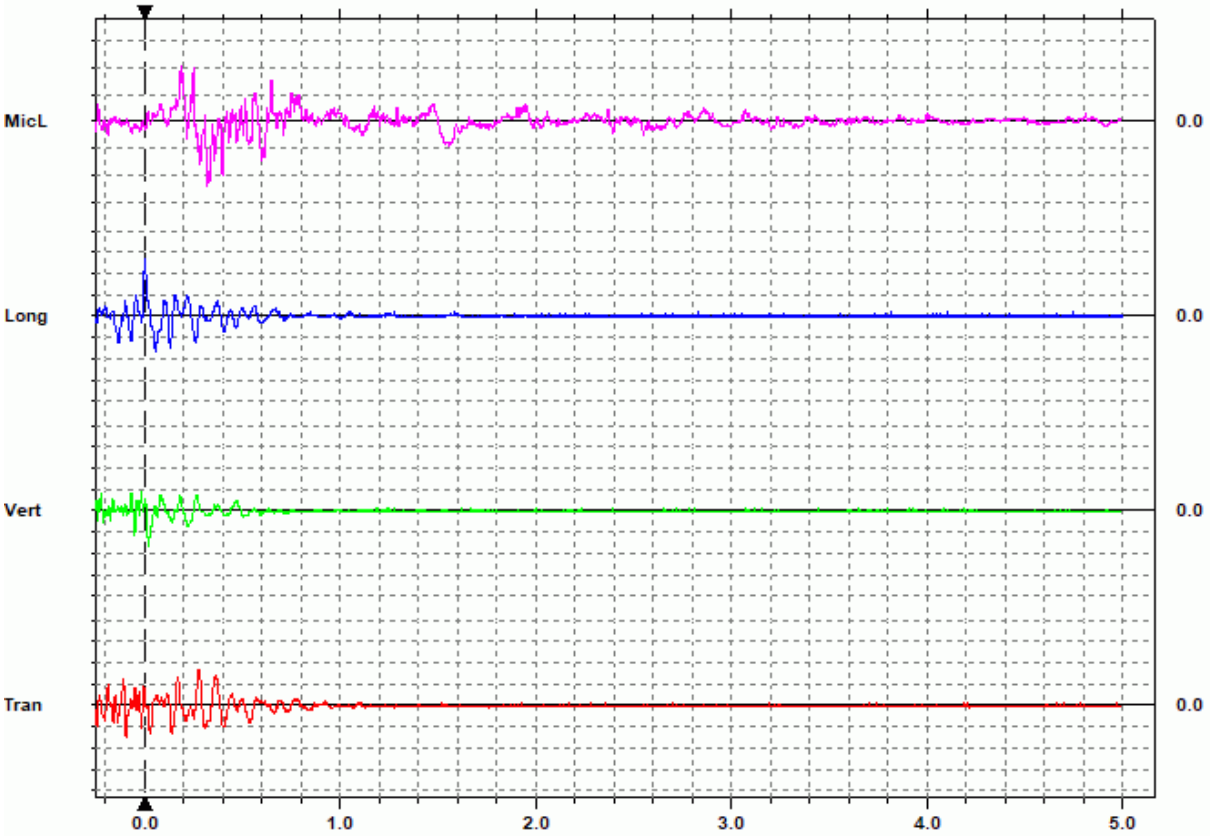
Microphone	Linear Weighting
PSPL	121.7 dB(L) at 0.321 sec.
ZC Freq	7.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	3.30	5.33	mm/s
ZC Freq	15	14	13	Hz
Time (Rel. to Trig)	0.276	0.021	0.002	sec
Peak Acceleration	0.0663	0.0663	0.0663	g
Peak Displacement	0.0364	0.0324	0.0505	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.44 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:51:30 June 1, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IHF2.XU0W
Job Number	8177		

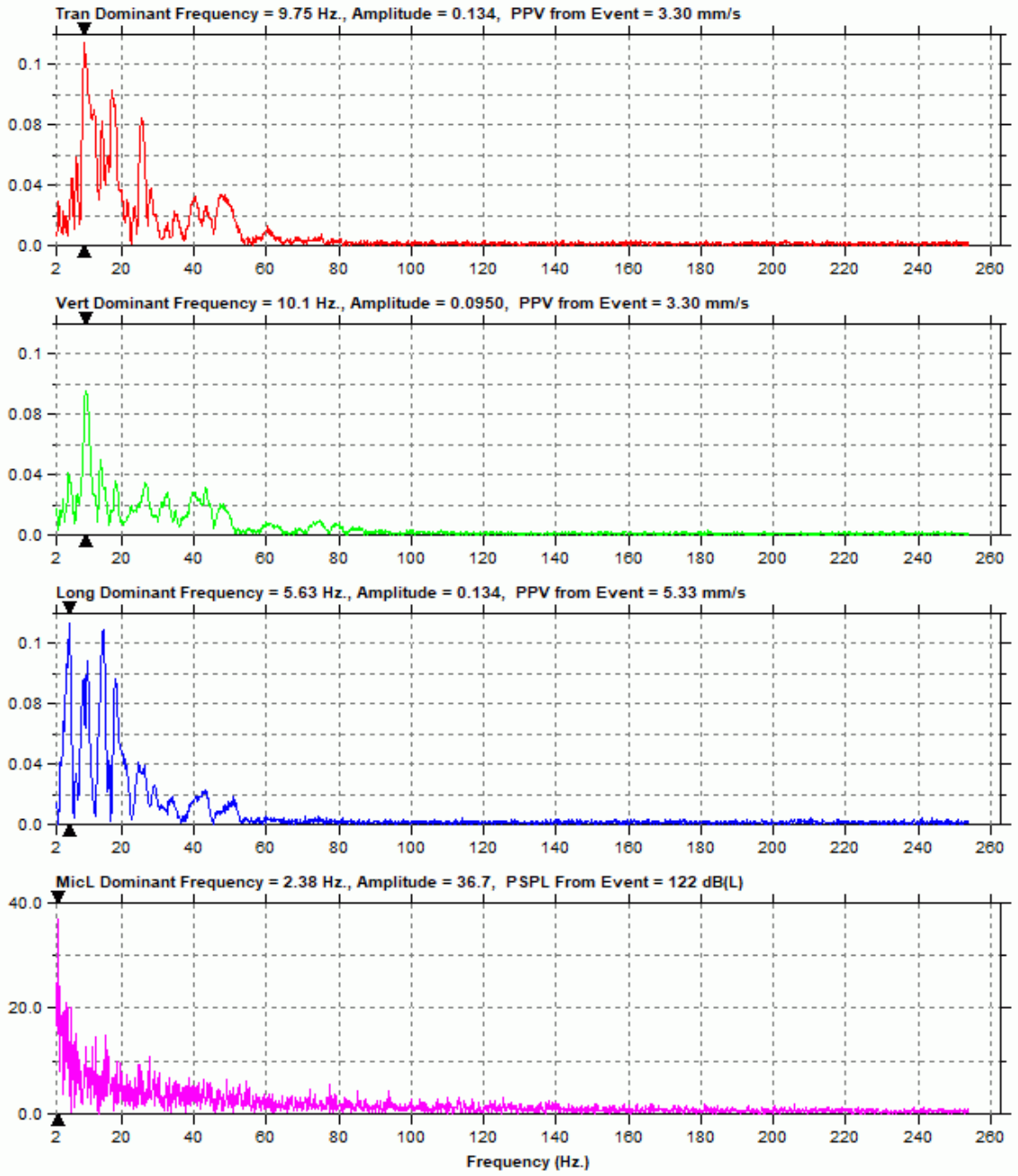
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 1, 2020 05:16:50
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:49 June 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IHIN.210W

Post Event Notes

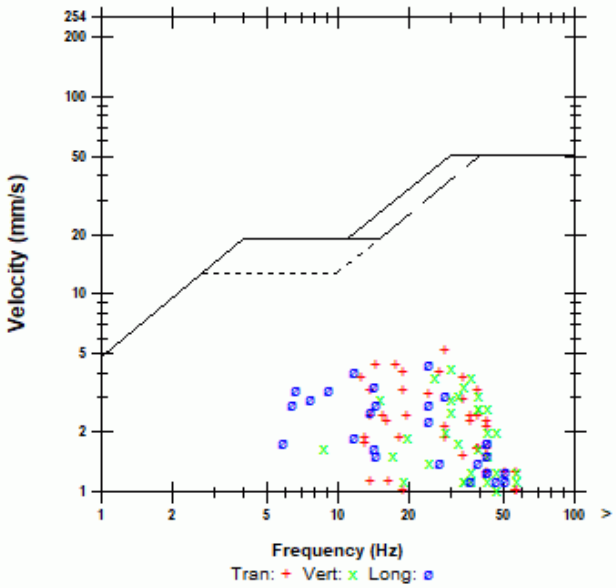
Extended Notes
Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

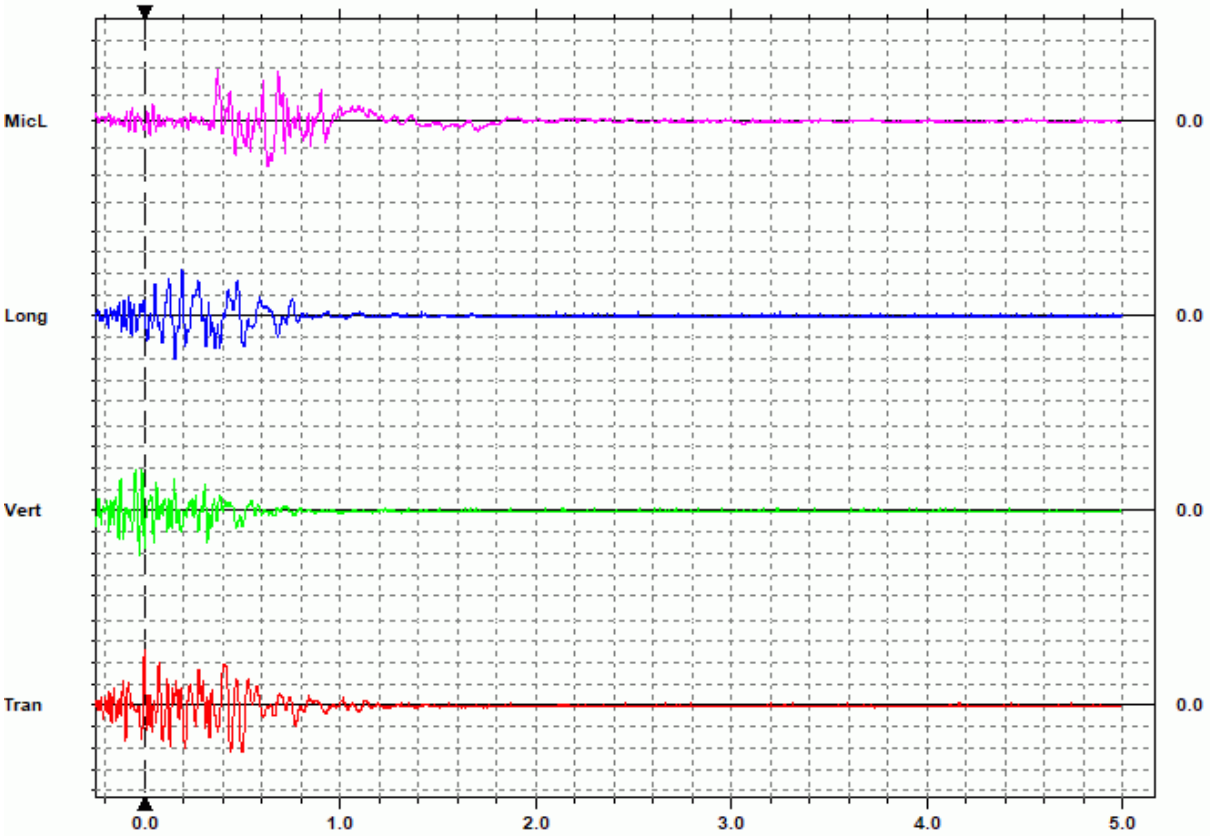
Microphone	Linear Weighting
PSPL	119.7 dB(L) at 0.373 sec.
ZC Freq	14 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	4.19	4.44	mm/s
ZC Freq	28	30	24	Hz
Time (Rel. to Trig)	0.001	-0.026	0.191	sec
Peak Acceleration	0.0928	0.106	0.0663	g
Peak Displacement	0.0551	0.0300	0.0635	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.32 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:58:49 June 3, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IHIN.210W
Job Number	8177		

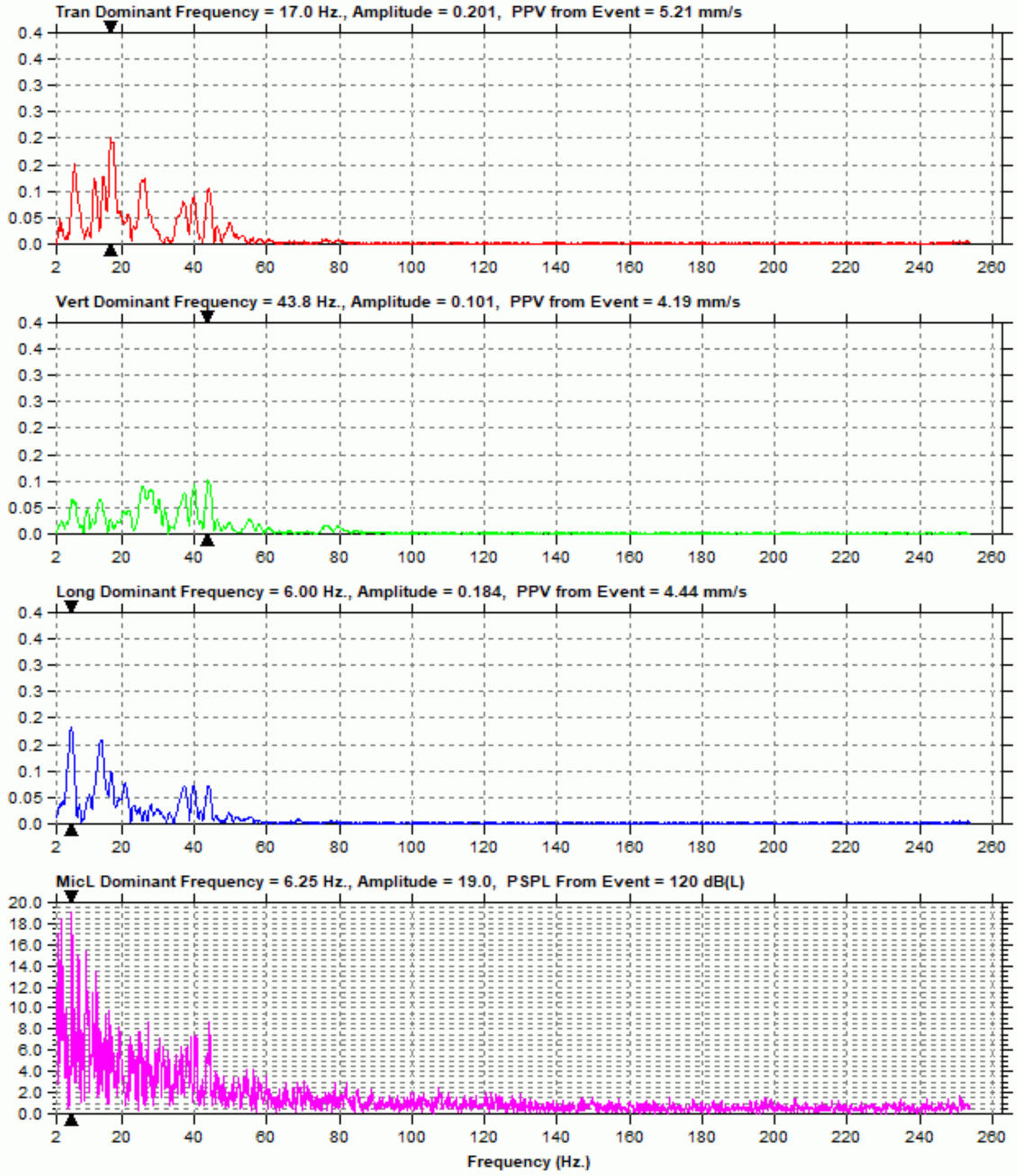
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 3, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 12:55:41 June 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263II6H.8T0W

Post Event Notes

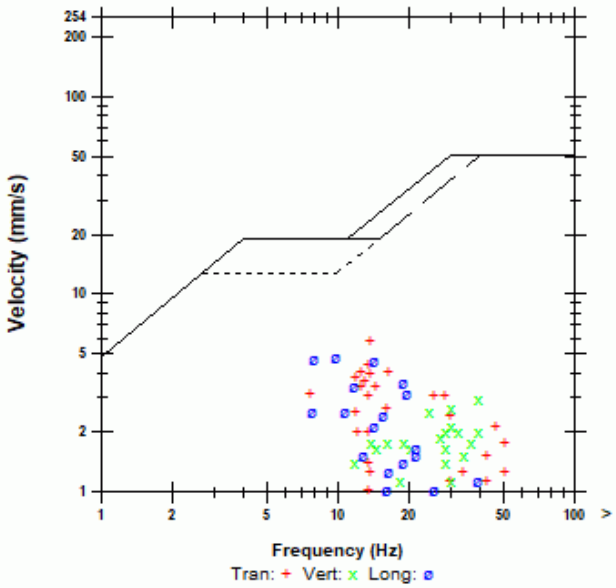
Extended Notes
Combo Mode June 16, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

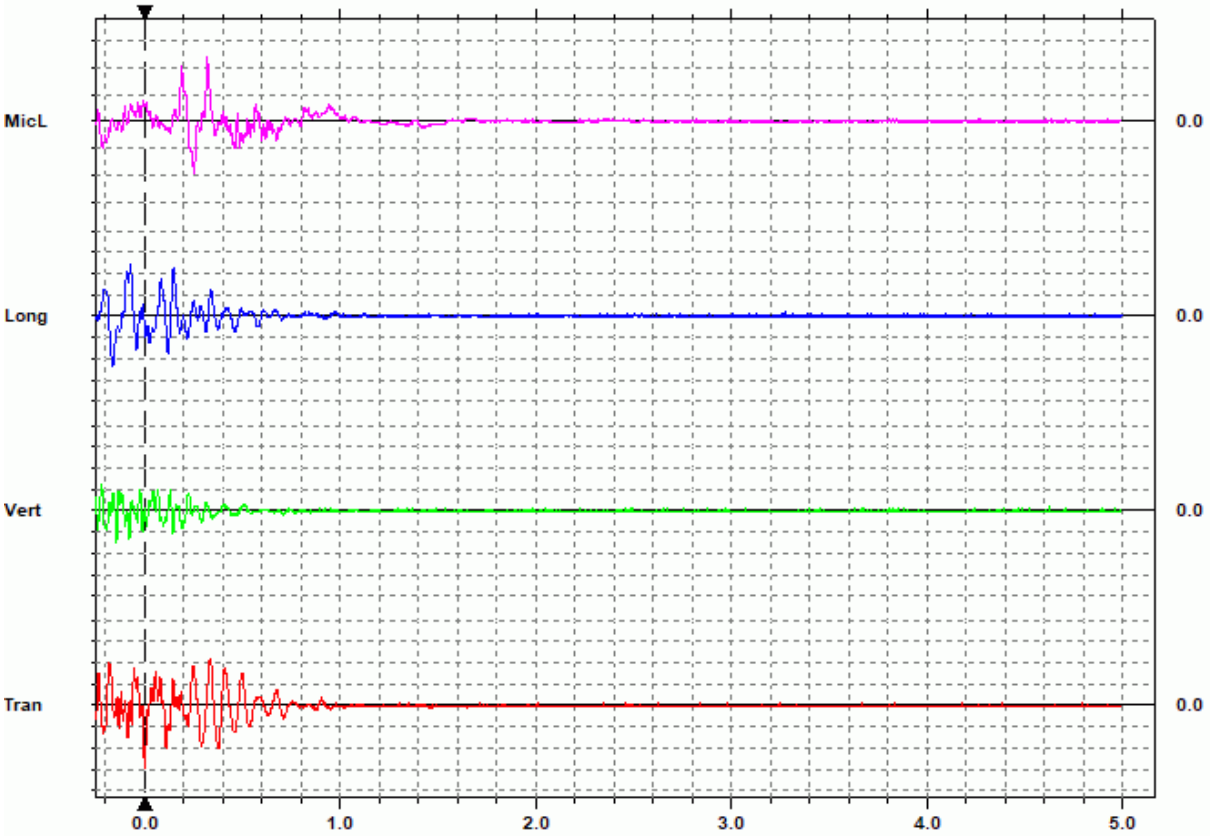
Microphone	Linear Weighting
PSPL	121.6 dB(L) at 0.322 sec.
ZC Freq	8.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.84	2.92	4.83	mm/s
ZC Freq	14	39	9.8	Hz
Time (Rel. to Trig)	0.003	-0.142	-0.070	sec
Peak Acceleration	0.0795	0.0928	0.0530	g
Peak Displacement	0.0528	0.0187	0.0741	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.98 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 12:55:41 June 16, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263II6H.8T0W
Job Number	8177		

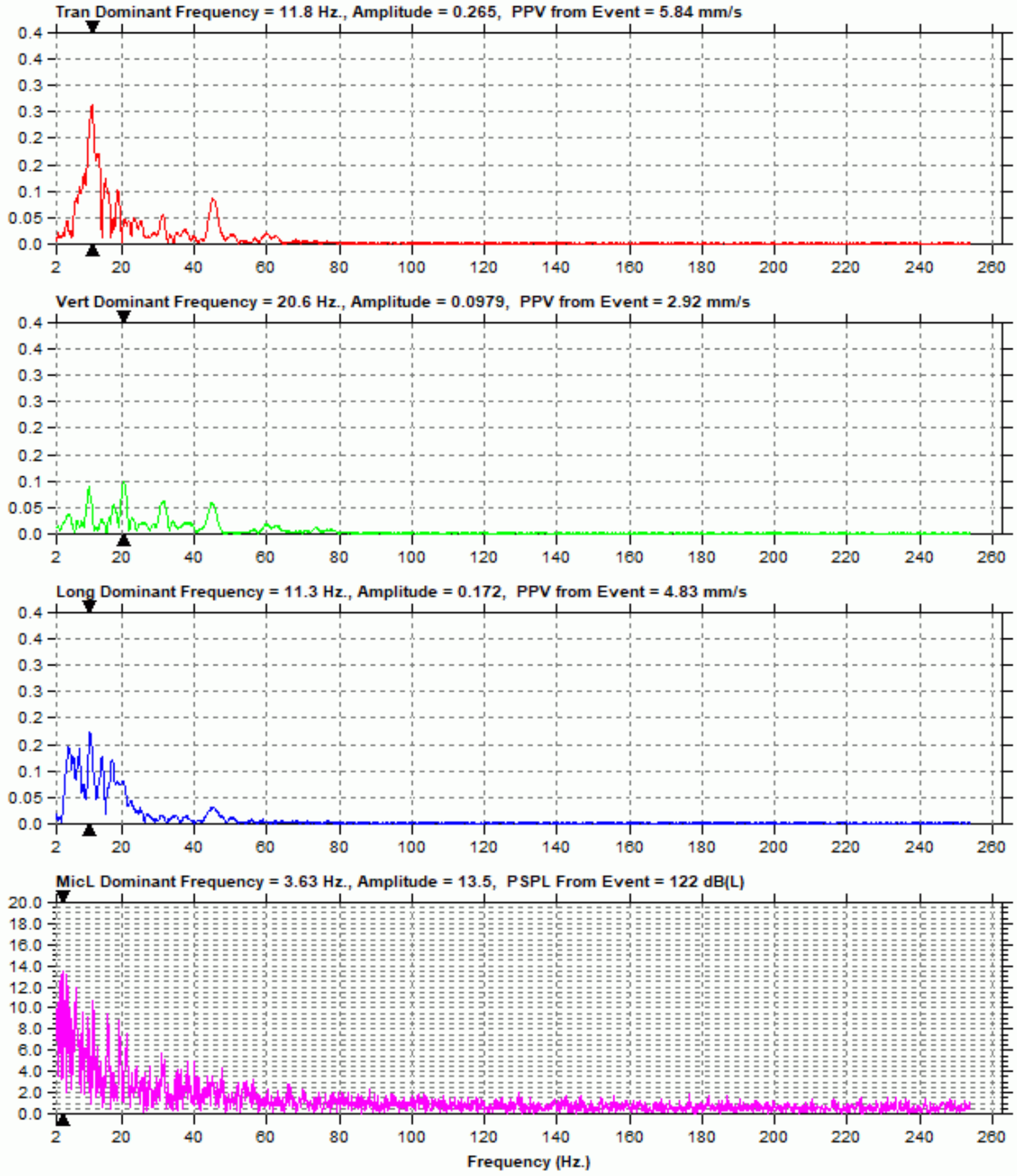
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 16, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:53:22 June 1, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHF3.0Y0W

Post Event Notes

Extended Notes

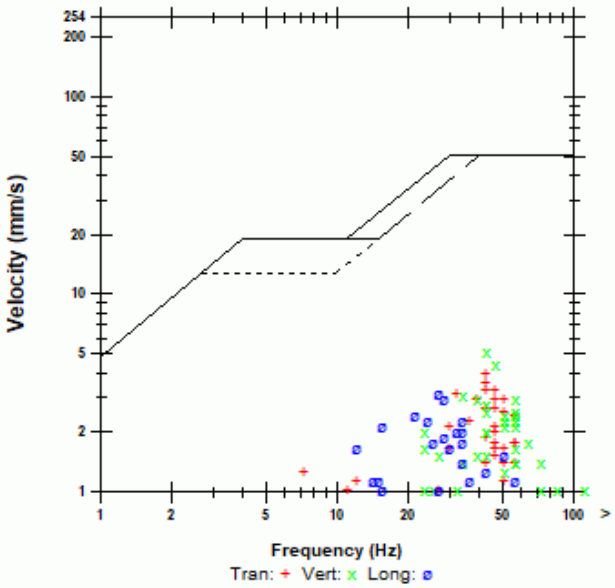
Combo Mode June 1, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

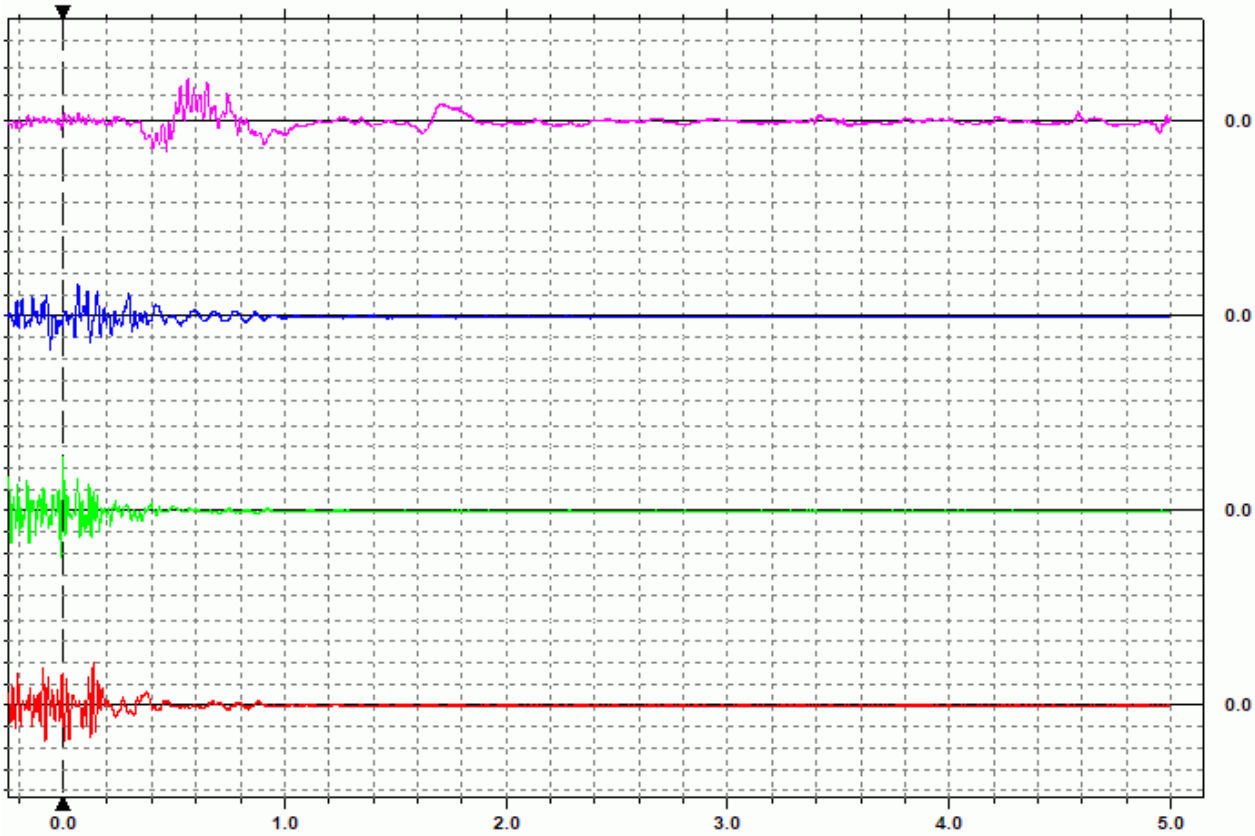
Microphone	Linear Weighting
PSPL	118.2 dB(L) at 0.563 sec.
ZC Freq	3.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.94	5.08	3.17	mm/s
ZC Freq	43	43	27	Hz
Time (Rel. to Trig)	0.136	0.000	-0.059	sec
Peak Acceleration	0.106	0.146	0.0663	g
Peak Displacement	0.0251	0.0174	0.0193	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.21 mm/s At 0.000 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 1, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:53:22 June 1, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHF3.0Y0W
Job Number	8177		

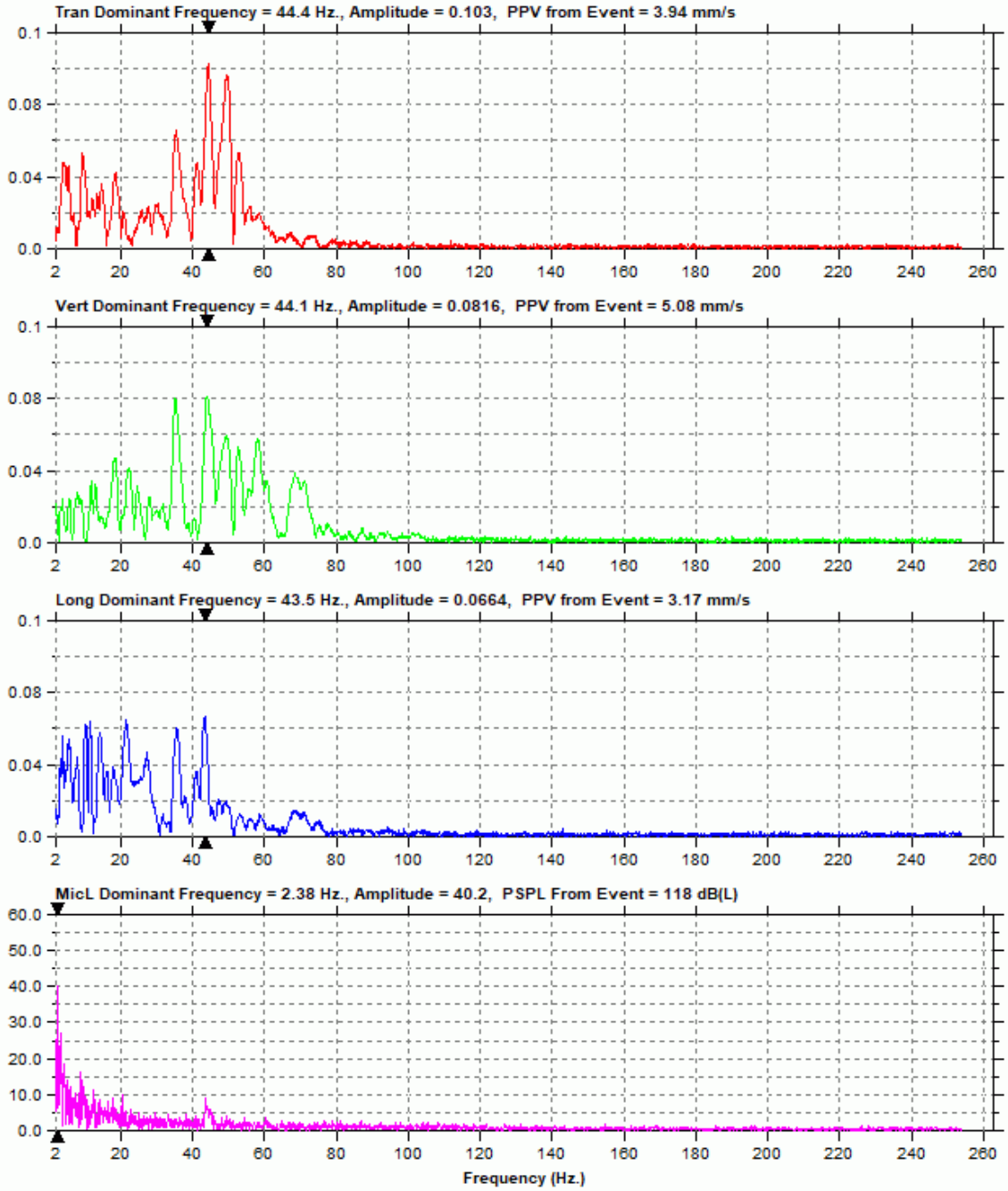
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 1, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 1, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:00:44 June 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHIN.580W

Post Event Notes

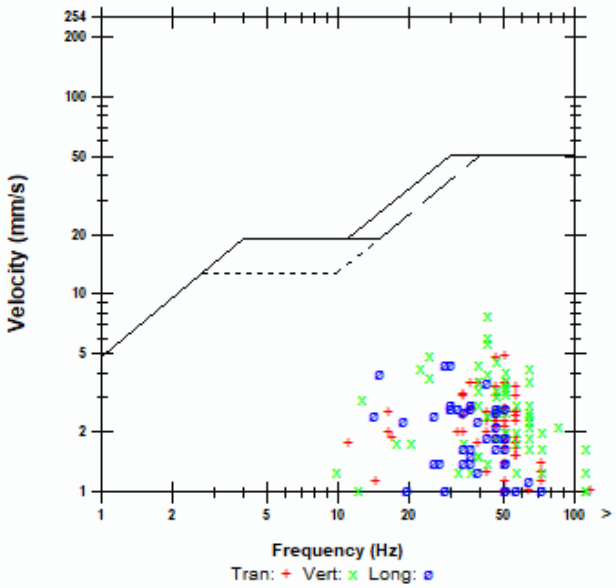
Extended Notes
Combo Mode June 3, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

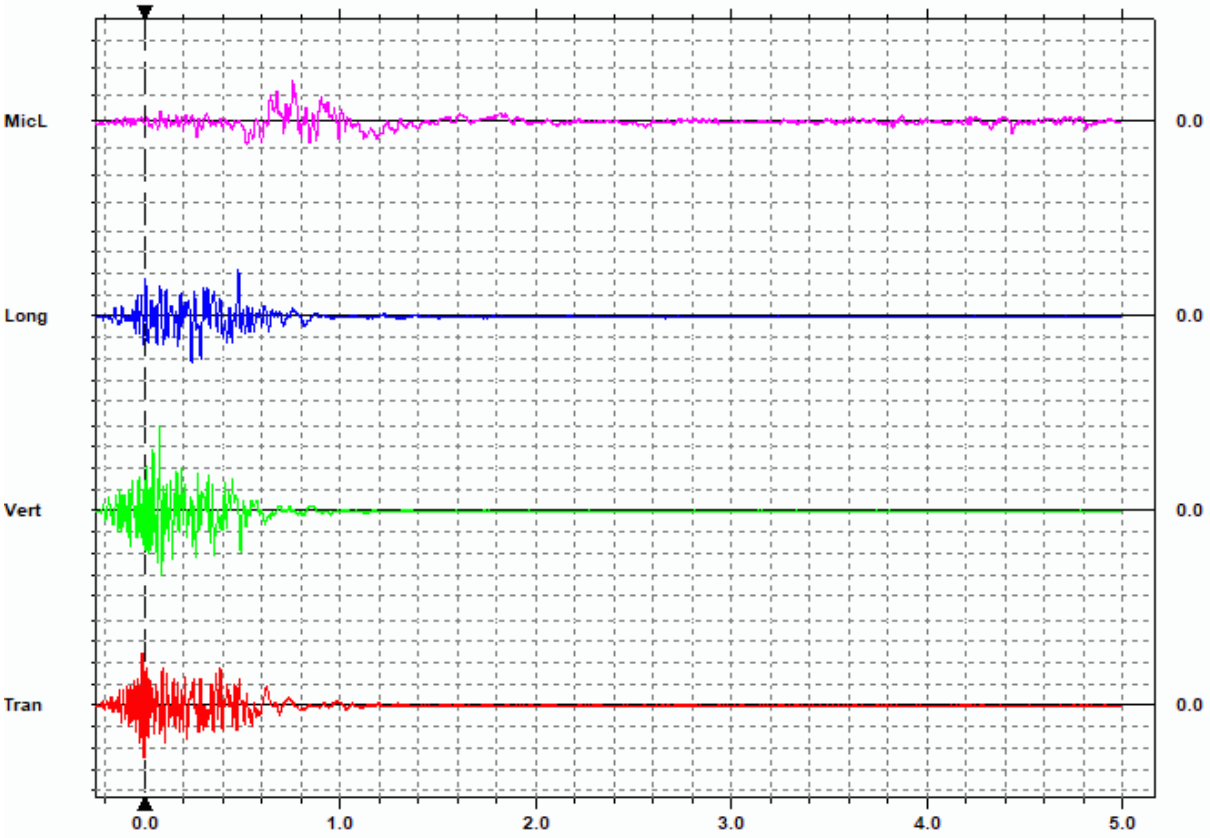
Microphone	Linear Weighting
PSPL	117.8 dB(L) at 0.759 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	7.87	4.44	mm/s
ZC Freq	51	43	30	Hz
Time (Rel. to Trig)	0.000	0.078	0.242	sec
Peak Acceleration	0.159	0.199	0.0928	g
Peak Displacement	0.0215	0.0290	0.0310	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.48 mm/s At 0.078 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:00:44 June 3, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHIN.580W
Job Number	8177		

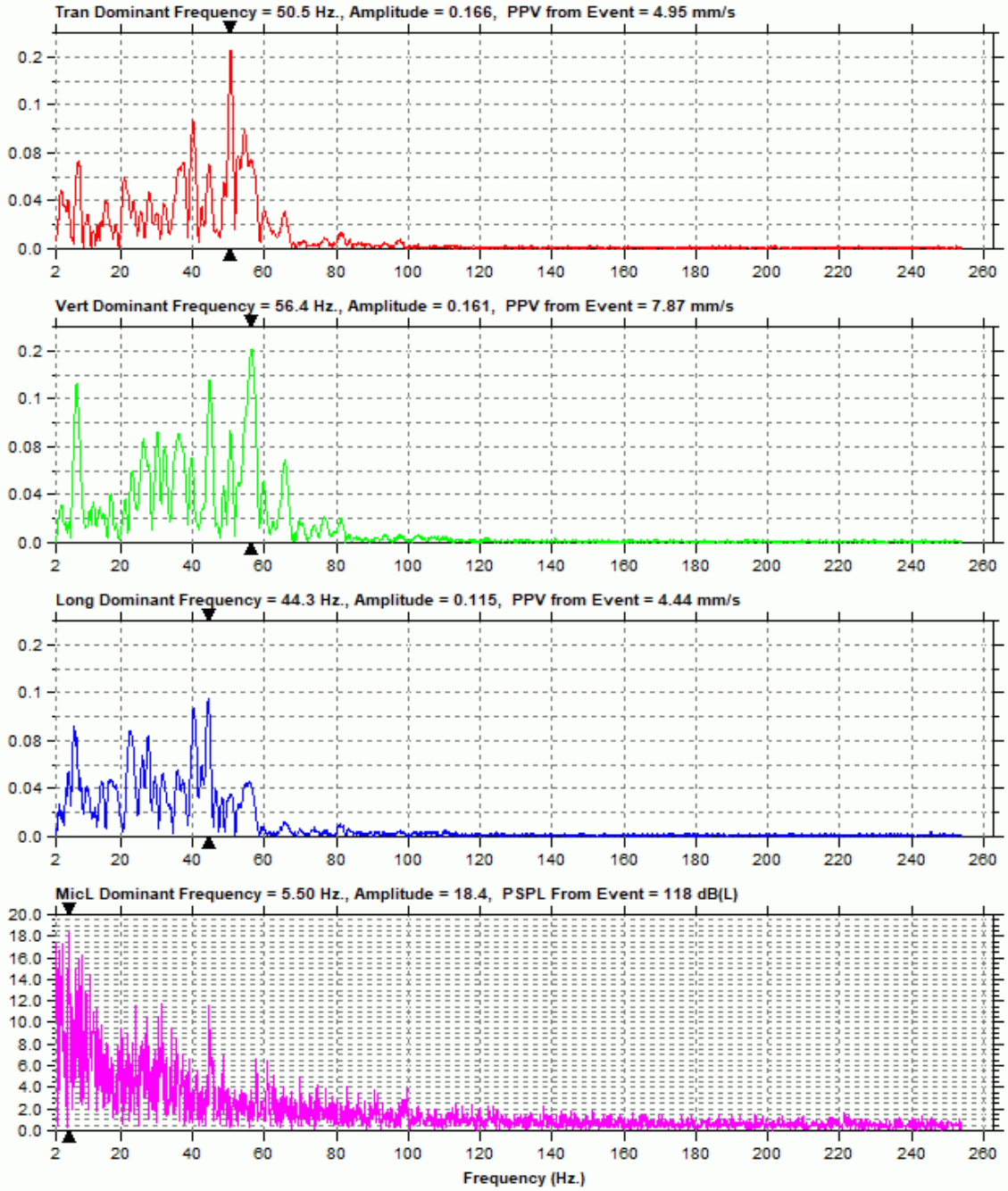
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 3, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:50:53 June 5, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHMC.0T0W

Post Event Notes

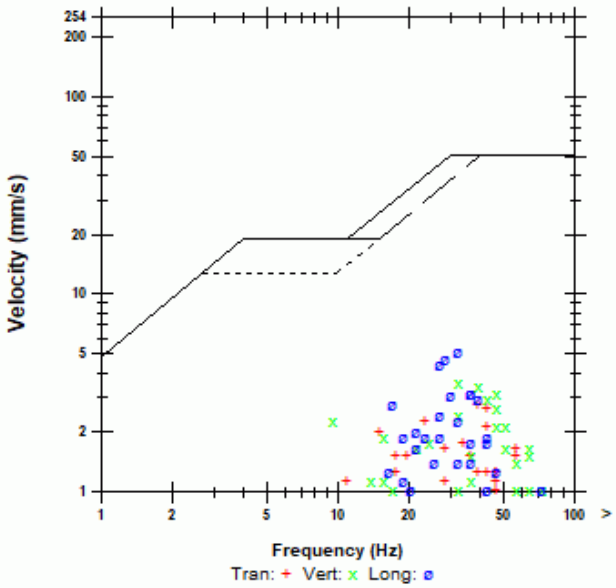
Extended Notes
Combo Mode June 5, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

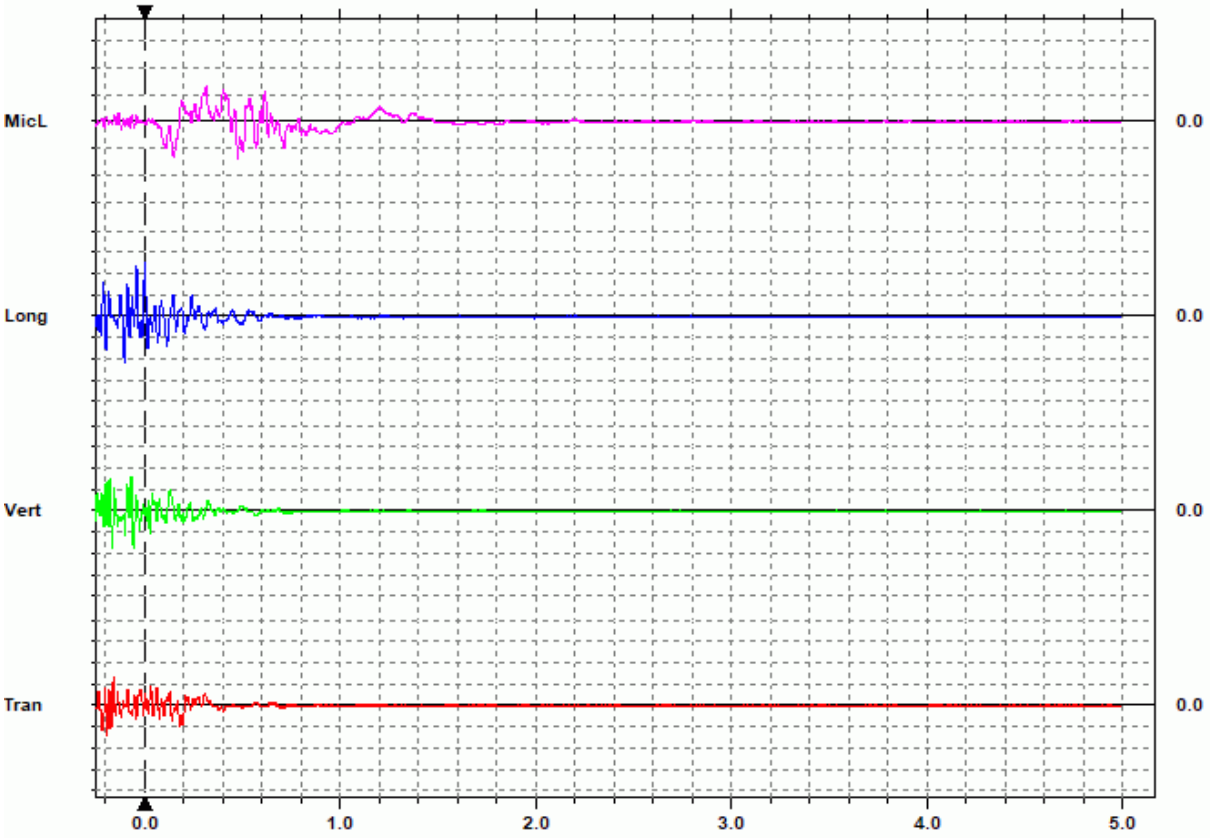
Microphone	Linear Weighting
PSPL	116.9 dB(L) at 0.475 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.79	3.56	5.08	mm/s
ZC Freq	39	32	32	Hz
Time (Rel. to Trig)	-0.192	-0.058	0.000	sec
Peak Acceleration	0.0795	0.106	0.0928	g
Peak Displacement	0.0224	0.0236	0.0257	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.16 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 5, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:50:53 June 5, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHMC.0T0W
Job Number	8177		

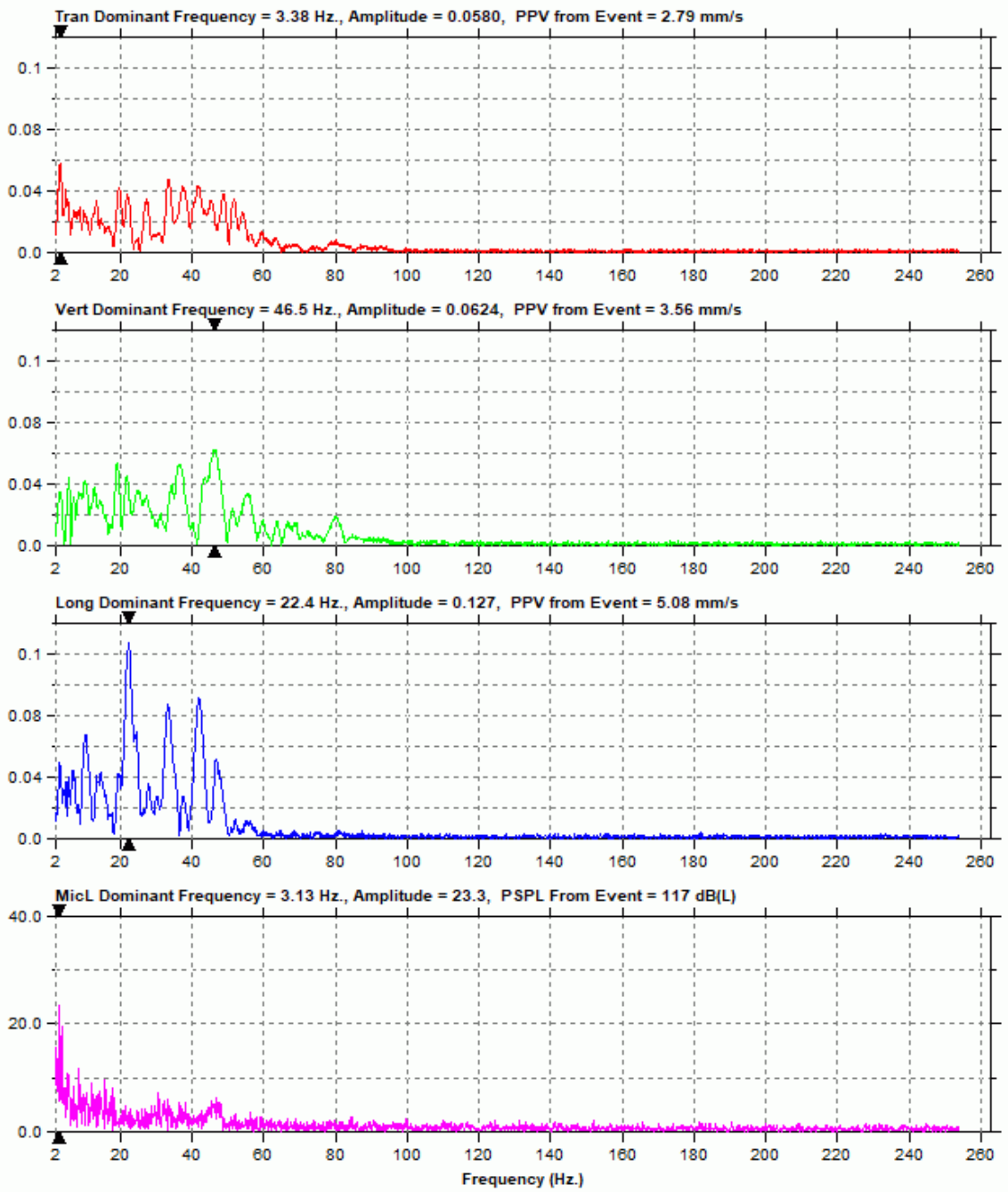
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 5, 2020 05:16:49
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 5, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:24:52 June 6, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHO5.HG0W

Post Event Notes

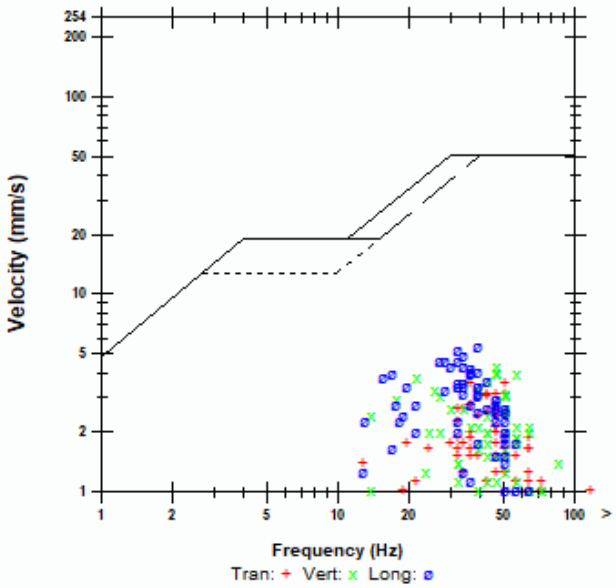
Extended Notes
Combo Mode June 6, 2020 05:19:05
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

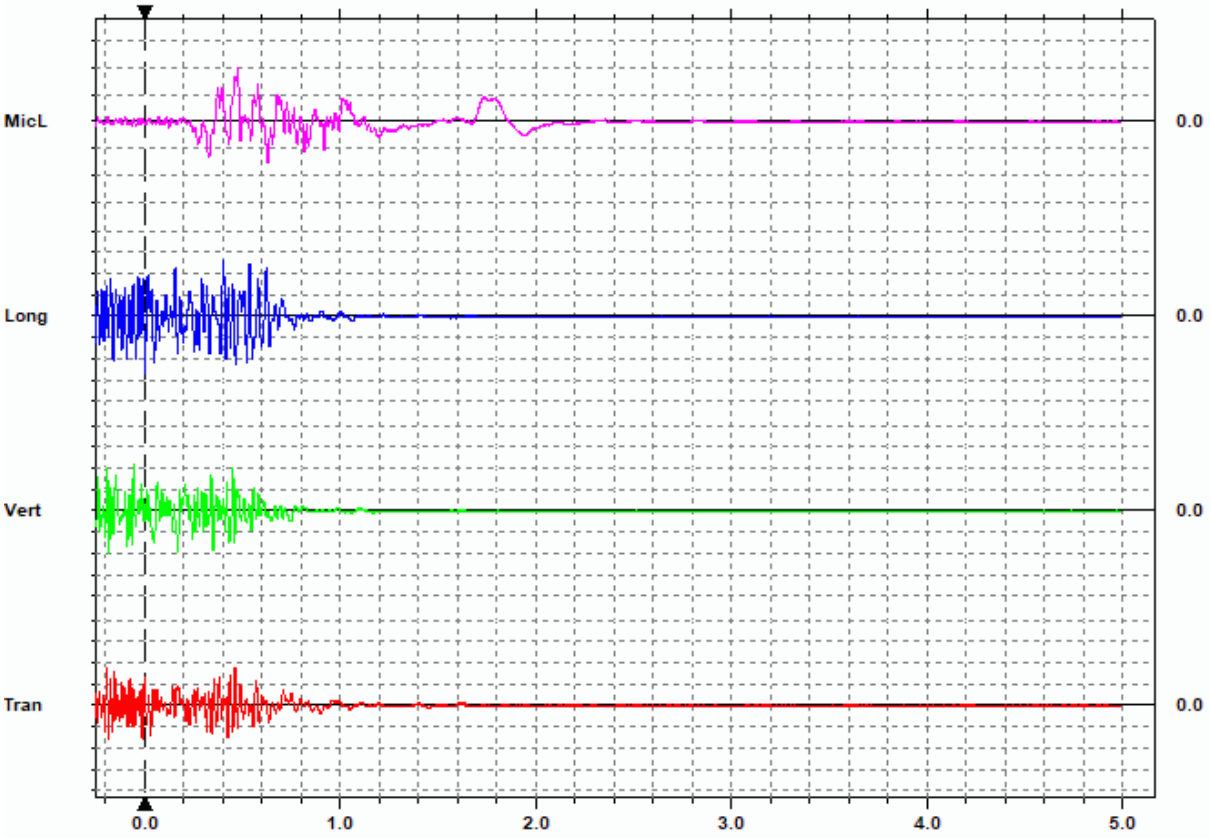
Microphone	Linear Weighting
PSPL	119.9 dB(L) at 0.475 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.56	4.32	5.46	mm/s
ZC Freq	51	47	39	Hz
Time (Rel. to Trig)	-0.194	-0.057	0.001	sec
Peak Acceleration	0.119	0.146	0.133	g
Peak Displacement	0.0164	0.0265	0.0350	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.85 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 6, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:24:52 June 6, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHO5.HG0W
Job Number	8177		

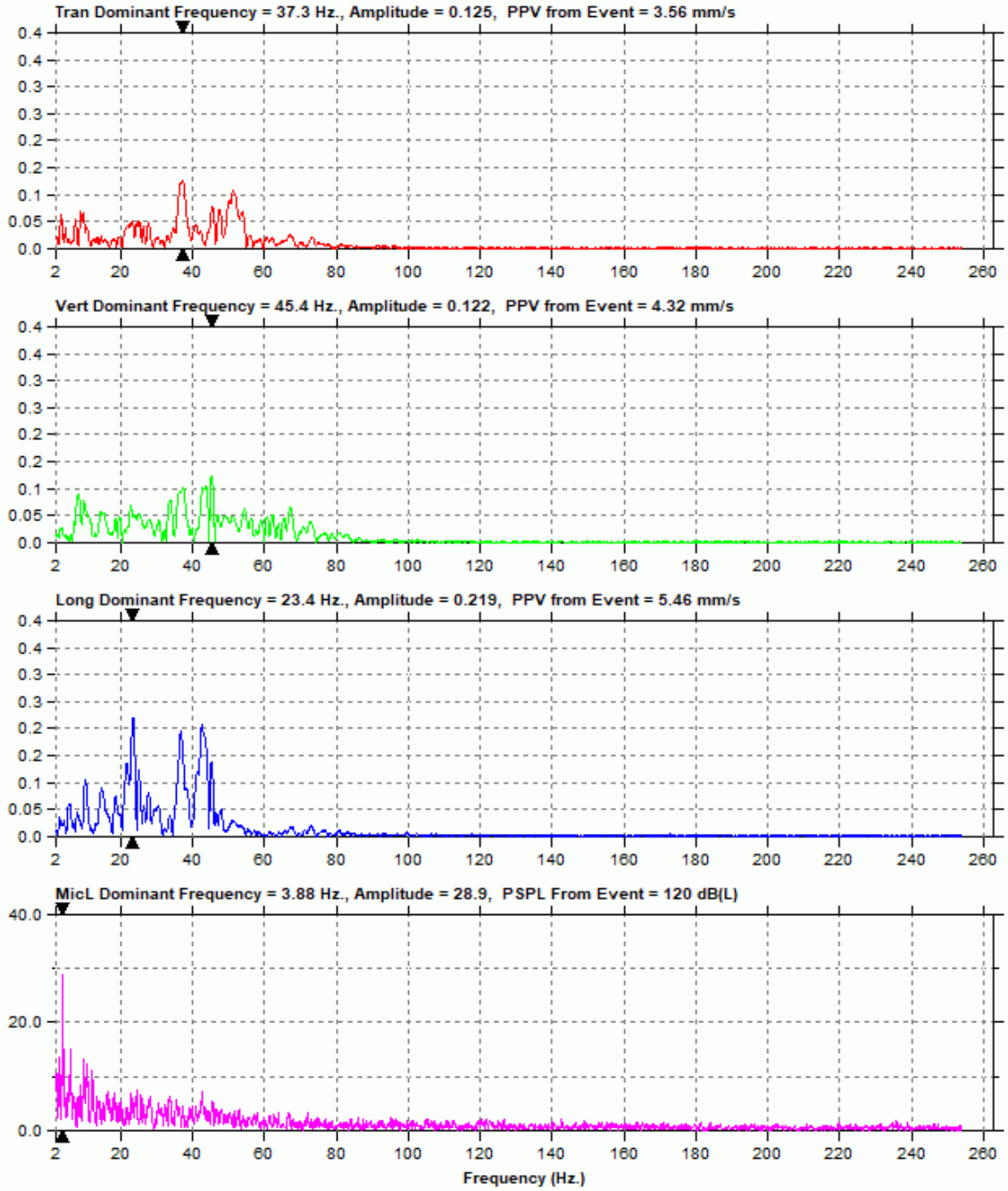
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 6, 2020 05:19:05
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 6, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:28:39 June 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHRU.ZR0W

Post Event Notes

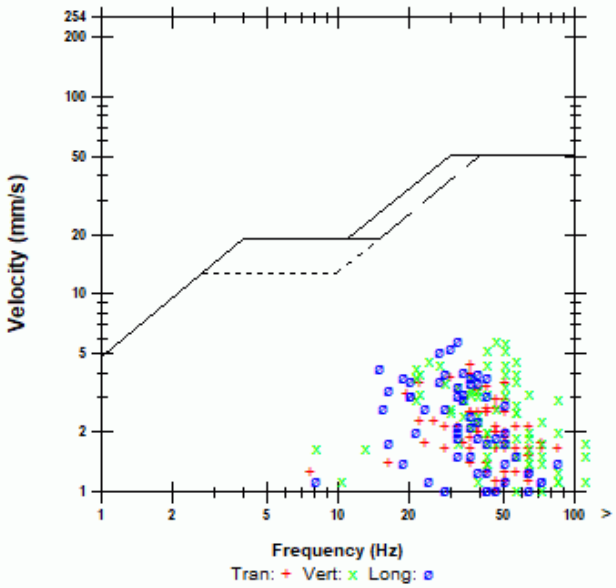
Extended Notes
Combo Mode June 8, 2020 05:19:46
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

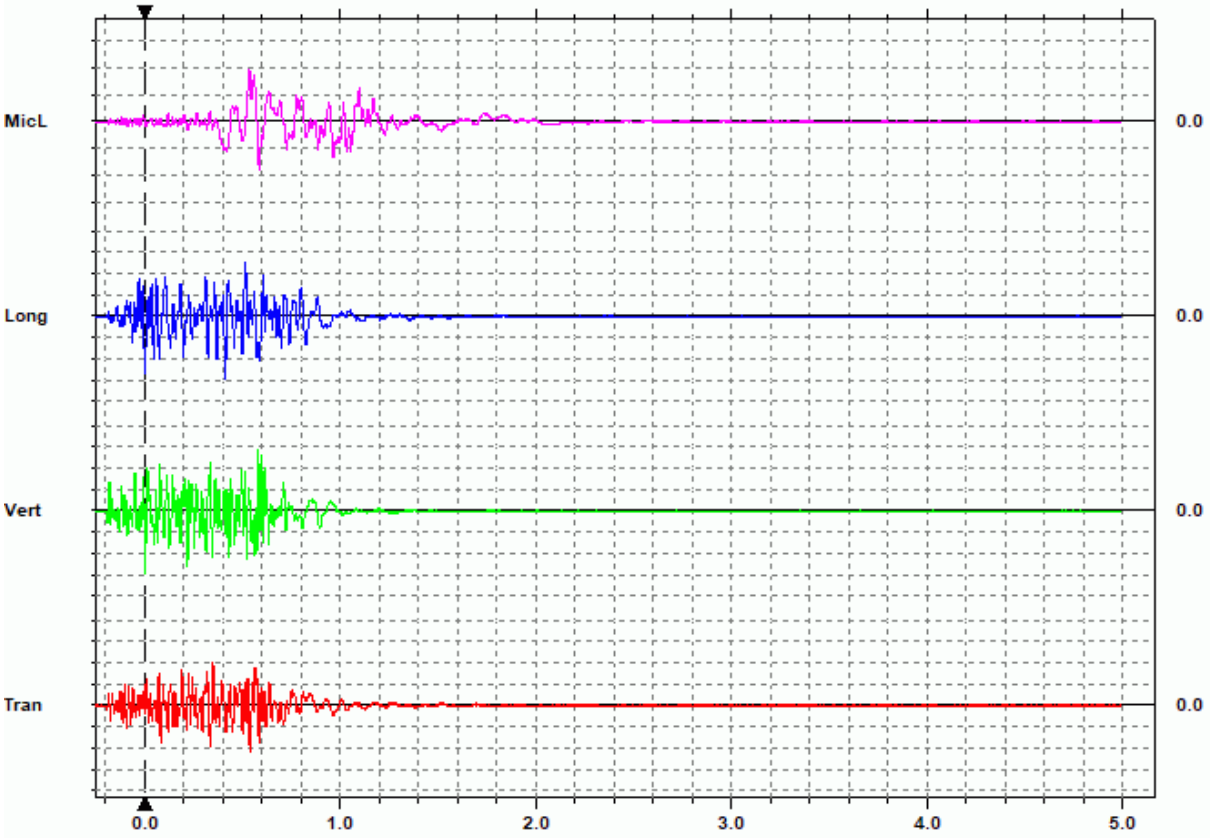
Microphone	Linear Weighting
PSPL	119.7 dB(L) at 0.535 sec.
ZC Freq	8.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.44	5.84	5.84	mm/s
ZC Freq	37	47	32	Hz
Time (Rel. to Trig)	0.539	0.002	0.411	sec
Peak Acceleration	0.106	0.186	0.119	g
Peak Displacement	0.0253	0.0260	0.0463	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.83 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:28:39 June 8, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHRU.ZR0W
Job Number	8177		

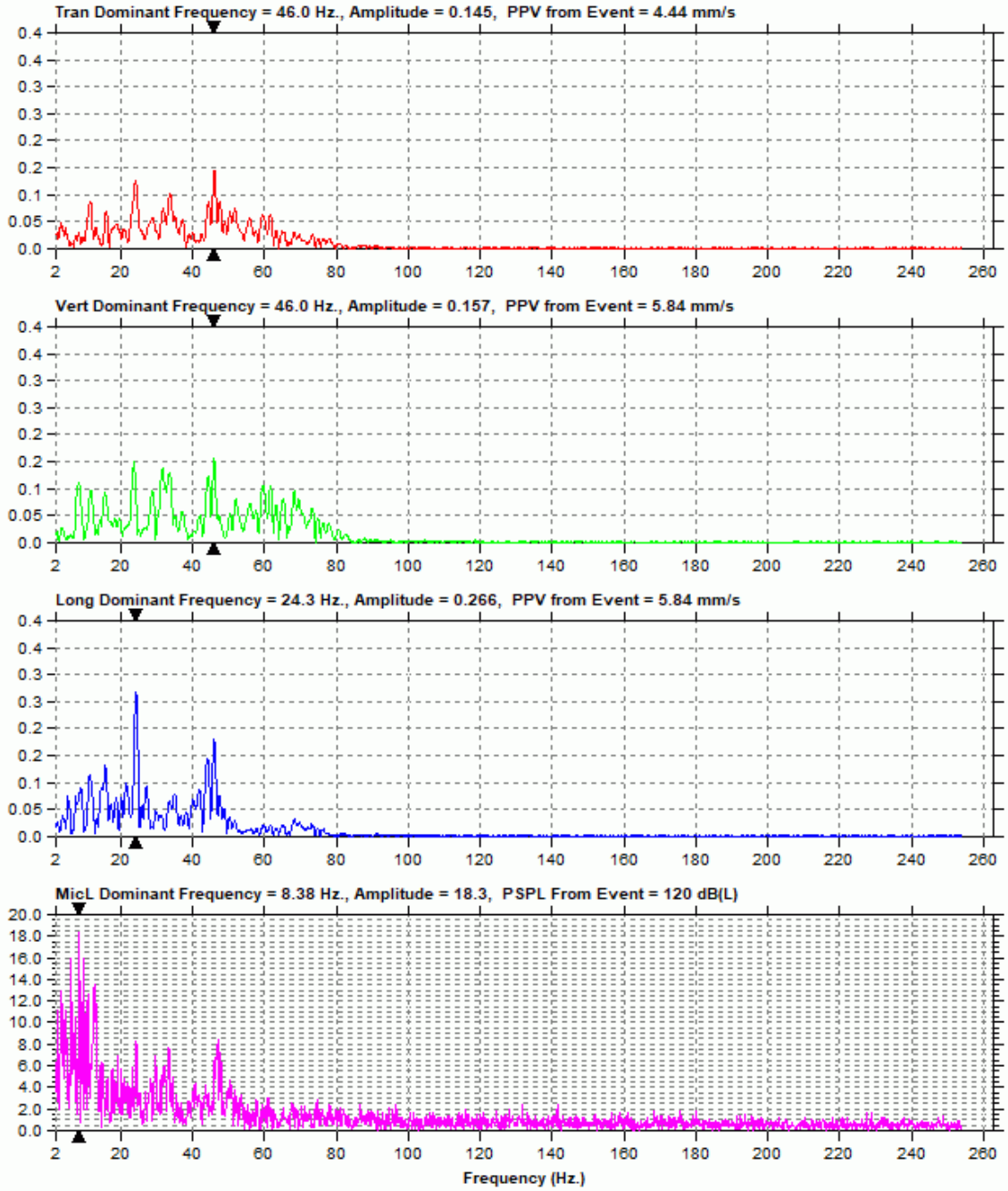
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 8, 2020 05:19:46
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:52:04 June 9, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHTQ.QS0W

Post Event Notes

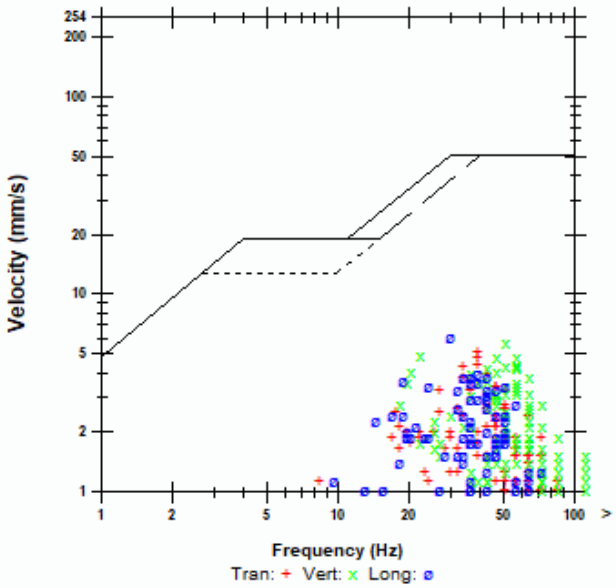
Extended Notes
Combo Mode June 9, 2020 05:16:46
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

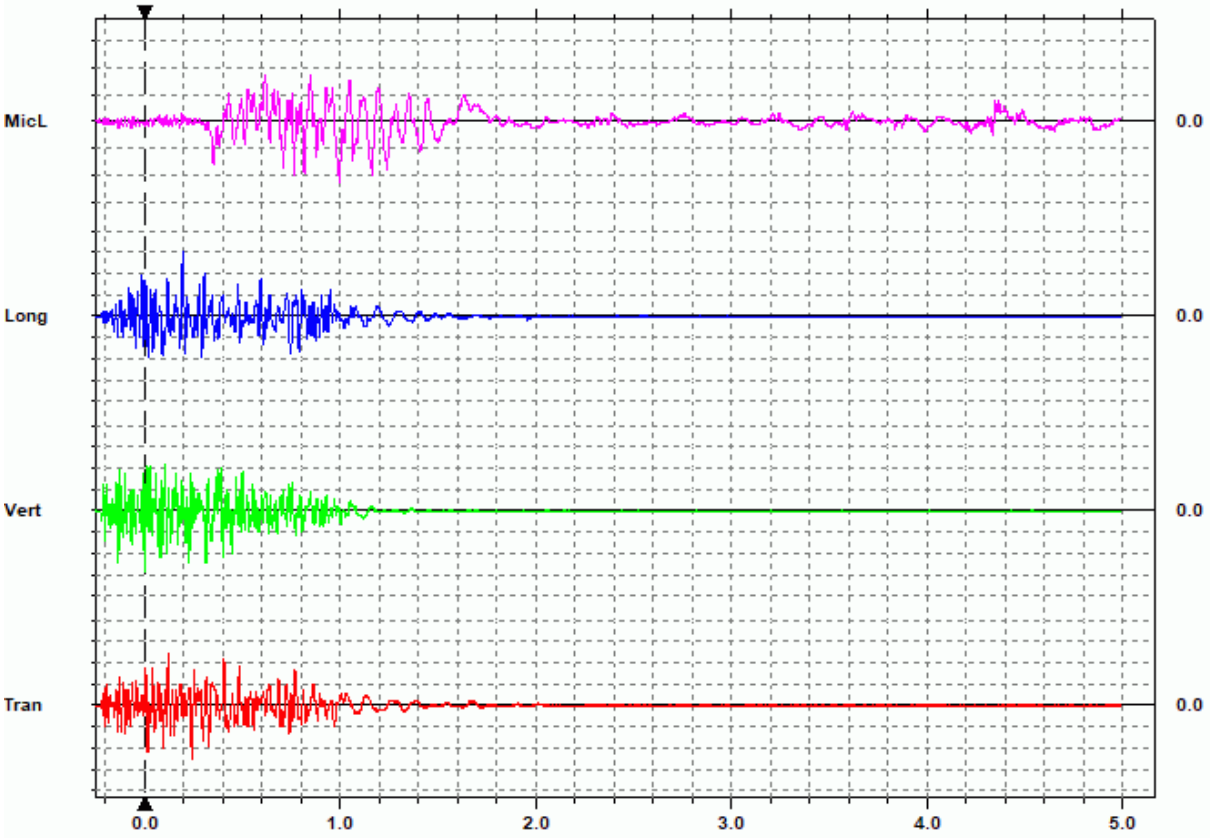
Microphone	Linear Weighting
PSPL	121.0 dB(L) at 0.998 sec.
ZC Freq	9.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	5.71	6.10	mm/s
ZC Freq	39	51	30	Hz
Time (Rel. to Trig)	0.243	0.001	0.197	sec
Peak Acceleration	0.133	0.172	0.133	g
Peak Displacement	0.0216	0.0285	0.0309	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.17 mm/s At 0.197 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 9, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:52:04 June 9, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHTQ.QS0W
Job Number	8177		

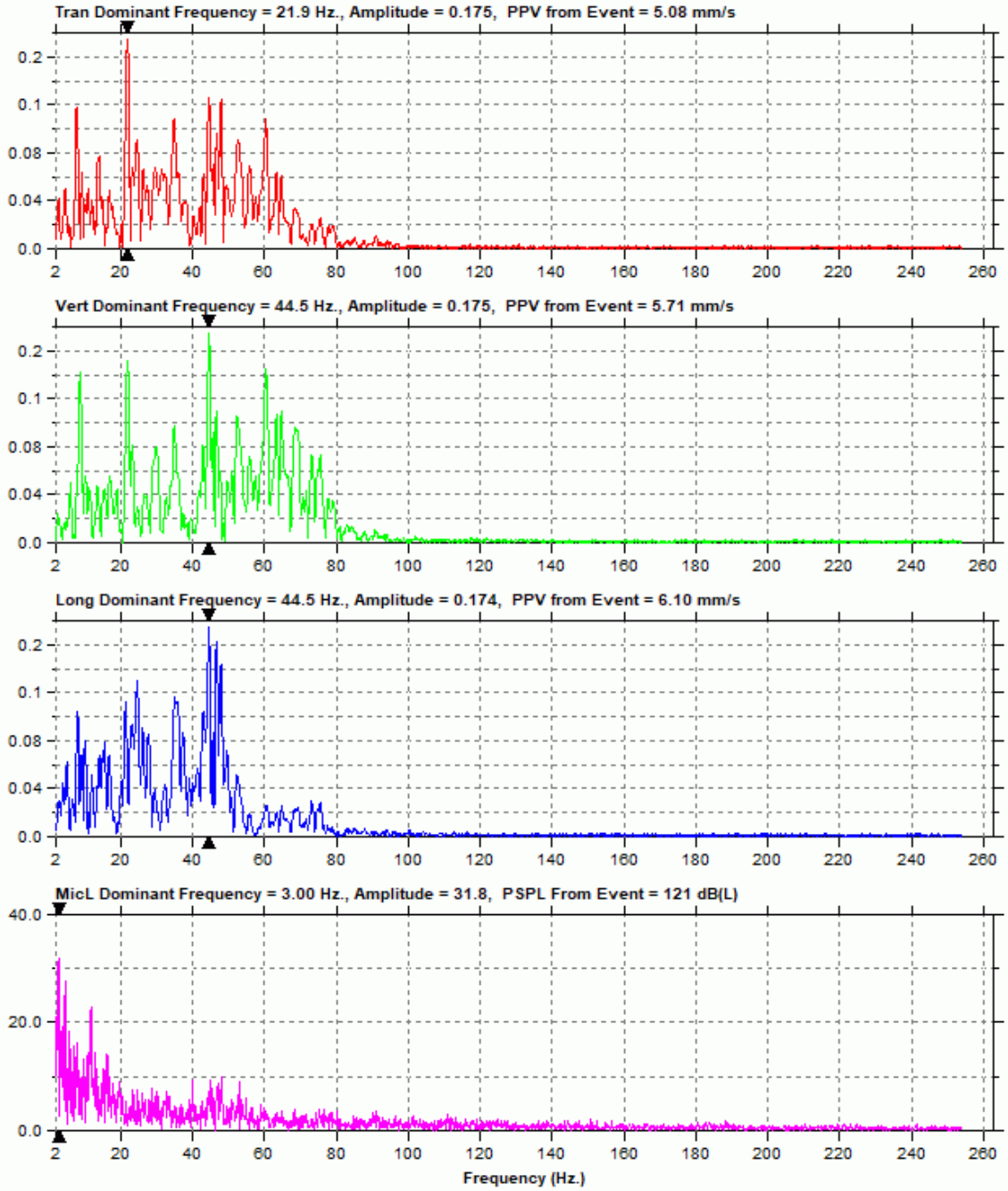
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 9, 2020 05:16:46
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 9, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:19:57 June 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IHZ9.990W

Post Event Notes

Extended Notes

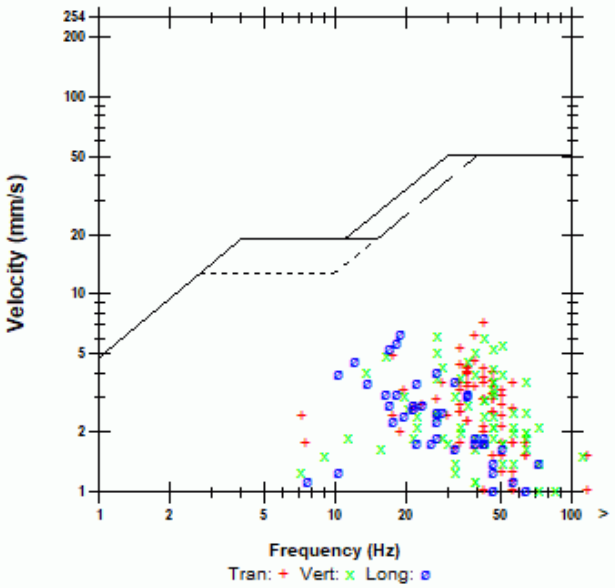
Combo Mode June 12, 2020 05:30:14
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

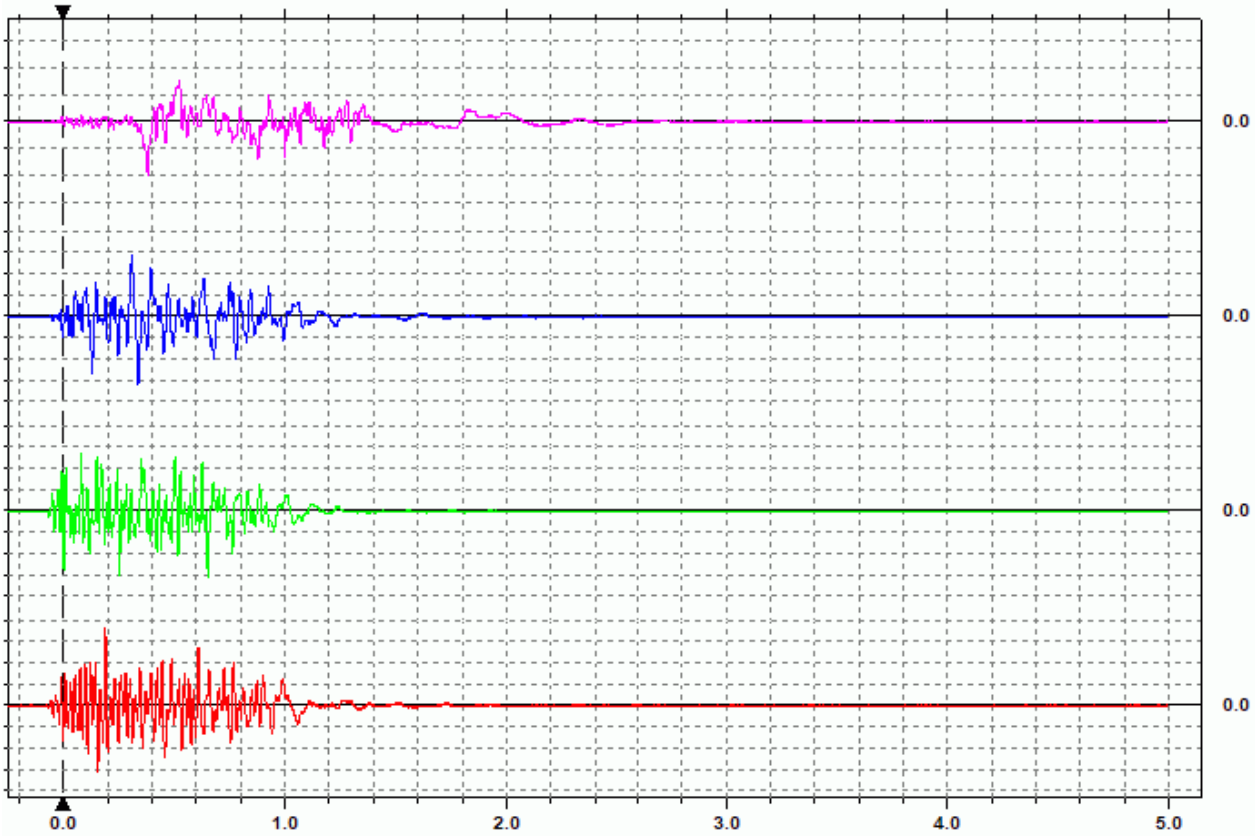
Microphone	Linear Weighting
PSPL	120.0 dB(L) at 0.380 sec.
ZC Freq	5.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.24	6.22	6.35	mm/s
ZC Freq	43	27	19	Hz
Time (Rel. to Trig)	0.188	0.651	0.337	sec
Peak Acceleration	0.186	0.172	0.0928	g
Peak Displacement	0.0358	0.0448	0.0465	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.72 mm/s At 0.188 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 13, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:19:57 June 12, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IHZ9.990W
Job Number	8177		

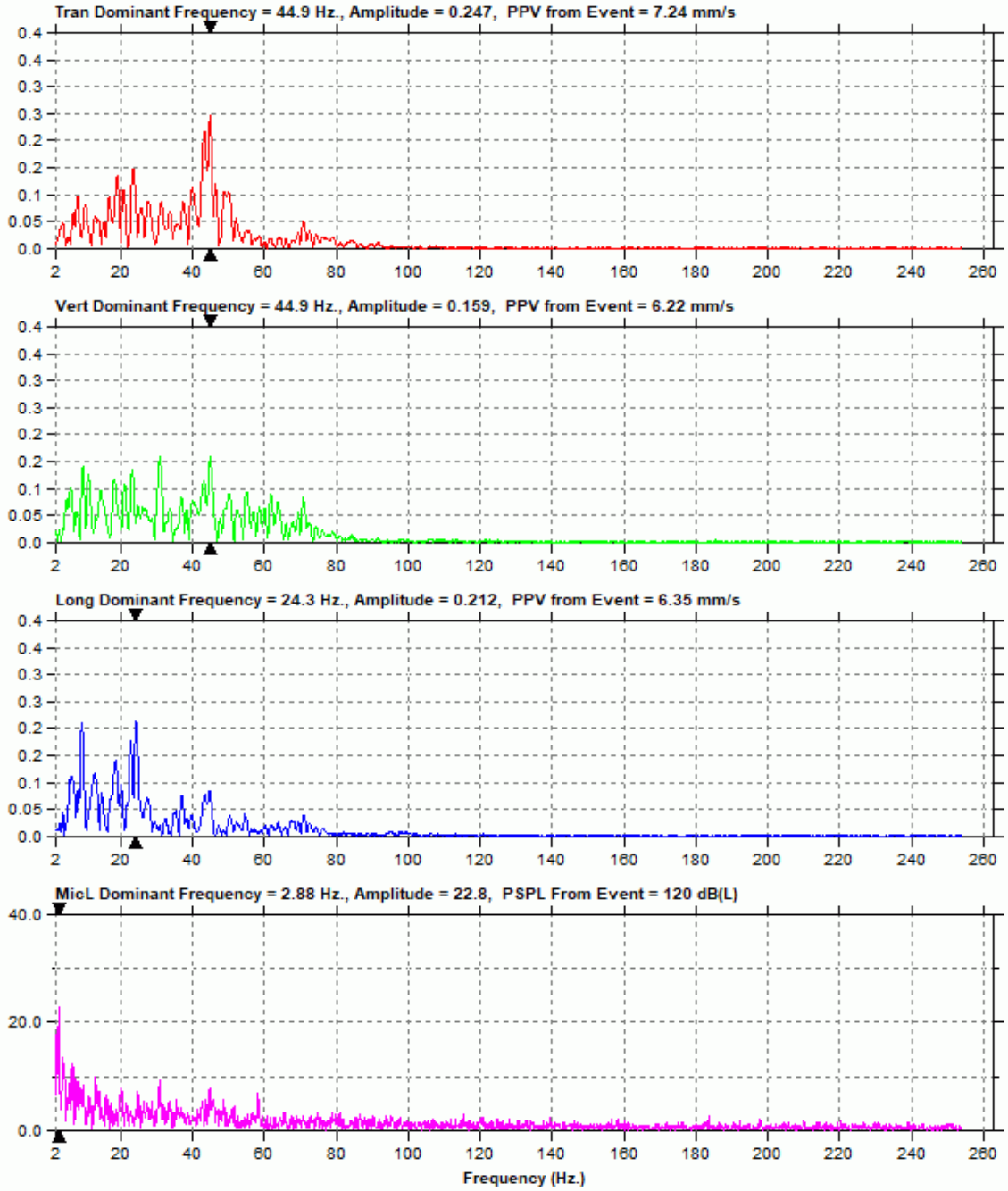
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 12, 2020 05:30:14
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 13, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:54:38 June 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028II4U.V20W

Post Event Notes

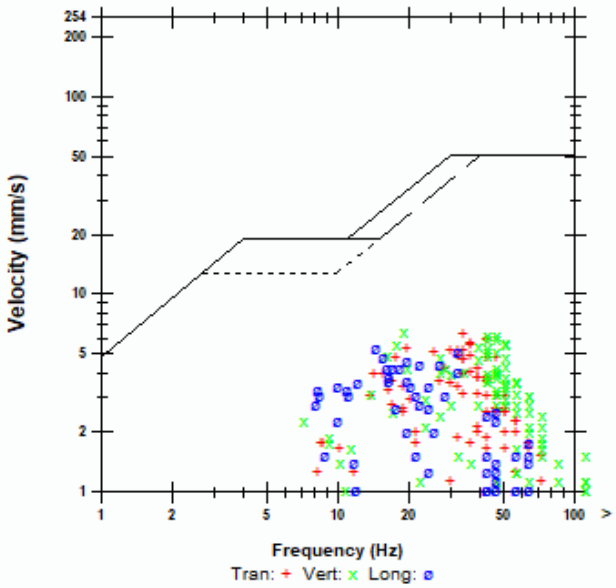
Extended Notes
Combo Mode June 15, 2020 05:17:29
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

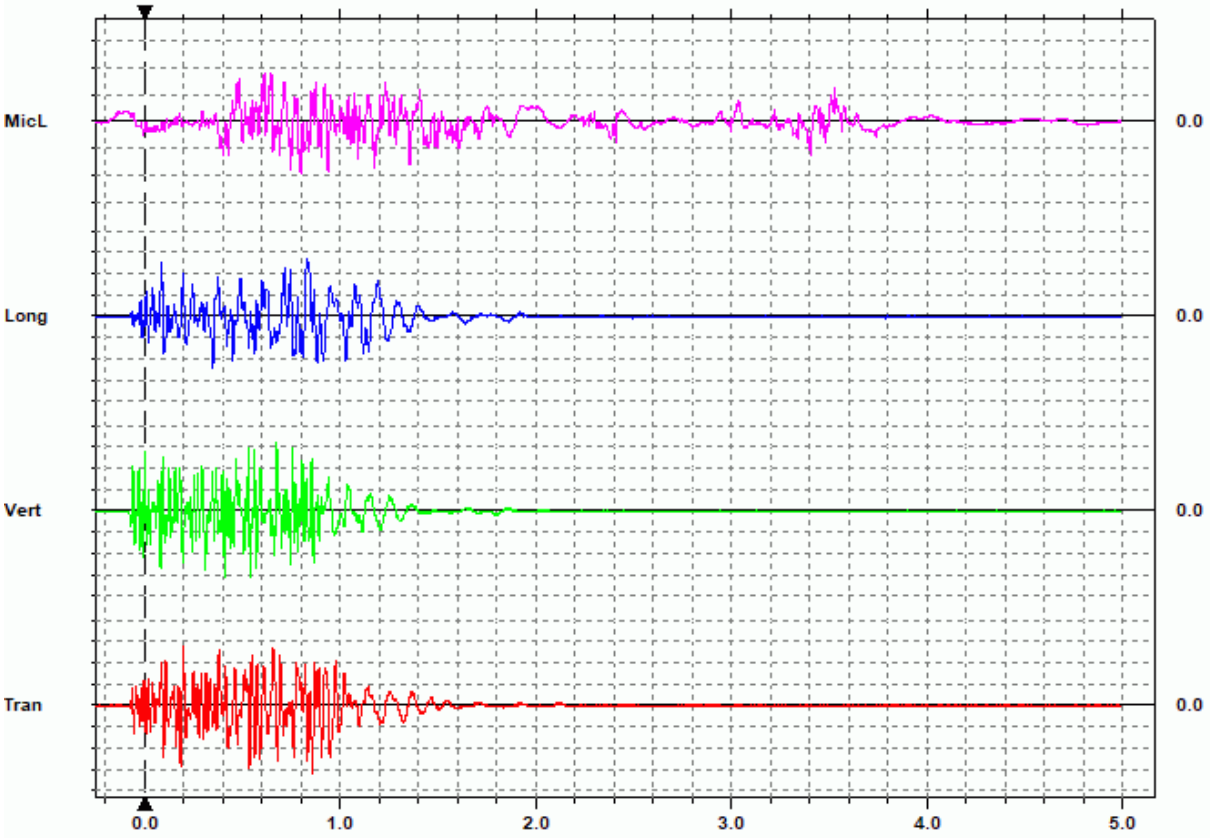
Microphone	Linear Weighting
PSPL	119.7 dB(L) at 0.799 sec.
ZC Freq	21 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.35	6.48	5.33	mm/s
ZC Freq	34	19	15	Hz
Time (Rel. to Trig)	0.858	0.675	0.831	sec
Peak Acceleration	0.159	0.212	0.119	g
Peak Displacement	0.0429	0.0427	0.0649	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.99 mm/s At 0.197 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:54:38 June 15, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028II4U.V20W
Job Number	8177		

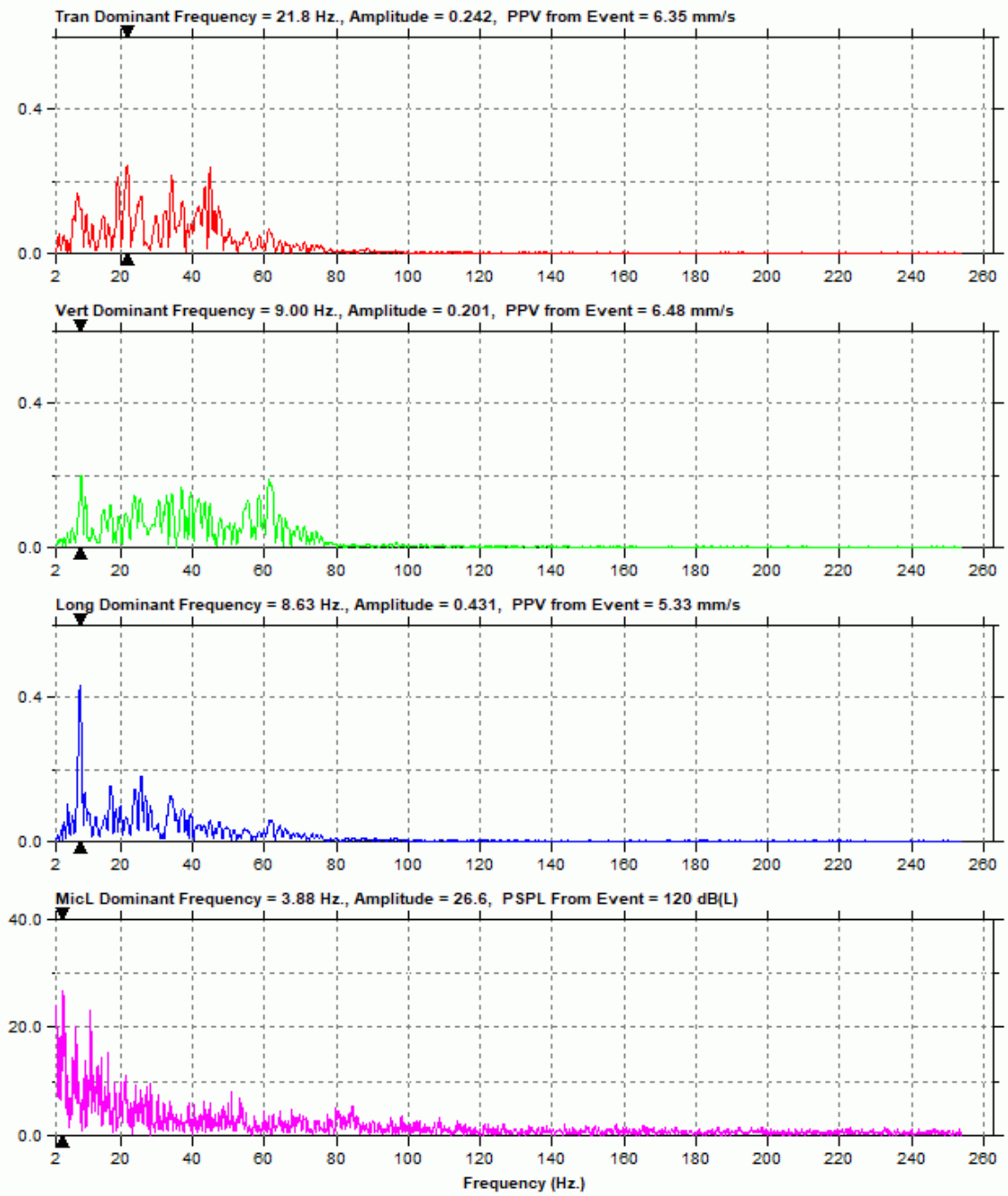
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 15, 2020 05:17:29
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 12:57:51 June 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028II6H.CF0W

Post Event Notes

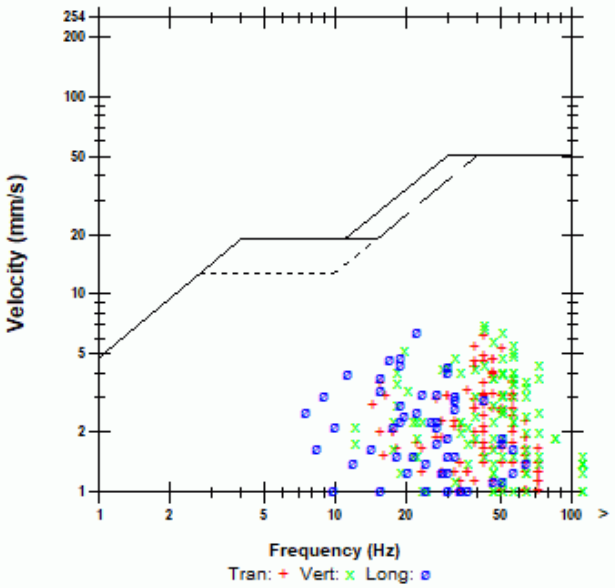
Extended Notes
Combo Mode June 16, 2020 05:19:02
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

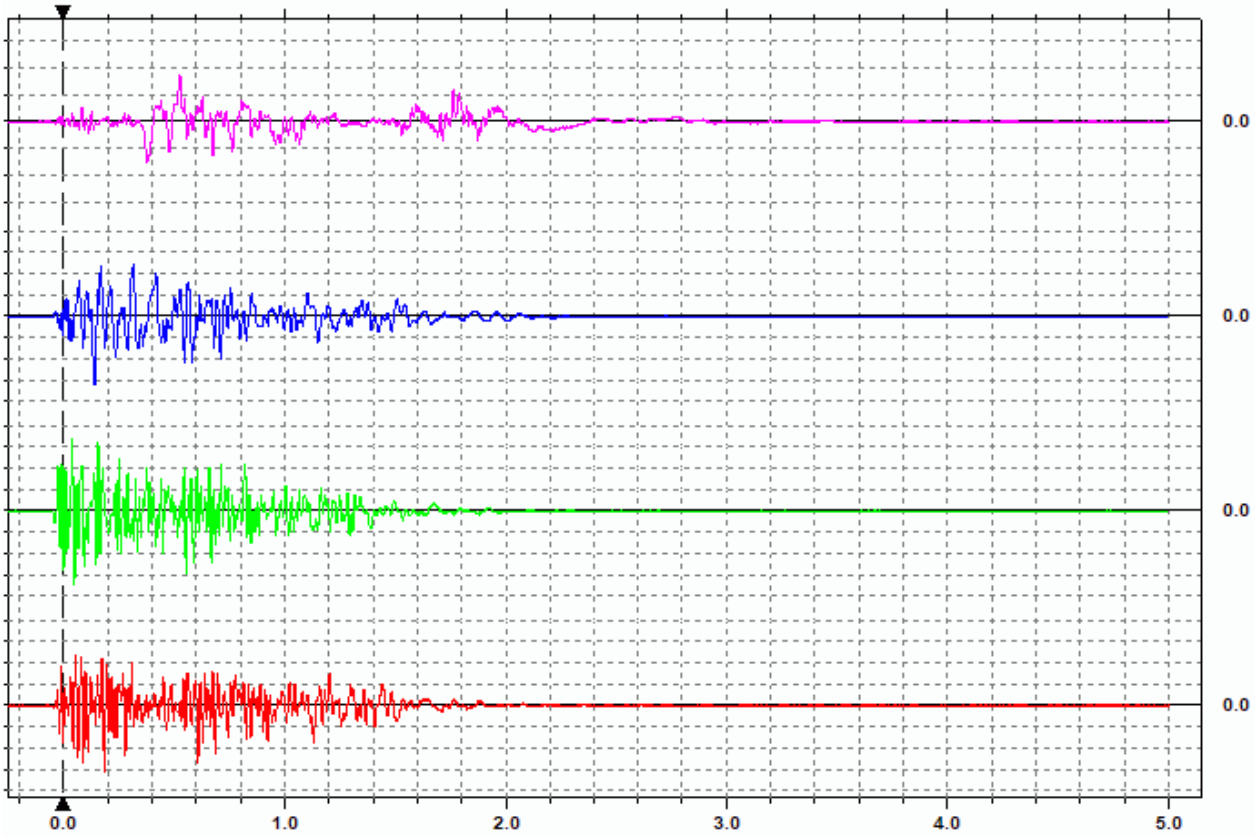
Microphone	Linear Weighting
PSPL	118.7 dB(L) at 0.526 sec.
ZC Freq	8.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.22	6.98	6.48	mm/s
ZC Freq	43	43	22	Hz
Time (Rel. to Trig)	0.185	0.050	0.140	sec
Peak Acceleration	0.172	0.199	0.106	g
Peak Displacement	0.0286	0.0310	0.0507	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.39 mm/s At 0.140 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 12:57:51 June 16, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028II6H.CF0W
Job Number	8177		

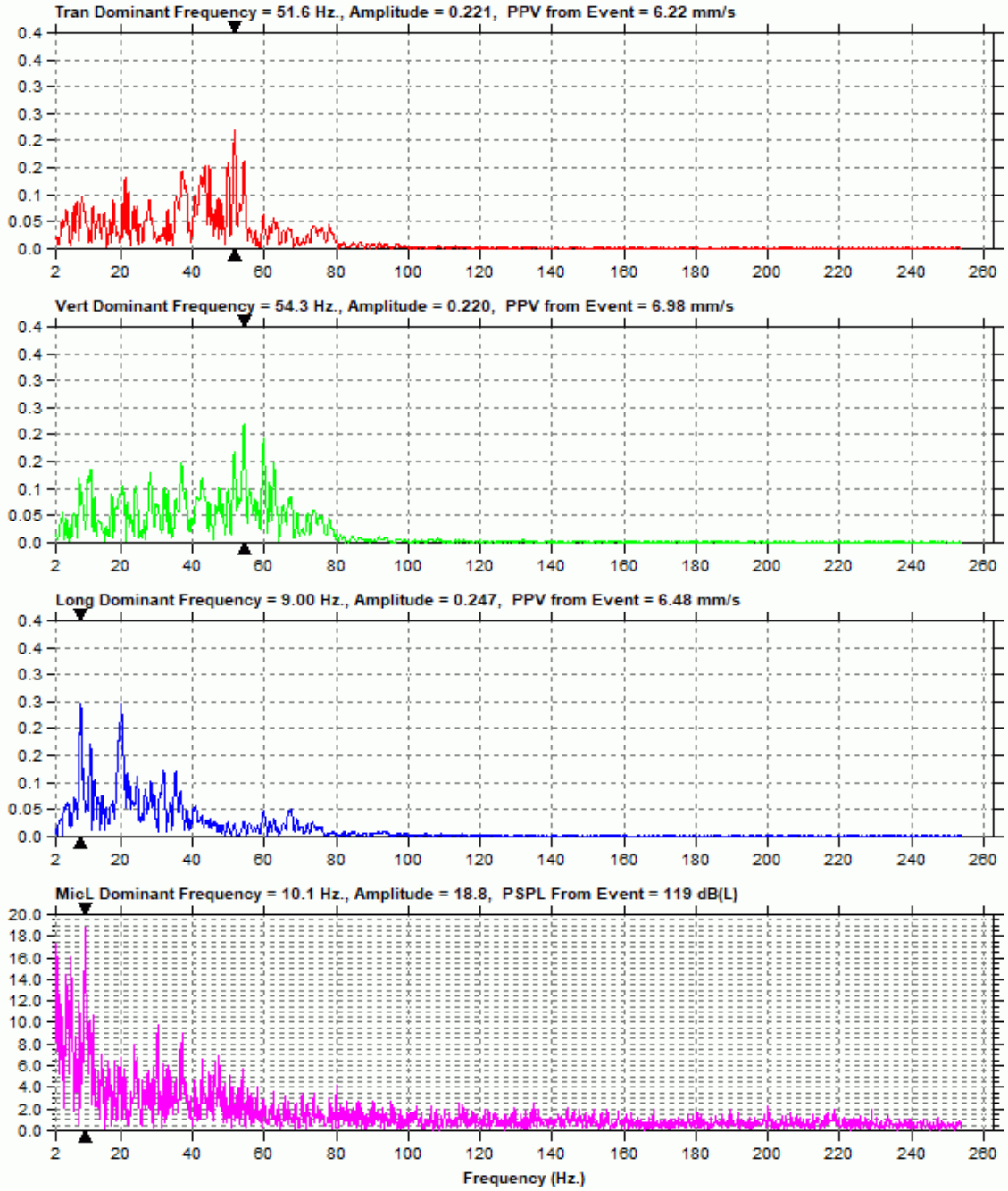
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 16, 2020 05:19:02
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Date/Time	Long At 15:52:28 June 9, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IHTQ.RG0W

Post Event Notes

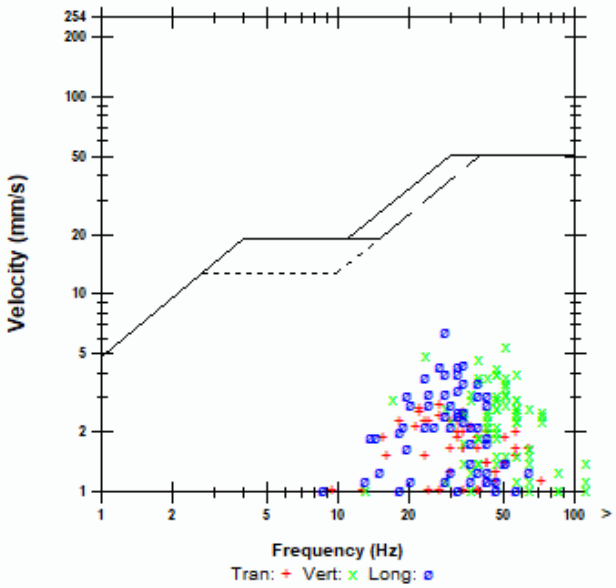
Extended Notes
Combo Mode June 9, 2020 05:19:37
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

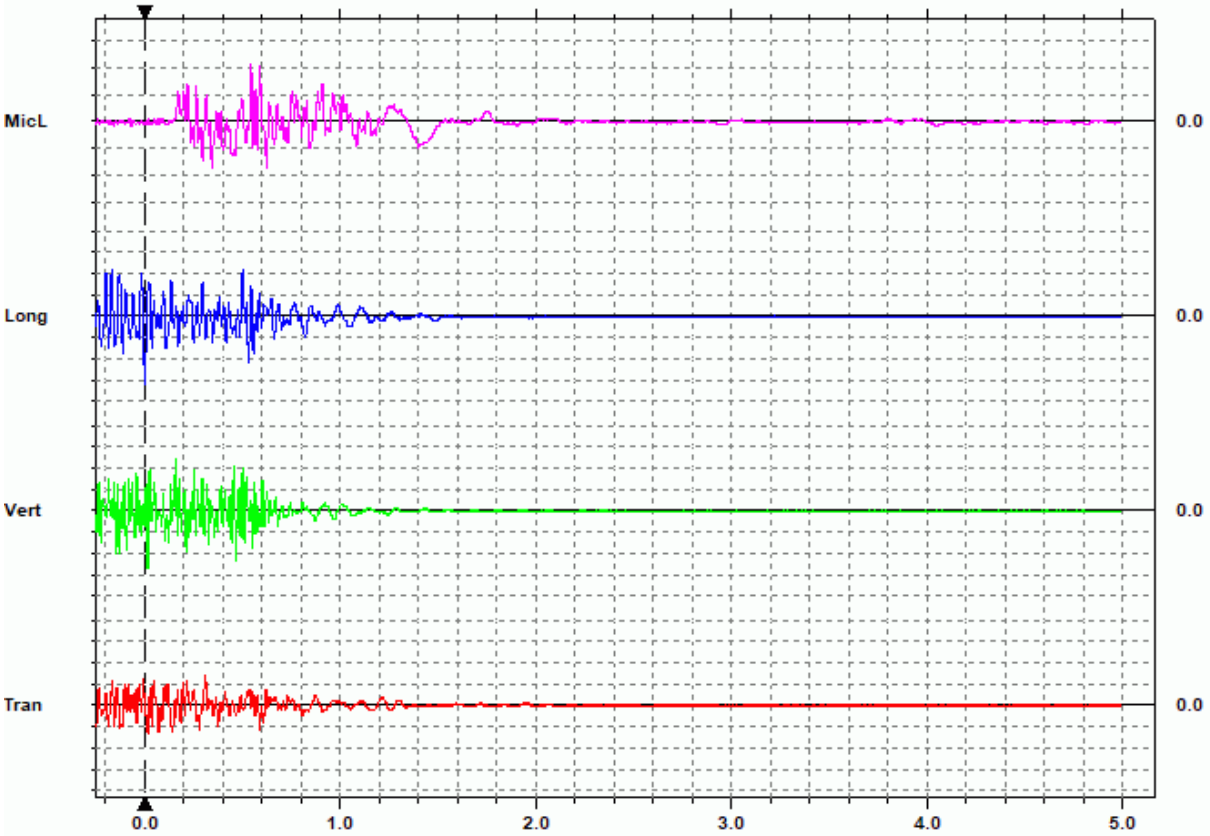
Microphone	Linear Weighting
PSPL	120.6 dB(L) at 0.546 sec.
ZC Freq	34 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.79	5.46	6.48	mm/s
ZC Freq	27	51	28	Hz
Time (Rel. to Trig)	0.311	0.018	0.003	sec
Peak Acceleration	0.0795	0.159	0.106	g
Peak Displacement	0.0195	0.0237	0.0329	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.58 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 9, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:52:28 June 9, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IHTQ.RG0W
Job Number	8177		

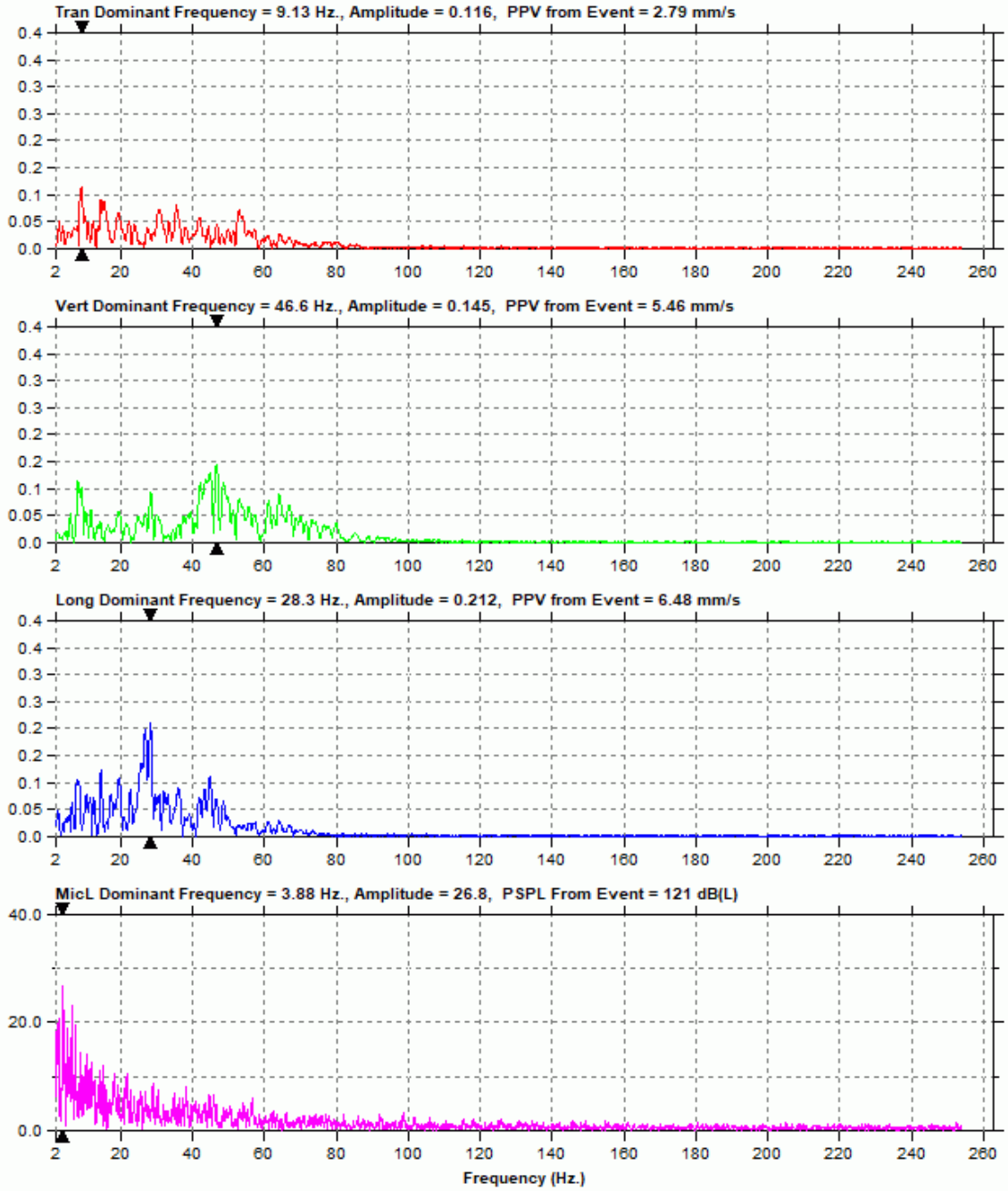
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 9, 2020 05:19:37
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 9, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:50:25 June 10, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043IHVL.C10W

Post Event Notes

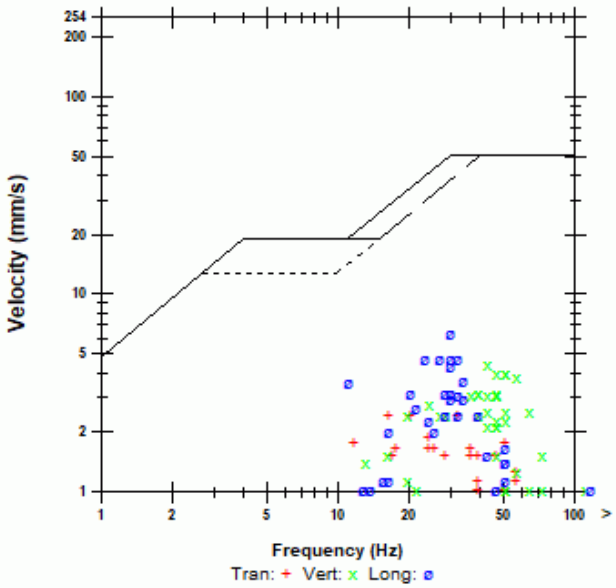
Extended Notes
Combo Mode June 10, 2020 11:40:39
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

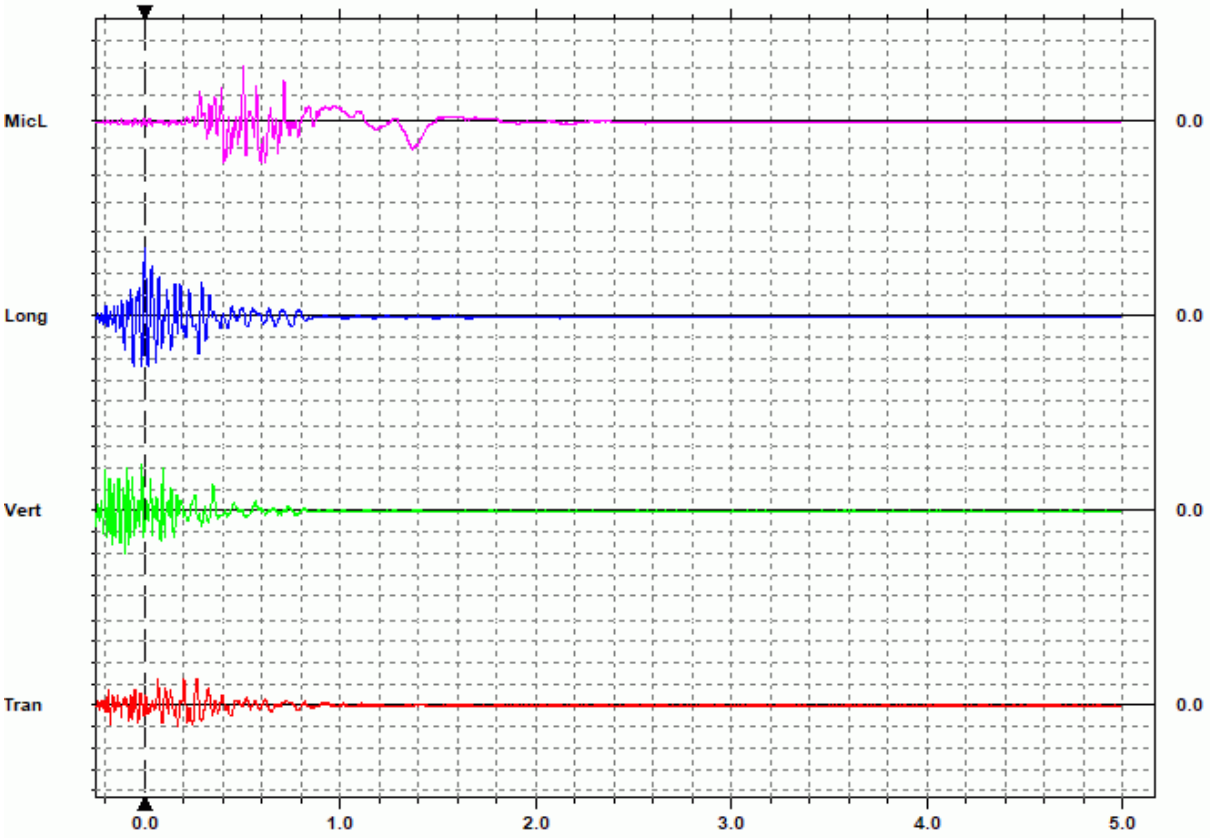
Microphone	Linear Weighting
PSPL	120.3 dB(L) at 0.506 sec.
ZC Freq	30 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.41	4.44	6.35	mm/s
ZC Freq	32	43	30	Hz
Time (Rel. to Trig)	0.070	-0.013	0.003	sec
Peak Acceleration	0.0530	0.133	0.119	g
Peak Displacement	0.0222	0.0174	0.0342	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.64 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:50:25 June 10, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043IHVL.C10W
Job Number	8177		

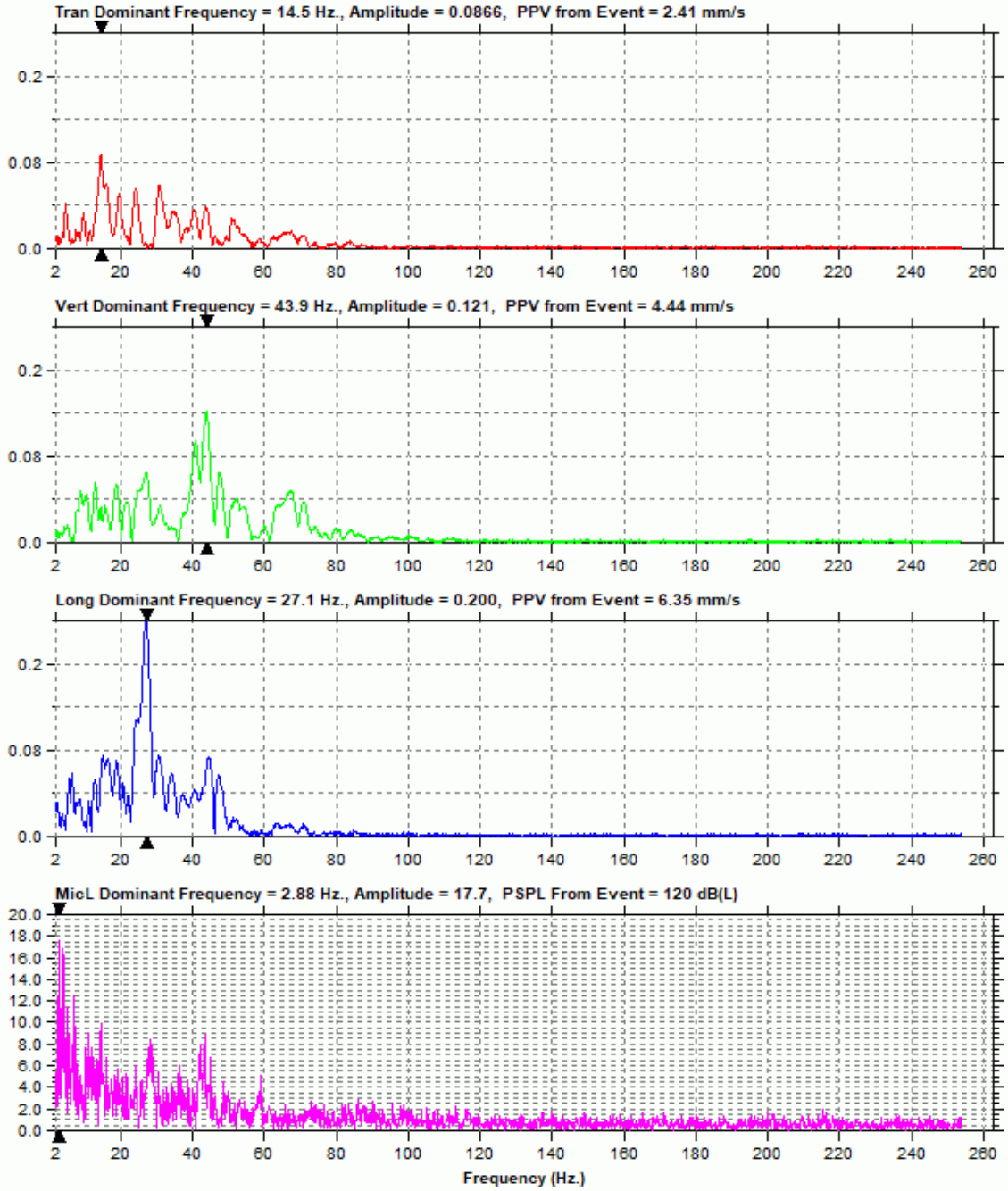
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 10, 2020 11:40:39
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 10, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:02 June 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043II4U.VQ0W

Post Event Notes

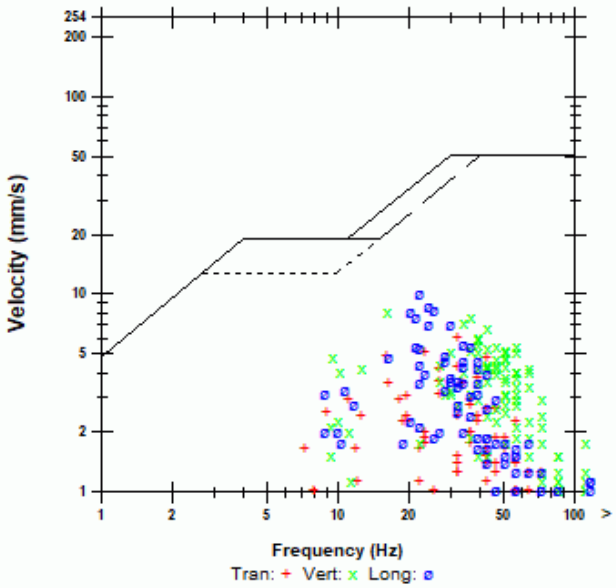
Extended Notes
Combo Mode June 15, 2020 05:17:11
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

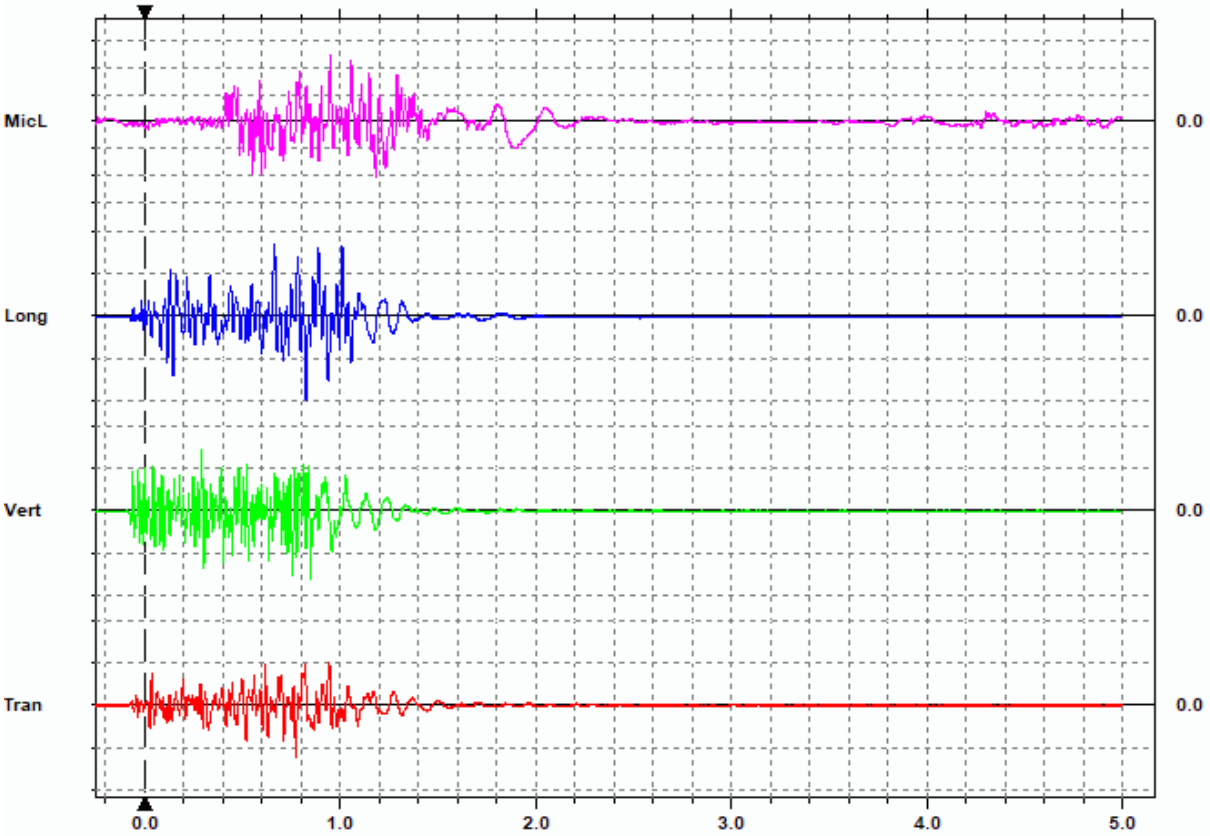
Microphone	Linear Weighting
PSPL	121.8 dB(L) at 0.950 sec.
ZC Freq	23 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	8.13	10.0	mm/s
ZC Freq	32	16	22	Hz
Time (Rel. to Trig)	0.774	0.850	0.826	sec
Peak Acceleration	0.146	0.212	0.146	g
Peak Displacement	0.0487	0.0655	0.0627	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.1 mm/s At 0.826 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:02 June 15, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043II4U.VQ0W
Job Number	8177		

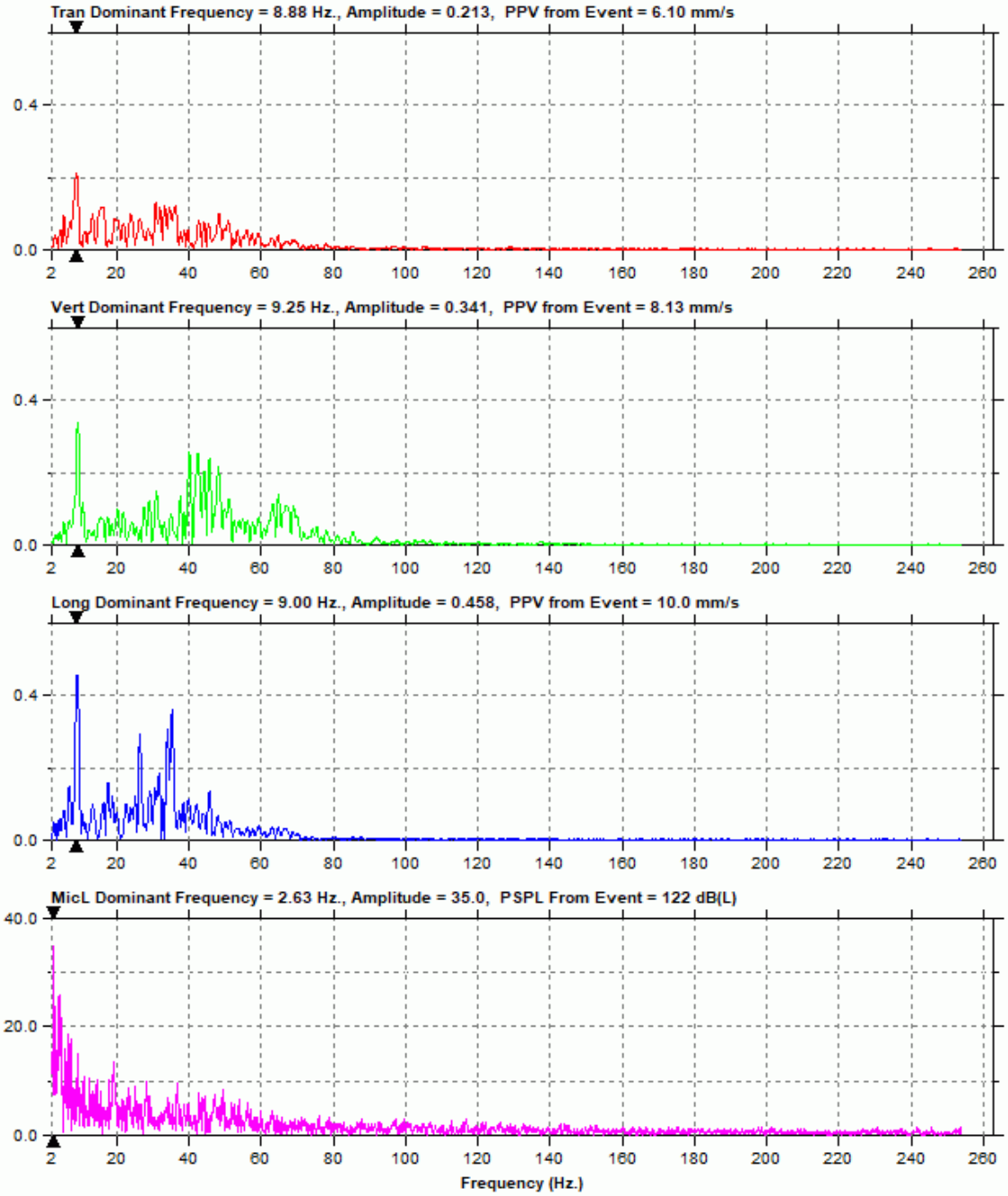
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 15, 2020 05:17:11
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 12:58:16 June 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	152 Cougarstone Common SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20043 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	November 25, 2019 by Instantel
File Name	V043II6H.D40W

Post Event Notes

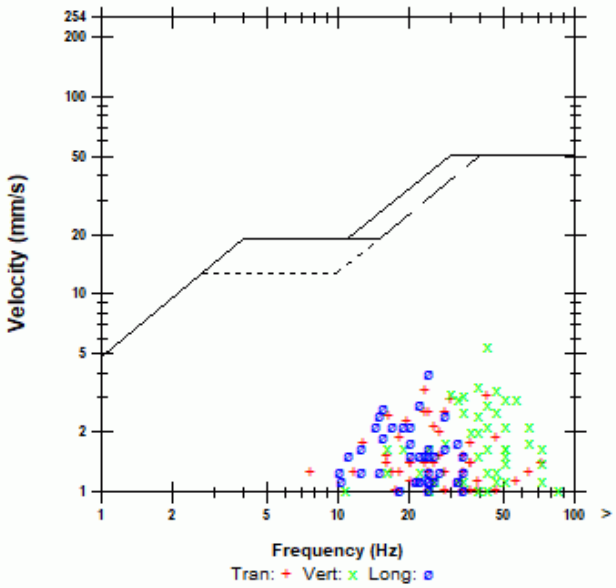
Extended Notes
Combo Mode June 16, 2020 11:49:06
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

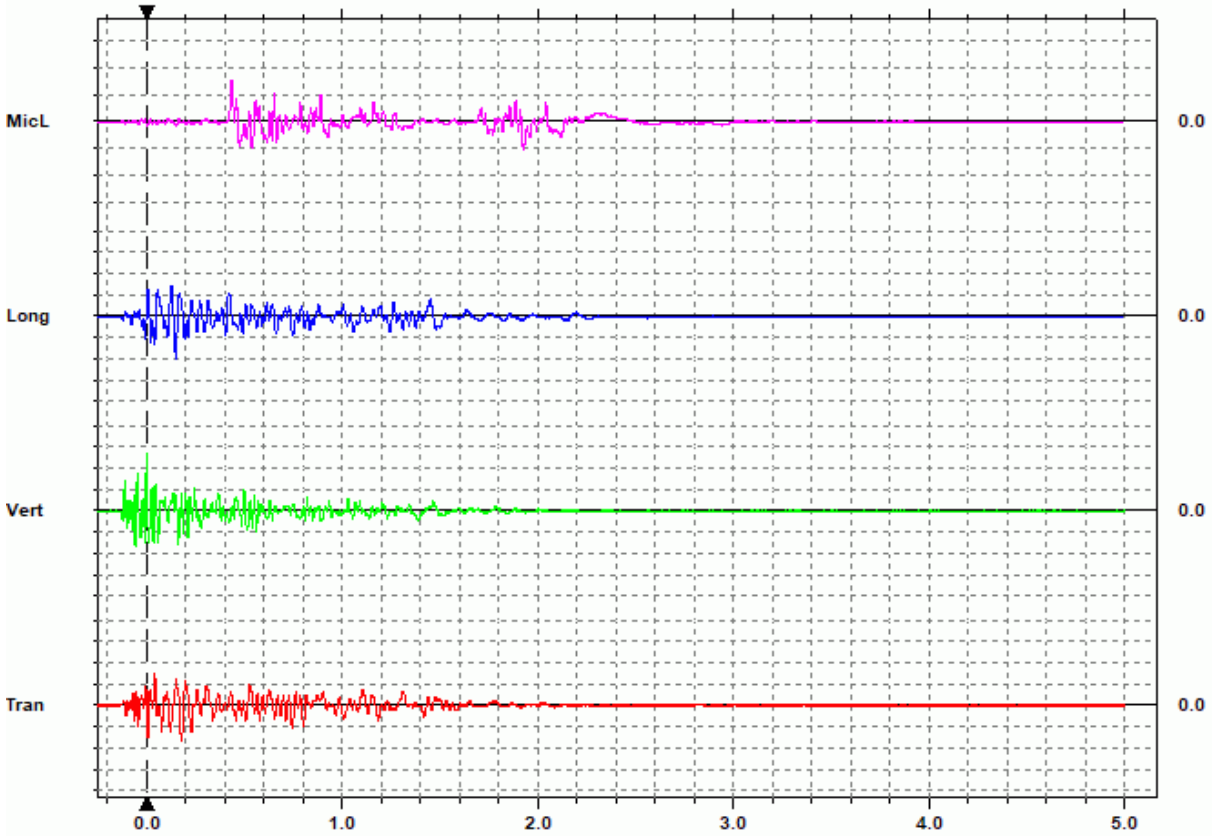
Microphone	Linear Weighting
PSPL	117.6 dB(L) at 0.437 sec.
ZC Freq	16 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.30	5.46	3.94	mm/s
ZC Freq	23	43	24	Hz
Time (Rel. to Trig)	0.180	0.001	0.149	sec
Peak Acceleration	0.0795	0.146	0.0663	g
Peak Displacement	0.0237	0.0192	0.0265	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.61 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: June 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 12:58:16 June 16, 2020	**Serial Number**	BE20043 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	November 25, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V043II6H.D40W
Job Number	8177		

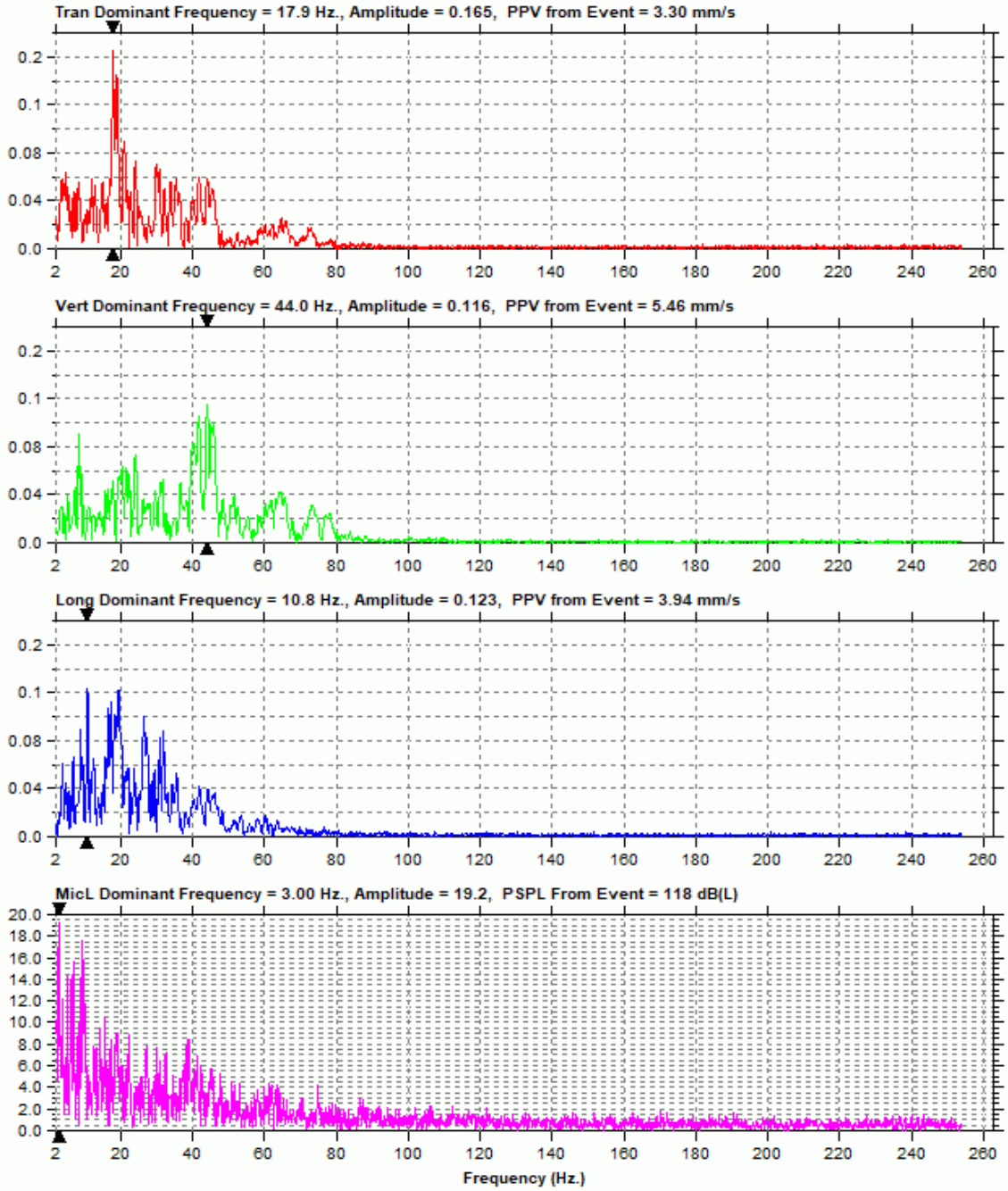
Notes

Location: 152 Cougarstone Common SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode June 16, 2020 11:49:06
Geophone is sandbagged in the backyard of 152 Cougarstone Common SW adjacent ongoing blasting operations.

Post Event Notes



Created: June 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																		
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	**Blast no.**	**Blast time:**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**
11-Jul-20	**WCRR-124**	16:05	1.65mm/s	120.5dB(L)	1.27mm/s	113.5dB(L)	3.30mm/s	119.9dB(L)	0.76mm/s	111.2dB(L)	3.20mm/s	119.9dB(L)	1.02mm/s	117.2dB(L)	0.76mm/s	116.4dB(L)	0.89mm/s	112.8dB(L)
13-Jul-20	**WCRR-125**	16:35	1.40mm/s	117.5dB(L)	0.76mm/s	113.3dB(L)	4.32mm/s	120.7dB(L)	0.51mm/s	105.5dB(L)	2.16mm/s	120.1dB(L)	0.89mm/s	113.5dB(L)	0.76mm/s	109.9dB(L)	0.76mm/s	109.9dB(L)
14-Jul-20	**WCRR-126**	16:10	4.57mm/s	121.9dB(L)	0.76mm/s	112.3dB(L)	10.50mm/s	123.2dB(L)	0.89mm/s	111.8dB(L)	7.75mm/s	122.3dB(L)	4.57mm/s	116.3dB(L)	2.29mm/s	115.7dB(L)	1.65mm/s	112.6dB(L)
15-Jul-20	**WCRR-127**	16:05	1.91mm/s	121.6dB(L)	1.14mm/s	113.8dB(L)	6.73mm/s	123.4dB(L)	0.64mm/s	109.5dB(L)	2.67mm/s	122.9dB(L)	1.52mm/s	116.4dB(L)	1.14mm/s	114.6dB(L)	0.89mm/s	110.2dB(L)
16-Jul-20	**WCRR-128**	16:08	4.95mm/s	118.1dB(L)	1.14mm/s	110.6dB(L)	12.70mm/s	121.3dB(L)	0.64mm/s	116.3dB(L)	6.98mm/s	119.6dB(L)	2.79mm/s	114.0dB(L)	1.91mm/s	111.2dB(L)	1.65mm/s	106.5dB(L)
17-Jul-20	**WCRR-129**	16:01	0.64mm/s	108.0dB(L)	1.14mm/s	118.8dB(L)	2.16mm/s	110.9dB(L)	0.25mm/s	101.9dB(L)	1.27mm/s	109.2dB(L)	0.64mm/s	106.5dB(L)	0.51mm/s	103.5dB(L)	0.64mm/s	101.0dB(L)
18-Jul-20	**WCRR-130**	16:10	3.94mm/s	121.1dB(L)	1.02mm/s	114.6dB(L)	12.60mm/s	125.7dB(L)	0.38mm/s	104.9dB(L)	9.40mm/s	125.0dB(L)	2.41mm/s	116.6dB(L)	1.91mm/s	111.8dB(L)	1.14mm/s	107.0dB(L)
22-Jul-20	**WCRR-131**	16:08	0.64mm/s	111.5dB(L)	1.52mm/s	116.6dB(L)	3.68mm/s	114.8dB(L)	0.38mm/s	107.5dB(L)	1.78mm/s	111.2dB(L)	1.02mm/s	106.5dB(L)	0.64mm/s	104.2dB(L)	0.51mm/s	103.5dB(L)
23-Jul-20	**WCRR-132**	15:25	8.38mm/s	125.2dB(L)	1.14mm/s	113.3dB(L)	19.00mm/s	127.5dB(L)	1.02mm/s	114.0dB(L)	11.80mm/s	127.9dB(L)	10.80mm/s	101.0dB(L)	4.45mm/s	121.3dB(L)	3.18mm/s	115.7dB(L)
24-Jul-20	**WCRR-133**	16:01	4.32mm/s	119.9dB(L)	1.52mm/s	109.2dB(L)	17.00mm/s	121.7dB(L)	0.51mm/s	102.8dB(L)	8.00mm/s	119.7dB(L)	5.71mm/s	113.5dB(L)	2.03mm/s	113.1dB(L)	0.89mm/s	106.0dB(L)
25-Jul-20	**WCRR-134**	16:04	2.16mm/s	121.8dB(L)	1.27mm/s	113.1dB(L)	6.48mm/s	125.6dB(L)	0.25mm/s	101.0dB(L)	4.06mm/s	122.7dB(L)	1.78mm/s	116.6dB(L)	1.02mm/s	115.4dB(L)	0.76mm/s	112.0dB(L)
27-Jul-20	**WCRR-135**	16:08	3.18mm/s	117.5dB(L)	1.02mm/s	112.3dB(L)	14.50mm/s	120.4dB(L)	0.51mm/s	109.9dB(L)	7.11mm/s	118.7dB(L)	3.30mm/s	114.4dB(L)	1.27mm/s	114.0dB(L)	0.76mm/s	110.9dB(L)
28-Jul-20	**WCRR-136**	16:05	2.92mm/s	115.6dB(L)	0.64mm/s	106.0dB(L)	11.80mm/s	120.3dB(L)	0.38mm/s	104.9dB(L)	5.59mm/s	117.2dB(L)	2.41mm/s	111.5dB(L)	1.02mm/s	111.8dB(L)	0.76mm/s	105.5dB(L)
29-Jul-20	**WCRR-137**	16:02	2.89mm/s	118.7dB(L)	1.14mm/s	112.0dB(L)	8.13mm/s	120.3dB(L)	0.51mm/s	102.8dB(L)	4.06mm/s	117.5dB(L)	2.16mm/s	113.8dB(L)	1.14mm/s	111.8dB(L)	0.76mm/s	107.0dB(L)
30-Jul-20	**WCRR-138**	16:00	1.27mm/s	113.1dB(L)	0.51mm/s	114.6dB(L)	5.71mm/s	119.8dB(L)	0.25mm/s	98.8dB(L)	3.81mm/s	116.3dB(L)	1.65mm/s	107.5dB(L)	0.64mm/s	105.5dB(L)	0.38mm/s	101.0dB(L)
31-Jul-20	**WCRR-139**	15:55	1.91mm/s	113.1dB(L)	1.27mm/s	111.5dB(L)	7.11mm/s	116.7dB(L)	0.38mm/s	108.0dB(L)	4.06mm/s	116.3dB(L)	2.67mm/s	111.8dB(L)	1.02mm/s	105.5dB(L)	0.76mm/s	100.0dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Vert At 15:17:27 July 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	92 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE20408 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 21, 2019 by Instantel
File Name	V408IK36.H30W

Post Event Notes

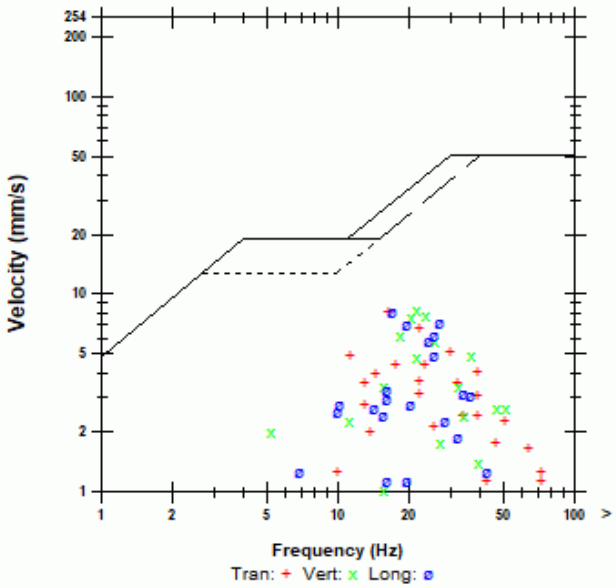
Extended Notes
Combo Mode July 23, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

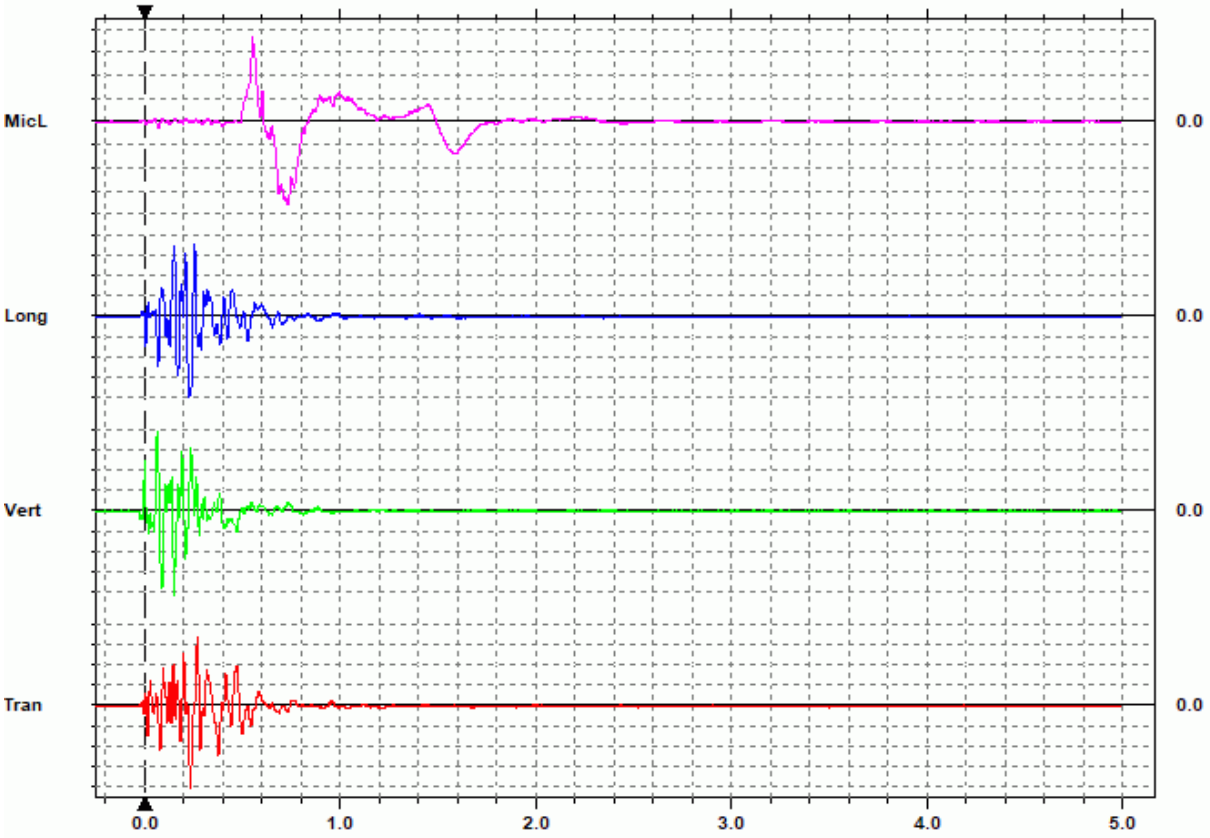
Microphone	Linear Weighting
PSPL	125.2 dB(L) at 0.551 sec.
ZC Freq	4.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.25	8.38	8.13	mm/s
ZC Freq	17	21	17	Hz
Time (Rel. to Trig)	0.233	0.150	0.226	sec
Peak Acceleration	0.133	0.186	0.146	g
Peak Displacement	0.0598	0.0623	0.0884	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.8 mm/s At 0.235 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:17:27 July 23, 2020	**Serial Number**	BE20408 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 21, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	V408IK36.H30W
Job Number	8177		

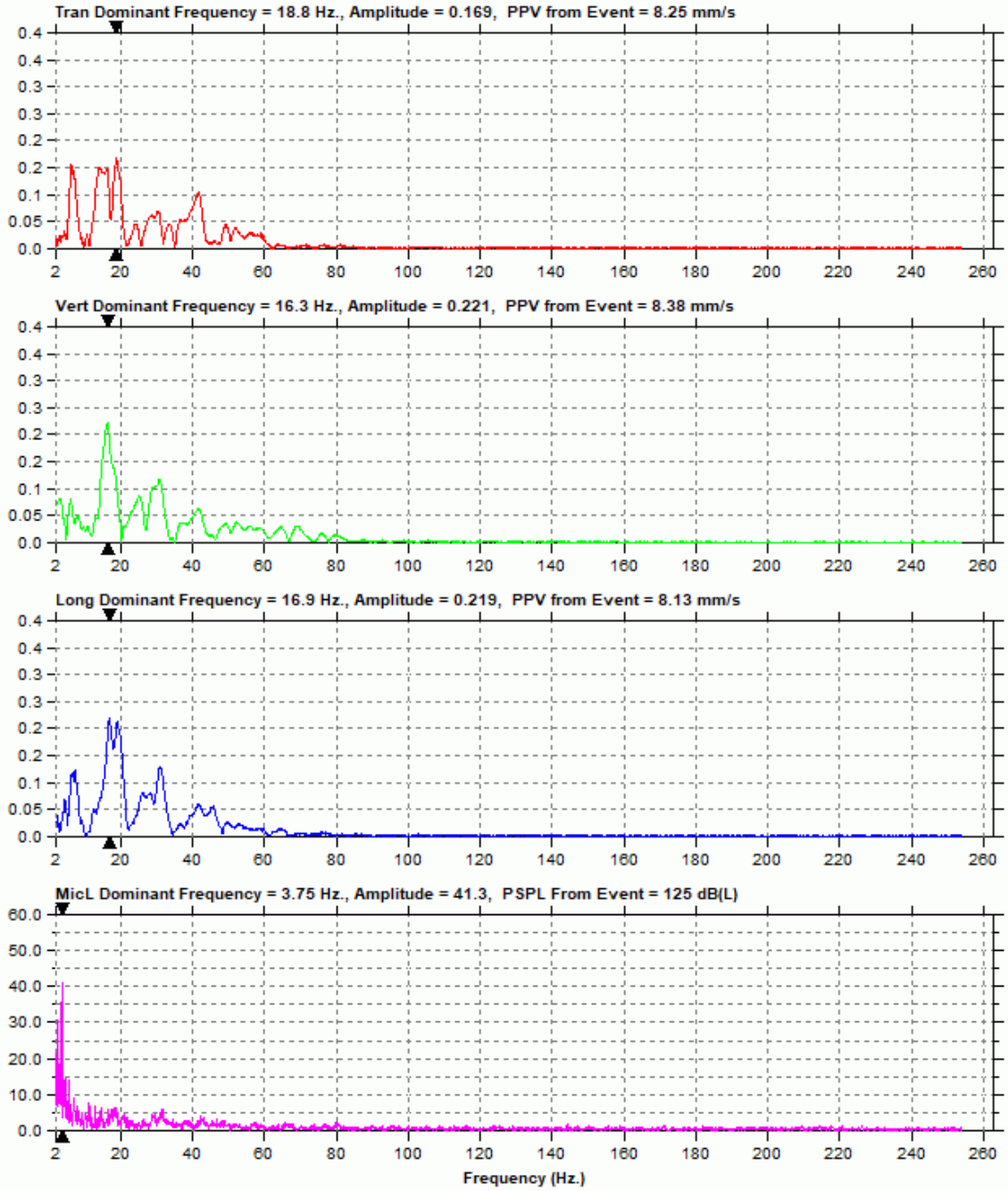
Notes

Location: 92 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 23, 2020 05:16:47
Geophone is sandbagged near the Northwest corner of 92 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:34 July 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IJMK.BY0W

Post Event Notes

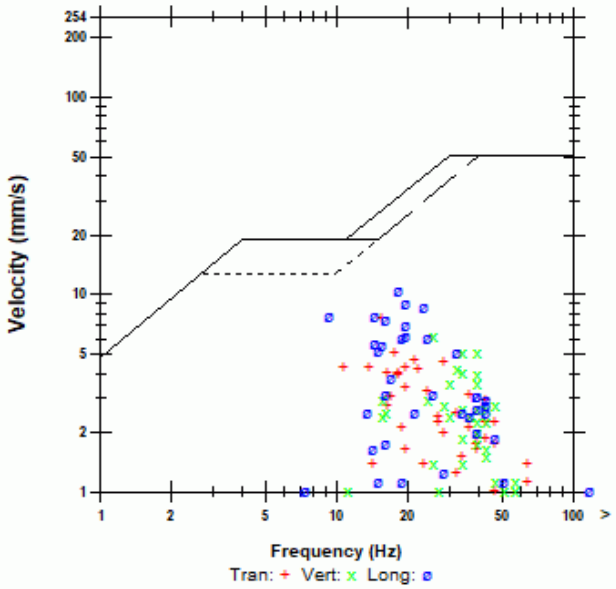
Extended Notes
Combo Mode July 14, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

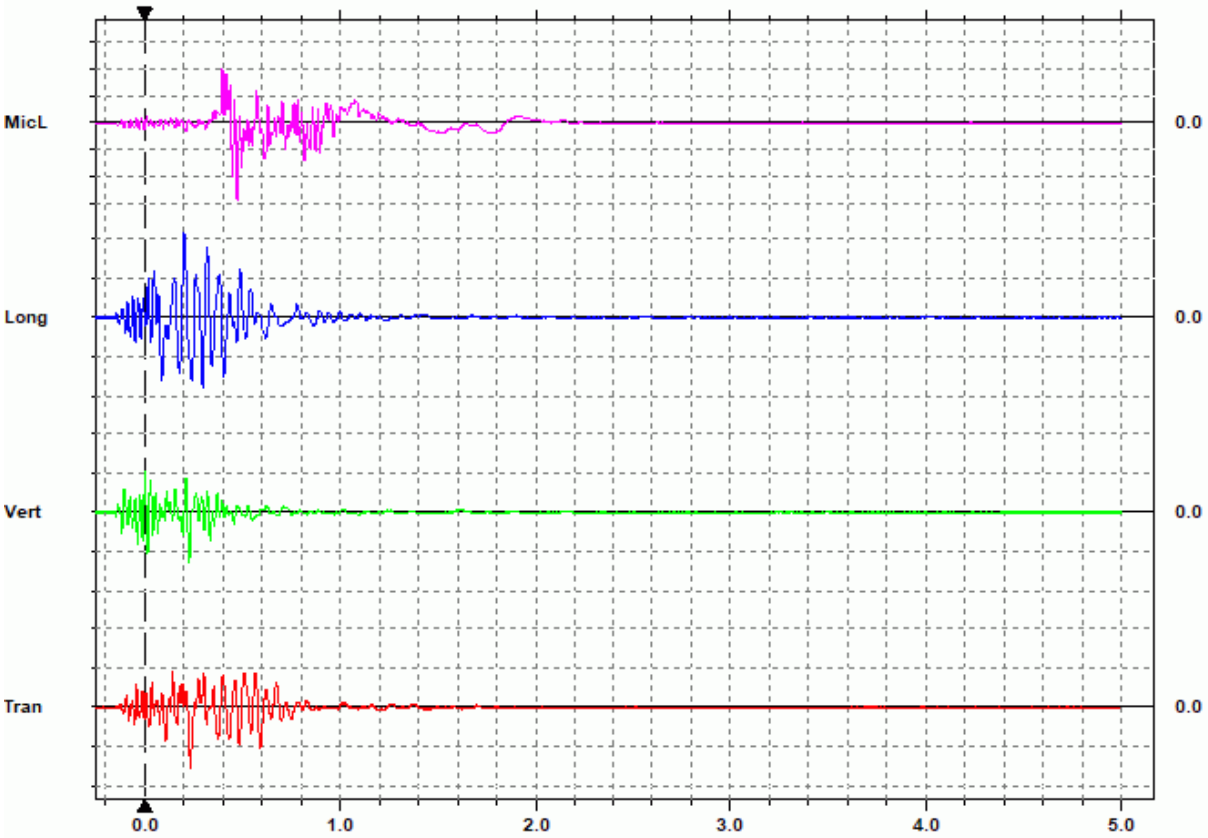
Microphone	Linear Weighting
PSPL	123.2 dB(L) at 0.472 sec.
ZC Freq	26 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.62	6.22	10.5	mm/s
ZC Freq	16	26	18	Hz
Time (Rel. to Trig)	0.232	0.227	0.201	sec
Peak Acceleration	0.0928	0.133	0.146	g
Peak Displacement	0.0604	0.0368	0.0920	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.6 mm/s At 0.203 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:34 July 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IJMK.BY0W
Job Number	8177		

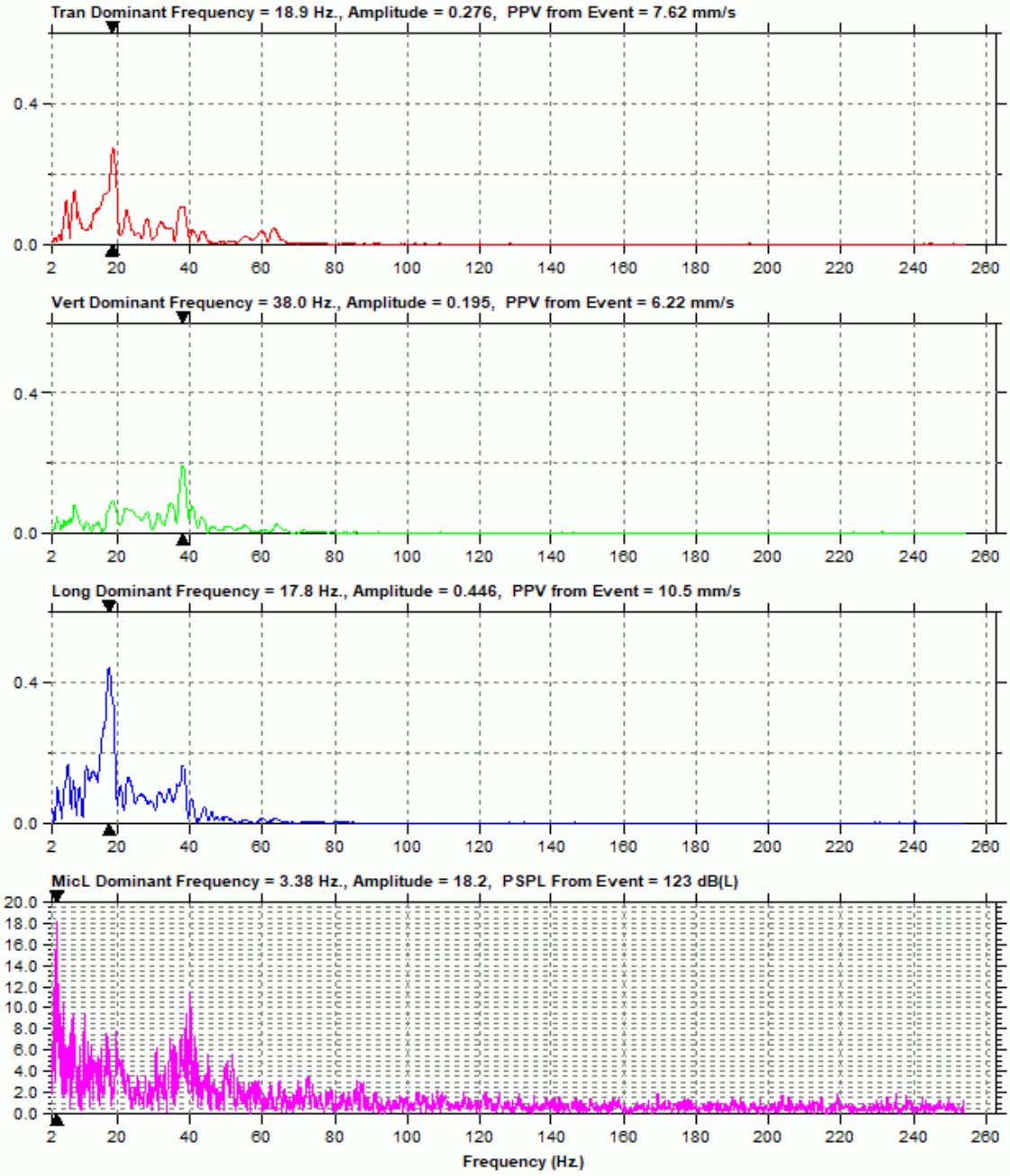
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 14, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:52:08 July 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IJOE.QW0W

Post Event Notes

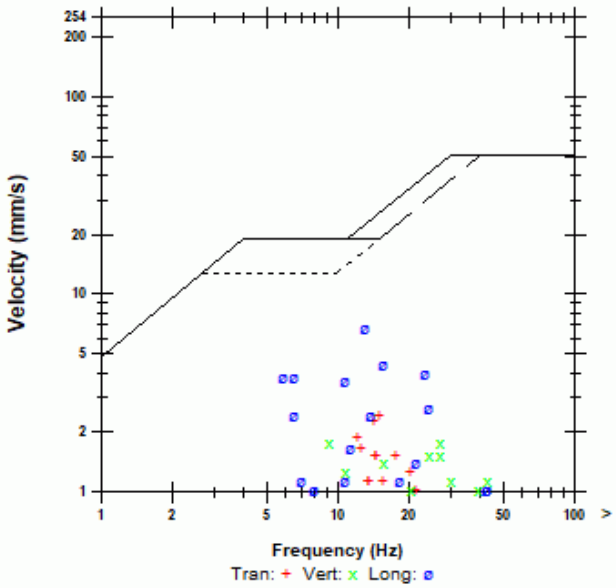
Extended Notes
Combo Mode July 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

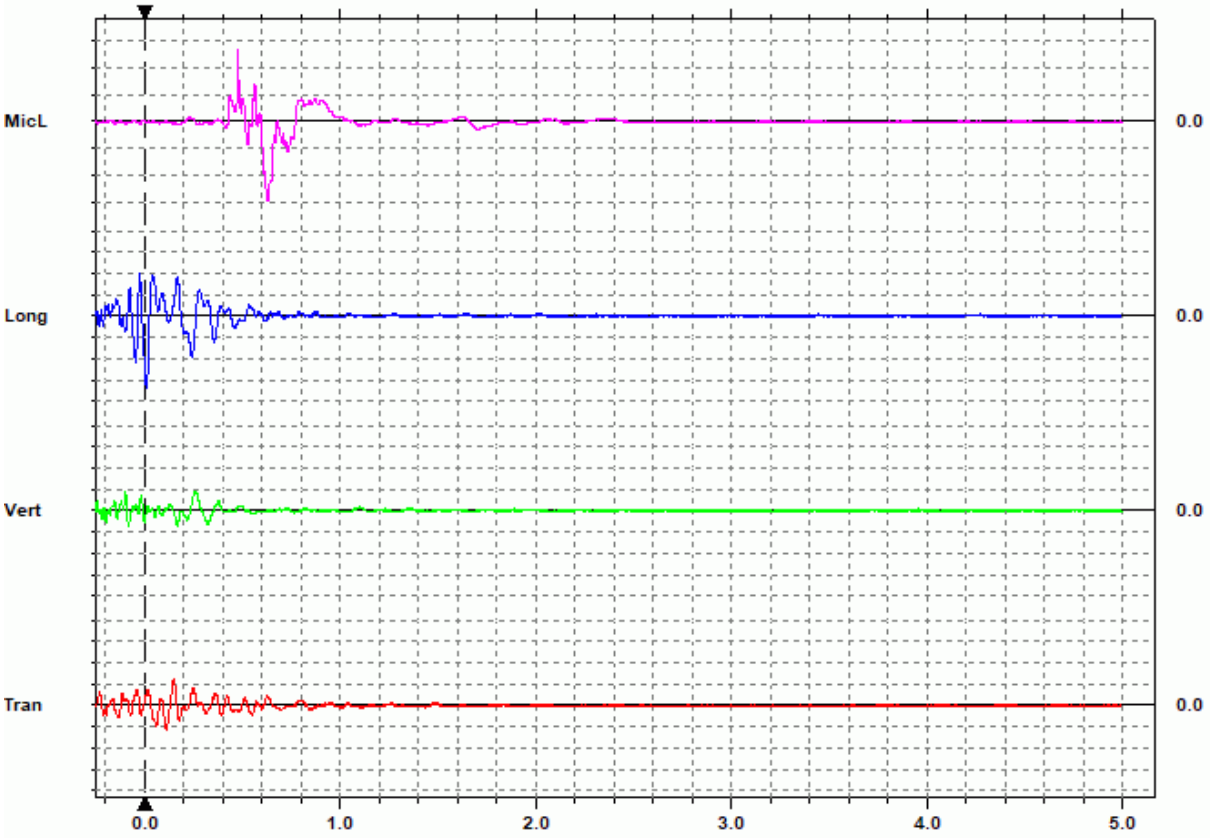
Microphone	Linear Weighting
PSPL	123.4 dB(L) at 0.631 sec.
ZC Freq	6.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.41	1.78	6.73	mm/s
ZC Freq	15	27	13	Hz
Time (Rel. to Trig)	0.146	-0.100	0.008	sec
Peak Acceleration	0.0398	0.0398	0.0663	g
Peak Displacement	0.0254	0.0304	0.0807	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.85 mm/s At 0.010 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:52:08 July 15, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IJOE.QW0W
Job Number	8177		

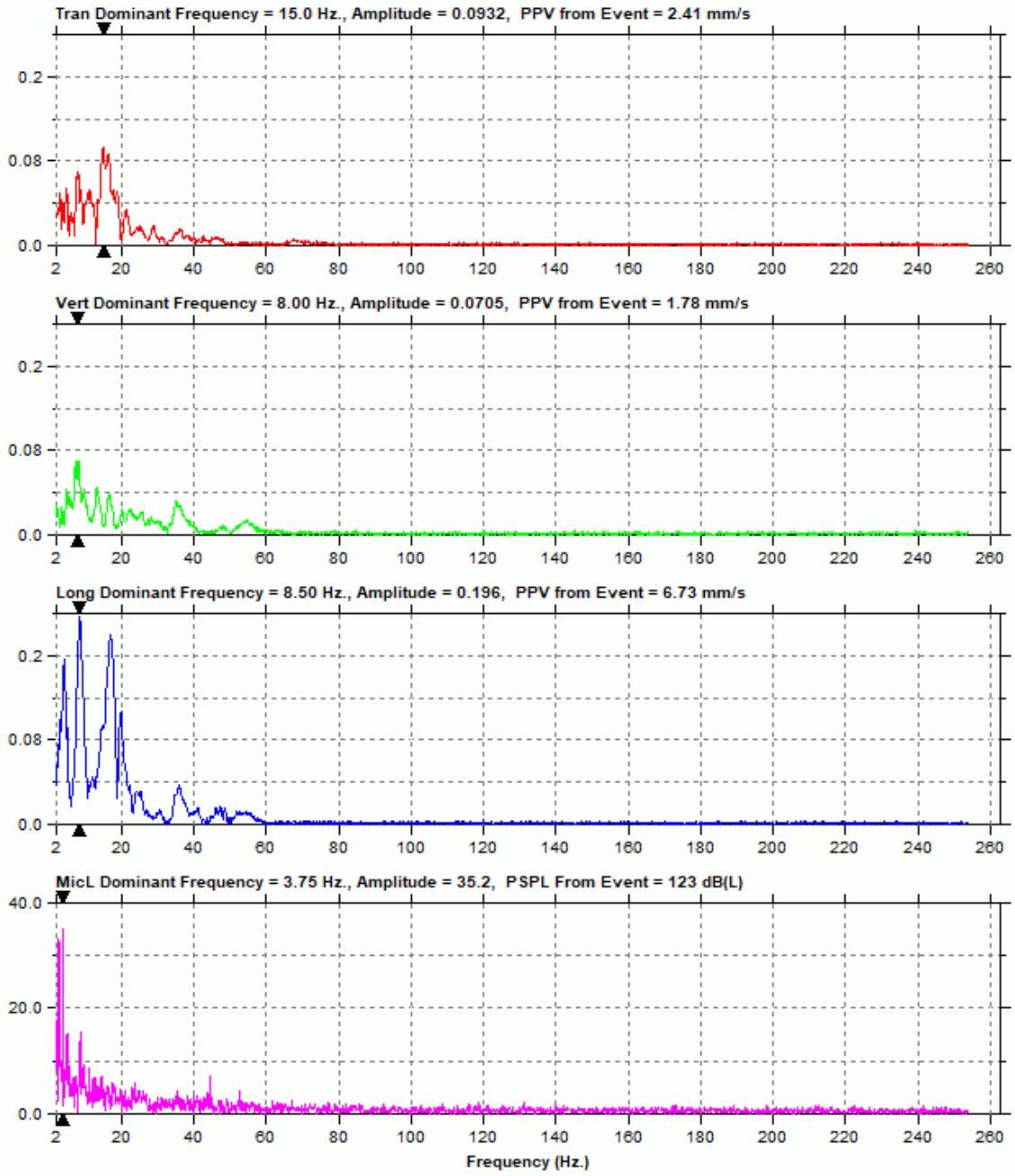
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:32 July 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IJQ9.KK0W

Post Event Notes

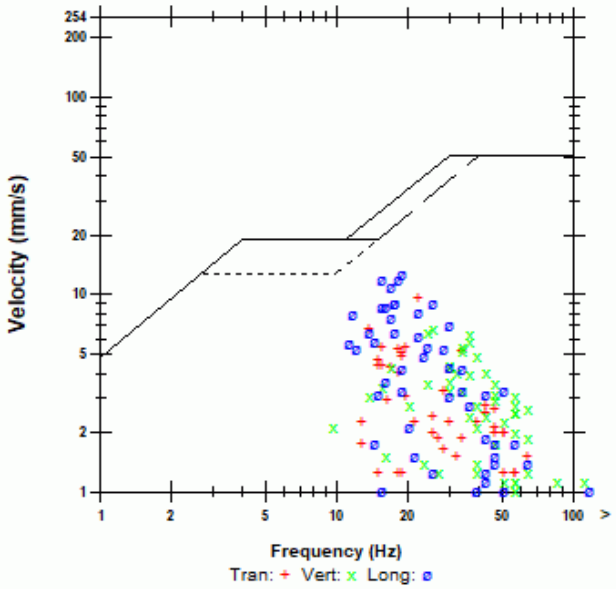
Extended Notes
Combo Mode July 16, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

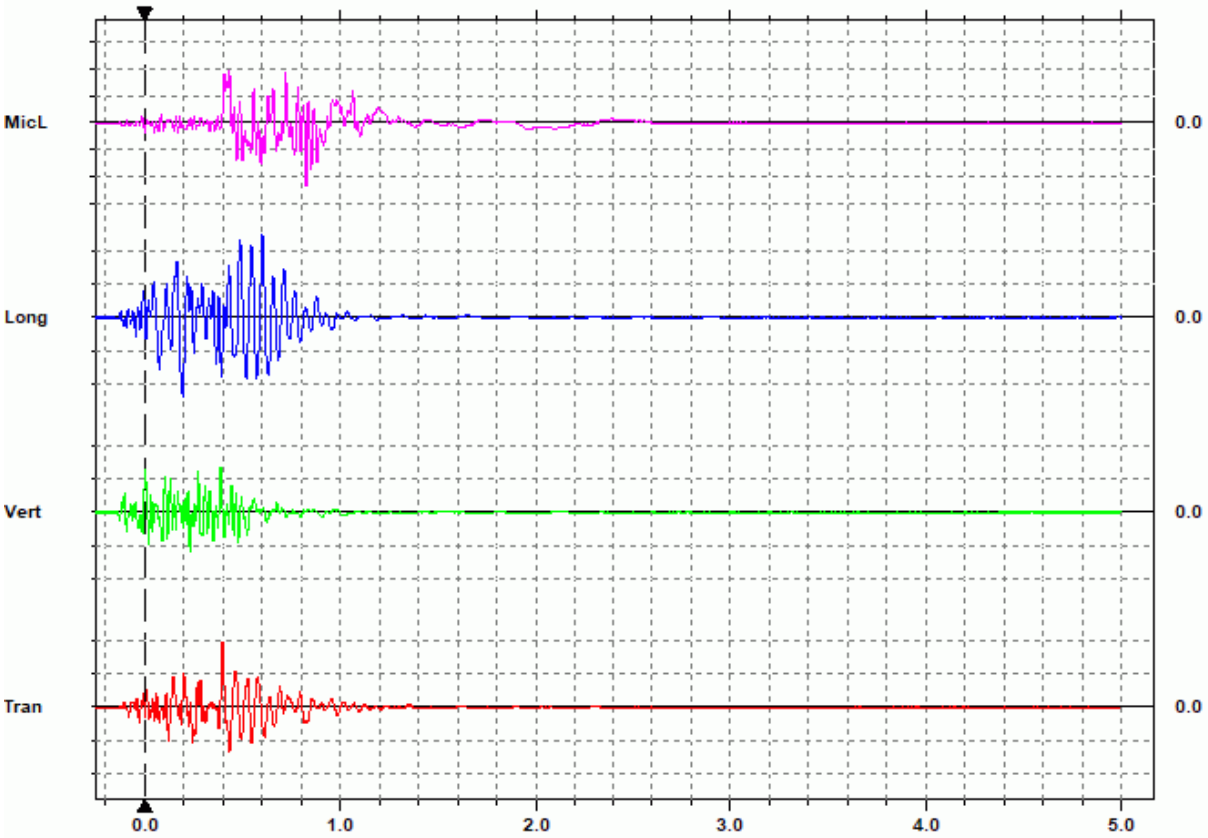
Microphone	Linear Weighting
PSPL	121.3 dB(L) at 0.826 sec.
ZC Freq	32 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.78	6.73	12.7	mm/s
ZC Freq	22	26	19	Hz
Time (Rel. to Trig)	0.397	0.388	0.603	sec
Peak Acceleration	0.133	0.146	0.159	g
Peak Displacement	0.0668	0.0399	0.127	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.1 mm/s At 0.604 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:32 July 16, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IJQ9.KK0W
Job Number	8177		

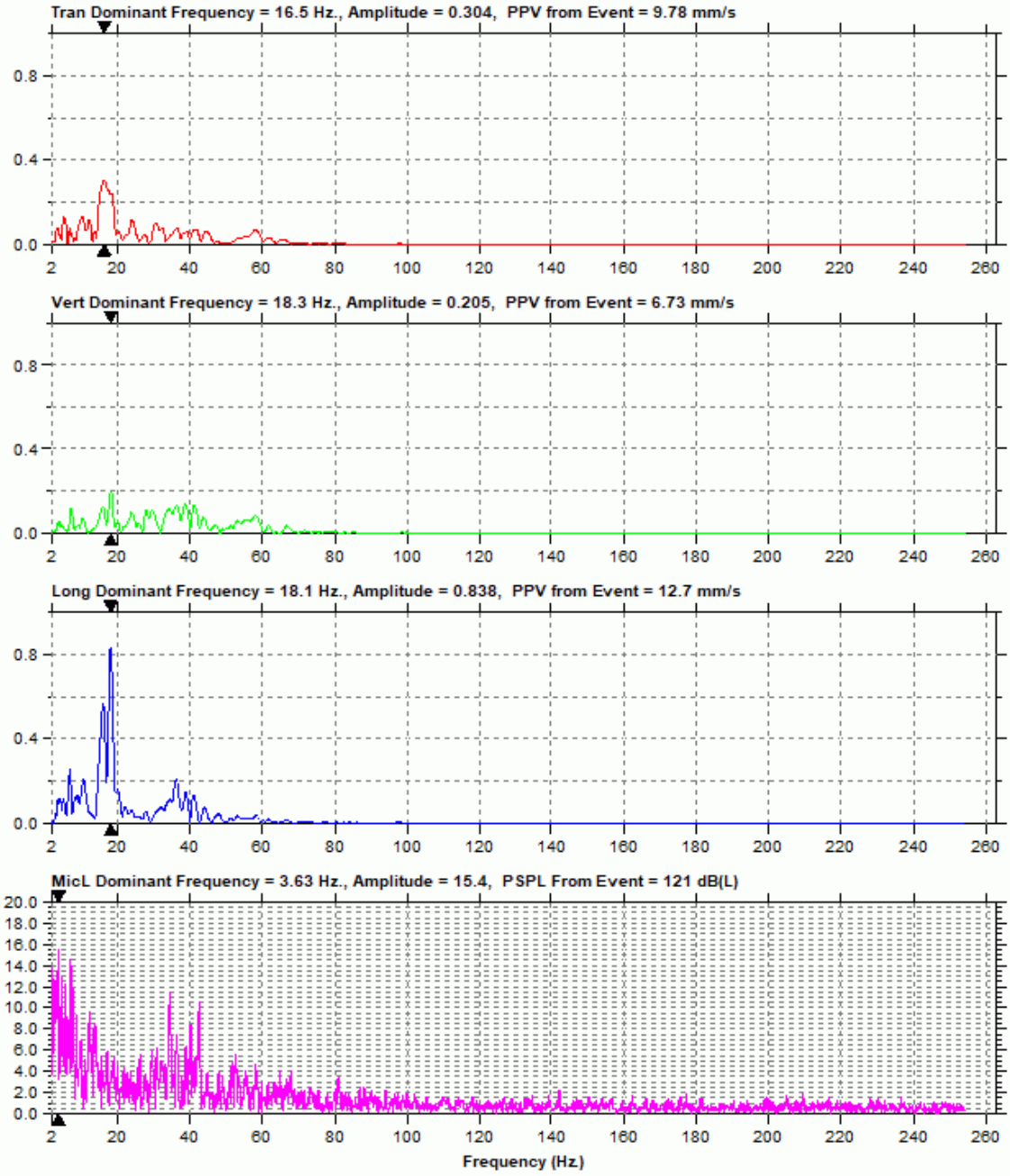
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 16, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:35 July 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IJTZ.3B0W

Post Event Notes

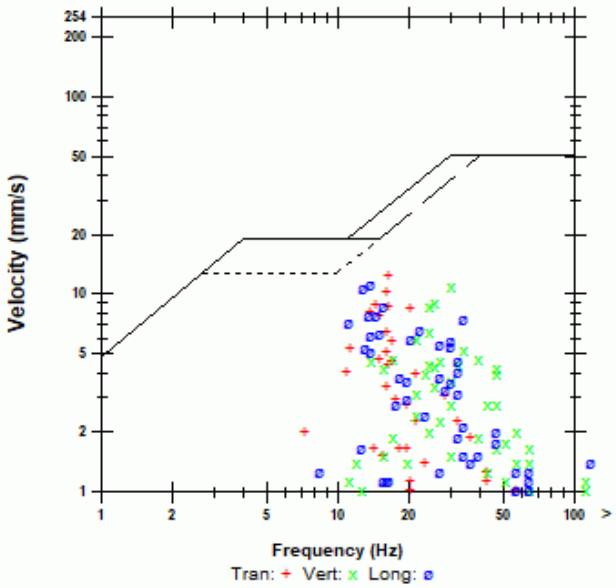
Extended Notes
Combo Mode July 18, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

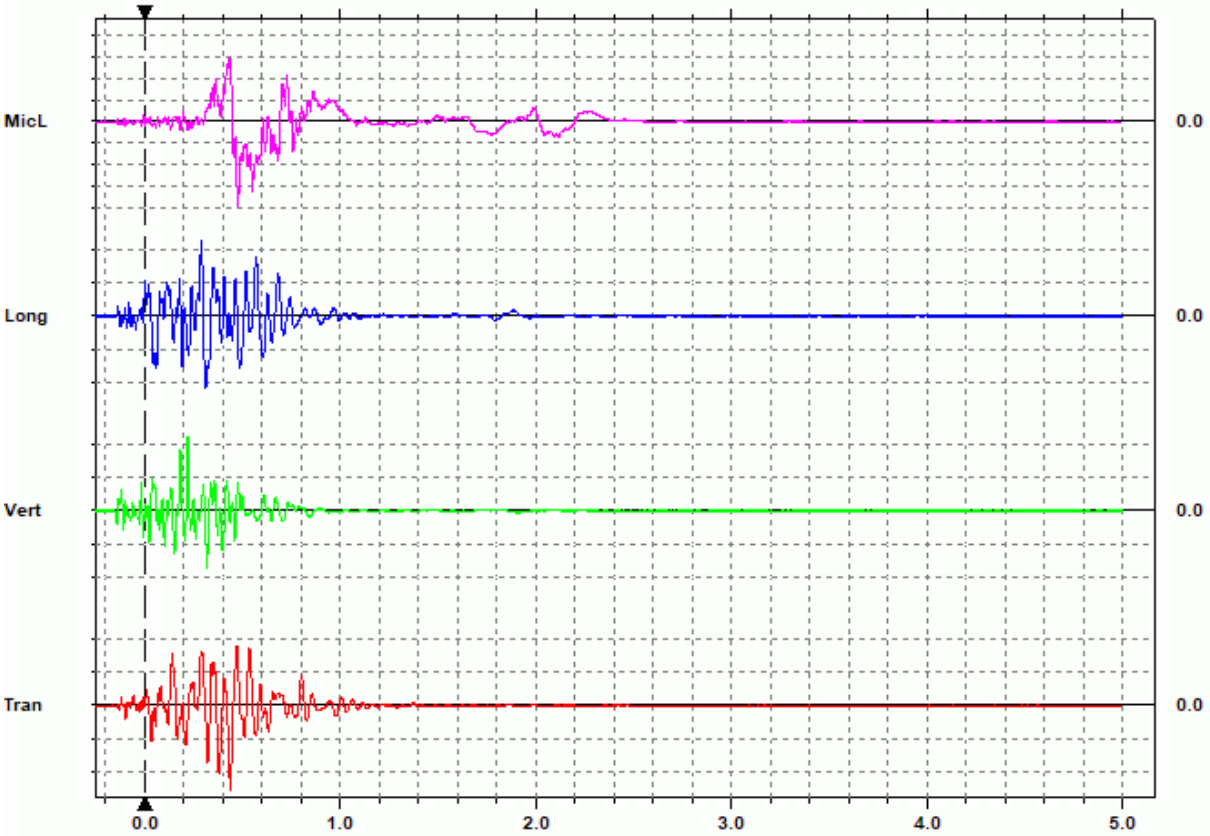
Microphone	Linear Weighting
PSPL	125.7 dB(L) at 0.477 sec.
ZC Freq	3.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	12.6	11.0	11.2	mm/s
ZC Freq	17	30	14	Hz
Time (Rel. to Trig)	0.438	0.220	0.290	sec
Peak Acceleration	0.133	0.199	0.186	g
Peak Displacement	0.106	0.0551	0.138	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.9 mm/s At 0.318 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:35 July 18, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IJTZ.3B0W
Job Number	8177		

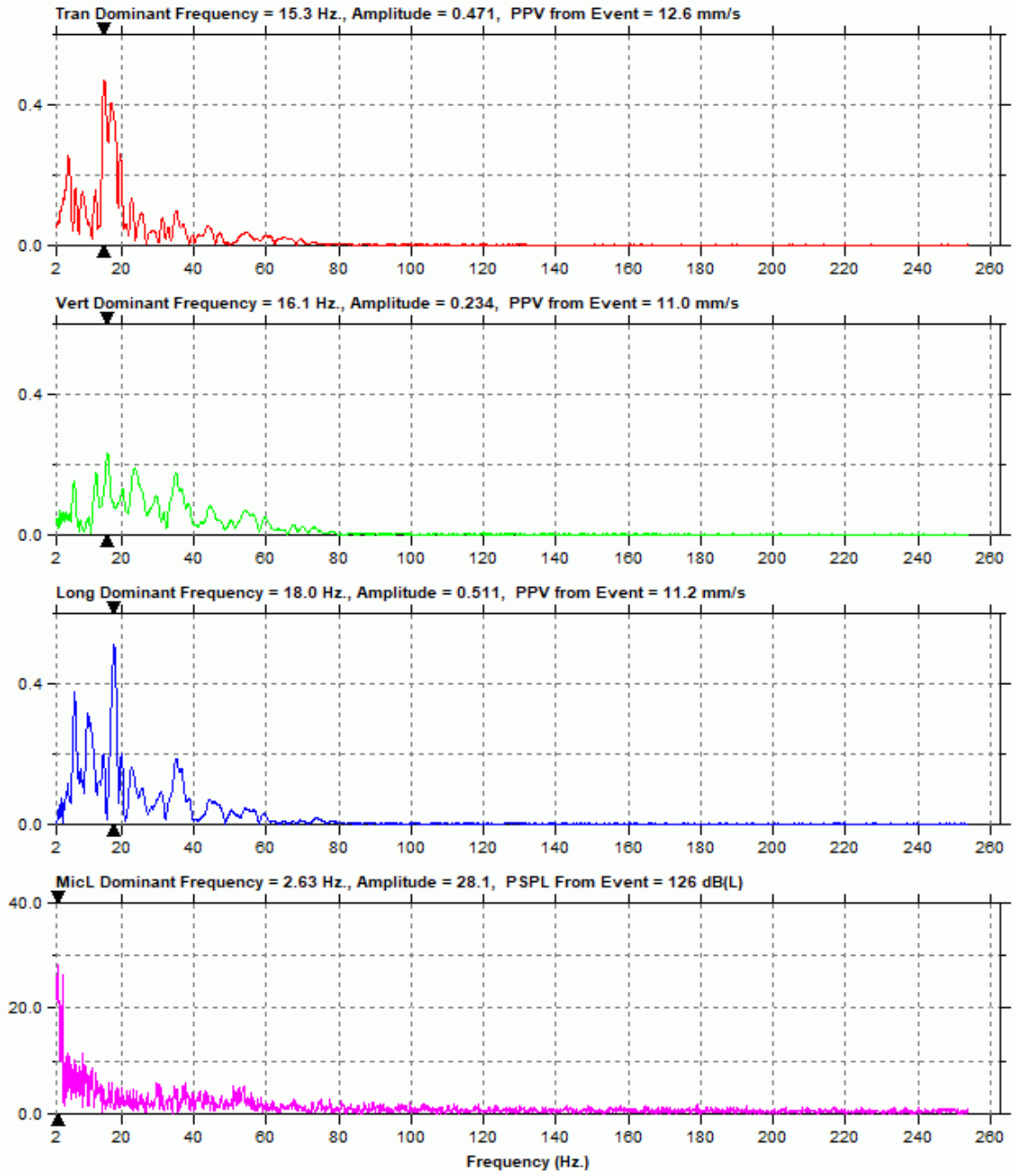
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 18, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:14:56 July 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IK36.CW0W

Post Event Notes

Extended Notes

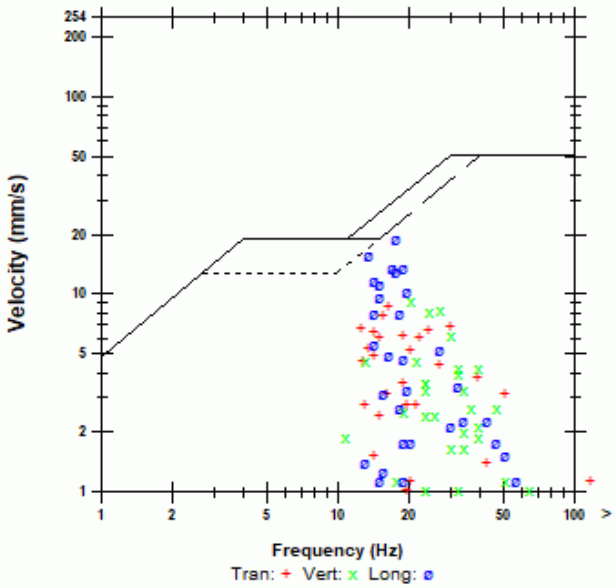
Combo Mode July 23, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

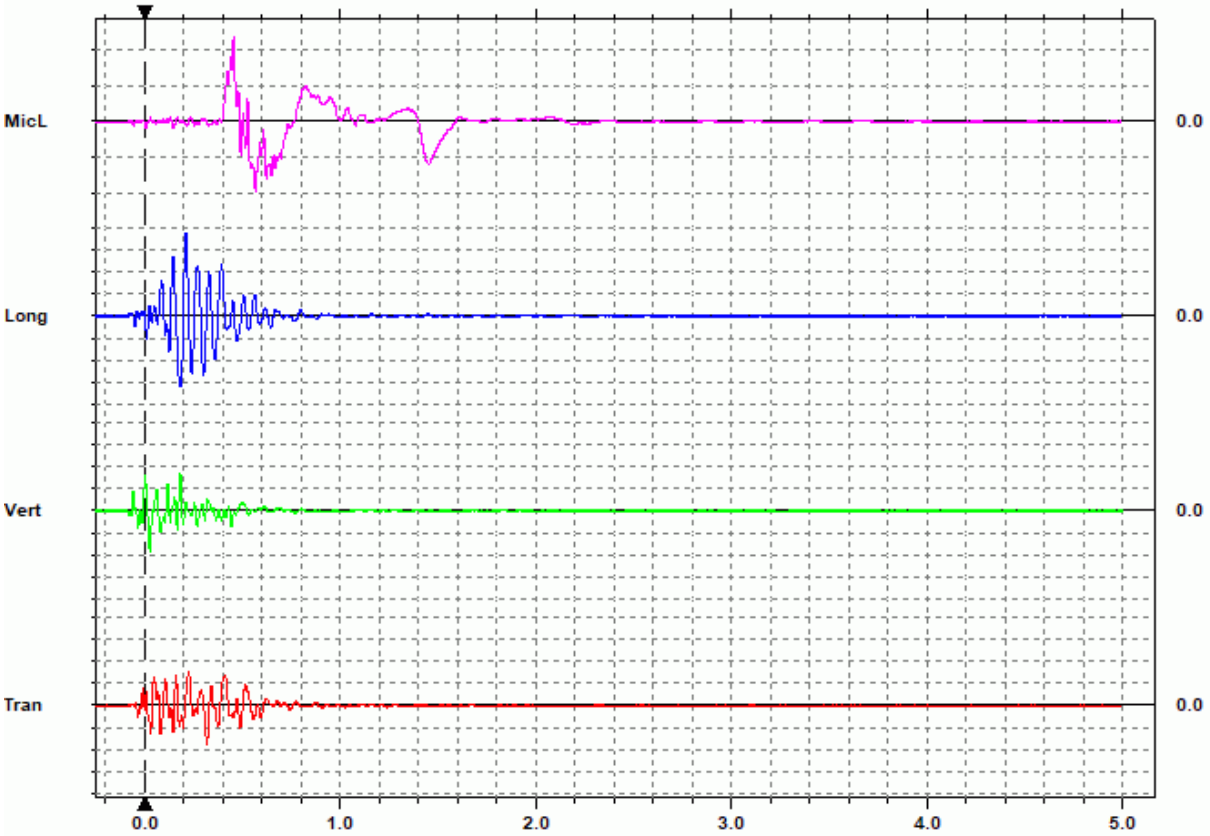
Microphone	Linear Weighting
PSPL	127.5 dB(L) at 0.457 sec.
ZC Freq	5.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.76	9.27	19.0	mm/s
ZC Freq	17	20	18	Hz
Time (Rel. to Trig)	0.320	0.029	0.213	sec
Peak Acceleration	0.159	0.146	0.239	g
Peak Displacement	0.0944	0.0588	0.200	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 19.3 mm/s At 0.213 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: July 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:14:56 July 23, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IK36.CW0W
Job Number	8177		

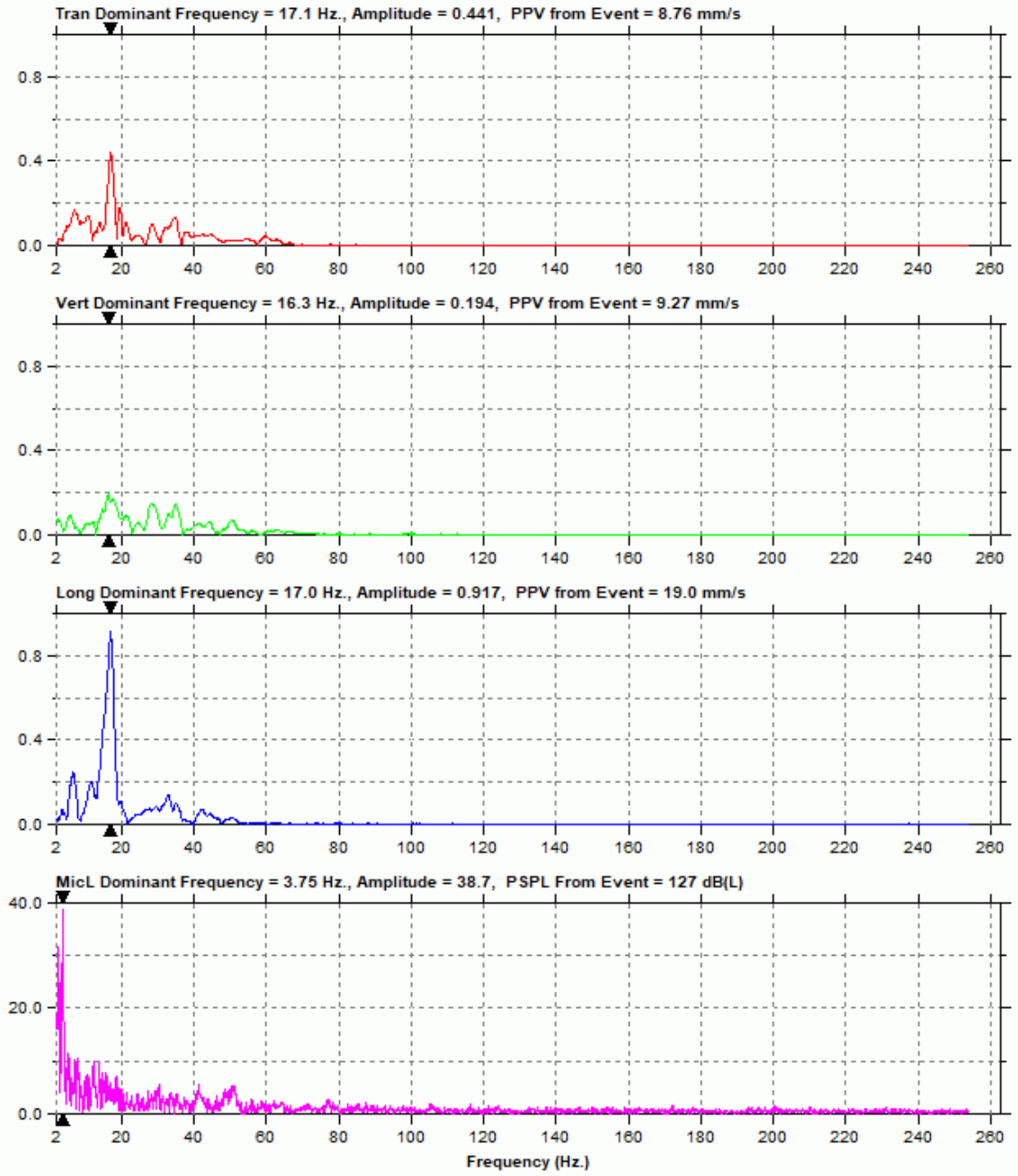
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 23, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:46 July 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IK52.JM0W

Post Event Notes

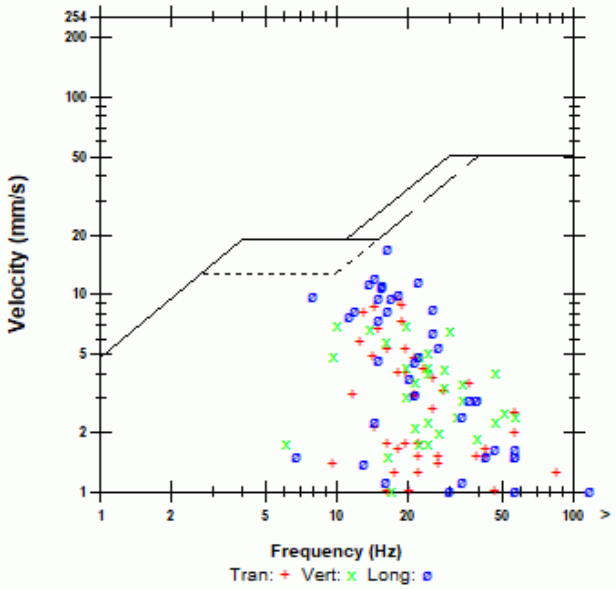
Extended Notes
Combo Mode July 24, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

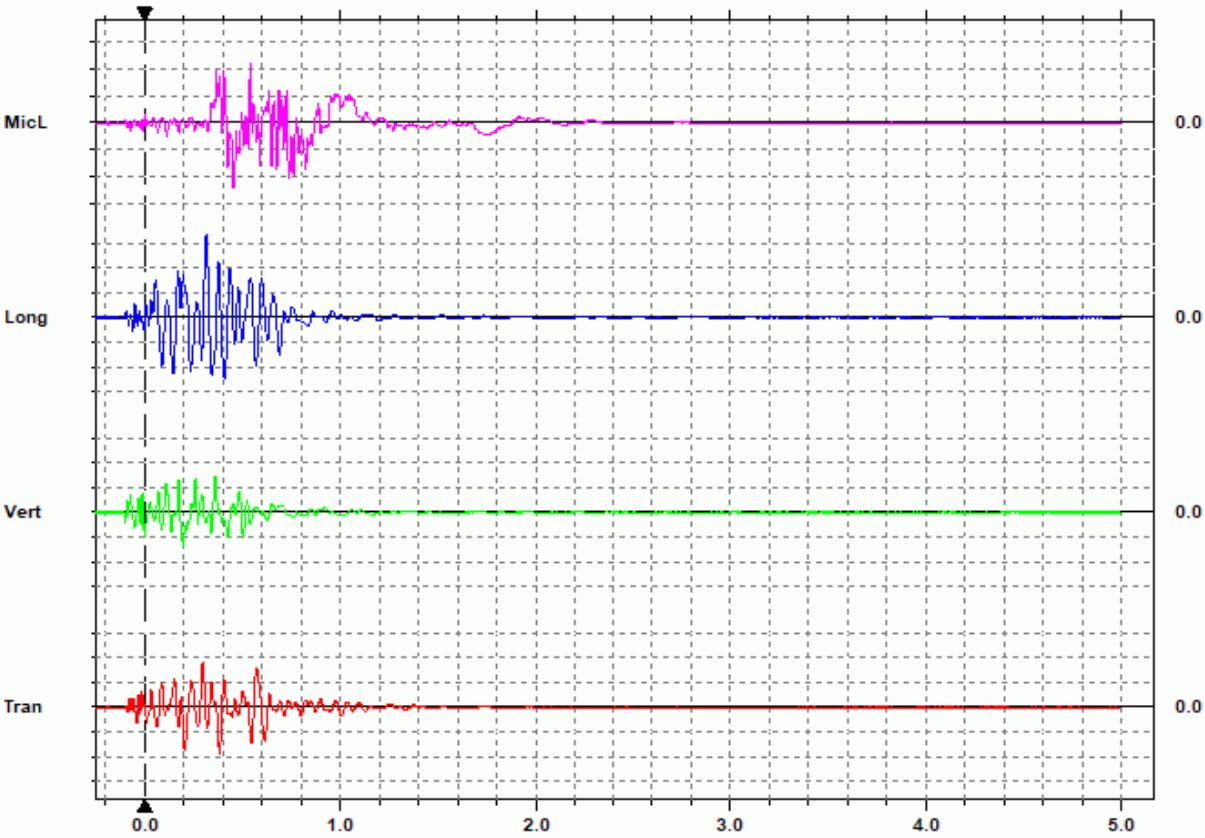
Microphone	Linear Weighting
PSPL	121.7 dB(L) at 0.453 sec.
ZC Freq	6.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.40	7.11	17.0	mm/s
ZC Freq	18	20	17	Hz
Time (Rel. to Trig)	0.384	0.359	0.315	sec
Peak Acceleration	0.119	0.146	0.172	g
Peak Displacement	0.0928	0.0853	0.180	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 17.5 mm/s At 0.315 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 24, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:46 July 24, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IK52.JM0W
Job Number	8177		

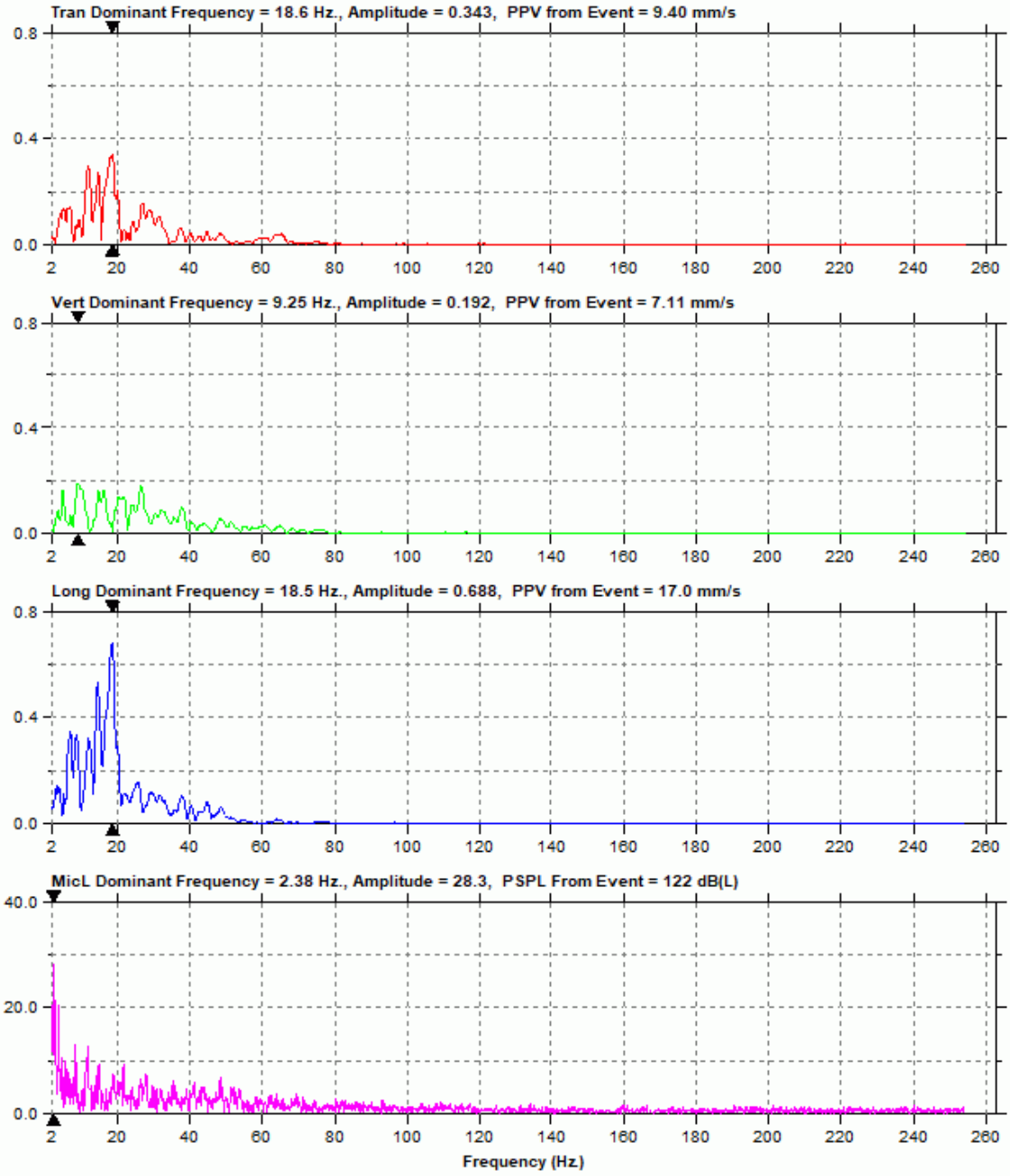
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 24, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:51:04 July 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IK6X.D40W

Post Event Notes

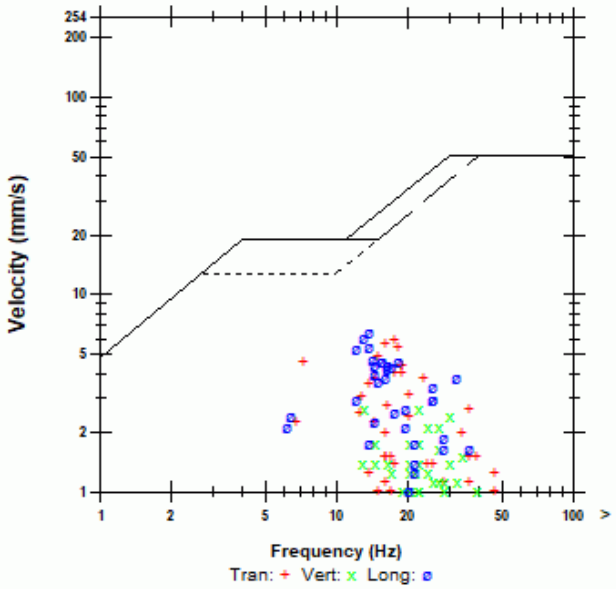
Extended Notes
Combo Mode July 25, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

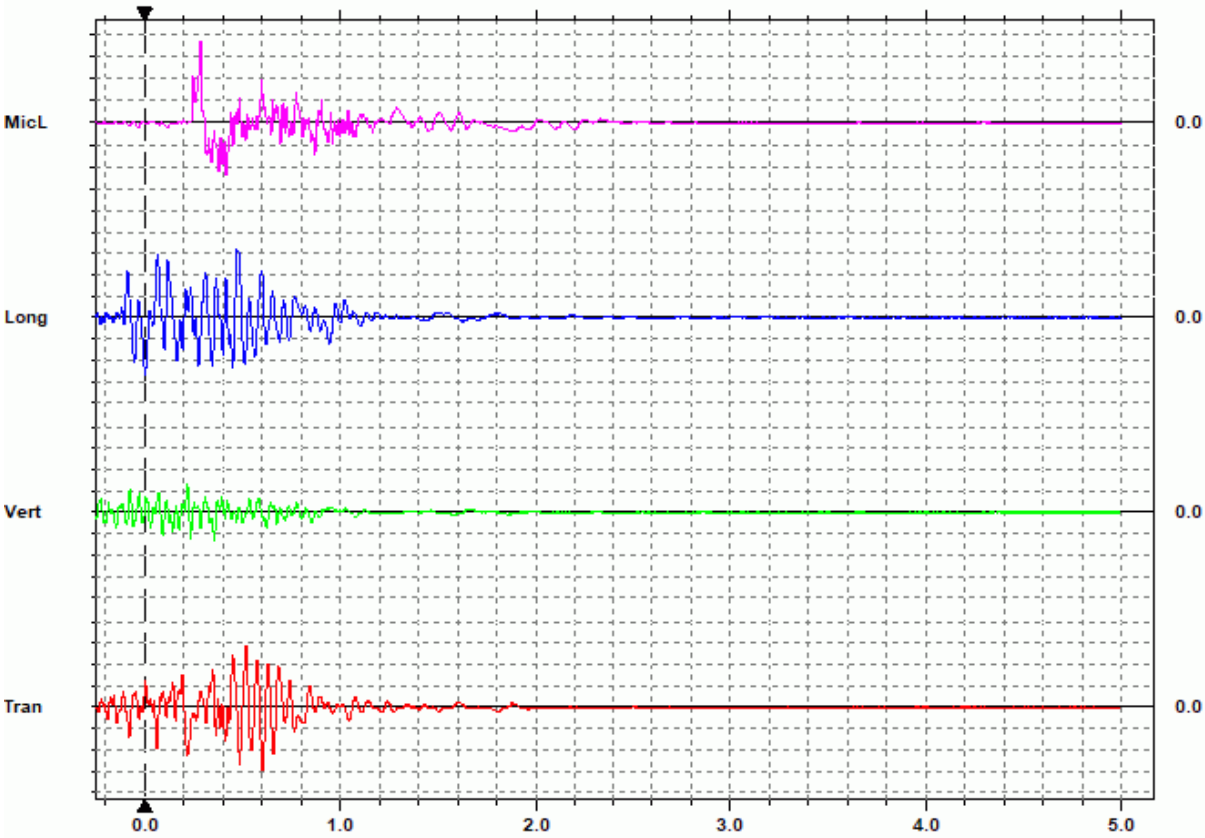
Microphone	Linear Weighting
PSPL	125.6 dB(L) at 0.288 sec.
ZC Freq	6.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.97	2.67	6.48	mm/s
ZC Freq	18	22	14	Hz
Time (Rel. to Trig)	0.604	0.219	0.475	sec
Peak Acceleration	0.0795	0.0530	0.0795	g
Peak Displacement	0.0709	0.0230	0.0824	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.83 mm/s At 0.485 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:51:04 July 25, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IK6X.D40W
Job Number	8177		

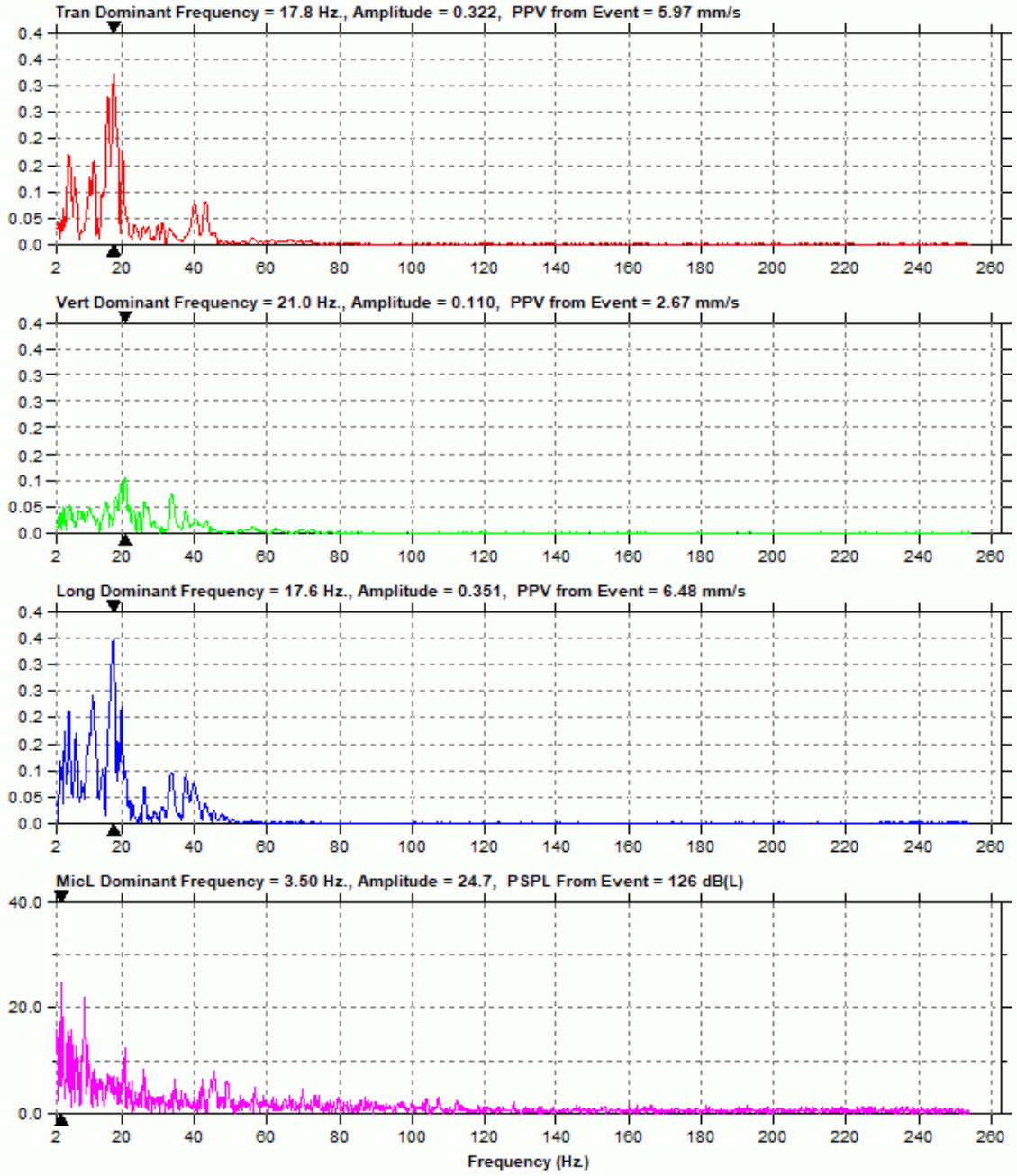
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 25, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:55:05 July 27, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKAM.VT0W

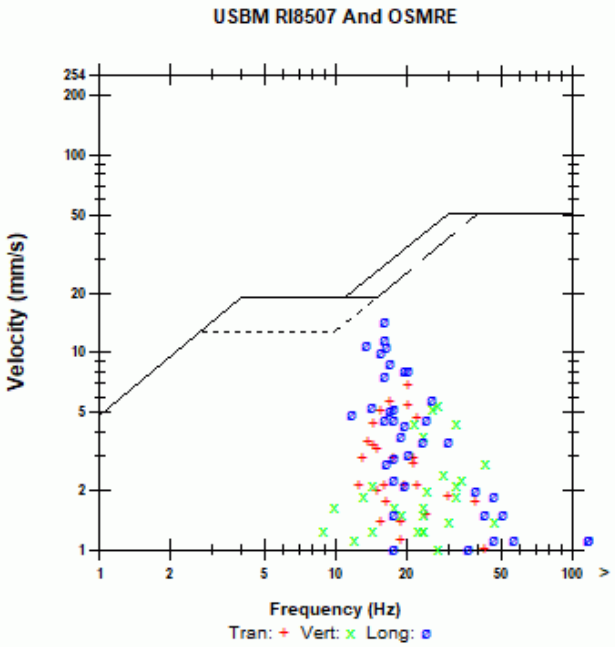
Post Event Notes

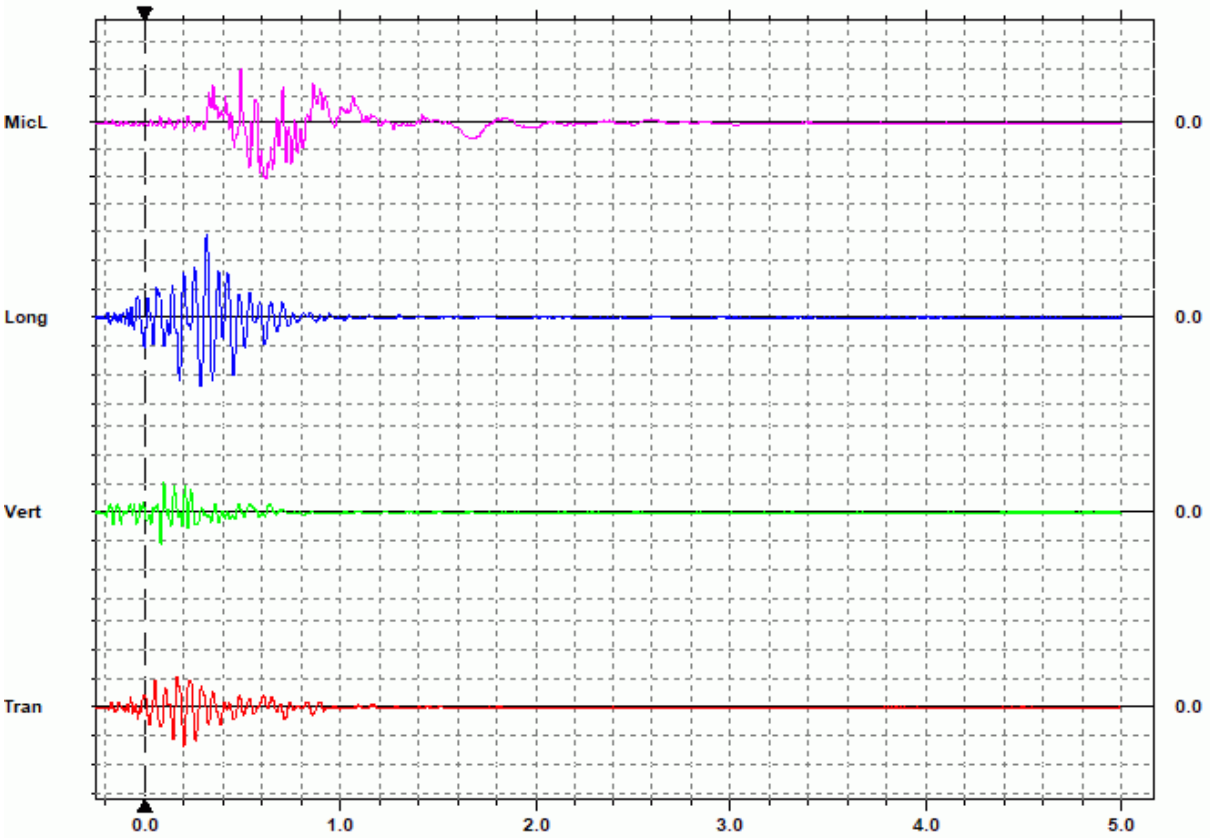
Extended Notes
Combo Mode July 27, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	120.4 dB(L) at 0.494 sec.
ZC Freq	23 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.86	5.46	14.5	mm/s
ZC Freq	20	27	16	Hz
Time (Rel. to Trig)	0.202	0.085	0.318	sec
Peak Acceleration	0.0928	0.119	0.159	g
Peak Displacement	0.0566	0.0306	0.142	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 14.5 mm/s At 0.318 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:55:05 July 27, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKAM.VT0W
Job Number	8177		

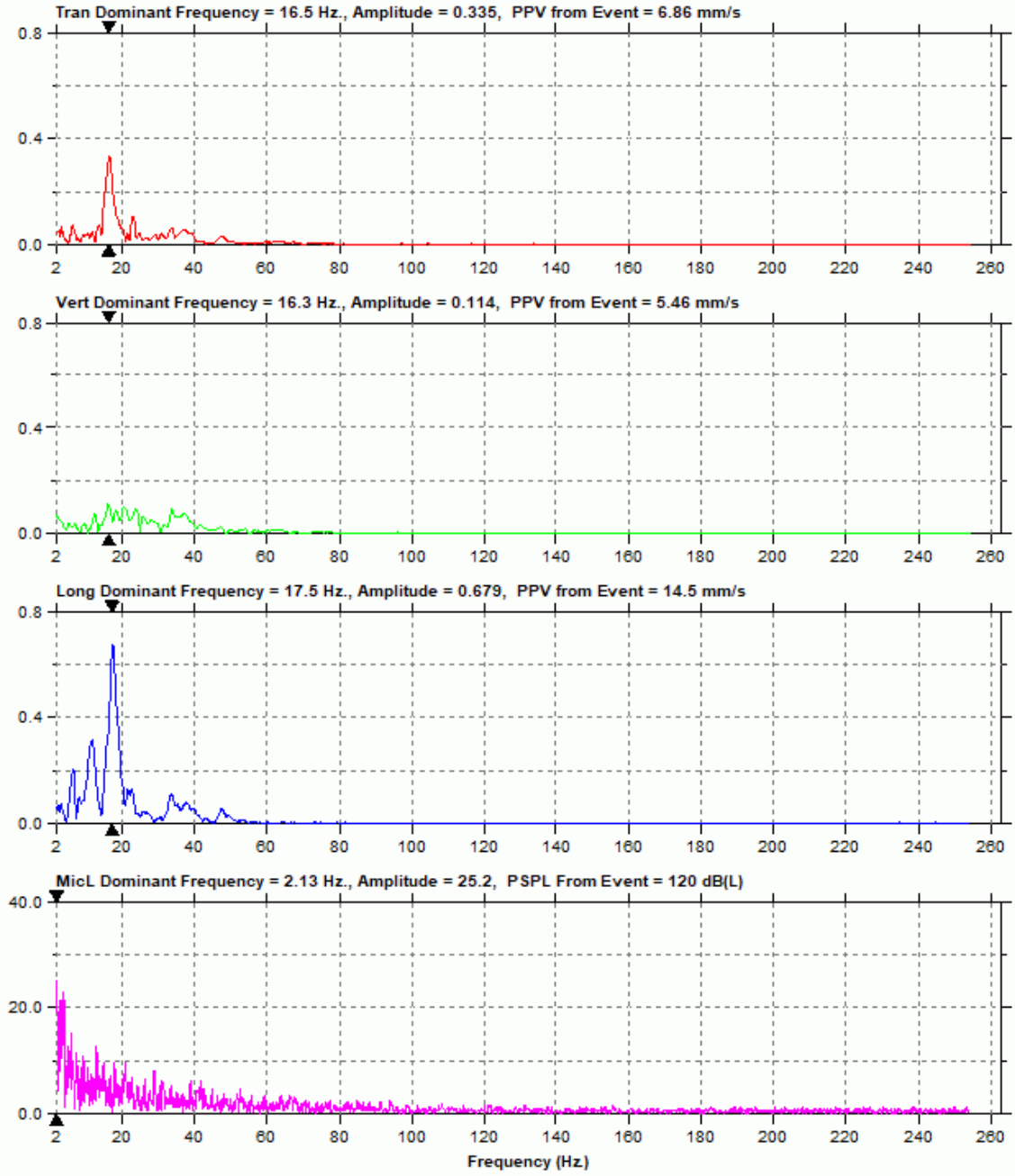
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 27, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:50:20 July 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKCH.BW0W

Post Event Notes

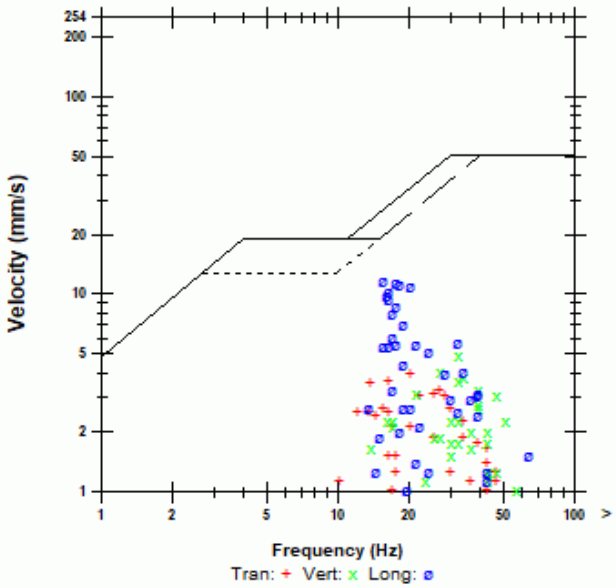
Extended Notes
Combo Mode July 28, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

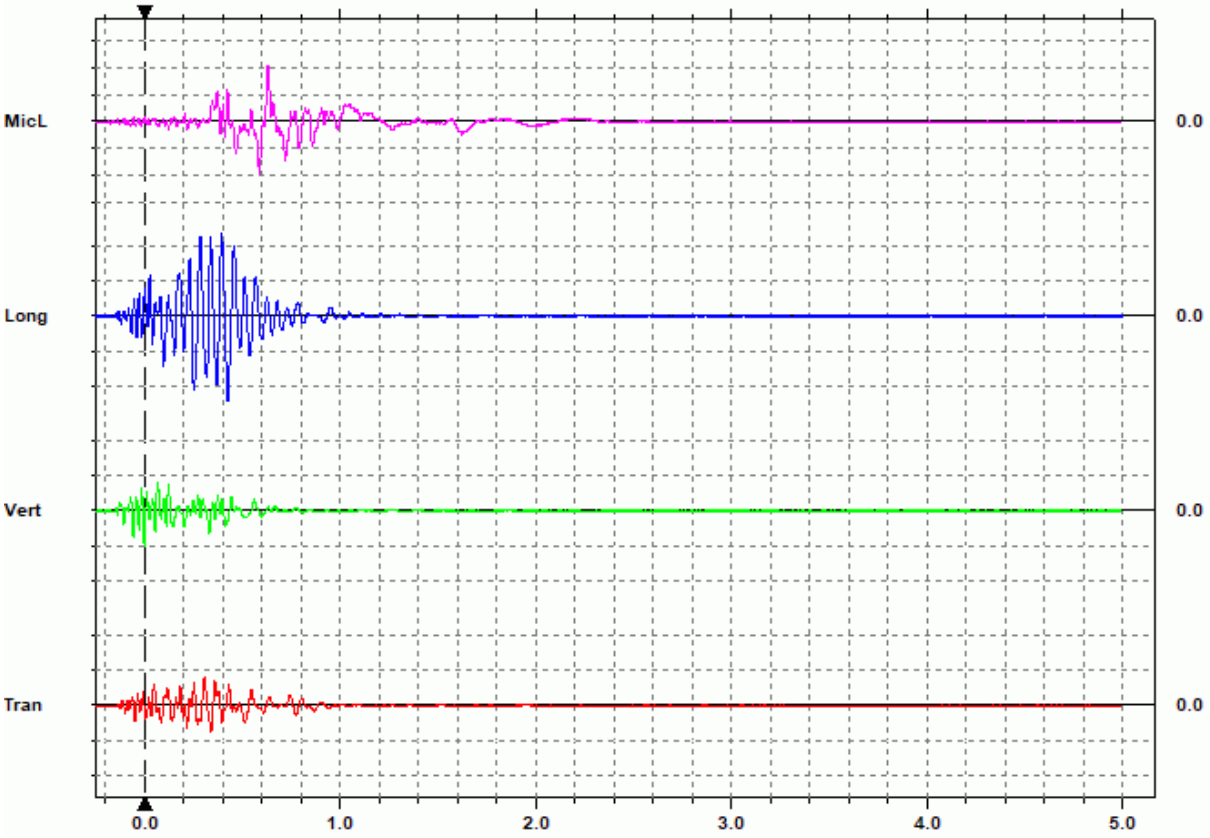
Microphone	Linear Weighting
PSPL	120.3 dB(L) at 0.630 sec.
ZC Freq	9.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.94	4.95	11.8	mm/s
ZC Freq	20	32	16	Hz
Time (Rel. to Trig)	0.307	0.000	0.426	sec
Peak Acceleration	0.0663	0.106	0.172	g
Peak Displacement	0.0363	0.0244	0.115	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.1 mm/s At 0.428 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:50:20 July 28, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKCH.BW0W
Job Number	8177		

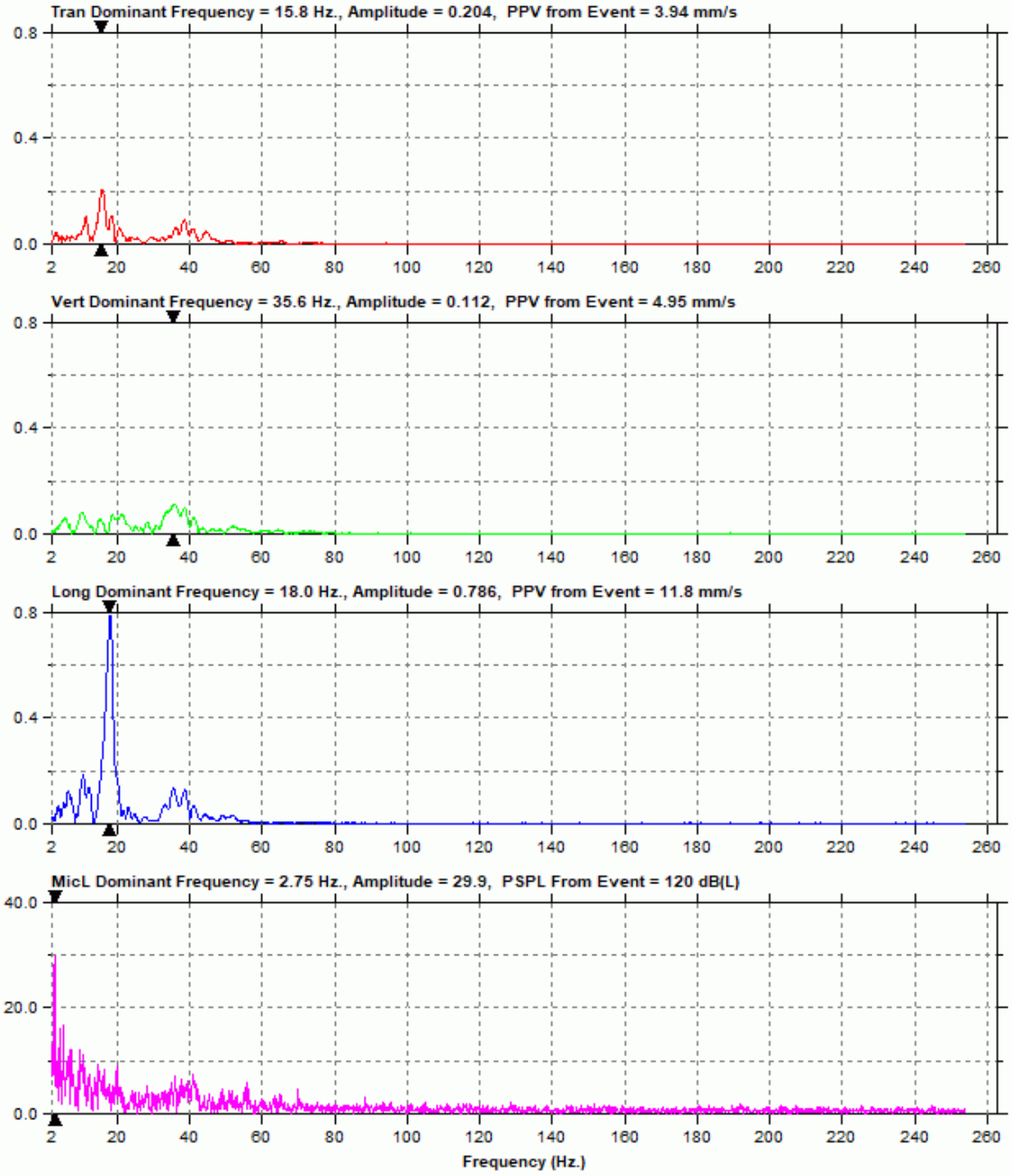
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 28, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:47:37 July 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKEB.VD0W

Post Event Notes

Extended Notes

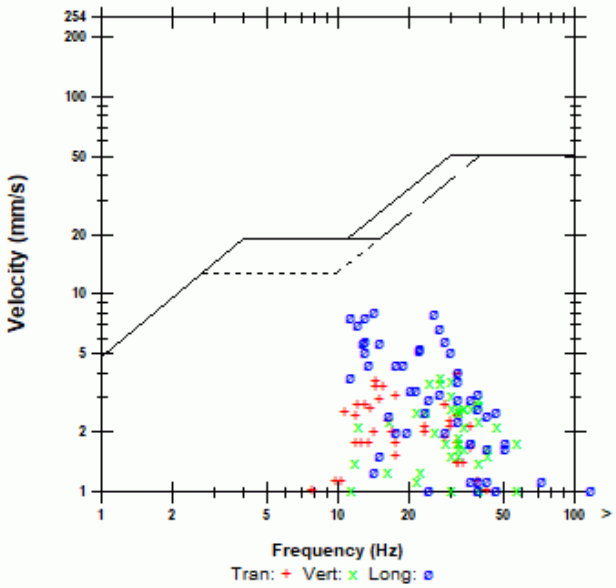
Combo Mode July 29, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

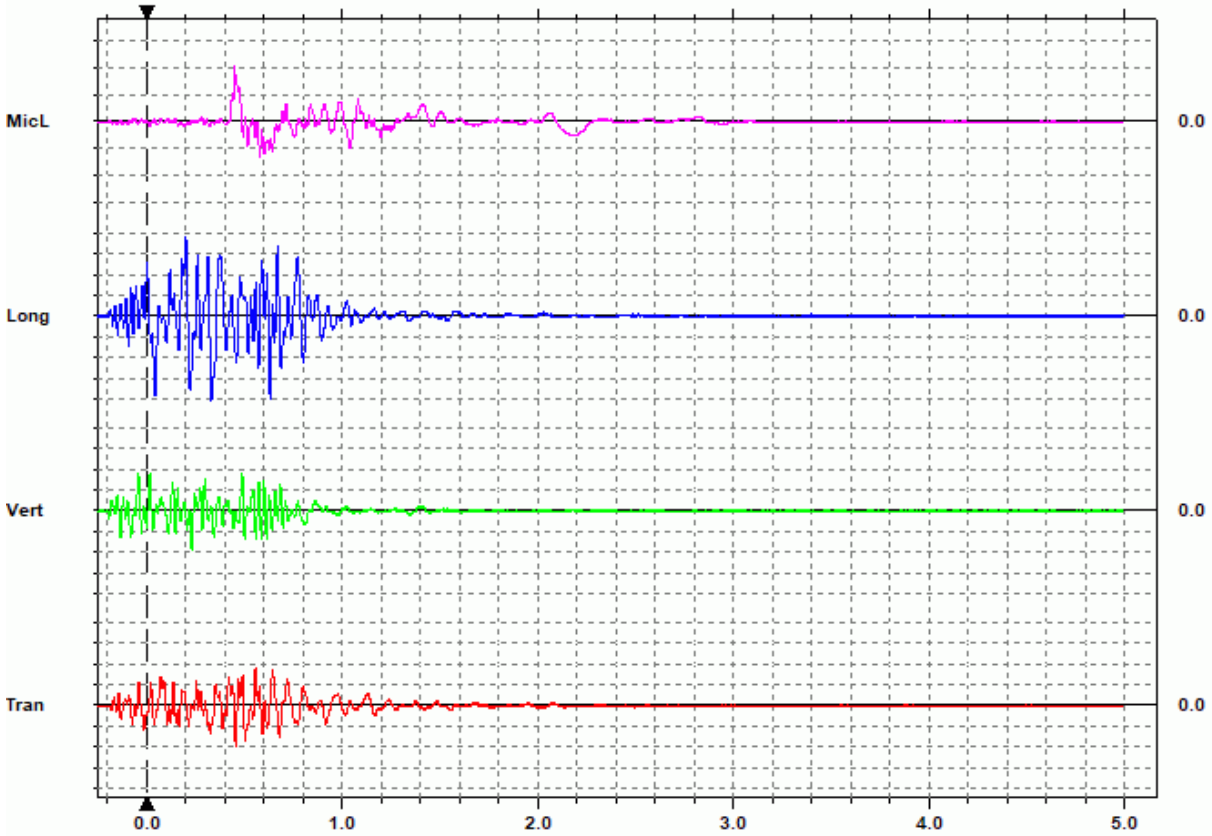
Microphone	Linear Weighting
PSPL	120.3 dB(L) at 0.449 sec.
ZC Freq	8.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.94	3.81	8.13	mm/s
ZC Freq	32	27	14	Hz
Time (Rel. to Trig)	0.455	0.229	0.330	sec
Peak Acceleration	0.0928	0.0795	0.133	g
Peak Displacement	0.0347	0.0231	0.0939	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.43 mm/s At 0.330 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:47:37 July 29, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKEB.VD0W
Job Number	8177		

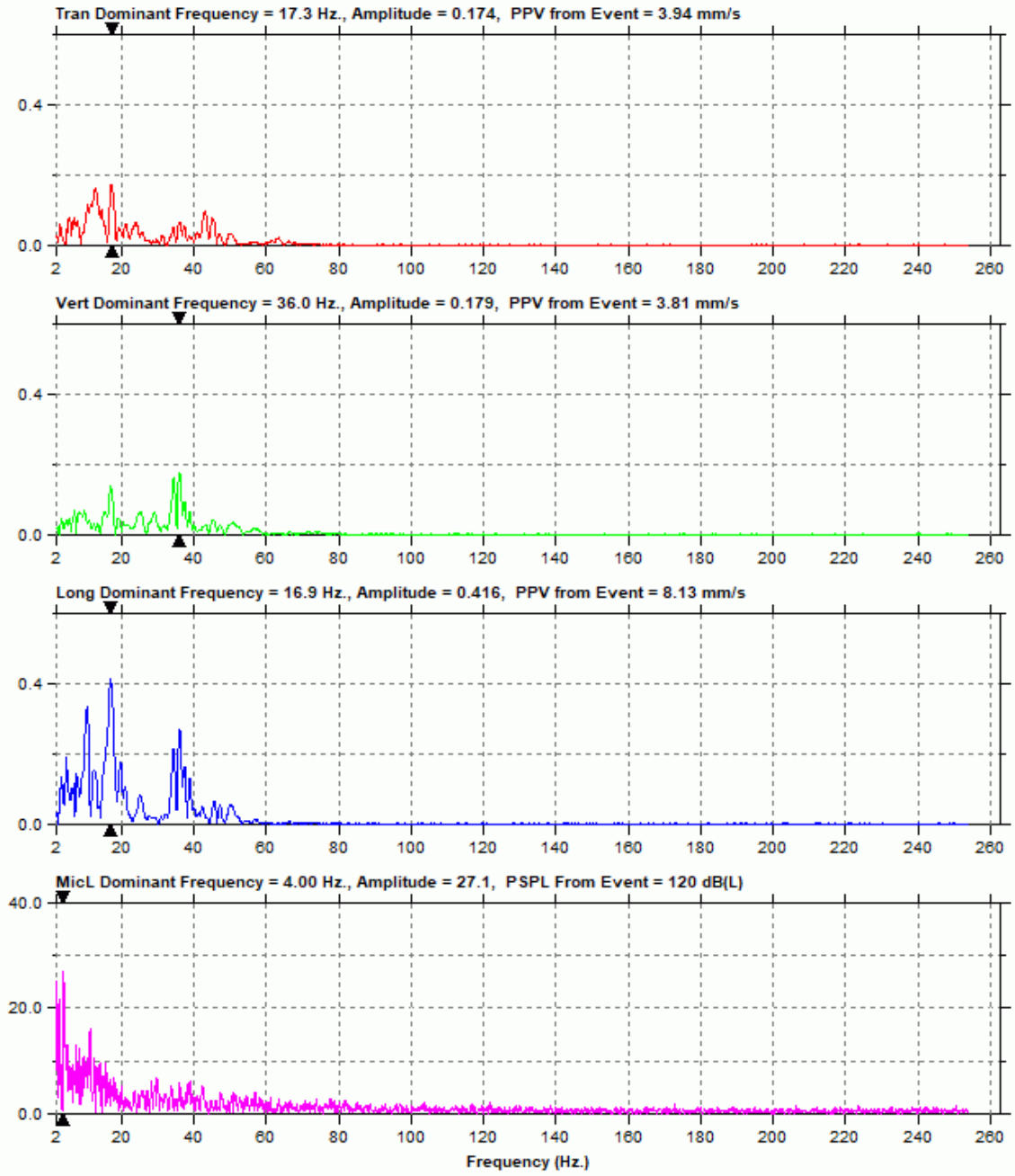
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 29, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:45:58 July 30, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKG6.GM0W

Post Event Notes

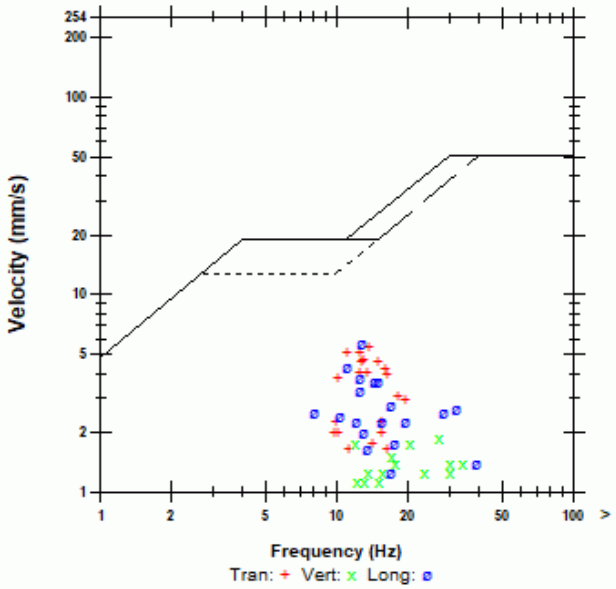
Extended Notes
Combo Mode July 30, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

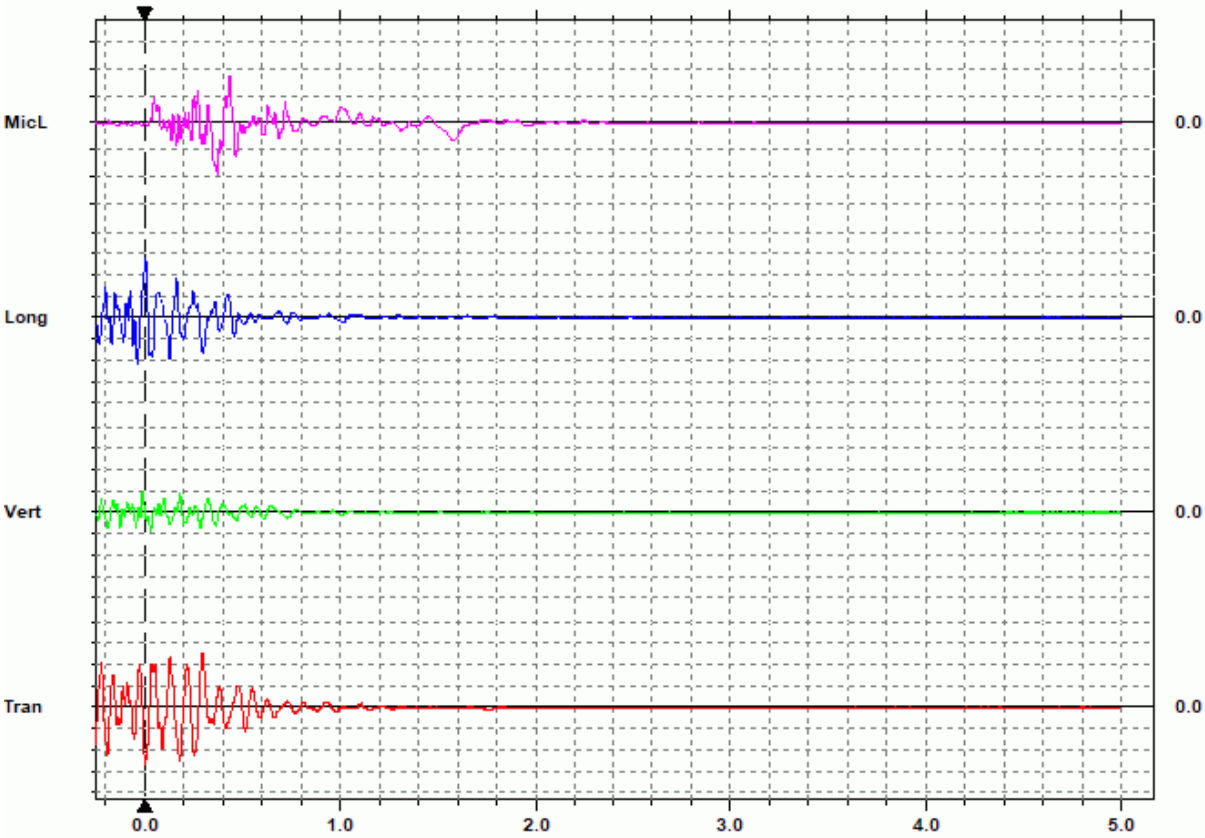
Microphone	Linear Weighting
PSPL	119.6 dB(L) at 0.372 sec.
ZC Freq	7.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.46	1.90	5.71	mm/s
ZC Freq	14	27	13	Hz
Time (Rel. to Trig)	0.002	-0.011	0.005	sec
Peak Acceleration	0.0663	0.0398	0.0795	g
Peak Displacement	0.0667	0.0182	0.0631	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.84 mm/s At 0.005 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 30, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:45:58 July 30, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKG6.GM0W
Job Number	8177		

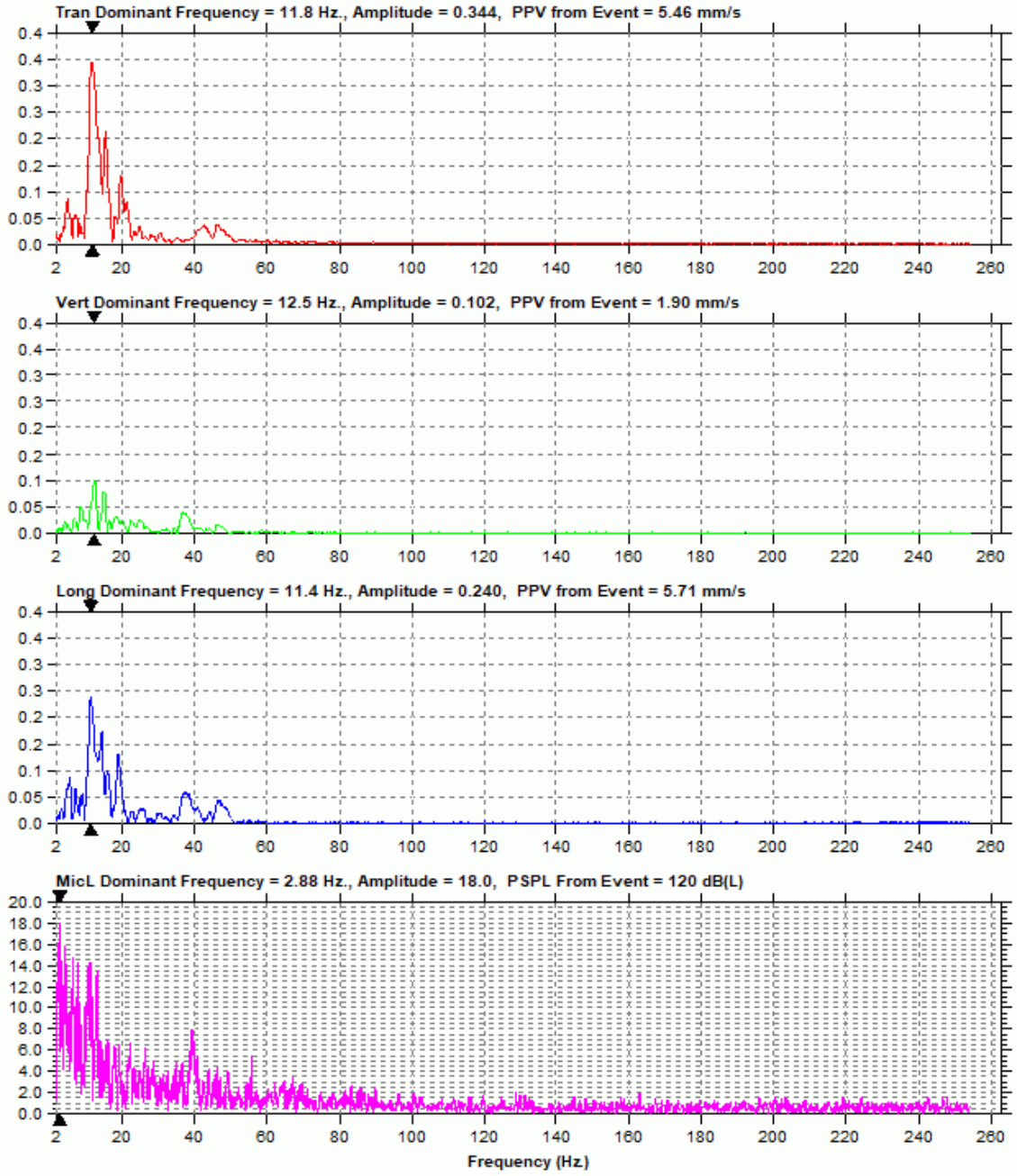
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 30, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



EXPLOTECH

Date/Time	Vert At 15:40:37 July 31, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKI0.VP0W

Post Event Notes

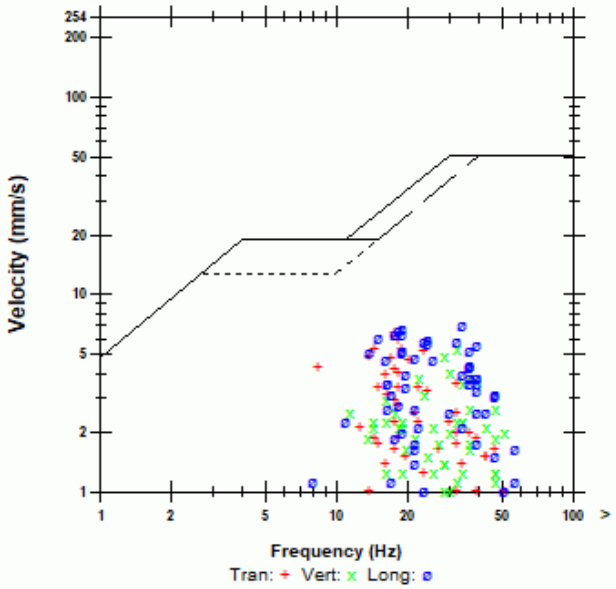
Extended Notes
Combo Mode July 31, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

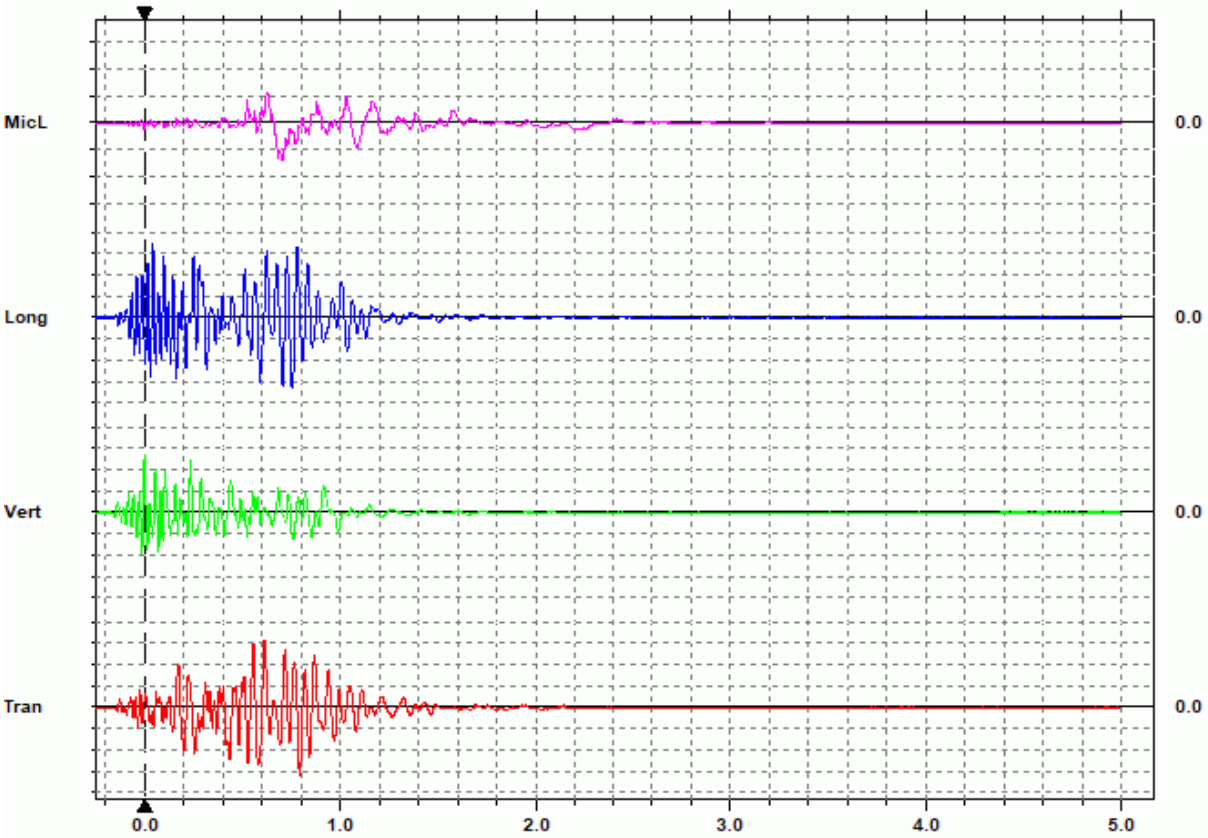
Microphone	Linear Weighting
PSPL	116.7 dB(L) at 0.706 sec.
ZC Freq	3.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.48	5.33	7.11	mm/s
ZC Freq	18	32	34	Hz
Time (Rel. to Trig)	0.794	0.001	0.044	sec
Peak Acceleration	0.0928	0.119	0.159	g
Peak Displacement	0.0651	0.0315	0.0598	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.76 mm/s At 0.591 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 31, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:40:37 July 31, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKI0.VP0W
Job Number	8177		

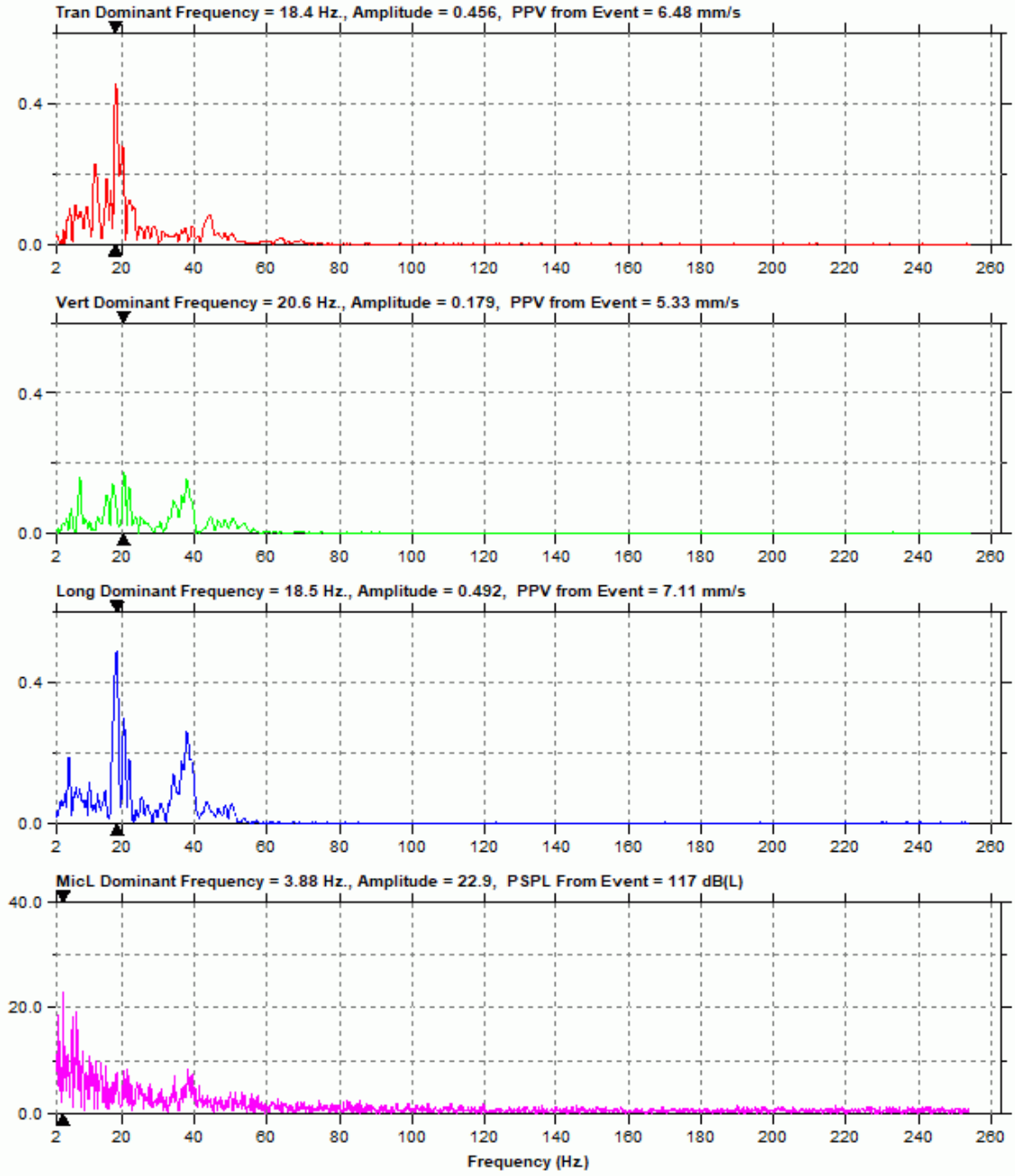
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 31, 2020 05:16:51
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 31, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:58 July 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IJMK.CM0W

Post Event Notes

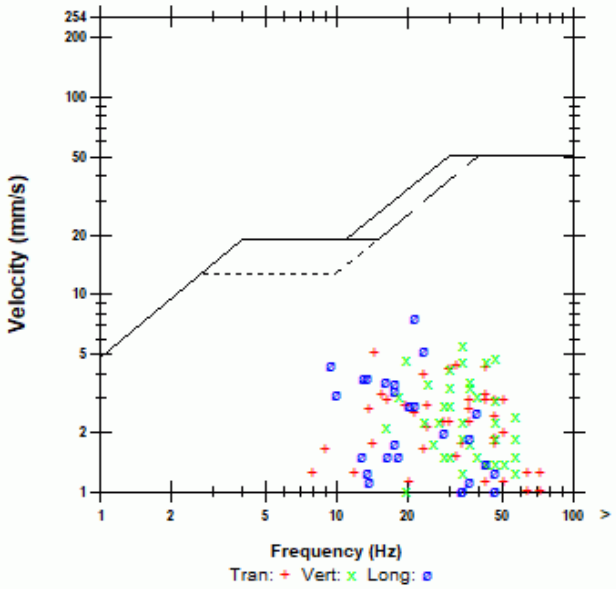
Extended Notes
Combo Mode July 14, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

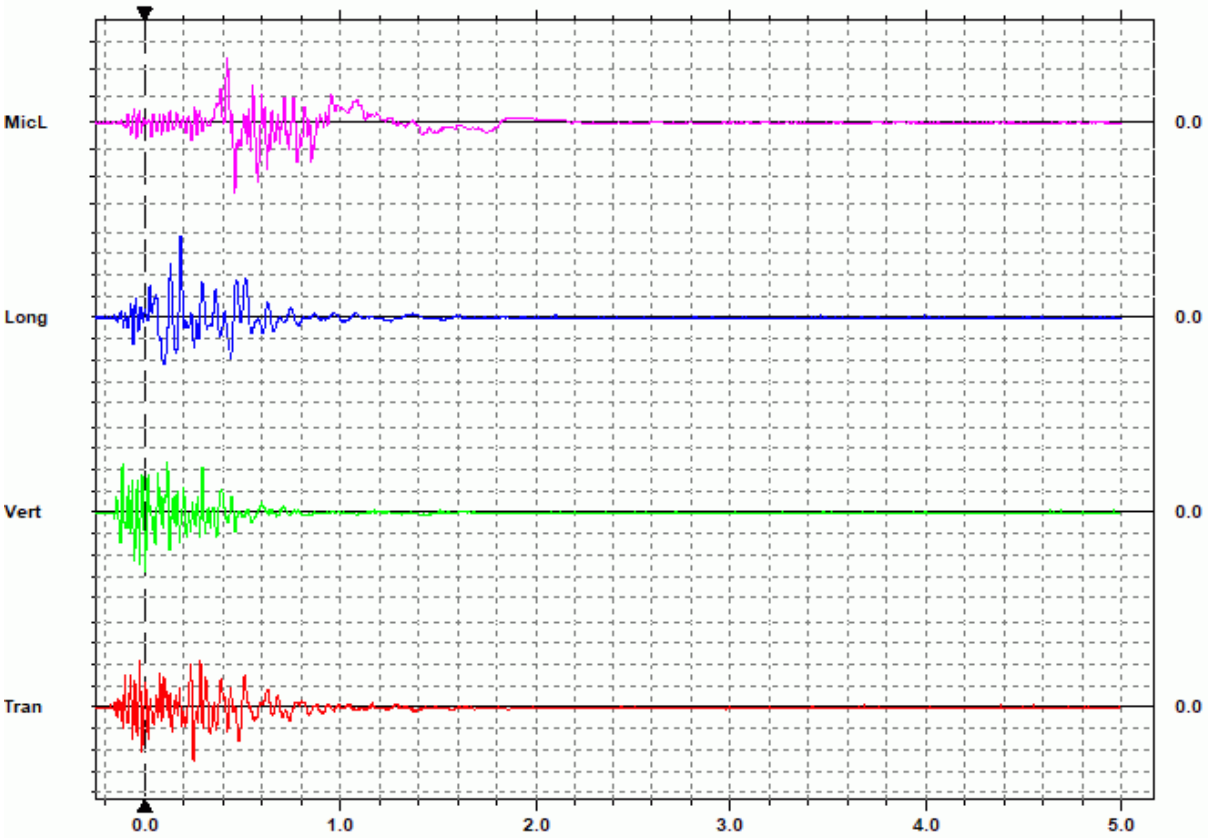
Microphone	Linear Weighting
PSPL	122.3 dB(L) at 0.460 sec.
ZC Freq	9.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	5.59	7.75	mm/s
ZC Freq	15	34	21	Hz
Time (Rel. to Trig)	0.248	0.002	0.184	sec
Peak Acceleration	0.133	0.146	0.106	g
Peak Displacement	0.0342	0.0281	0.0734	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.81 mm/s At 0.184 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:58 July 14, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IJMK.CM0W
Job Number	8177		

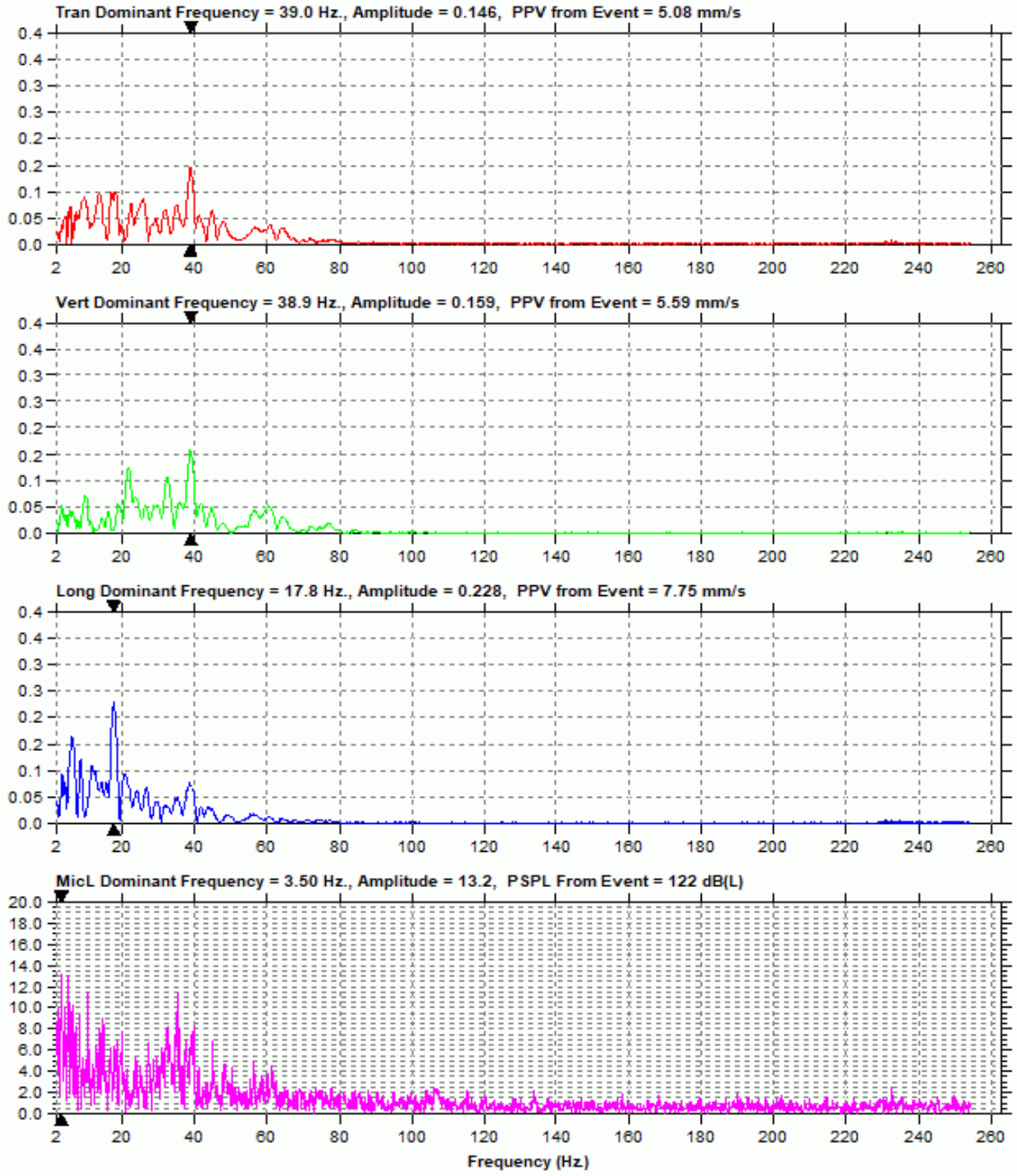
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 14, 2020 05:16:48
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:56 July 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IJQ9.L80W

Post Event Notes

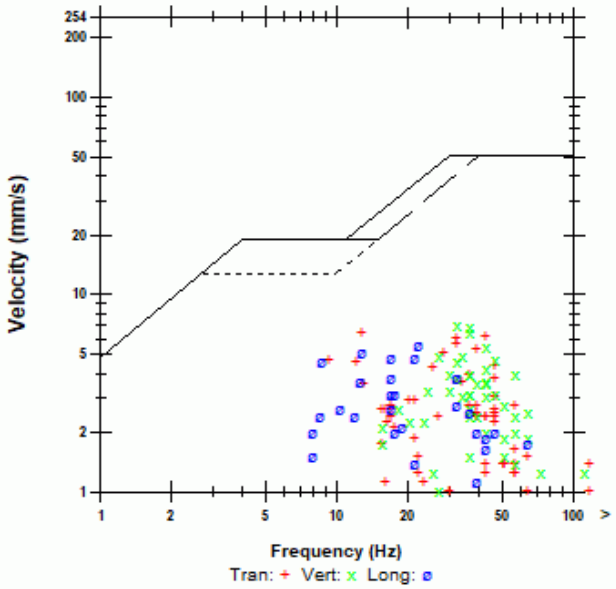
Extended Notes
Combo Mode July 16, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

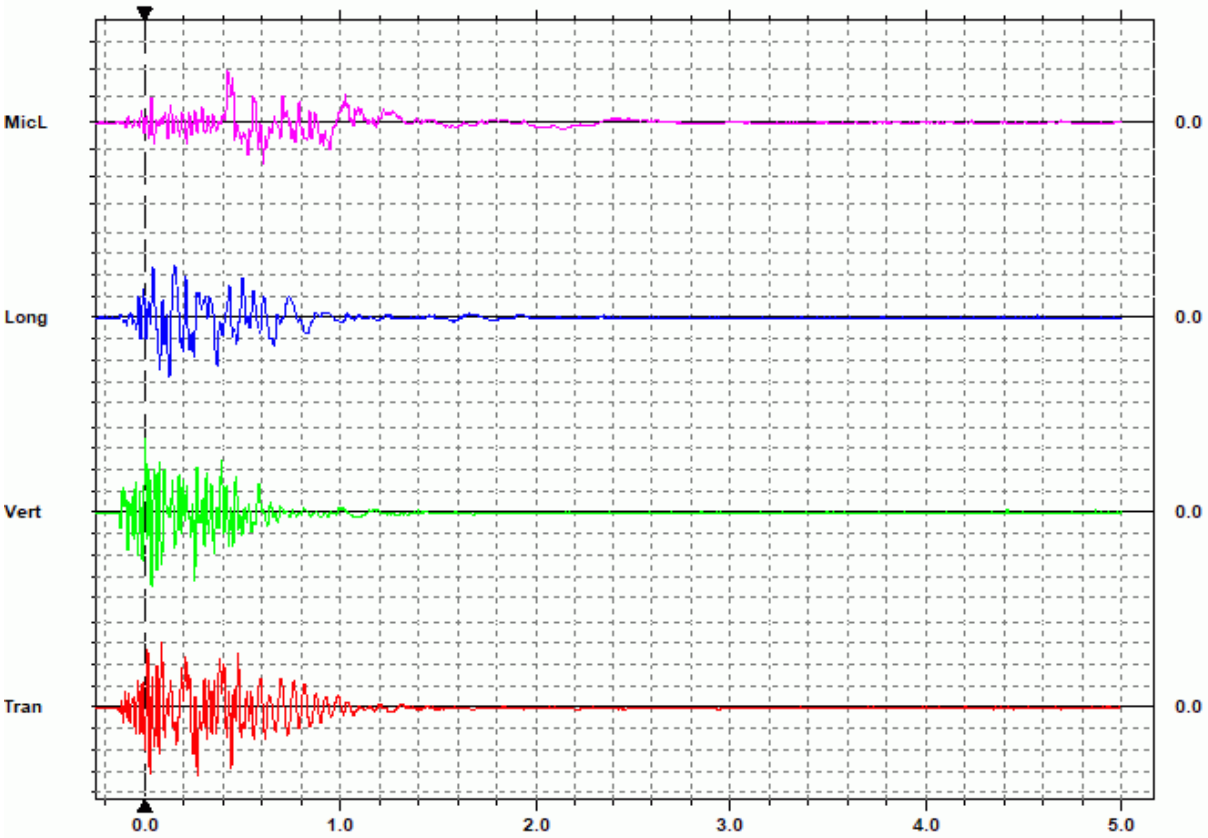
Microphone	Linear Weighting
PSPL	119.6 dB(L) at 0.424 sec.
ZC Freq	7.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.48	6.98	5.59	mm/s
ZC Freq	13	32	22	Hz
Time (Rel. to Trig)	0.270	0.004	0.125	sec
Peak Acceleration	0.146	0.159	0.106	g
Peak Displacement	0.0667	0.0338	0.0646	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.94 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:55:56 July 16, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IJQ9.L80W
Job Number	8177		

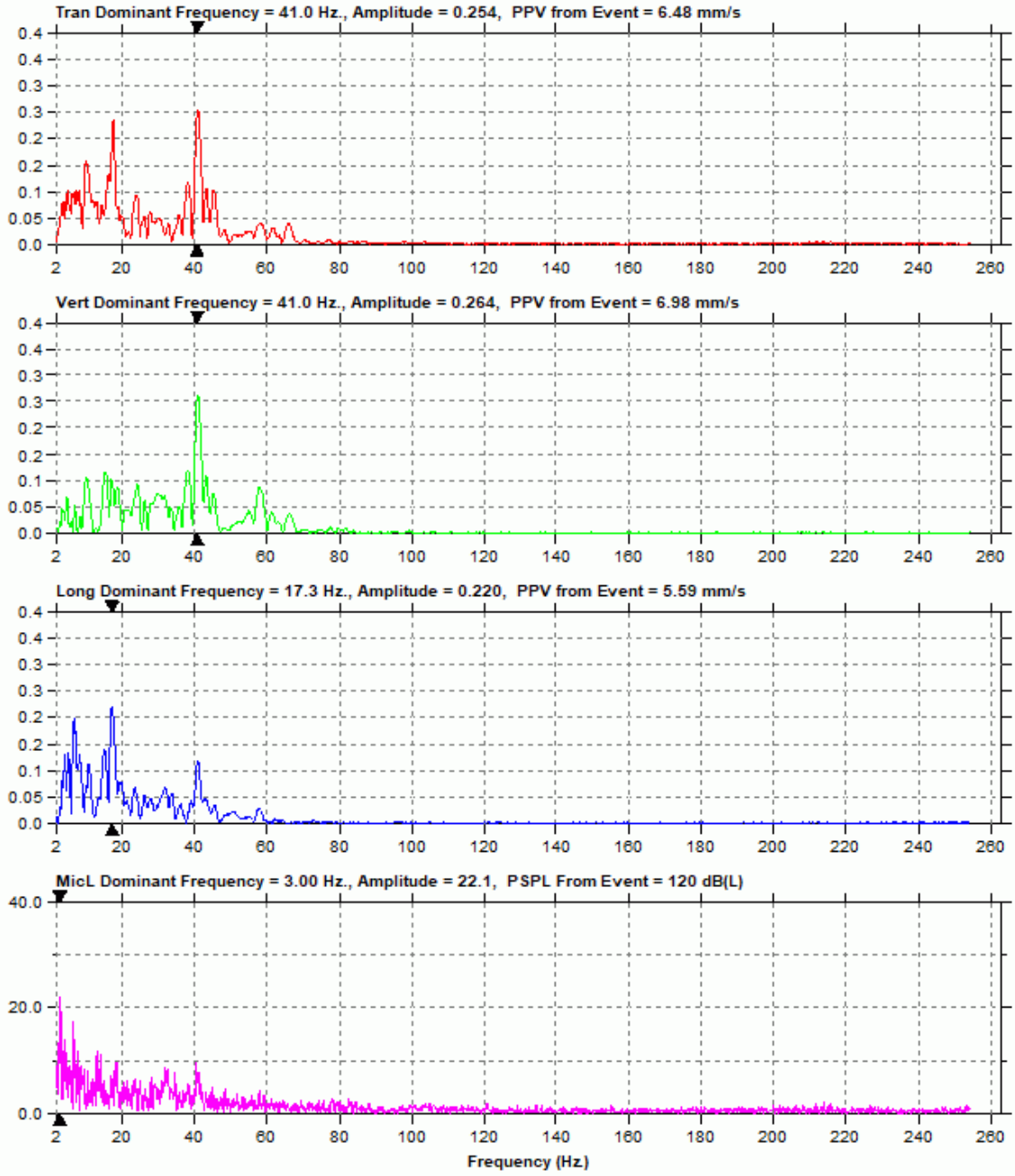
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 16, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 16, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:59 July 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IJTZ.3Z0W

Post Event Notes

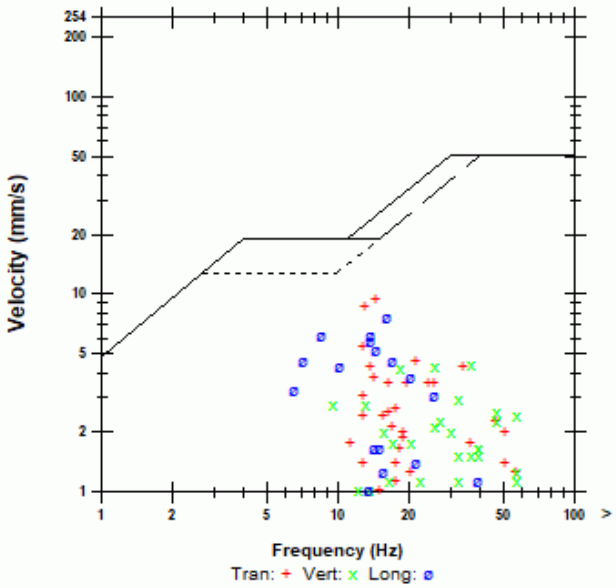
Extended Notes
Combo Mode July 18, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

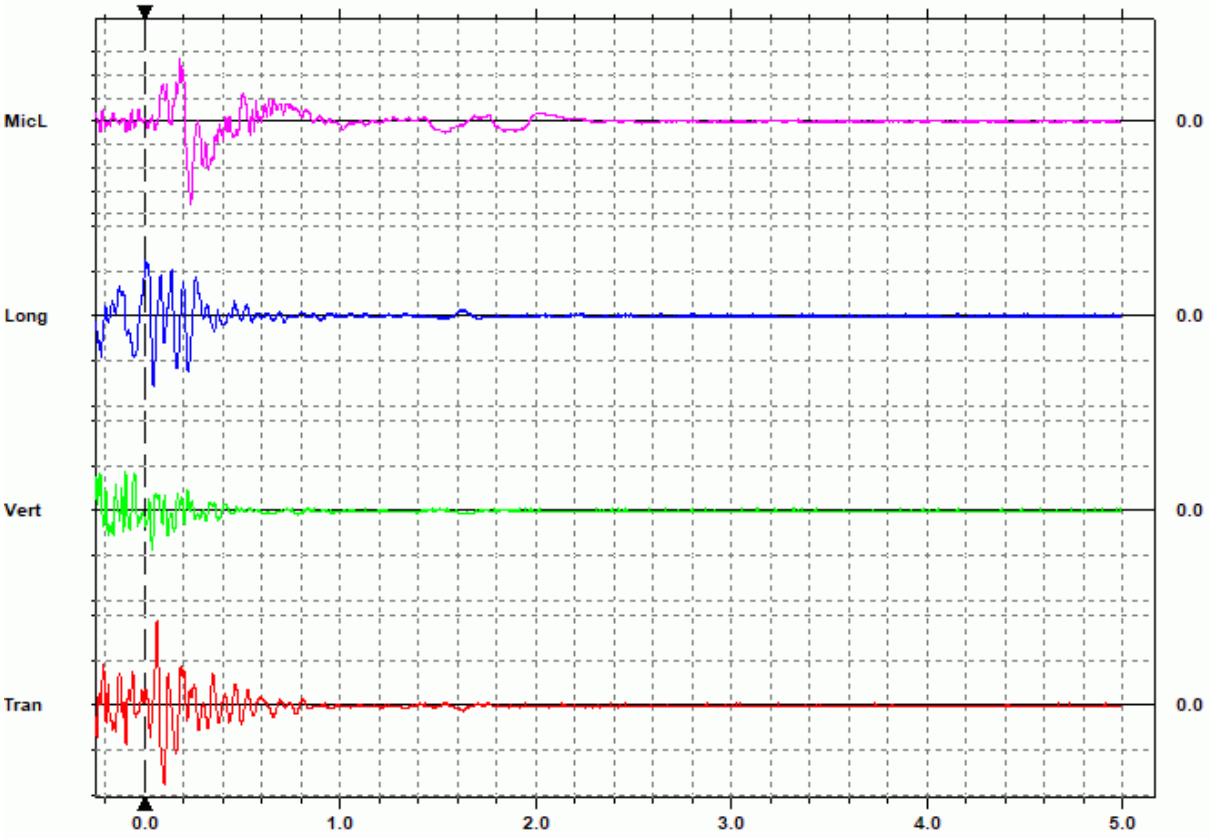
Microphone	Linear Weighting
PSPL	125.0 dB(L) at 0.236 sec.
ZC Freq	8.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.40	4.44	7.75	mm/s
ZC Freq	15	37	16	Hz
Time (Rel. to Trig)	0.063	-0.097	0.045	sec
Peak Acceleration	0.119	0.106	0.0928	g
Peak Displacement	0.110	0.0398	0.111	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.52 mm/s At 0.063 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:59 July 18, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IJTZ.3Z0W
Job Number	8177		

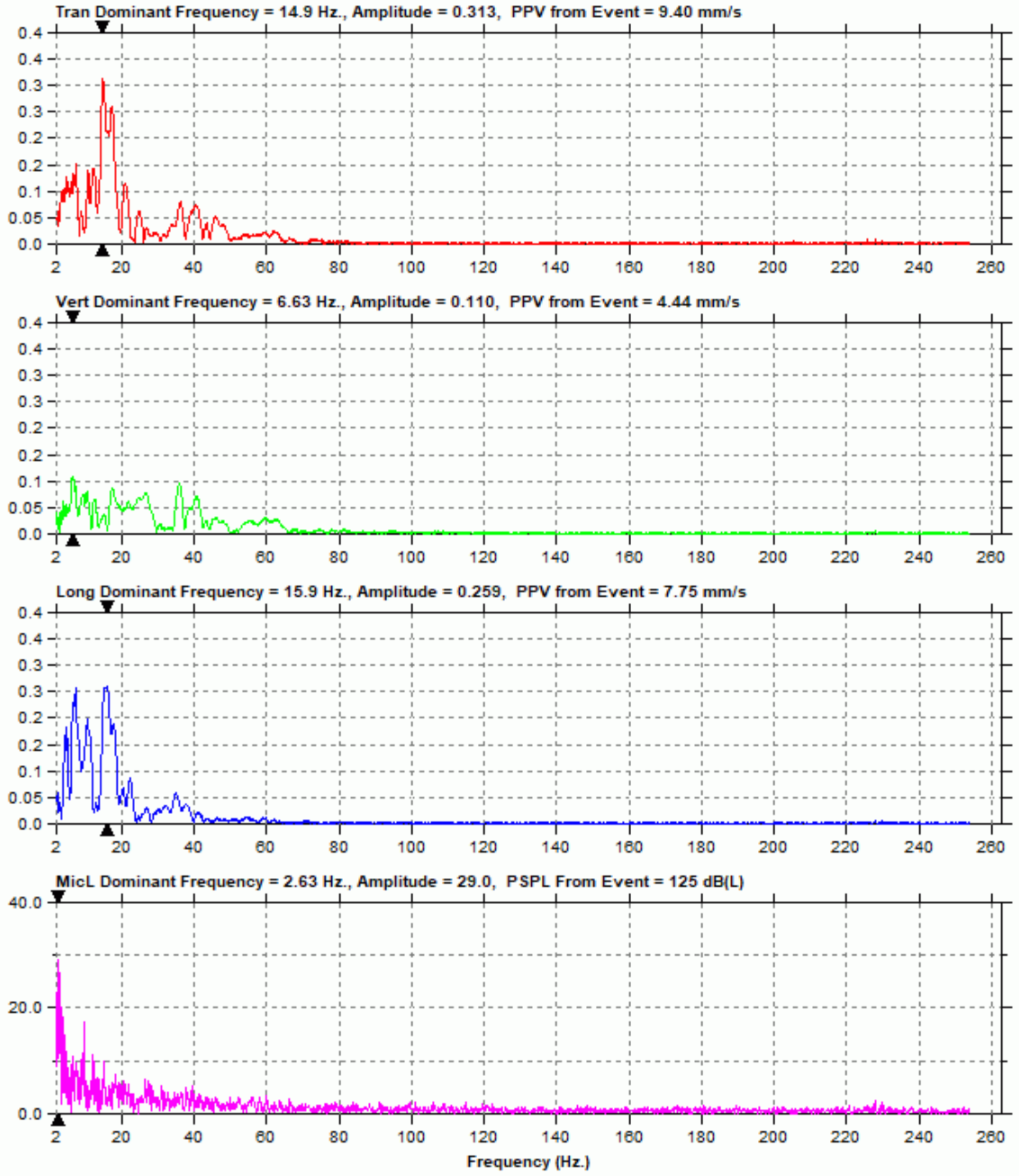
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 18, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 18, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:15:19 July 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IK36.DJ0W

Post Event Notes

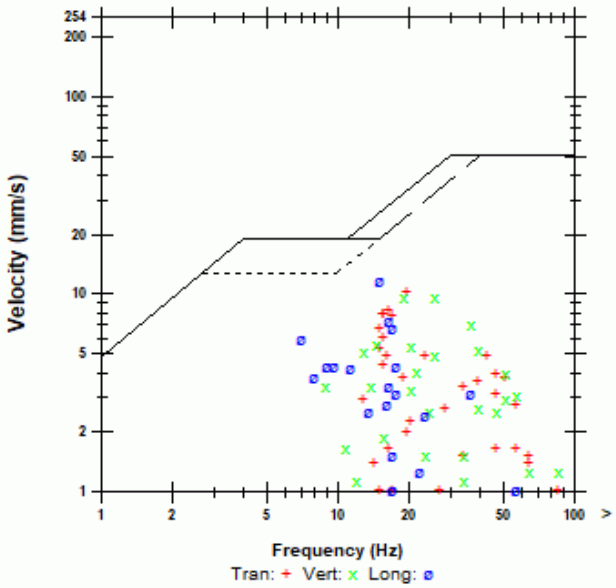
Extended Notes
Combo Mode July 23, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

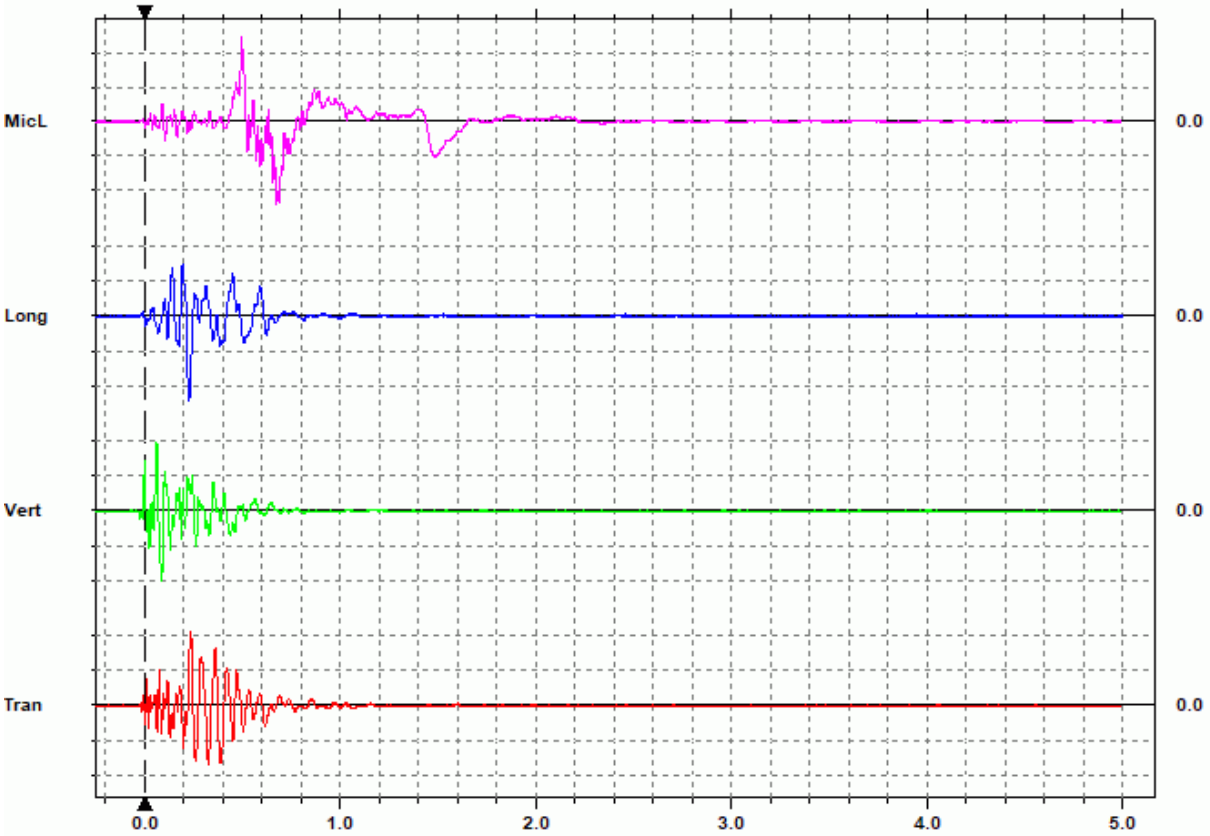
Microphone	Linear Weighting
PSPL	127.9 dB(L) at 0.498 sec.
ZC Freq	5.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	10.3	9.78	11.8	mm/s
ZC Freq	20	19	15	Hz
Time (Rel. to Trig)	0.237	0.089	0.230	sec
Peak Acceleration	0.159	0.172	0.133	g
Peak Displacement	0.0881	0.0825	0.118	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 14.3 mm/s At 0.232 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: July 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:15:19 July 23, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IK36.DJ0W
Job Number	8177		

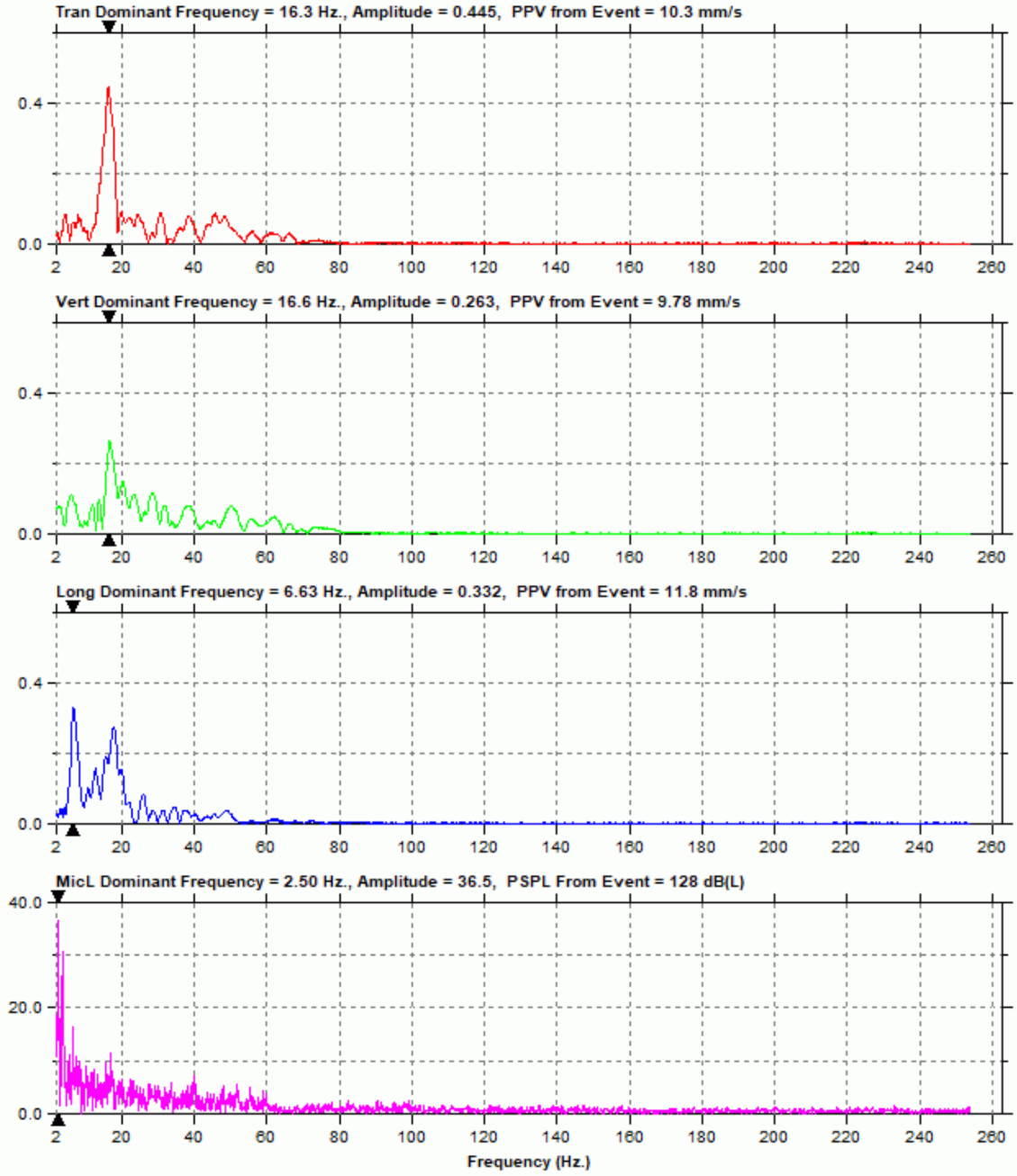
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 23, 2020 05:16:46
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:48:09 July 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IK52.K90W

Post Event Notes

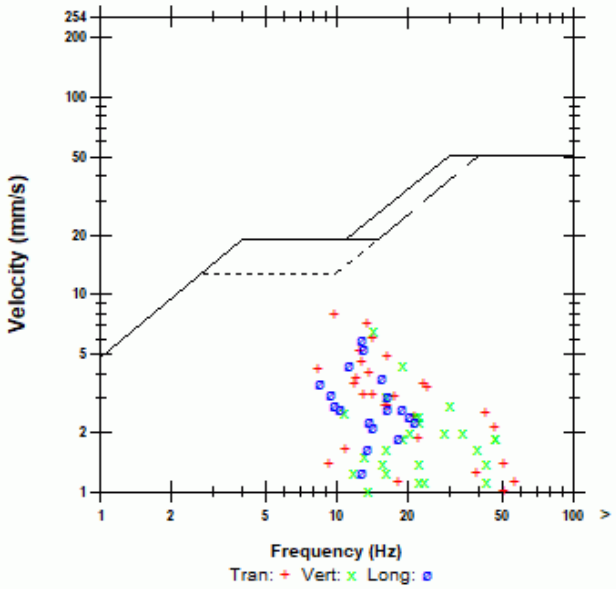
Extended Notes
Combo Mode July 24, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

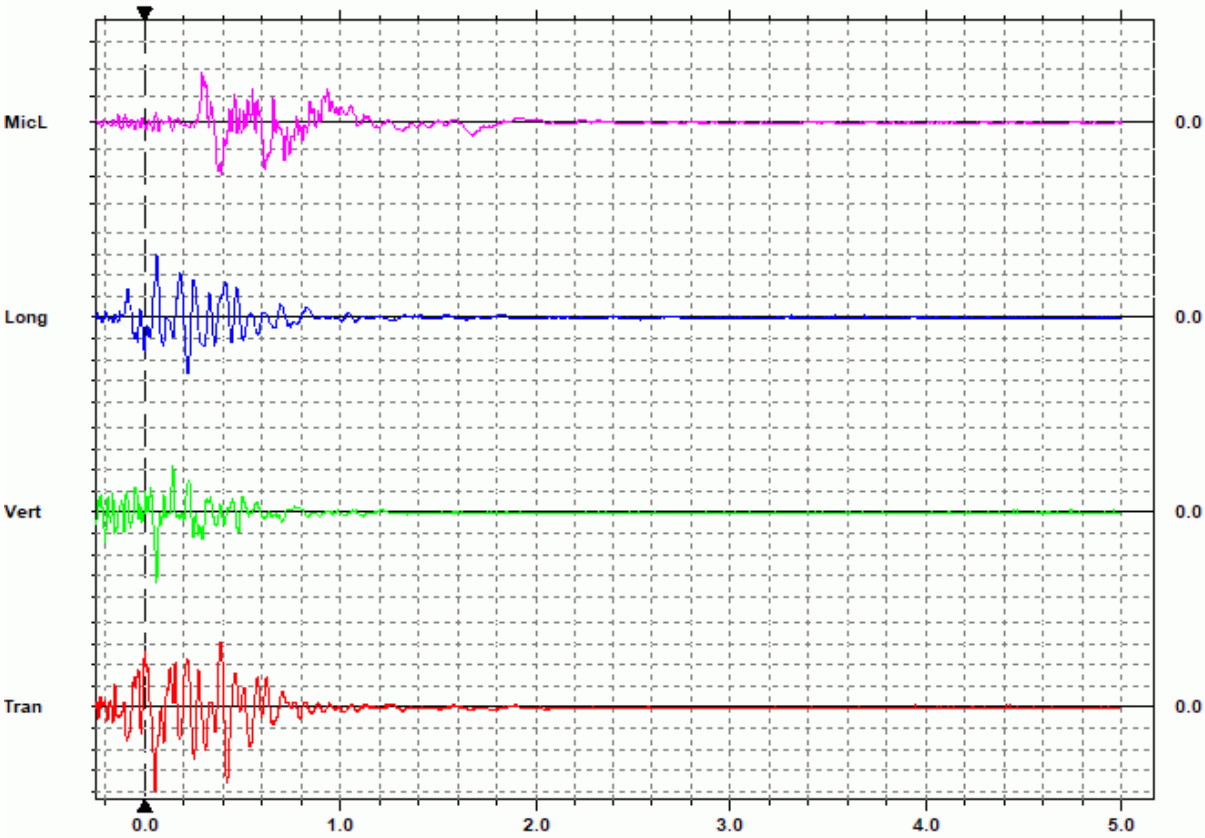
Microphone	Linear Weighting
PSPL	119.7 dB(L) at 0.292 sec.
ZC Freq	7.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.00	6.60	5.97	mm/s
ZC Freq	9.8	14	13	Hz
Time (Rel. to Trig)	0.055	0.061	0.063	sec
Peak Acceleration	0.0795	0.0663	0.0663	g
Peak Displacement	0.0920	0.0562	0.0649	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.3 mm/s At 0.061 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 24, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:48:09 July 24, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IK52.K90W
Job Number	8177		

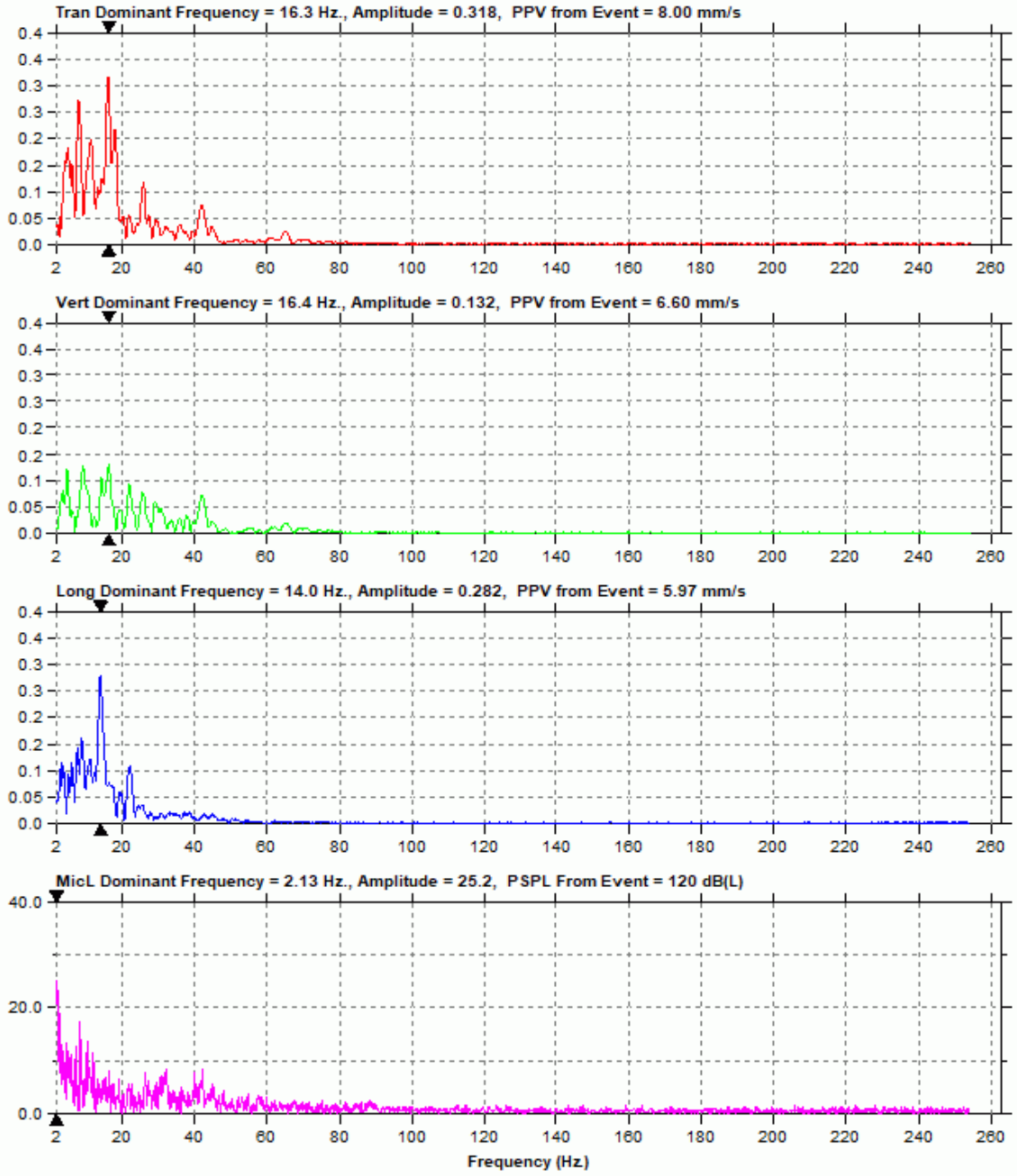
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 24, 2020 05:16:45
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:55:28 July 27, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IKAM.WG0W

Post Event Notes

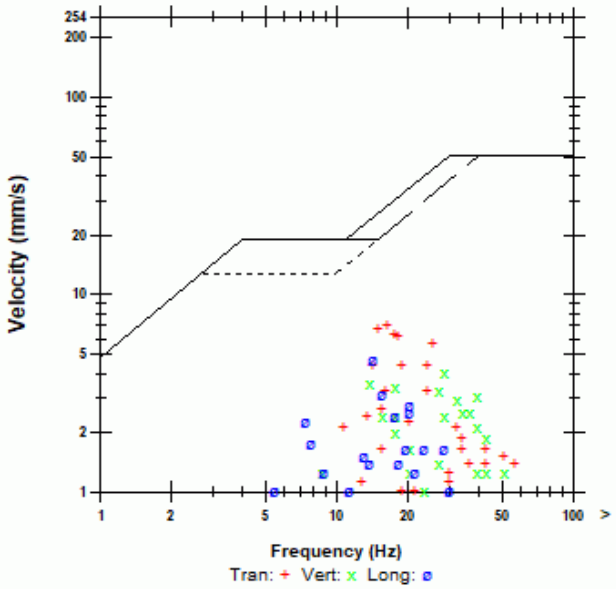
Extended Notes
Combo Mode July 27, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

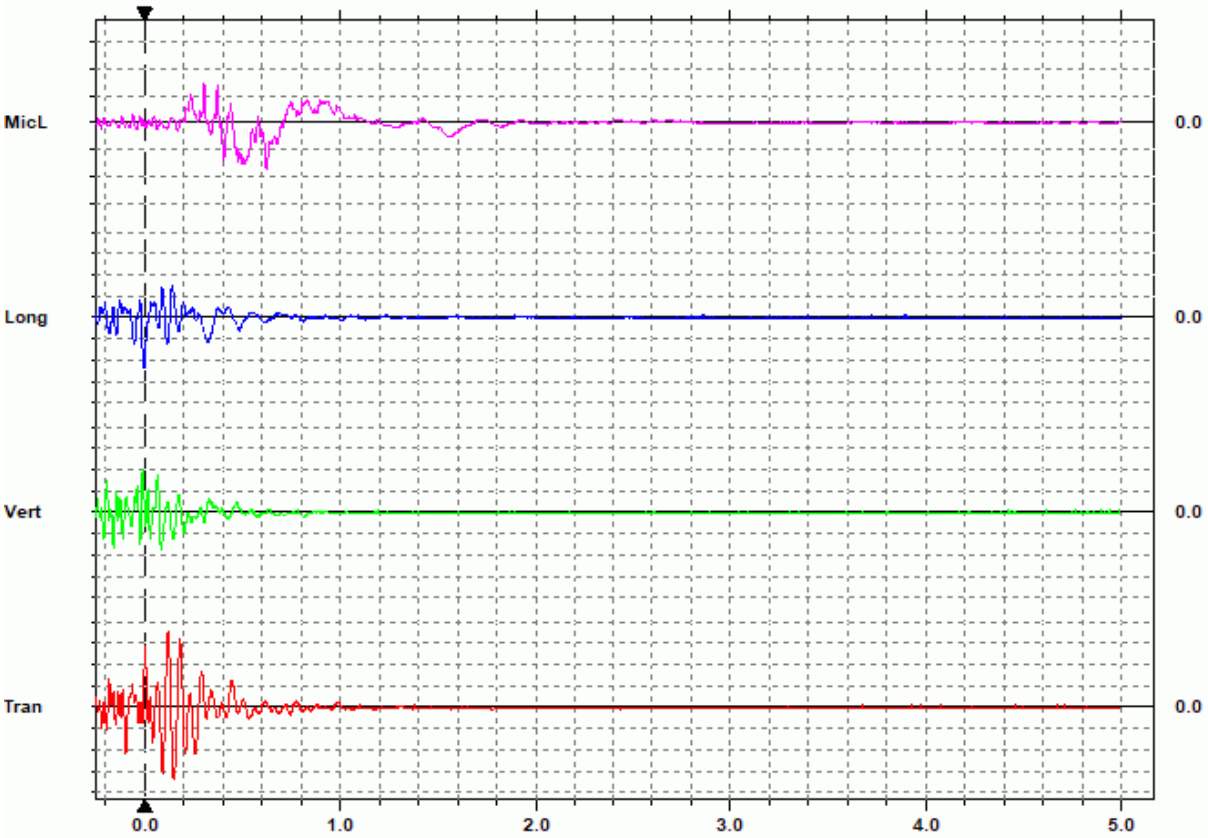
Microphone	Linear Weighting
PSPL	118.7 dB(L) at 0.623 sec.
ZC Freq	4.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.11	4.06	4.70	mm/s
ZC Freq	17	28	14	Hz
Time (Rel. to Trig)	0.120	-0.010	-0.004	sec
Peak Acceleration	0.0928	0.0928	0.0663	g
Peak Displacement	0.0729	0.0298	0.0473	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.55 mm/s At 0.148 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 27, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:55:28 July 27, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IKAM.WG0W
Job Number	8177		

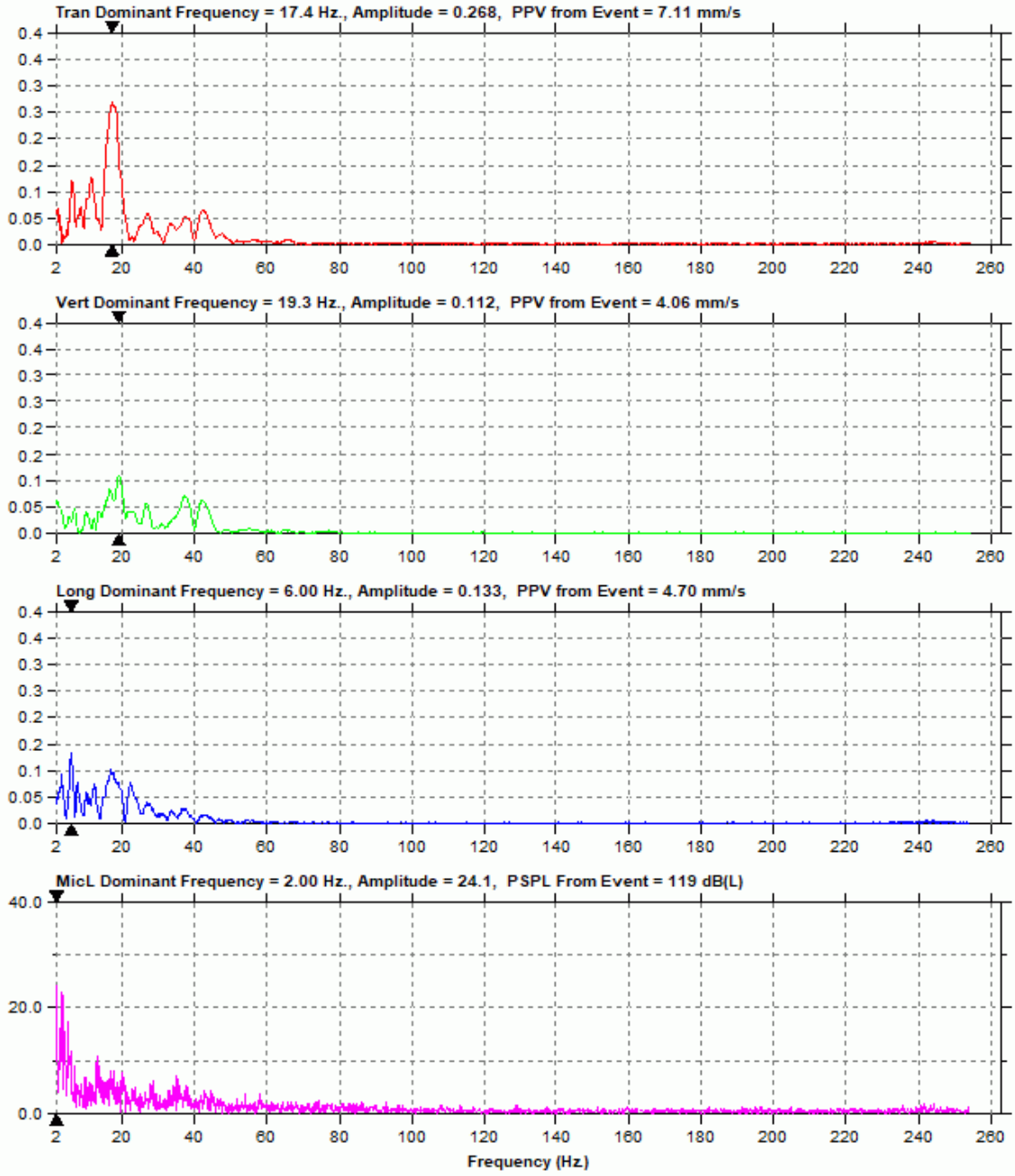
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 27, 2020 05:16:49
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 27, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:50:43 July 28, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IKCH.CJ0W

Post Event Notes

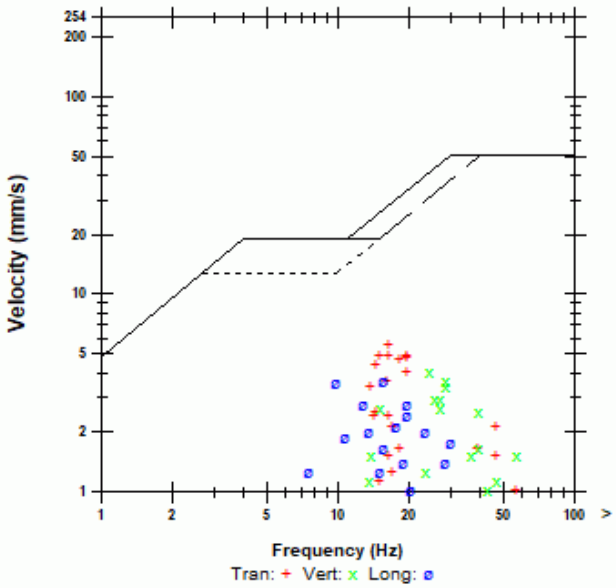
Extended Notes
Combo Mode July 28, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

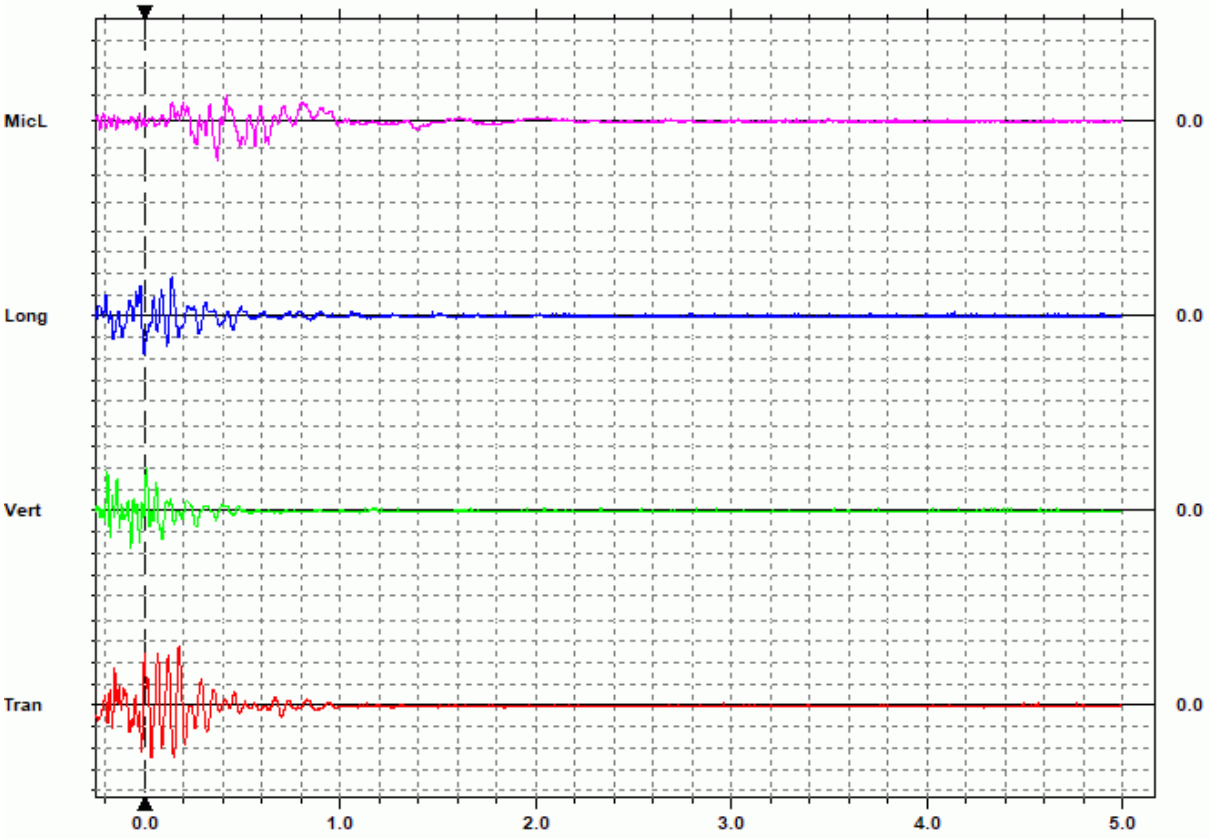
Microphone	Linear Weighting
PSPL	117.2 dB(L) at 0.372 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.59	4.06	3.68	mm/s
ZC Freq	17	24	16	Hz
Time (Rel. to Trig)	0.176	0.010	0.139	sec
Peak Acceleration	0.119	0.0663	0.0663	g
Peak Displacement	0.0513	0.0278	0.0438	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.10 mm/s At 0.000 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 28, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:50:43 July 28, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IKCH.CJ0W
Job Number	8177		

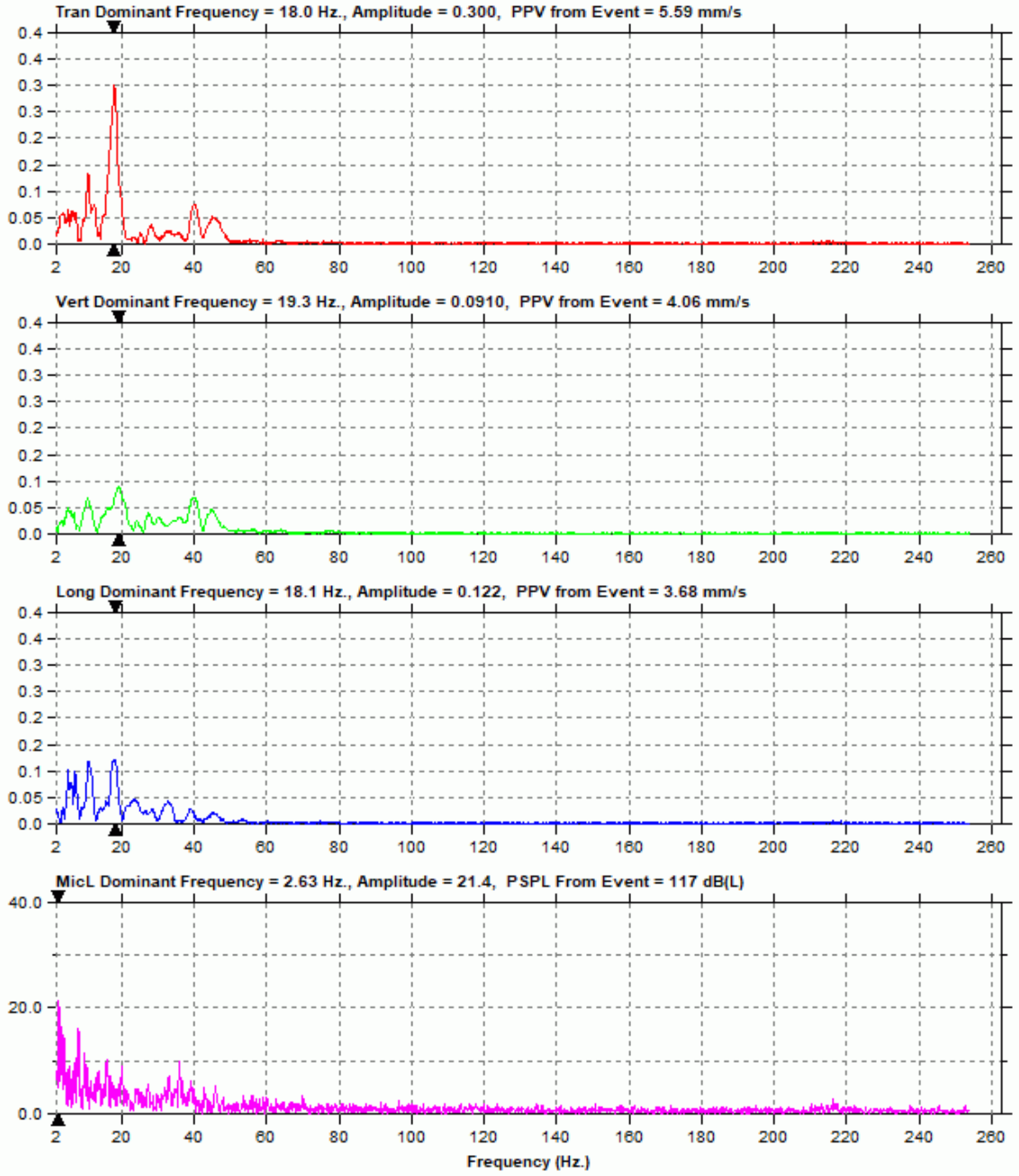
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 28, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 28, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:18:20 July 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IK36.IK0W

Post Event Notes

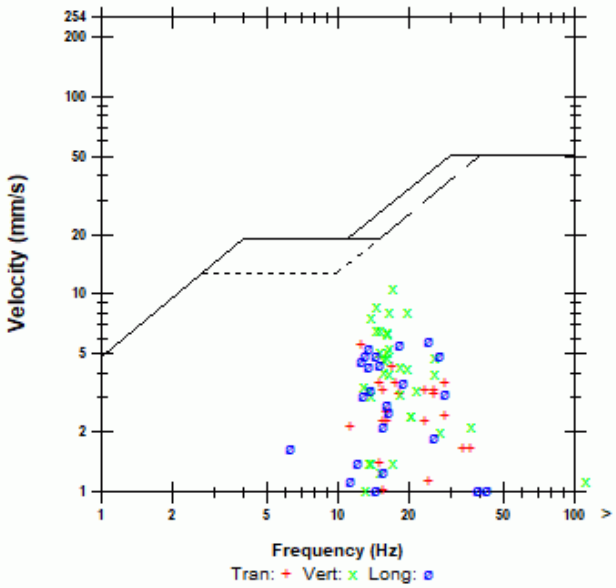
Extended Notes
Combo Mode July 23, 2020 14:24:43
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

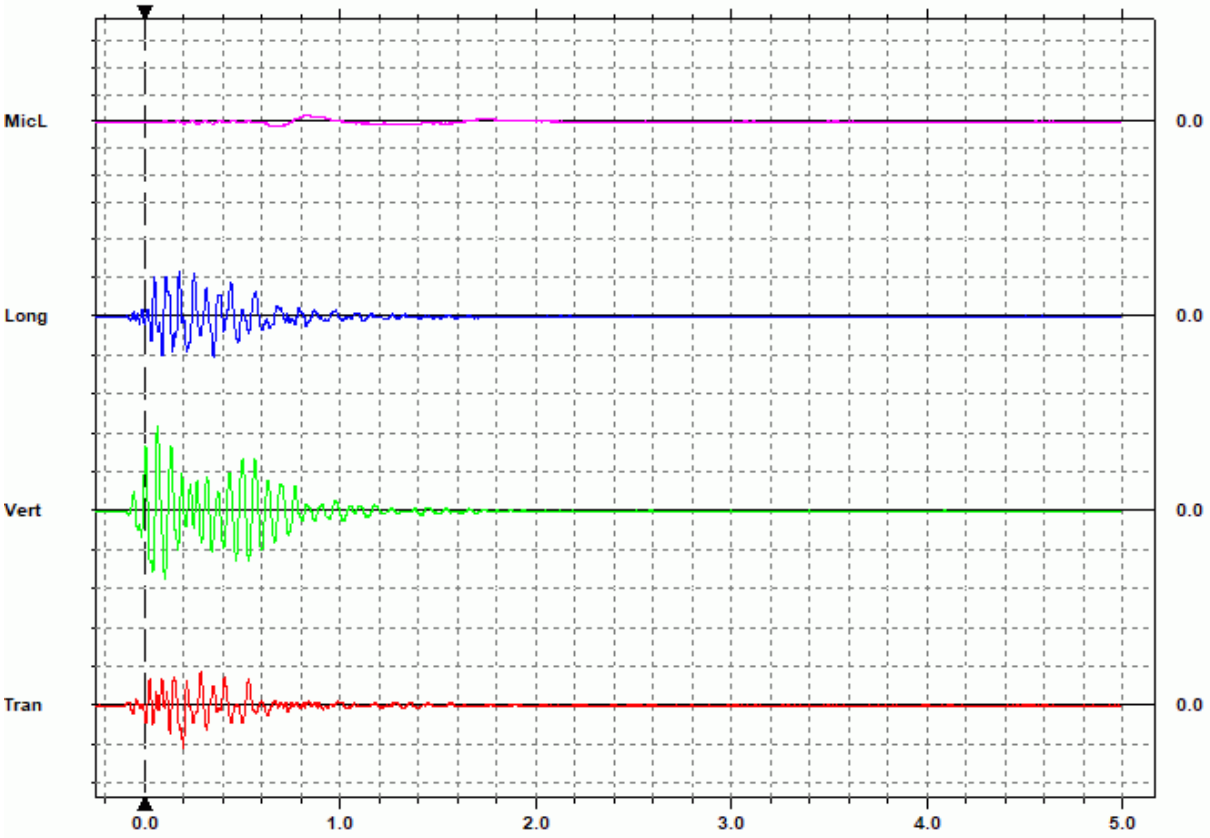
Microphone	Linear Weighting
PSPL	101.0 dB(L) at 0.813 sec.
ZC Freq	2.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.59	10.8	5.84	mm/s
ZC Freq	12	17	24	Hz
Time (Rel. to Trig)	0.199	0.068	0.179	sec
Peak Acceleration	0.0928	0.146	0.0928	g
Peak Displacement	0.0638	0.101	0.0599	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.0 mm/s At 0.068 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:18:20 July 23, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IK36.IK0W
Job Number	8177		

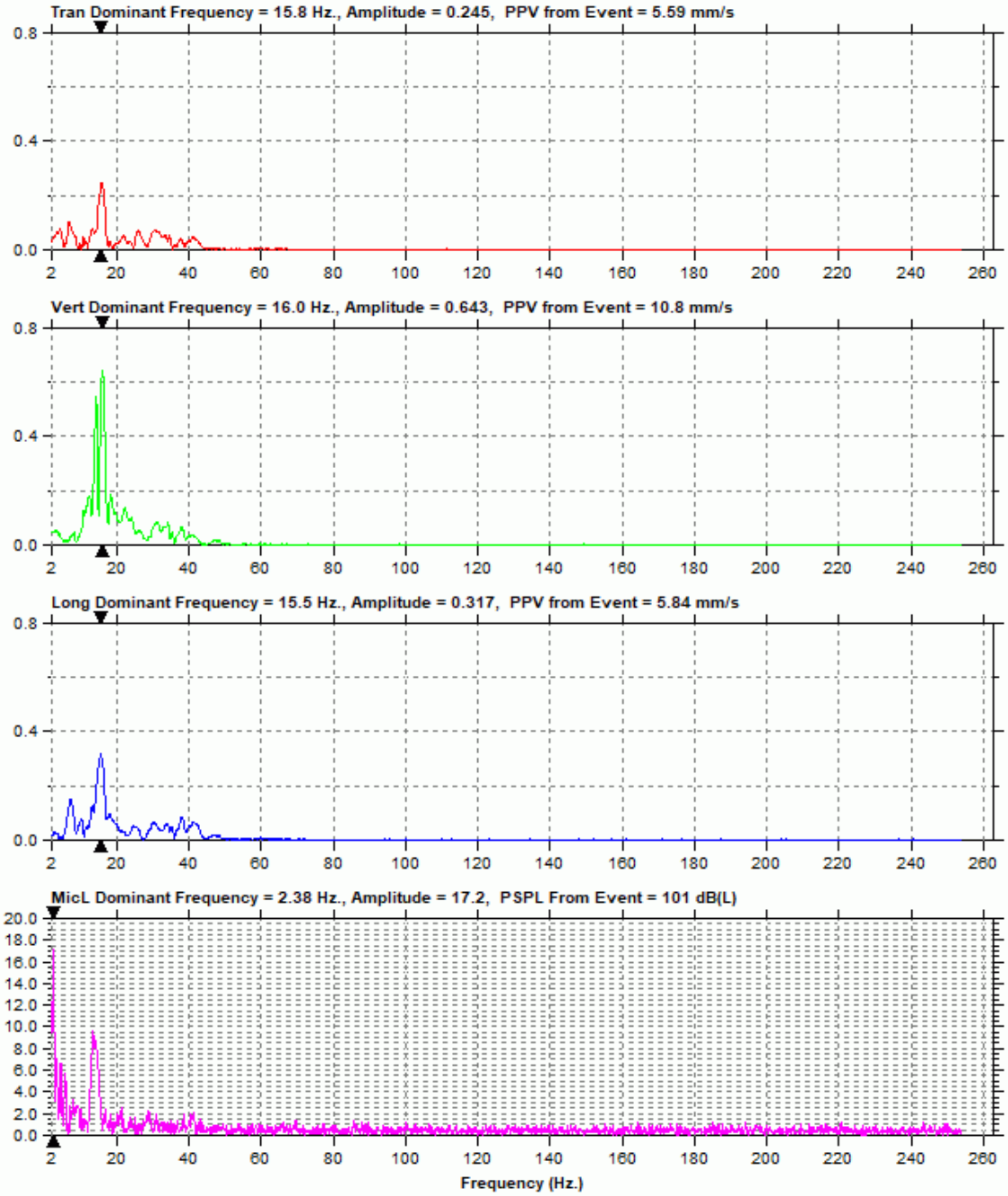
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 23, 2020 14:24:43
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:51:12 July 24, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IK52.PC0W

Post Event Notes

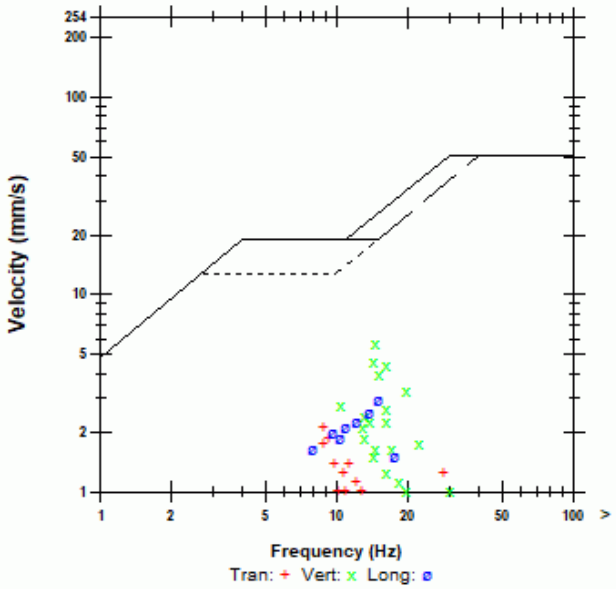
Extended Notes
Combo Mode July 24, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

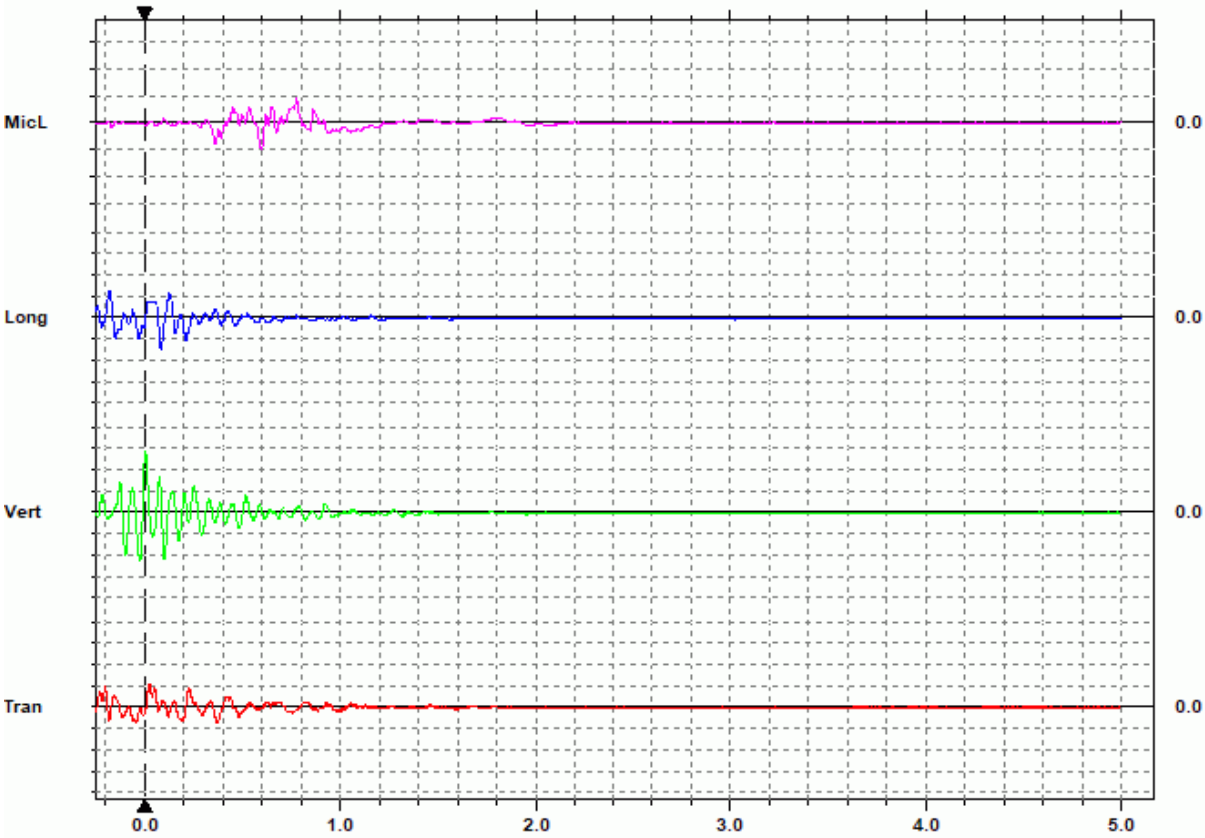
Microphone	Linear Weighting
PSPL	113.5 dB(L) at 0.599 sec.
ZC Freq	13 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.16	5.71	2.92	mm/s
ZC Freq	8.8	15	15	Hz
Time (Rel. to Trig)	0.022	0.004	0.083	sec
Peak Acceleration	0.0265	0.0663	0.0398	g
Peak Displacement	0.0387	0.0590	0.0418	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.76 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: July 24, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:51:12 July 24, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IK52.PC0W
Job Number	8177		

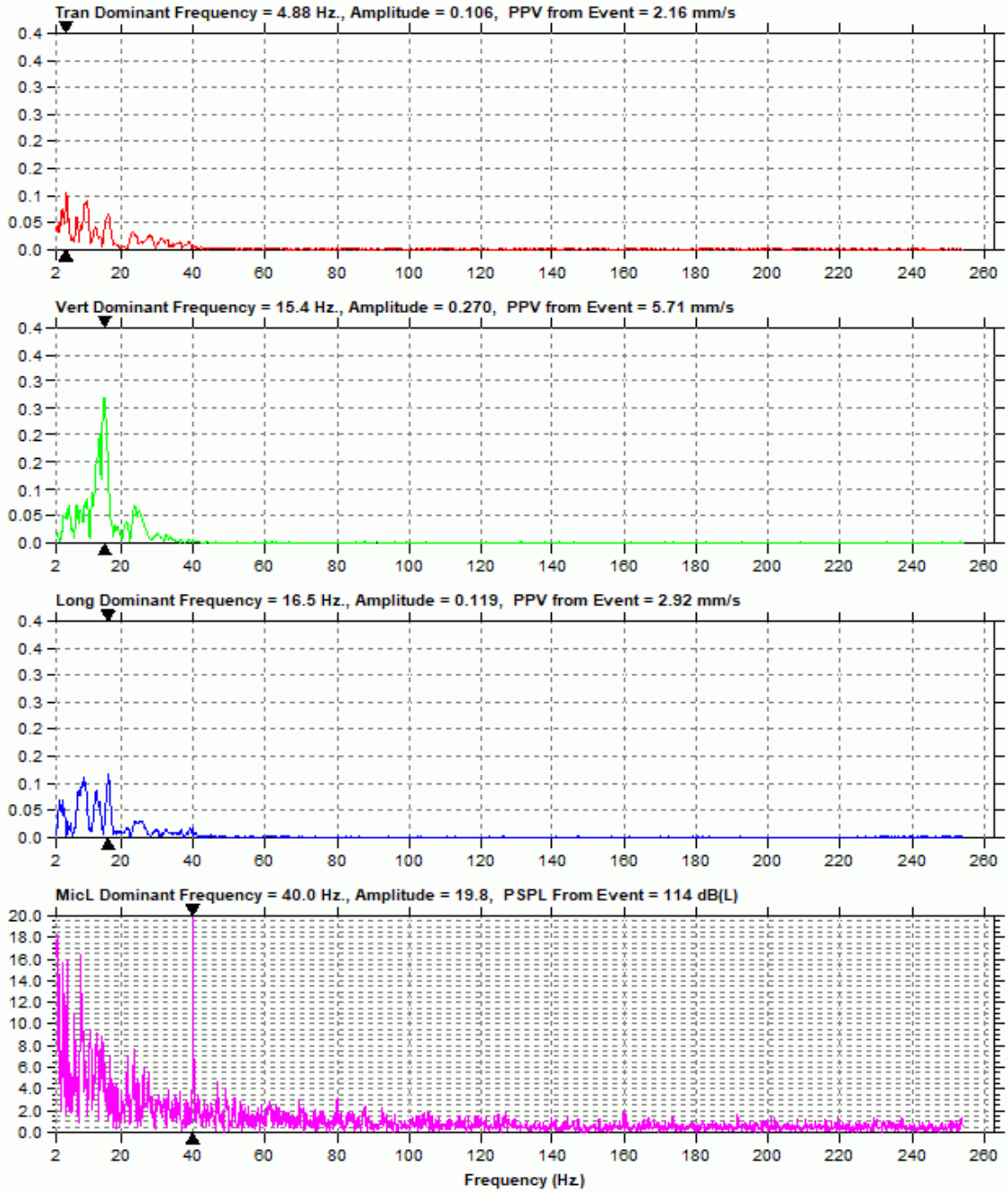
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode July 24, 2020 05:16:47
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: July 24, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																		
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		77 Cougar Ridge Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
4-Aug-20	WCRR-140	16:05	1.14mm/s	113.5dB(L)	1.02mm/s	114.0dB(L)	8.13mm/s	117.6dB(L)	0.25mm/s	105.5dB(L)	3.18mm/s	117.1dB(L)	1.40mm/s	106.5dB(L)	0.64mm/s	106.0dB(L)	0.64mm/s	101.0dB(L)
5-Aug-20	WCRR-141	16:09	0.64mm/s	106.5dB(L)	2.41mm/s	117.9dB(L)	1.91mm/s	110.2dB(L)	0.38mm/s	102.8dB(L)	1.14mm/s	109.2dB(L)	1.14mm/s	115.2dB(L)	0.64mm/s	102.8dB(L)	0.38mm/s	97.5dB(L)
6-Aug-20	WCRR-142	16:05	1.65mm/s	115.0dB(L)	1.91mm/s	122.5dB(L)	3.05mm/s	116.1dB(L)	0.51mm/s	118.6dB(L)	2.67mm/s	118.7dB(L)	3.56mm/s	122.4dB(L)	1.27mm/s	114.6dB(L)	0.89mm/s	117.9dB(L)
8-Aug-20	WCRR-143	16:02	1.40mm/s	127.1dB(L)	1.27mm/s	123.8dB(L)	6.10mm/s	115.7dB(L)	0.51mm/s	131.1dB(L)	3.18mm/s	128.7dB(L)	5.59mm/s	131.3dB(L)	4.19mm/s	117.2dB(L)	0.89mm/s	117.4dB(L)
10-Aug-20	WCRR-144	18:02	4.83mm/s	124.7dB(L)	1.40mm/s	116.6dB(L)	14.60mm/s	125.5dB(L)	0.51mm/s	129.4dB(L)	8.38mm/s	126.8dB(L)	5.21mm/s	123.4dB(L)	Communication with monitor interrupted		2.16mm/s	118.1dB(L)
11-Aug-20	WCRR-145	16:03	3.68mm/s	119.0dB(L)	0.76mm/s	109.5dB(L)	11.40mm/s	122.4dB(L)	0.38mm/s	112.0dB(L)	8.76mm/s	121.1dB(L)	4.95mm/s	113.3dB(L)	1.14mm/s	109.5dB(L)	1.02mm/s	104.9dB(L)
12-Aug-20	WCRR-146	16:02	2.29mm/s	125.0dB(L)	1.27mm/s	115.7dB(L)	6.73mm/s	130.2dB(L)	0.51mm/s	112.6dB(L)	5.33mm/s	127.2dB(L)	2.16mm/s	120.0dB(L)	Communication with monitor interrupted		0.89mm/s	113.1dB(L)
14-Aug-20	WCRR-147	15:58	2.29mm/s	126.0dB(L)	0.13mm/s	119.3dB(L)	8.38mm/s	131.6dB(L)	0.38mm/s	131.0dB(L)	6.10mm/s	128.6dB(L)	6.48mm/s	129.8dB(L)	1.02mm/s	120.5dB(L)	0.64mm/s	121.6dB(L)
15-Aug-20	WCRR-148	16:55	1.40mm/s	117.9dB(L)	1.02mm/s	114.2dB(L)	9.52mm/s	121.7dB(L)	0.38mm/s	107.5dB(L)	0.38mm/s	98.8dB(L)	2.03mm/s	113.1dB(L)	3.30mm/s	107.0dB(L)	0.64mm/s	106.5dB(L)
17-Aug-20	WCRR-149	16:01	1.78mm/s	120.2dB(L)	1.27mm/s	117.8dB(L)	4.19mm/s	123.2dB(L)	0.64mm/s	110.2dB(L)	2.03mm/s	121.3dB(L)	2.03mm/s	114.6dB(L)	0.89mm/s	113.3dB(L)	0.89mm/s	109.5dB(L)
18-Aug-20	WCRR-150	16:18	1.91mm/s	120.2dB(L)	1.52mm/s	112.3dB(L)	8.13mm/s	124.7dB(L)	0.51mm/s	120.1dB(L)	5.59mm/s	122.6dB(L)	4.95mm/s	129.0dB(L)	0.89mm/s	114.0dB(L)	0.51mm/s	114.8dB(L)
19-Aug-20	WCRR-151	16:07	2.03mm/s	121.2dB(L)	0.89mm/s	111.8dB(L)	4.19mm/s	124.5dB(L)	0.64mm/s	105.5dB(L)	Communication with monitor interrupted		2.41mm/s	116.3dB(L)	0.89mm/s	113.3dB(L)	0.76mm/s	109.2dB(L)
20-Aug-20	WCRR-152	16:06	1.65mm/s	116.9dB(L)	0.51mm/s	108.4dB(L)	4.83mm/s	118.1dB(L)	0.51mm/s	105.5dB(L)	3.18mm/s	119.4dB(L)	4.83mm/s	116.4dB(L)	0.89mm/s	113.8dB(L)	1.02mm/s	107.5dB(L)
22-Aug-20	Undetonate charge	18:03	0.25mm/s	119.1dB(L)	0.25mm/s	104.2dB(L)	0.76mm/s	122.1dB(L)	0.25mm/s	120.7dB(L)	0.64mm/s	120.7dB(L)	1.91mm/s	120.6dB(L)	0.25mm/s	109.2dB(L)	0.25mm/s	104.2dB(L)
23-Aug-20	Undetonate charge	13:05	0.38mm/s	124.1dB(L)	0.13mm/s	91.5dB(L)	1.14mm/s	129.2dB(L)	0.25mm/s	91.5dB(L)	0.89mm/s	127.8dB(L)	2.03mm/s	122.2dB(L)	0.25mm/s	88.0dB(L)	0.25mm/s	88.0dB(L)
23-Aug-20	Undetonate charge	17:00	0.38mm/s	91.5dB(L)	0.13mm/s	88.0dB(L)	0.64mm/s	118.5dB(L)	0.25mm/s	91.5dB(L)	0.51mm/s	116.6dB(L)	1.91mm/s	123.6dB(L)	0.25mm/s	91.5dB(L)	1.14mm/s	93.5dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Tran At 15:49:39 August 4, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKPF.YR0W

Post Event Notes

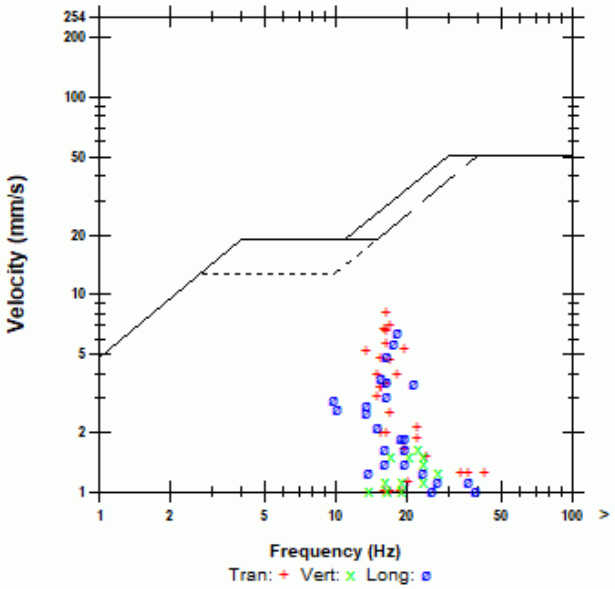
Extended Notes
Combo Mode August 4, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

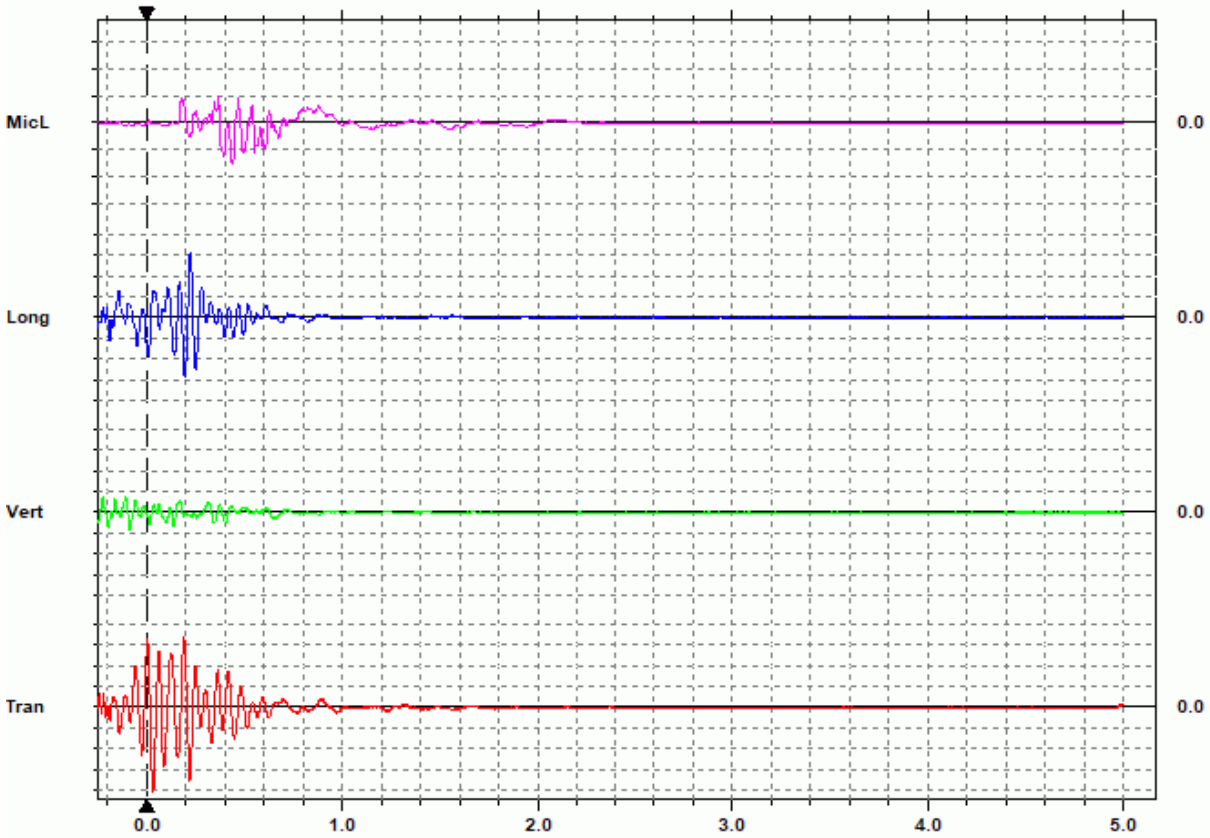
Microphone	Linear Weighting
PSPL	117.6 dB(L) at 0.440 sec.
ZC Freq	16 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.13	1.65	6.48	mm/s
ZC Freq	17	22	18	Hz
Time (Rel. to Trig)	0.034	-0.085	0.225	sec
Peak Acceleration	0.0928	0.0265	0.0795	g
Peak Displacement	0.0775	0.0138	0.0547	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.44 mm/s At 0.224 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 4, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:49:39 August 4, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKPF.YR0W
Job Number	8177		

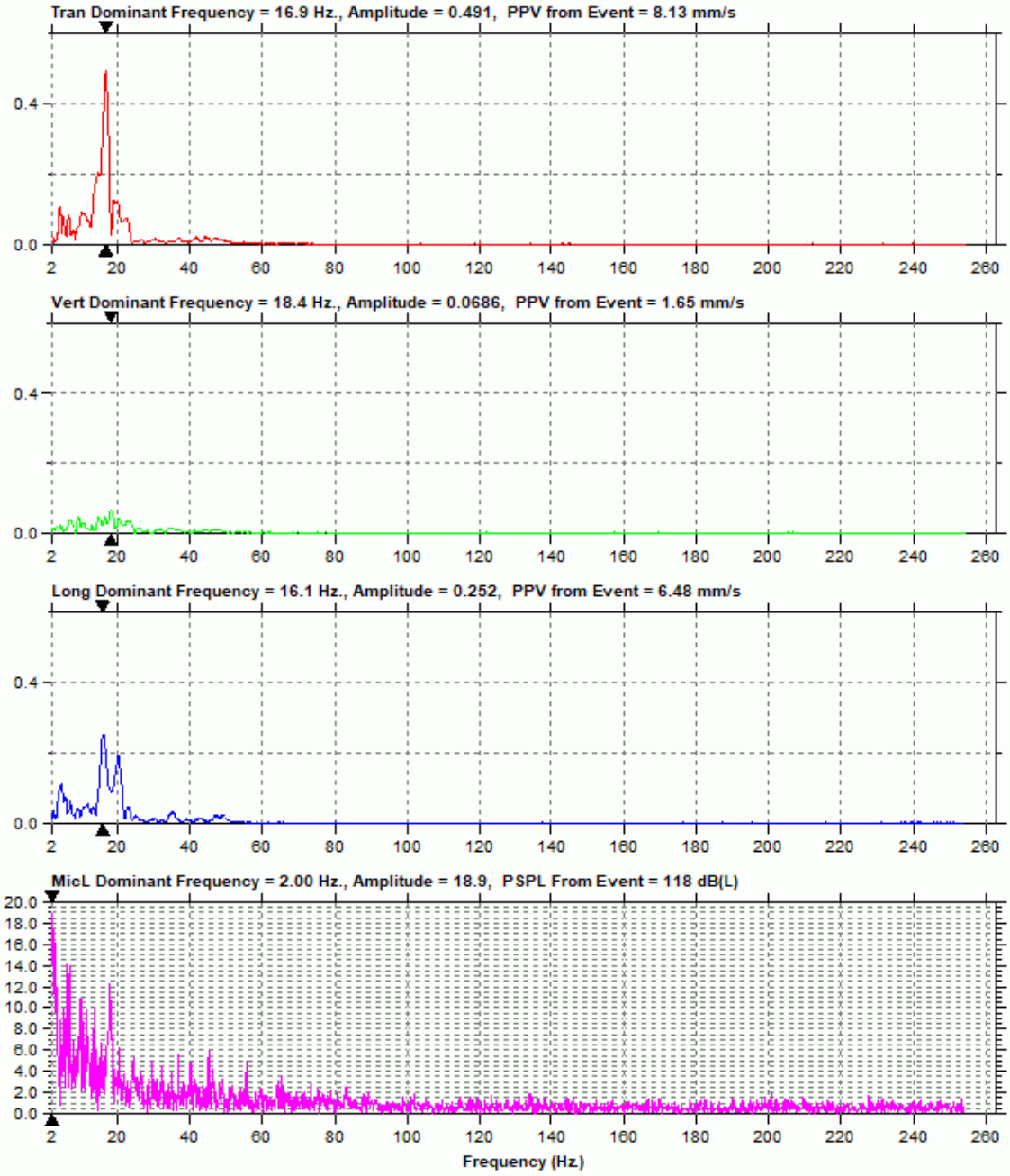
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 4, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 4, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:46:55 August 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IKWU.I70W

Post Event Notes

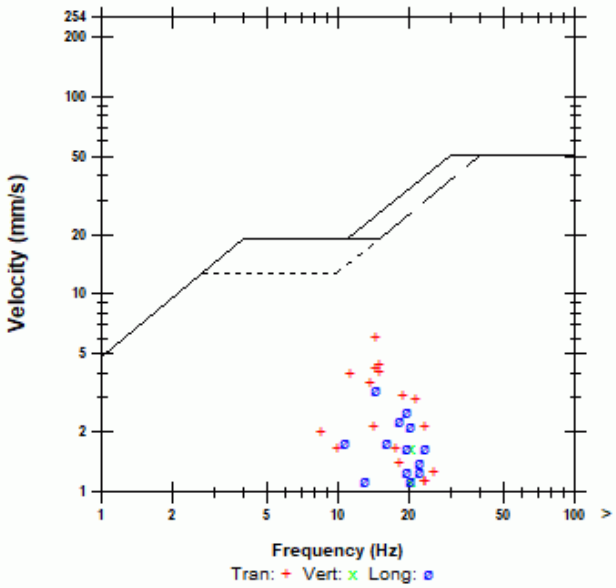
Extended Notes
Combo Mode August 8, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

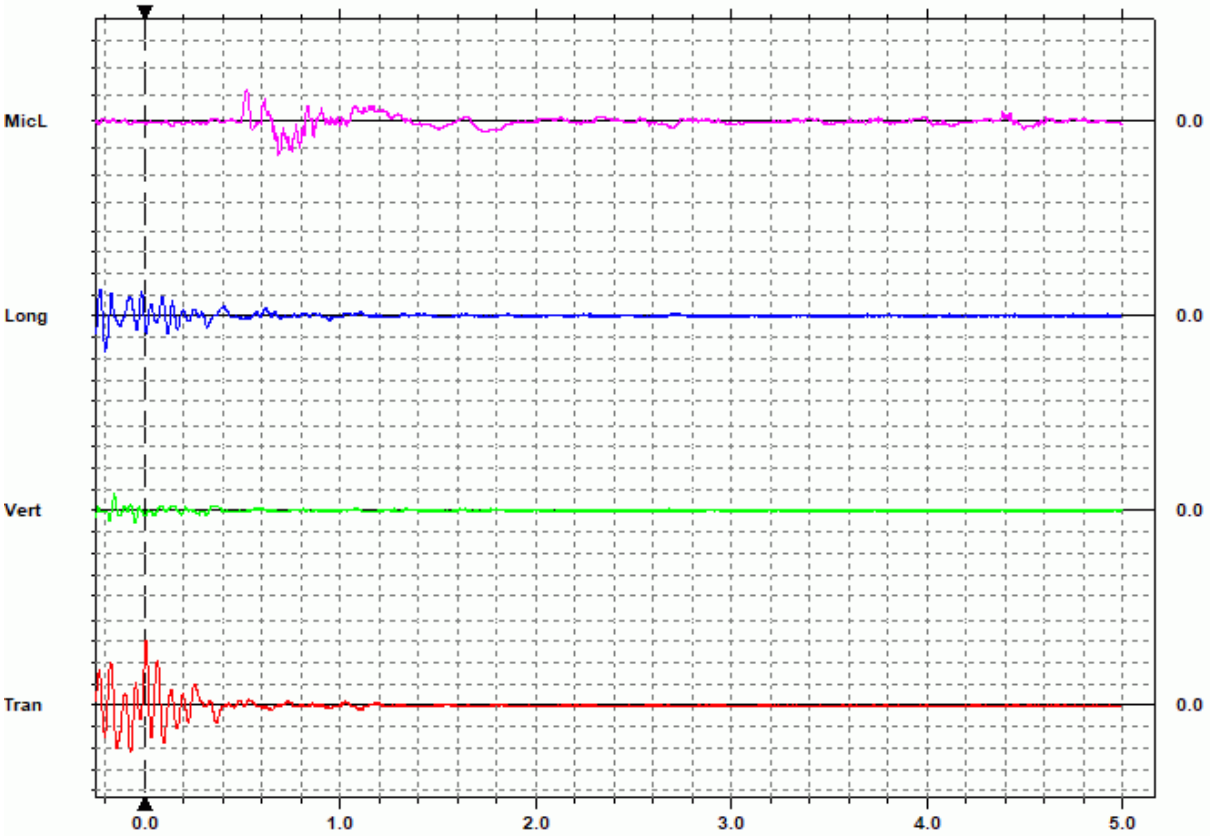
Microphone	Linear Weighting
PSPL	115.7 dB(L) at 0.684 sec.
ZC Freq	2.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	1.65	3.30	mm/s
ZC Freq	15	20	15	Hz
Time (Rel. to Trig)	0.006	-0.157	-0.203	sec
Peak Acceleration	0.0663	0.0265	0.0398	g
Peak Displacement	0.0620	0.0120	0.0358	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.33 mm/s At 0.007 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:46:55 August 8, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IKWU.I70W
Job Number	8177		

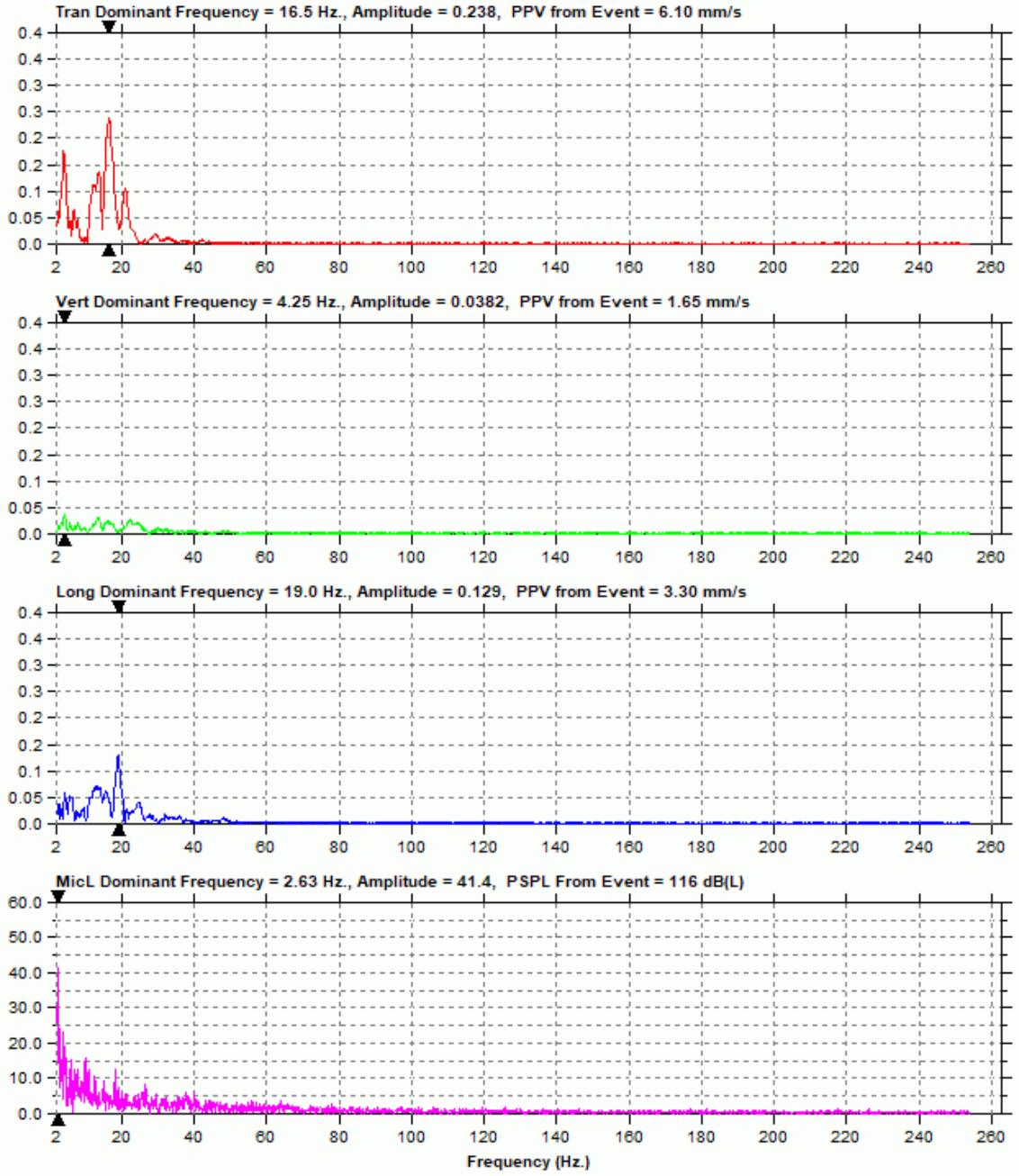
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 8, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:46:13 August 10, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IL0P.D10W

Post Event Notes

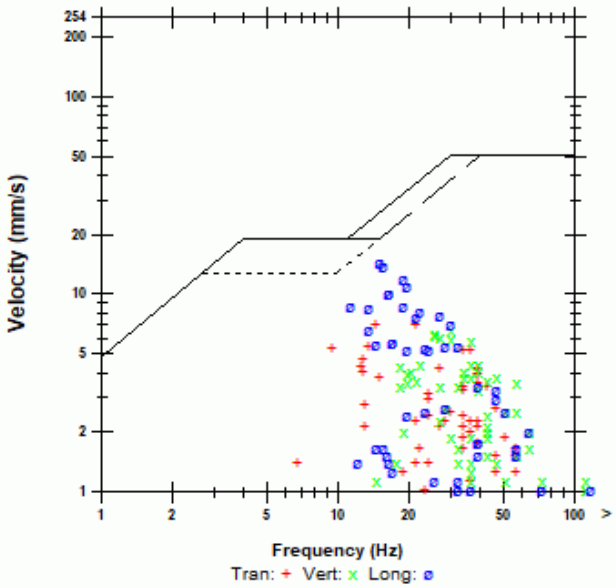
Extended Notes
Combo Mode August 10, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

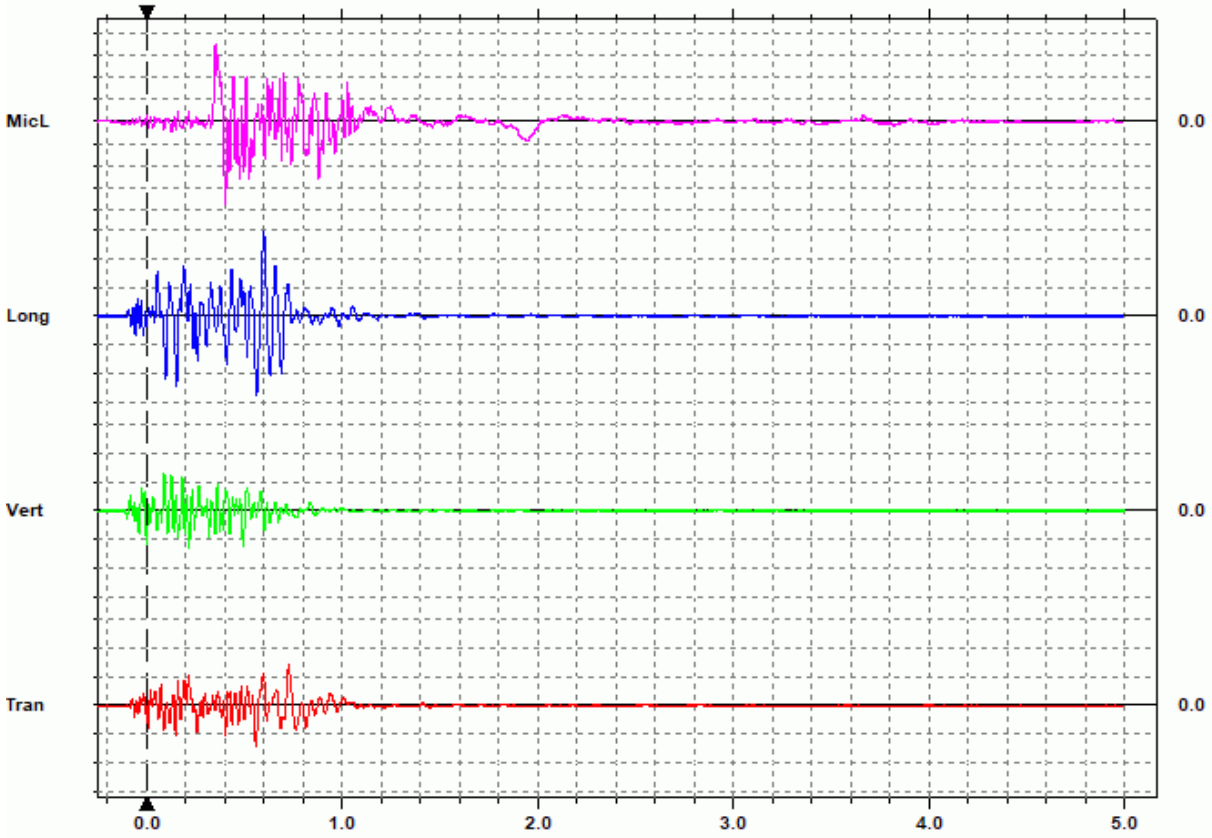
Microphone	Linear Weighting
PSPL	125.5 dB(L) at 0.404 sec.
ZC Freq	22 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.98	6.60	14.6	mm/s
ZC Freq	21	30	15	Hz
Time (Rel. to Trig)	0.560	0.219	0.601	sec
Peak Acceleration	0.119	0.146	0.172	g
Peak Displacement	0.0688	0.0376	0.146	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 15.8 mm/s At 0.601 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:46:13 August 10, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IL0P.D10W
Job Number	8177		

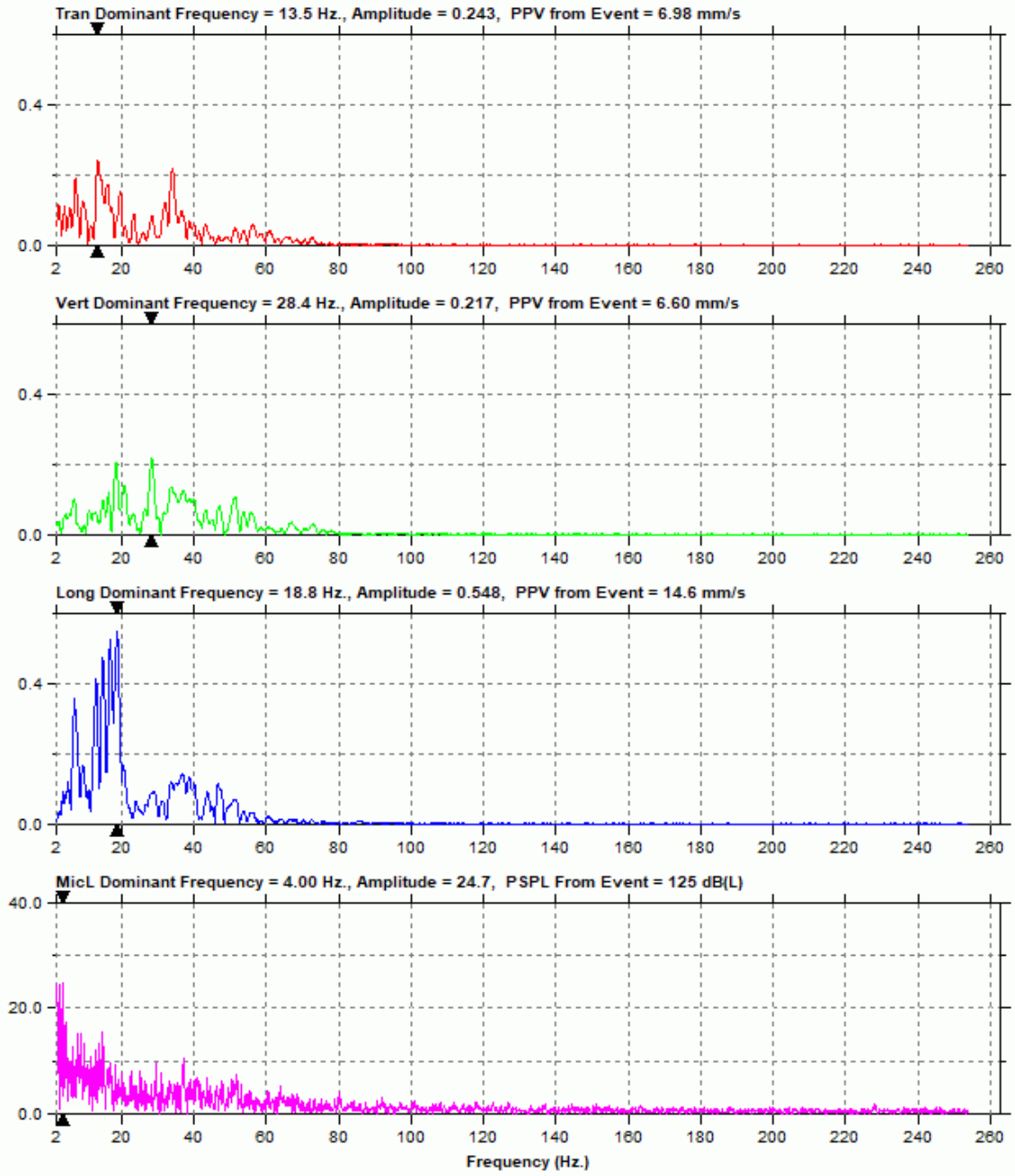
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 10, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:54 August 11, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IL2E.JU0W

Post Event Notes

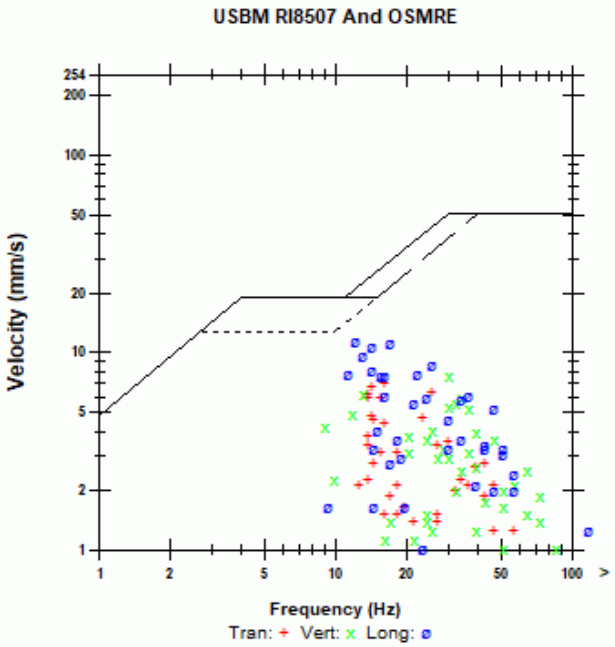
Extended Notes

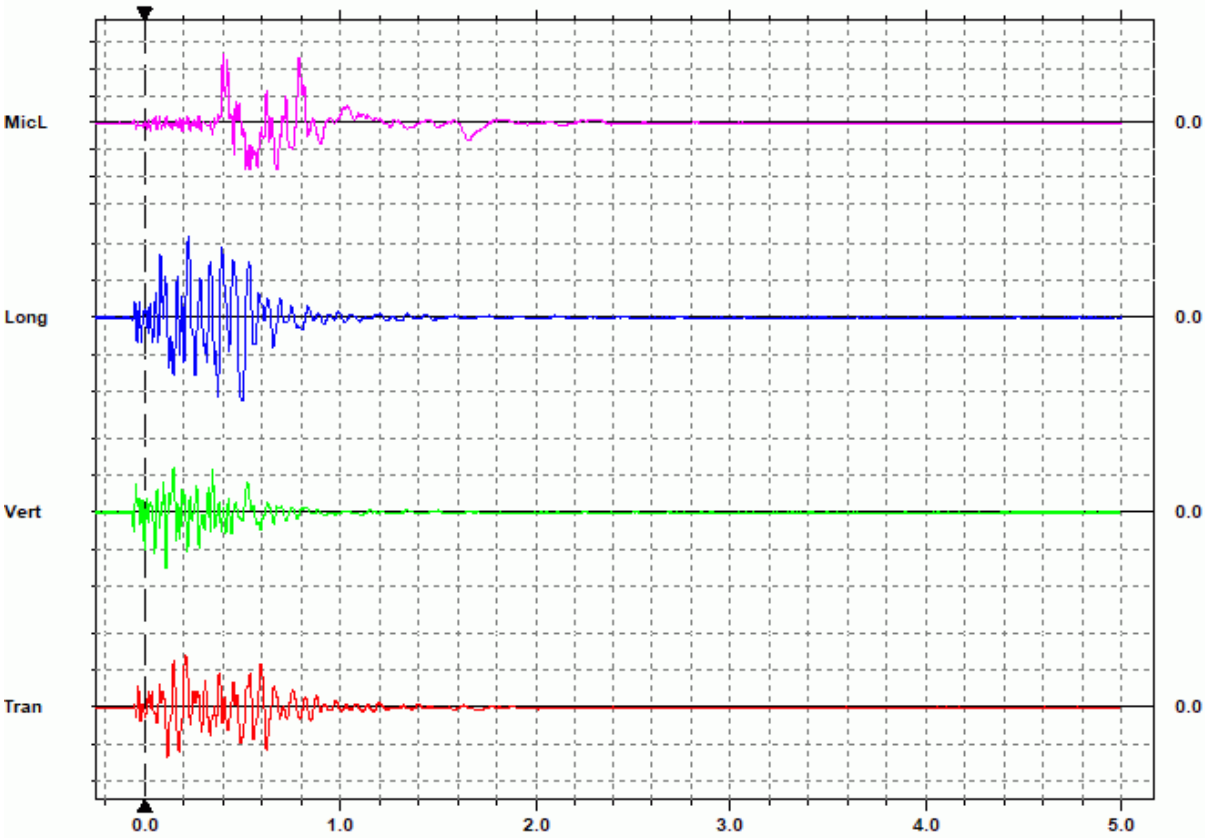
Combo Mode August 11, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	122.4 dB(L) at 0.400 sec.
ZC Freq	6.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.98	7.62	11.4	mm/s
ZC Freq	16	30	12	Hz
Time (Rel. to Trig)	0.206	0.108	0.499	sec
Peak Acceleration	0.106	0.172	0.199	g
Peak Displacement	0.0747	0.0609	0.165	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.5 mm/s At 0.222 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 11, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:54 August 11, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IL2E.JU0W
Job Number	8177		

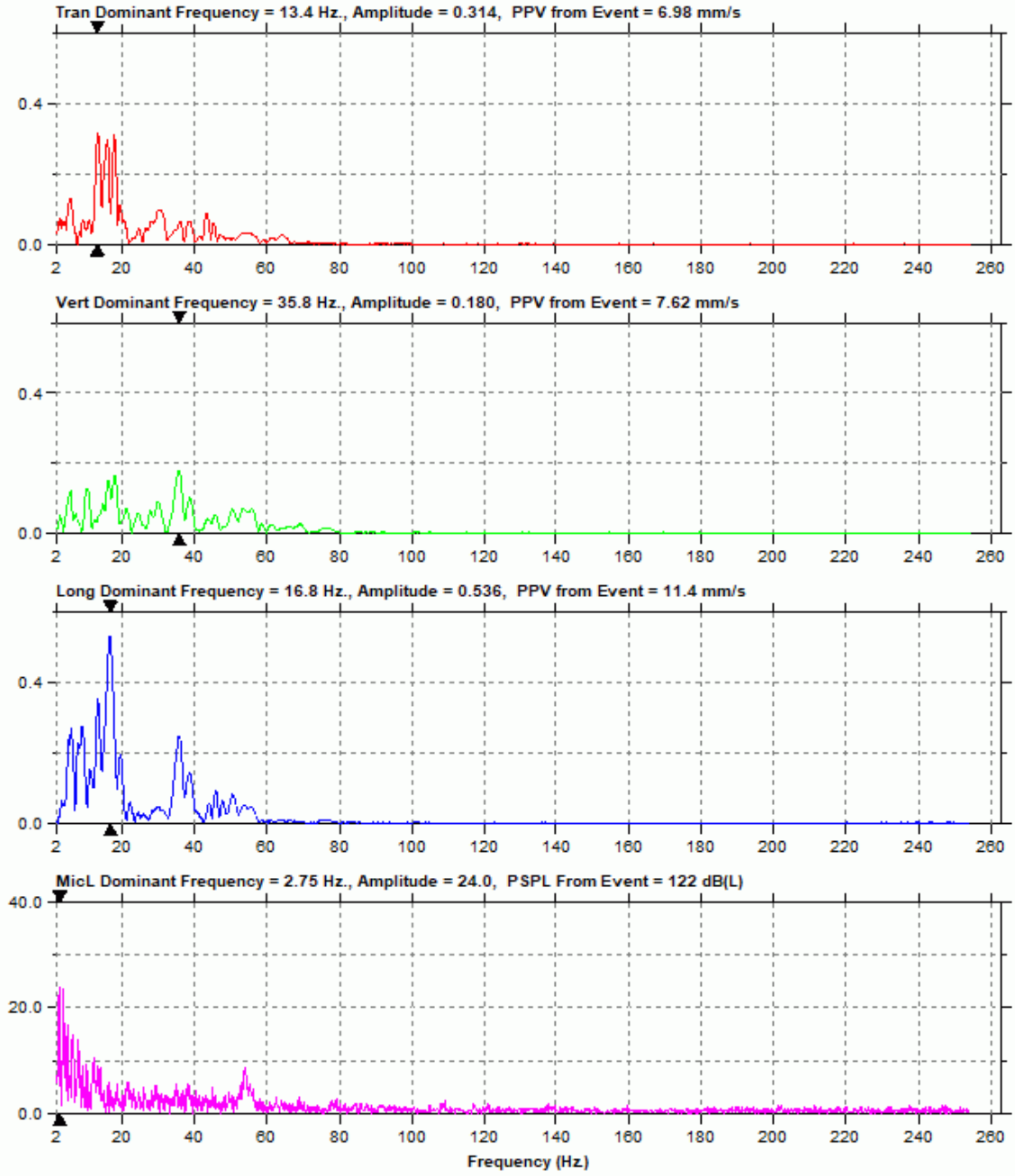
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 11, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 11, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:46:41 August 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IL49.5T0W

Post Event Notes

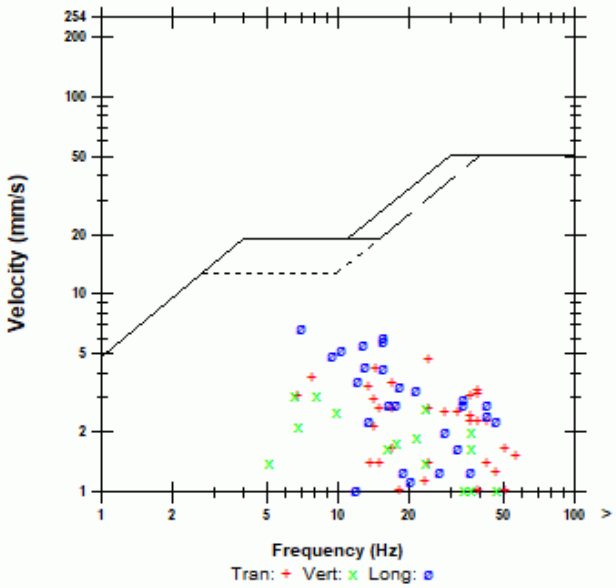
Extended Notes
Combo Mode August 12, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

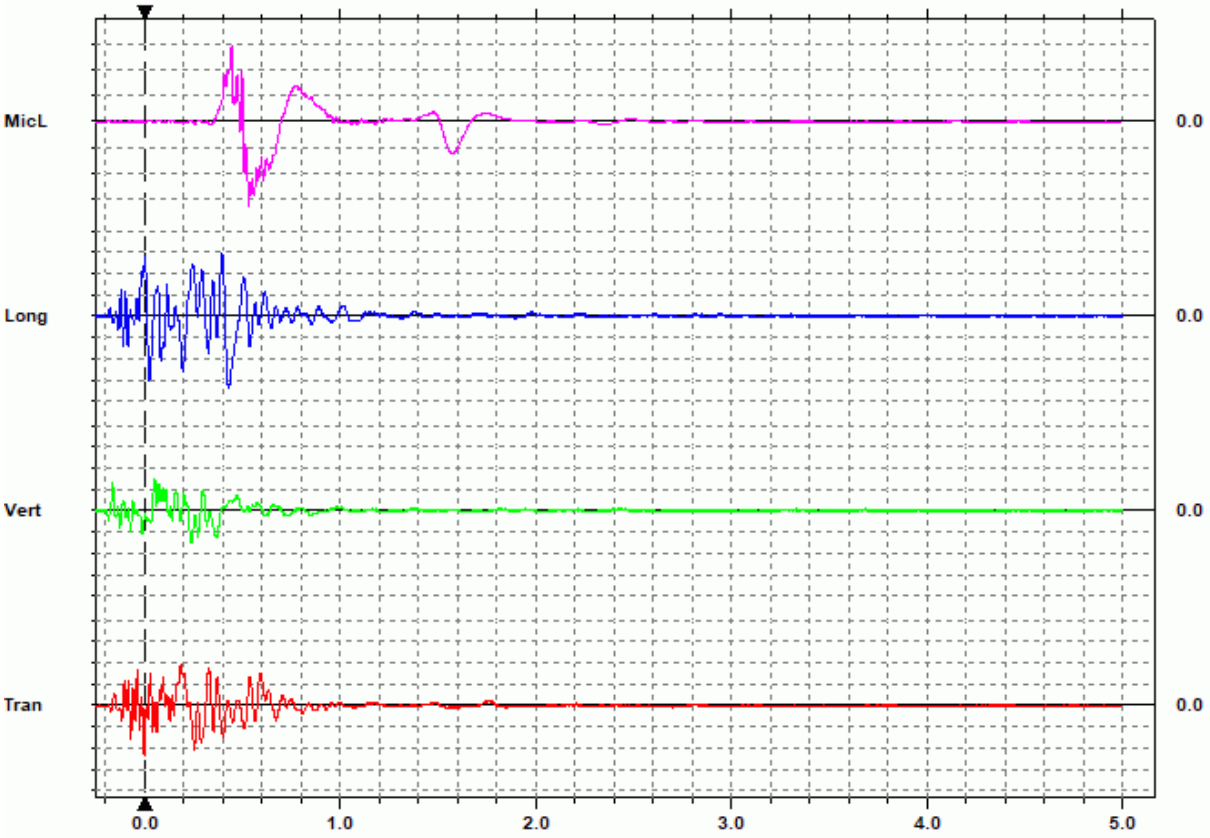
Microphone	Linear Weighting
PSPL	130.2 dB(L) at 0.534 sec.
ZC Freq	2.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	3.05	6.73	mm/s
ZC Freq	24	6.5	7.0	Hz
Time (Rel. to Trig)	-0.001	0.052	0.430	sec
Peak Acceleration	0.0795	0.0530	0.0928	g
Peak Displacement	0.0737	0.0618	0.132	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.96 mm/s At 0.000 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:46:41 August 12, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IL49.5T0W
Job Number	8177		

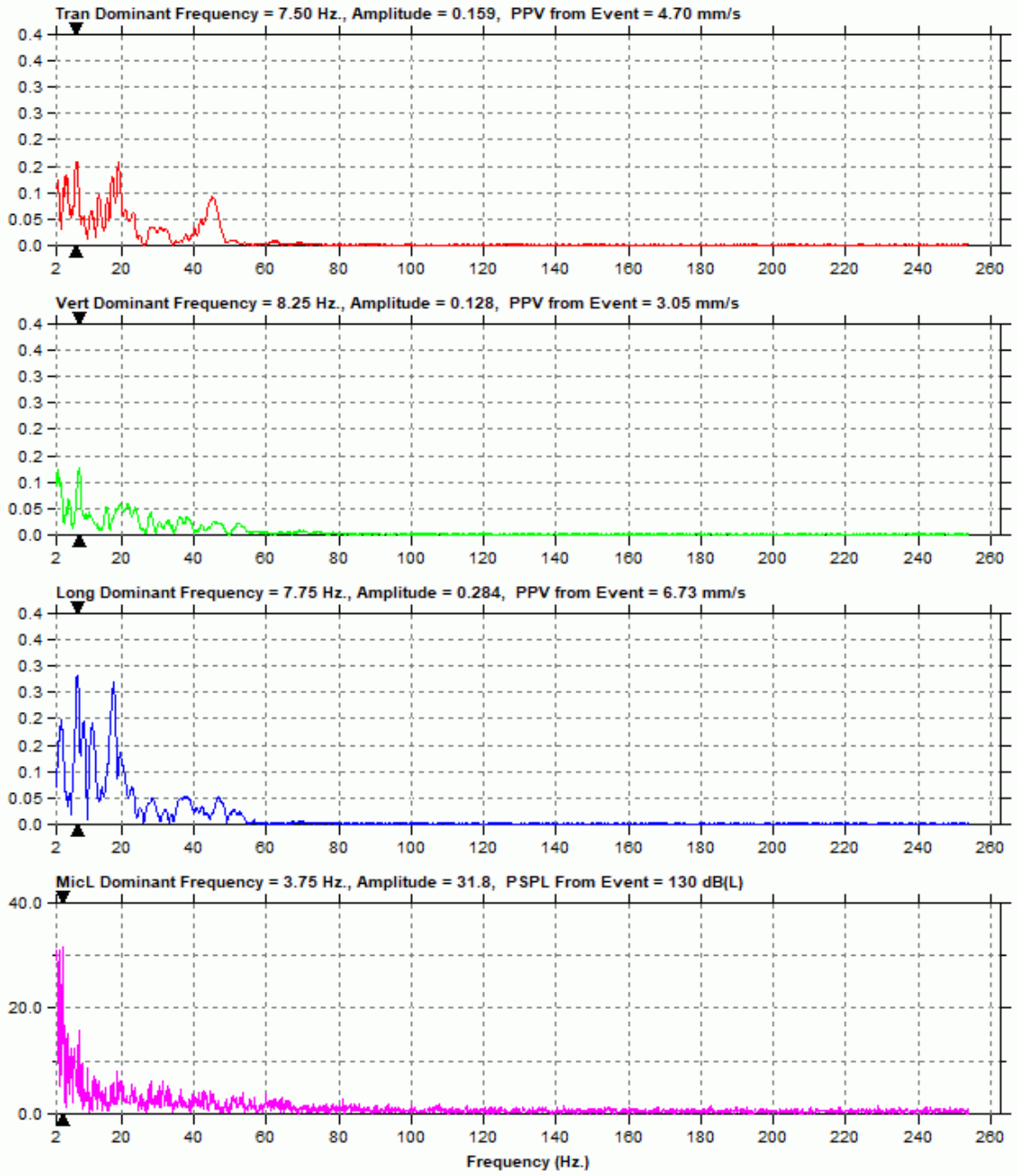
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 12, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:42:17 August 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IL7Y.AH0W

Post Event Notes

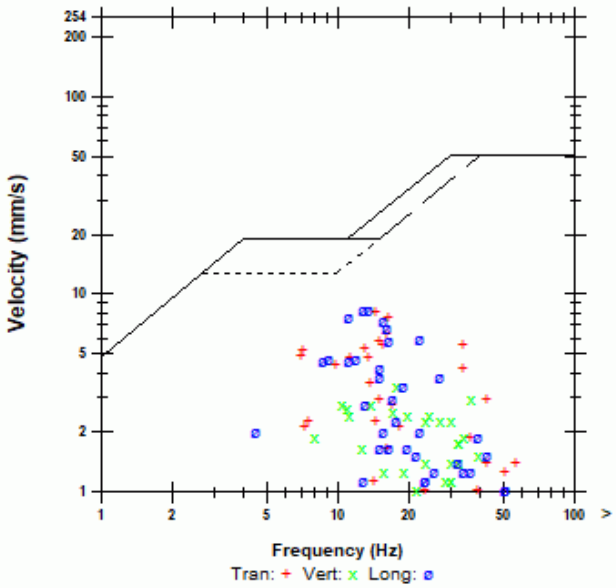
Extended Notes
Combo Mode August 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

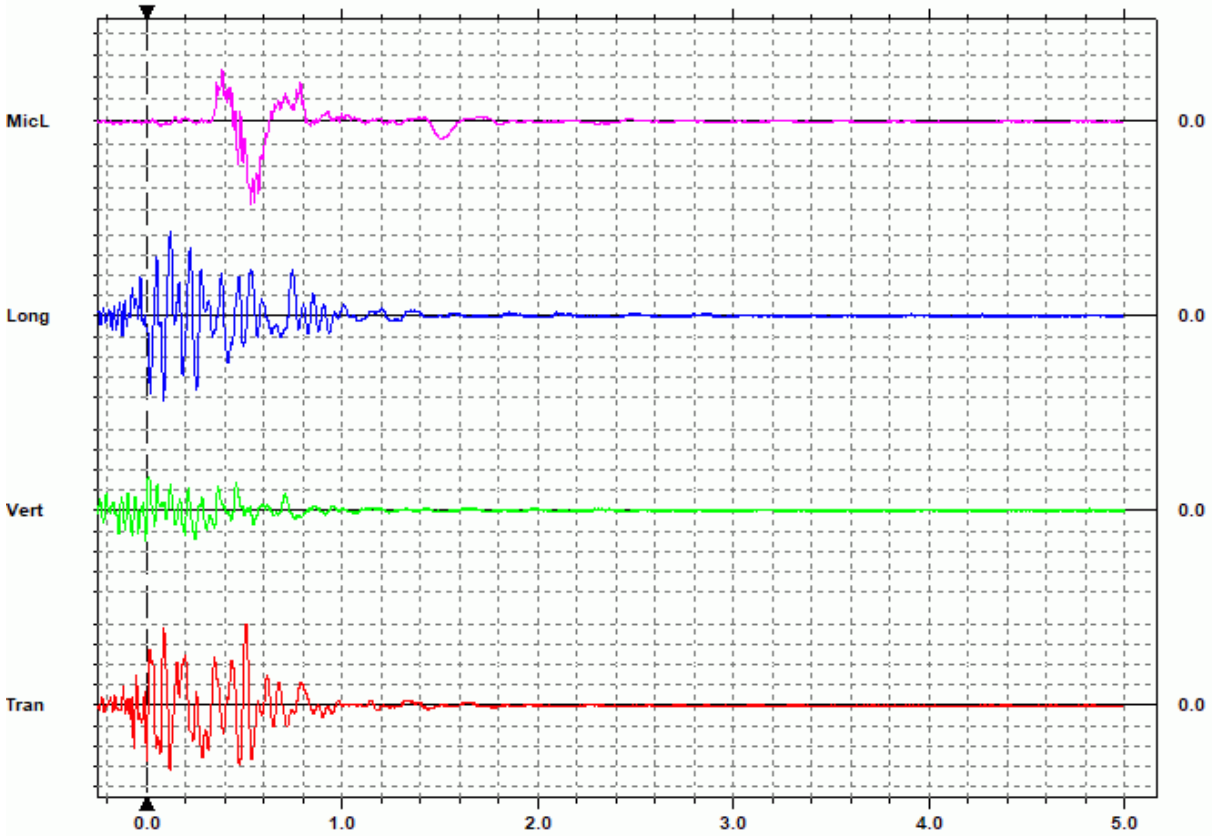
Microphone	Linear Weighting
PSPL	131.6 dB(L) at 0.534 sec.
ZC Freq	3.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.13	3.43	8.38	mm/s
ZC Freq	15	18	13	Hz
Time (Rel. to Trig)	0.510	0.009	0.088	sec
Peak Acceleration	0.133	0.0795	0.0928	g
Peak Displacement	0.112	0.0363	0.0884	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.4 mm/s At 0.089 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:42:17 August 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IL7Y.AH0W
Job Number	8177		

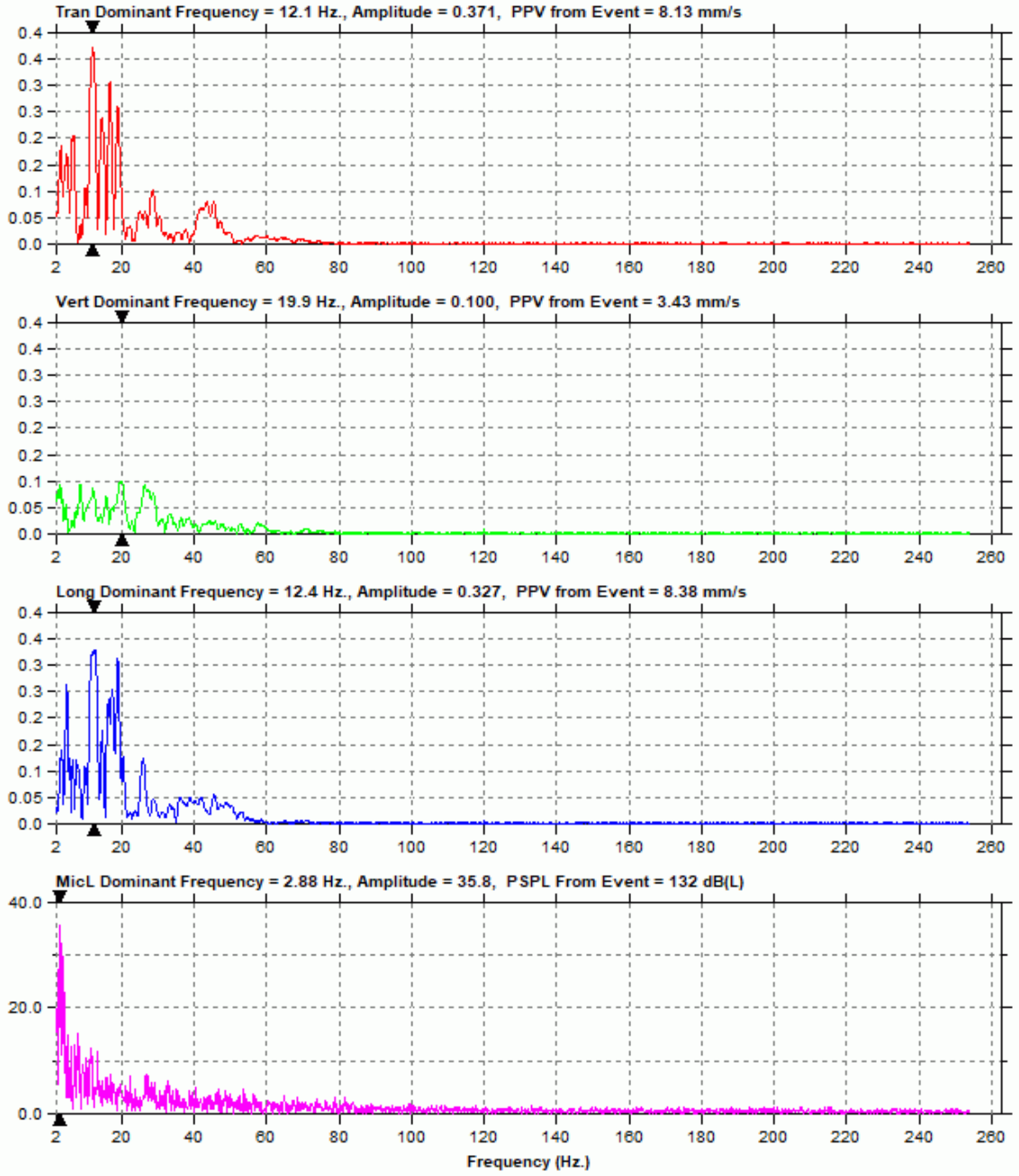
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:39:45 August 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IL9V.M90W

Post Event Notes

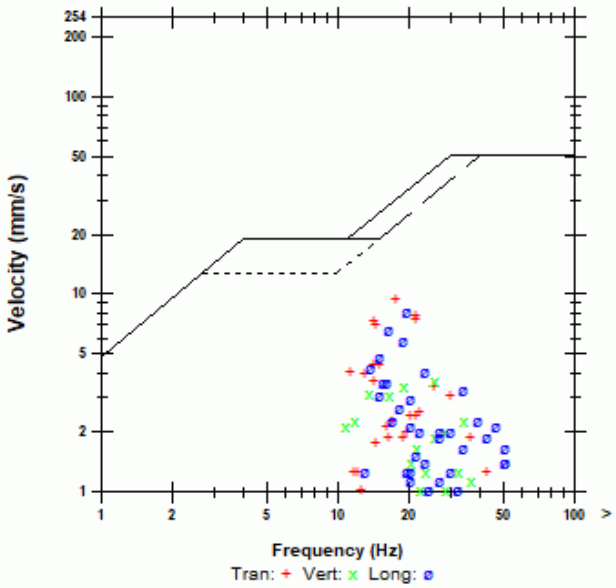
Extended Notes
Combo Mode August 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

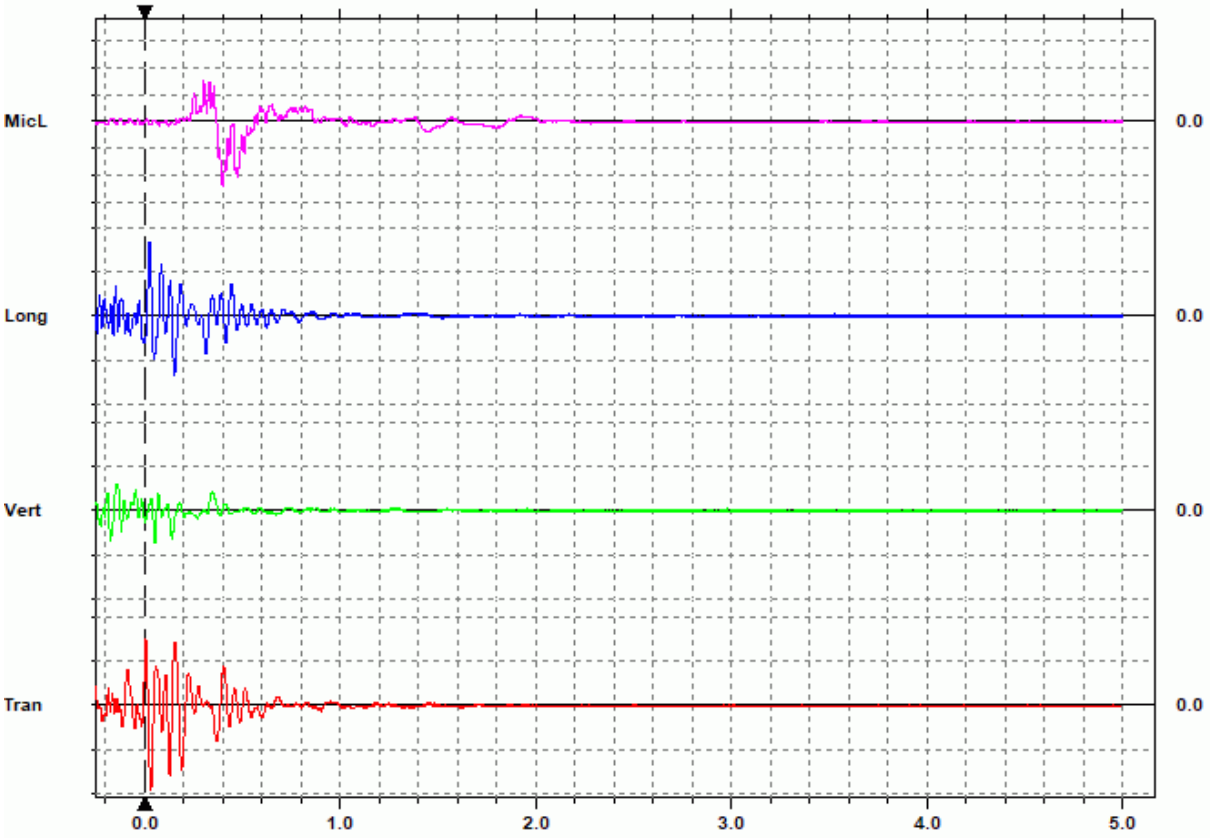
Microphone	Linear Weighting
PSPL	121.7 dB(L) at 0.400 sec.
ZC Freq	2.6 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.52	3.68	8.25	mm/s
ZC Freq	18	26	20	Hz
Time (Rel. to Trig)	0.031	0.051	0.024	sec
Peak Acceleration	0.106	0.0663	0.106	g
Peak Displacement	0.0851	0.0327	0.0653	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.8 mm/s At 0.028 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:39:45 August 15, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IL9V.M90W
Job Number	8177		

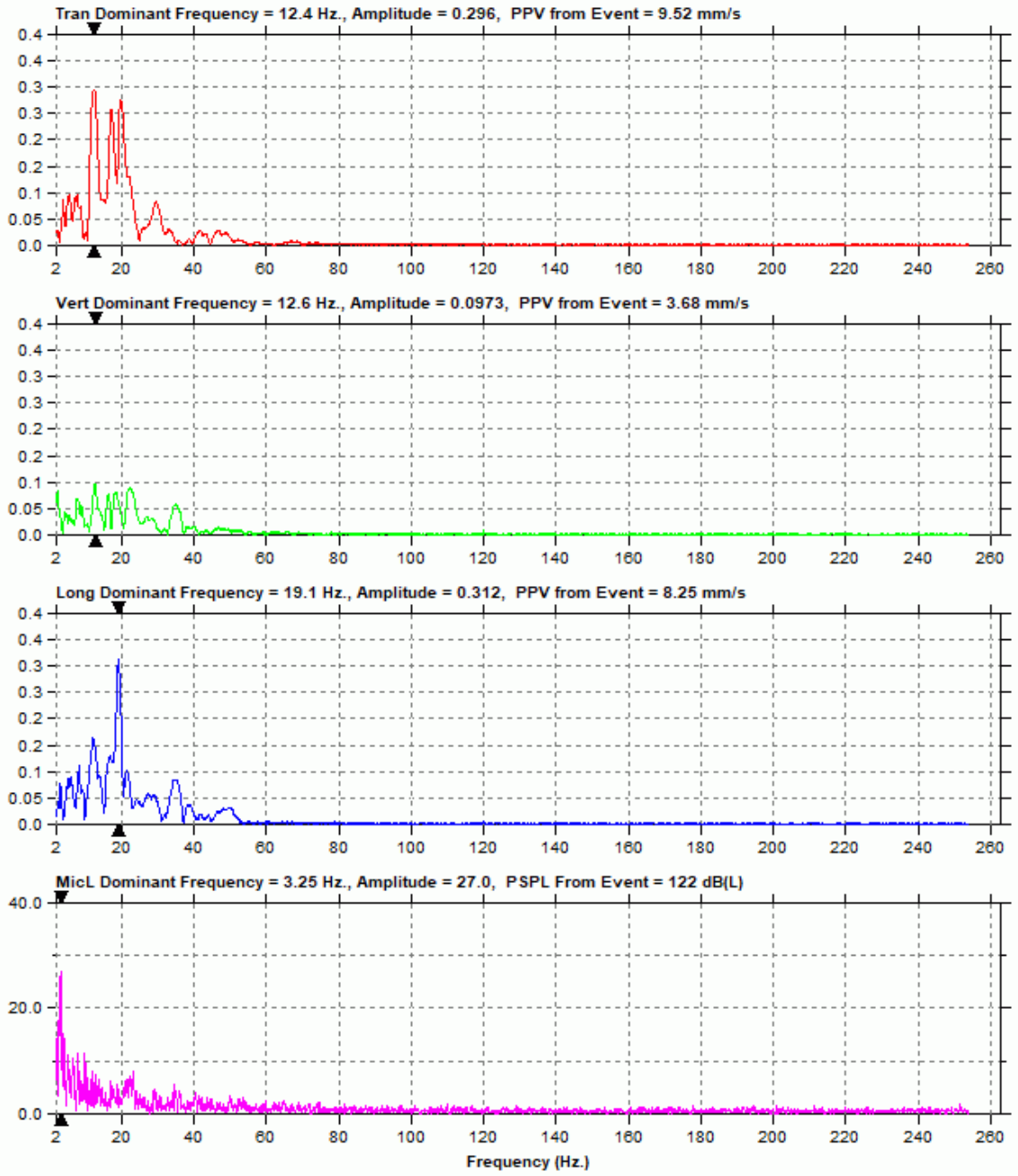
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:25 August 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251ILFD.W10W

Post Event Notes

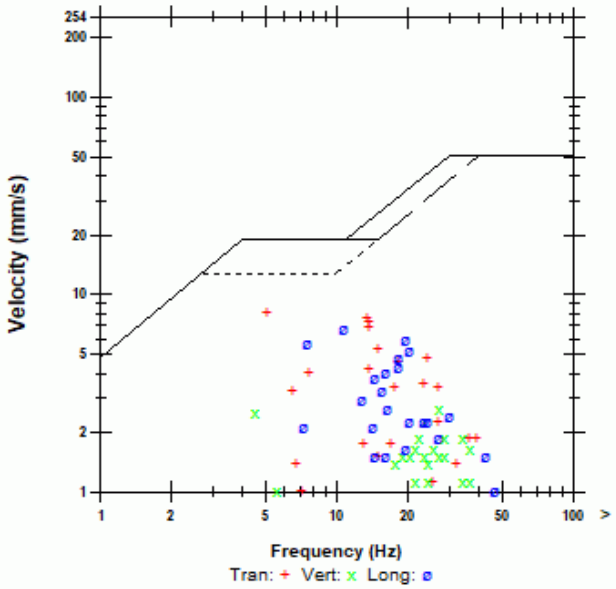
Extended Notes
Combo Mode August 18, 2020 05:17:10
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

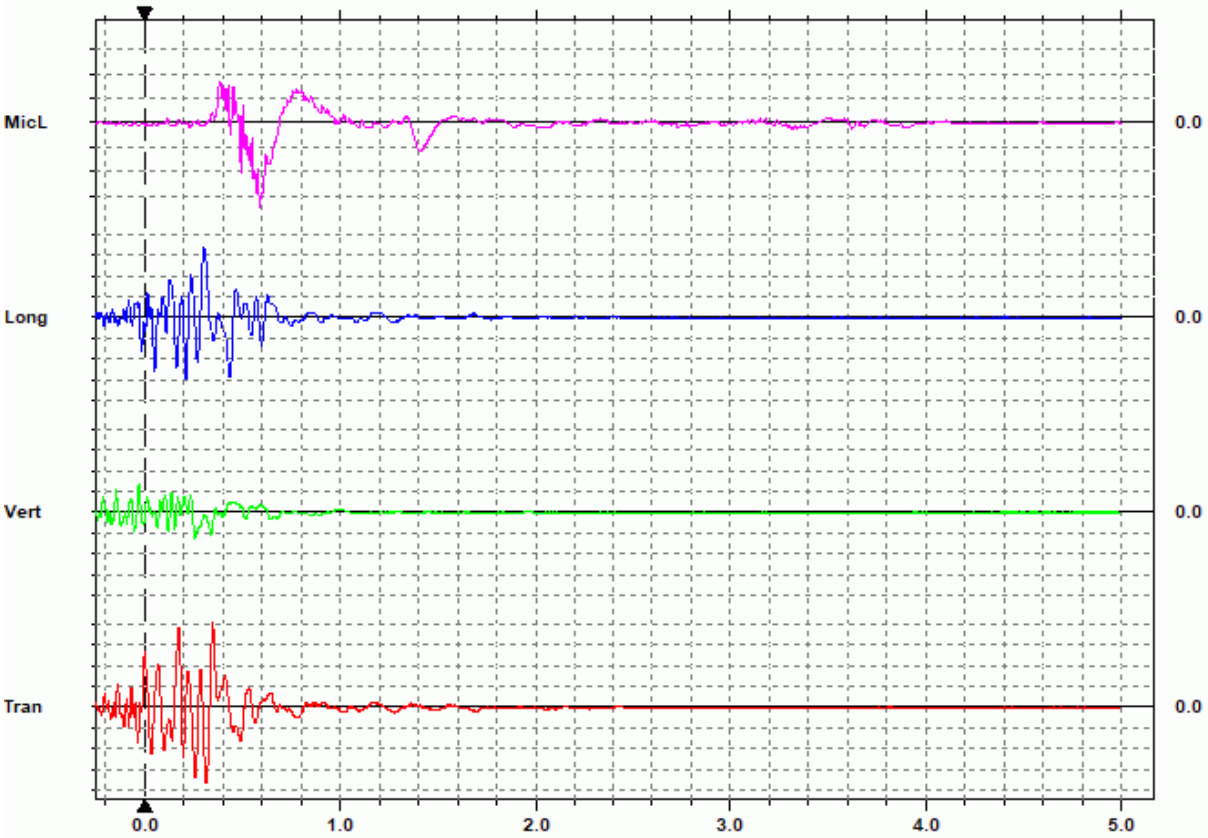
Microphone	Linear Weighting
PSPL	124.7 dB(L) at 0.589 sec.
ZC Freq	2.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.13	2.67	6.73	mm/s
ZC Freq	5.1	27	11	Hz
Time (Rel. to Trig)	0.349	-0.028	0.304	sec
Peak Acceleration	0.106	0.0530	0.0663	g
Peak Displacement	0.140	0.0701	0.0982	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.47 mm/s At 0.313 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:25 August 18, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251ILFD.W10W
Job Number	8177		

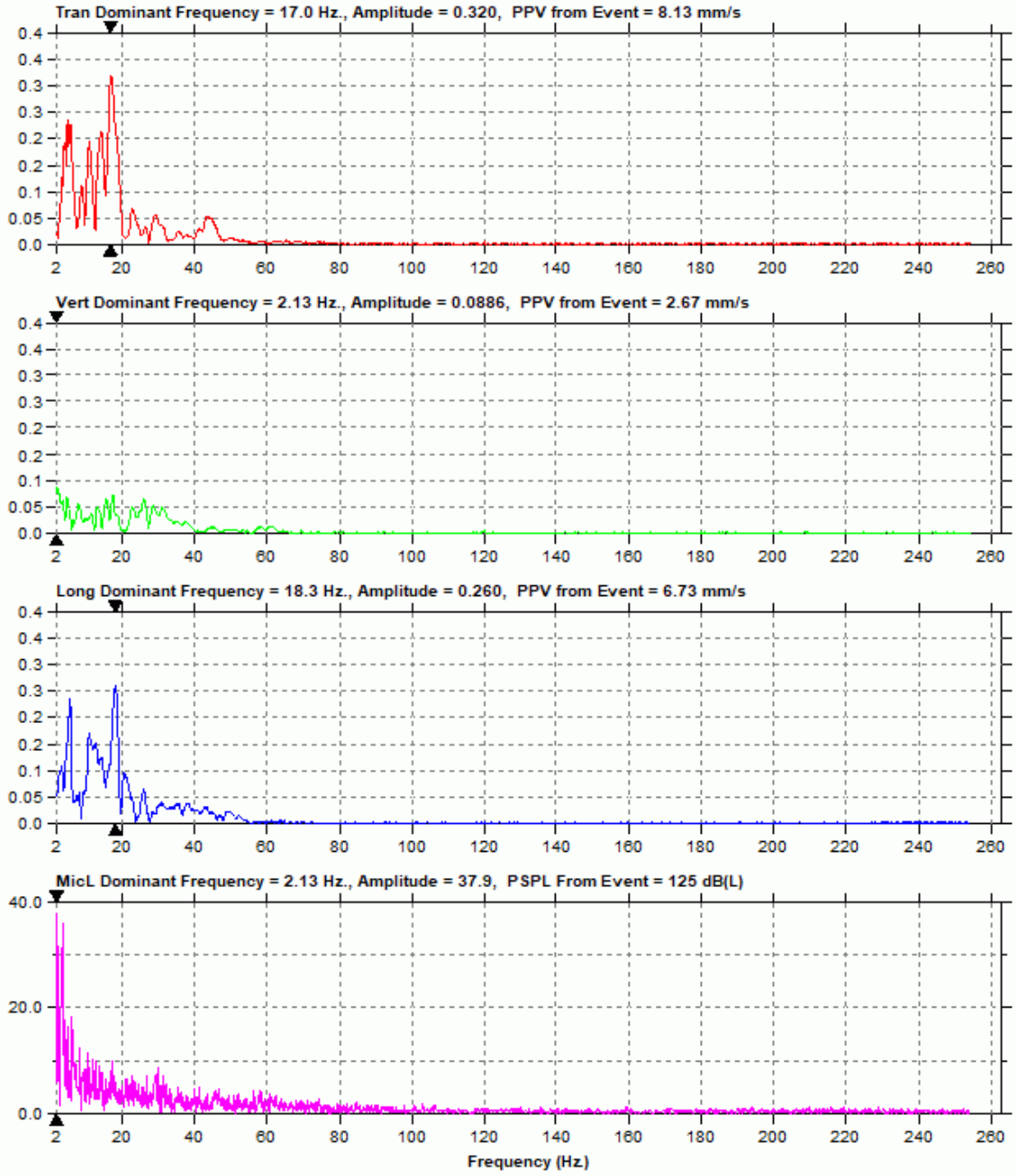
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 18, 2020 05:17:10
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 18, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:46:35 August 10, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IL0P.DN0W

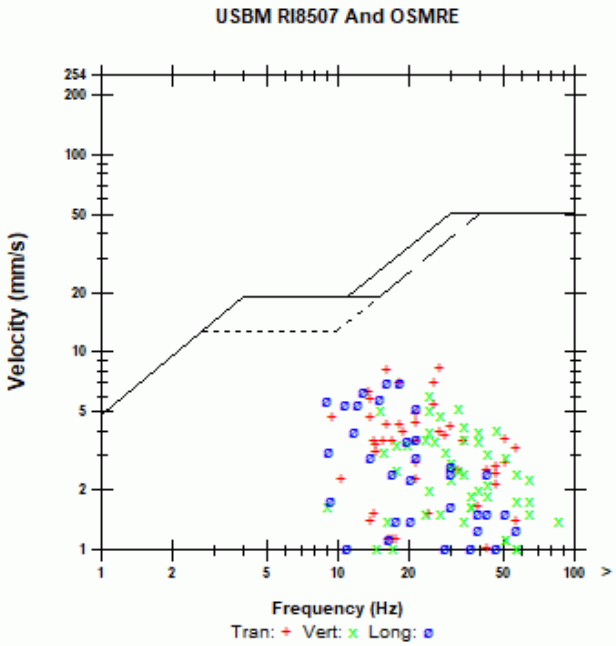
Post Event Notes

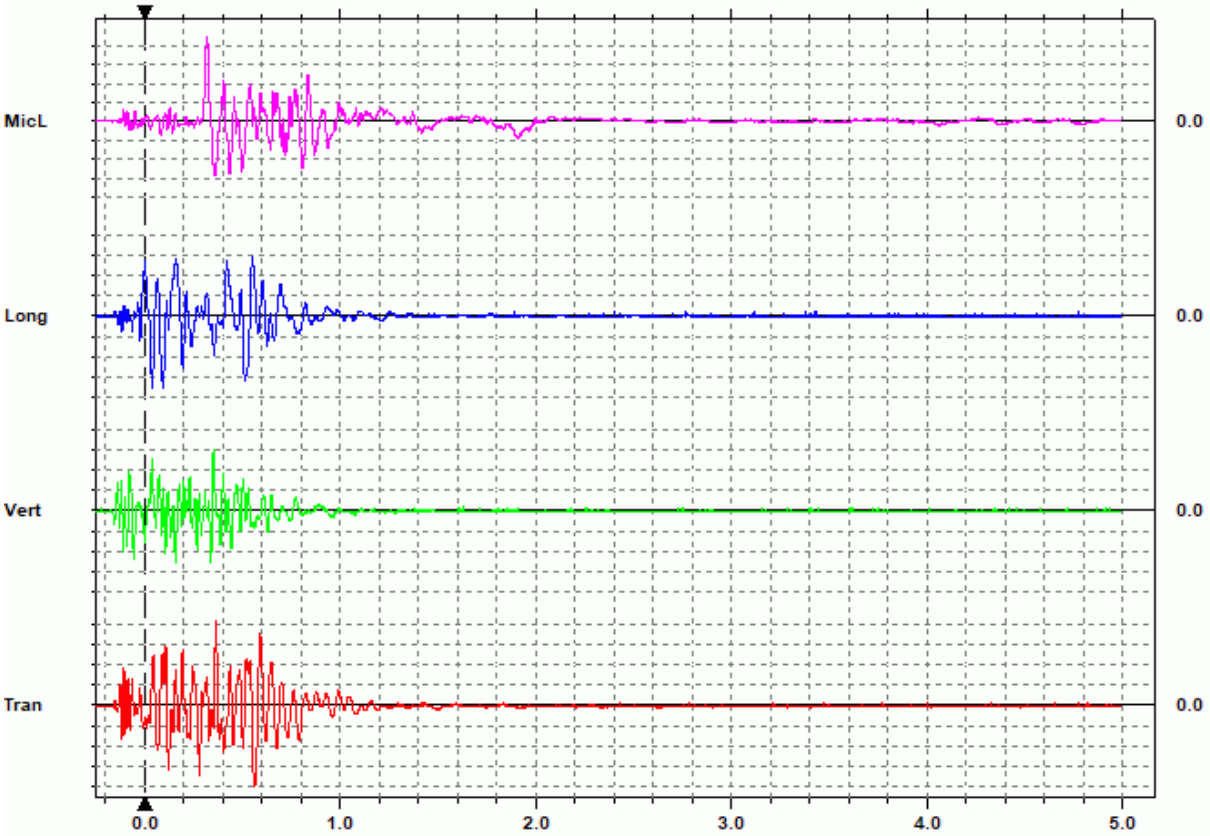
Extended Notes
Combo Mode August 10, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	126.8 dB(L) at 0.321 sec.
ZC Freq	9.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.38	6.10	7.11	mm/s
ZC Freq	27	24	18	Hz
Time (Rel. to Trig)	0.365	0.354	0.039	sec
Peak Acceleration	0.146	0.146	0.0795	g
Peak Displacement	0.0850	0.0335	0.0946	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.14 mm/s At 0.039 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:46:35 August 10, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IL0P.DN0W
Job Number	8177		

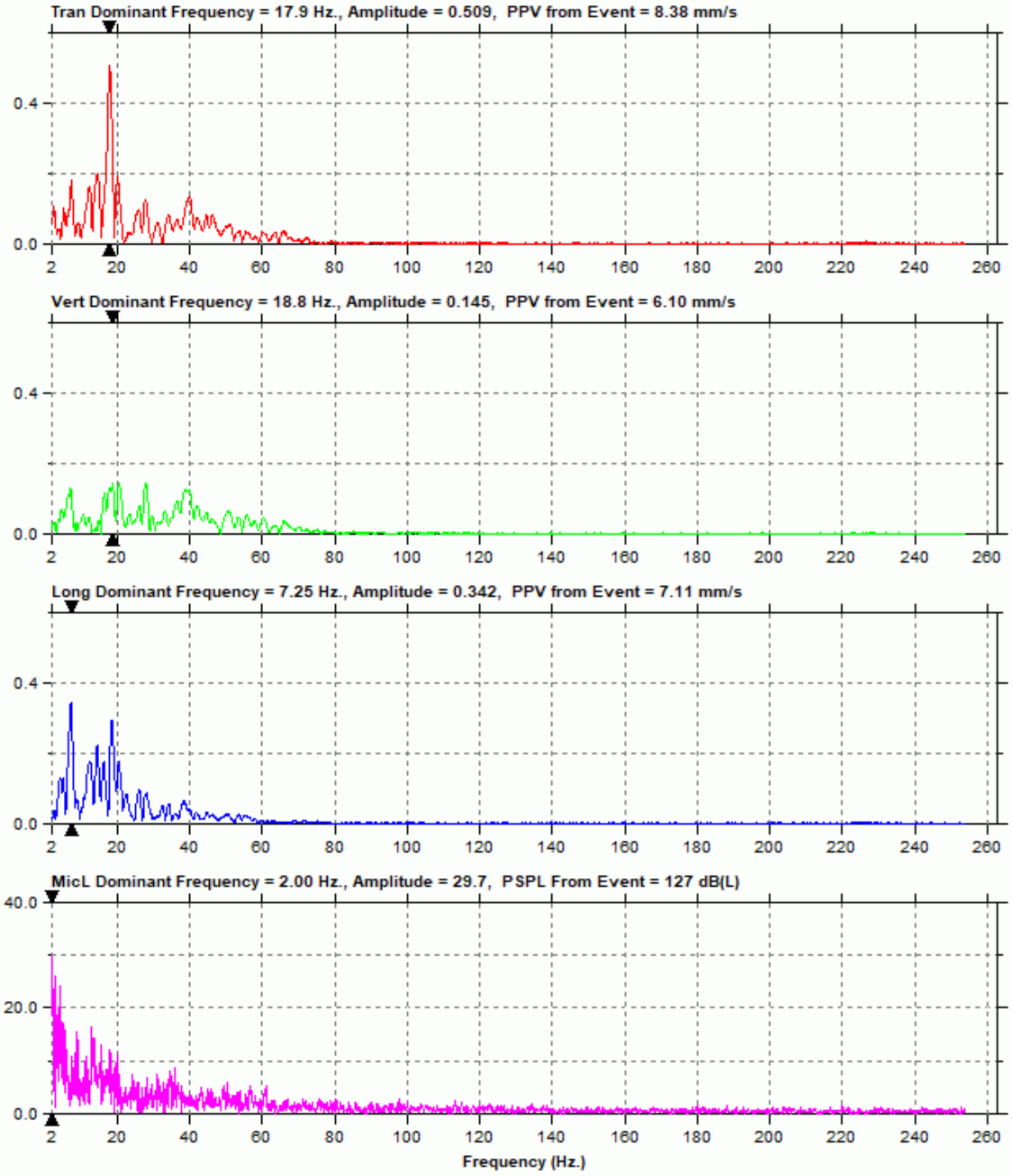
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 10, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:48:16 August 11, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IL2E.KG0W

Post Event Notes

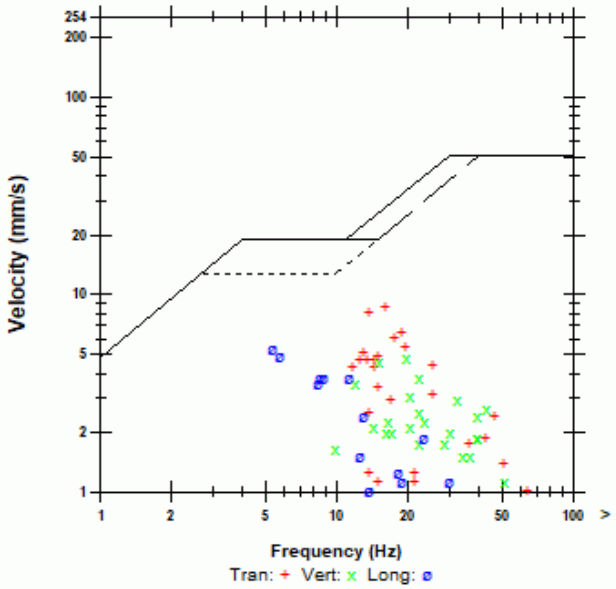
Extended Notes
Combo Mode August 11, 2020 05:16:40
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

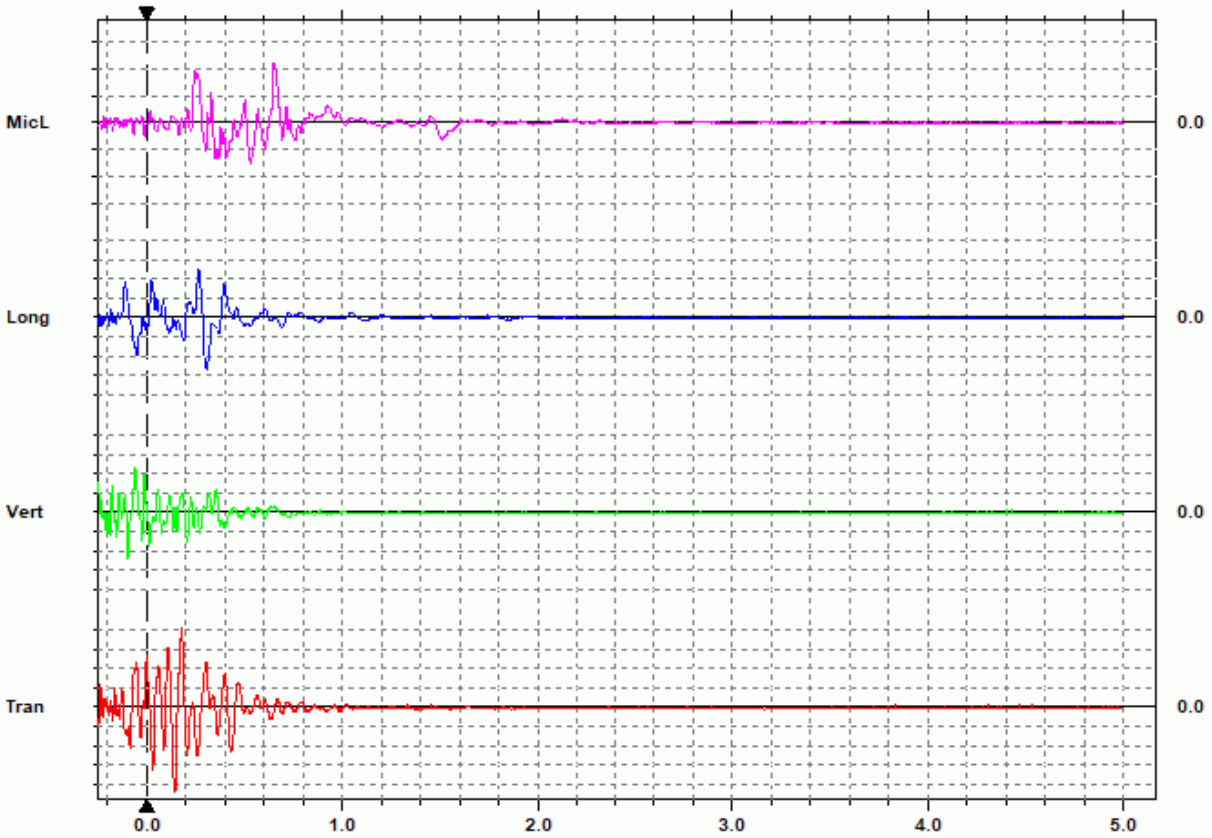
Microphone	Linear Weighting
PSPL	121.1 dB(L) at 0.651 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.76	4.83	5.33	mm/s
ZC Freq	16	20	5.4	Hz
Time (Rel. to Trig)	0.146	-0.094	0.307	sec
Peak Acceleration	0.133	0.106	0.0795	g
Peak Displacement	0.0892	0.0429	0.102	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.82 mm/s At 0.147 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 11, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:48:16 August 11, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IL2E.KG0W
Job Number	8177		

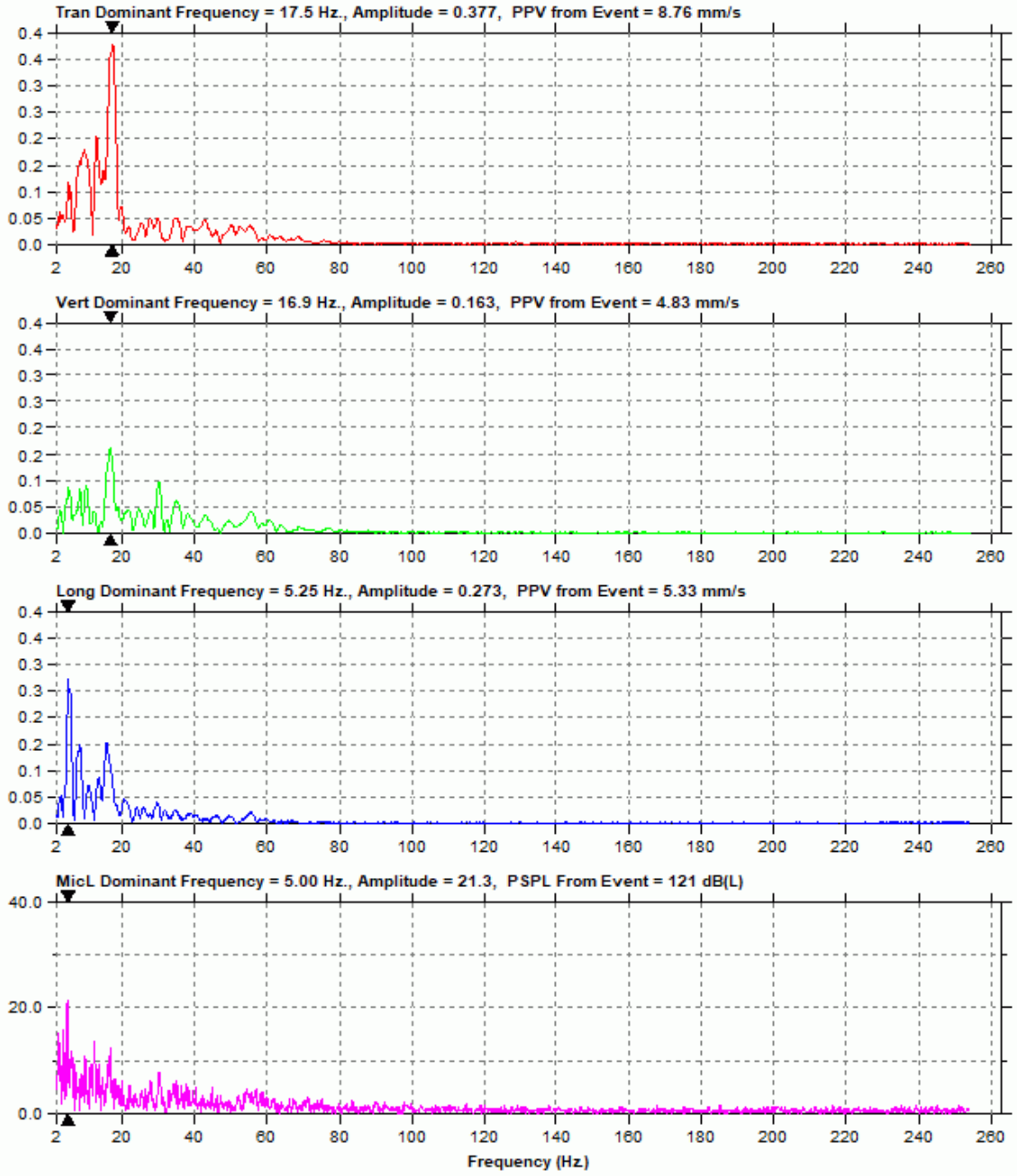
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 11, 2020 05:16:40
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 11, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:47:03 August 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IL49.6F0W

Post Event Notes

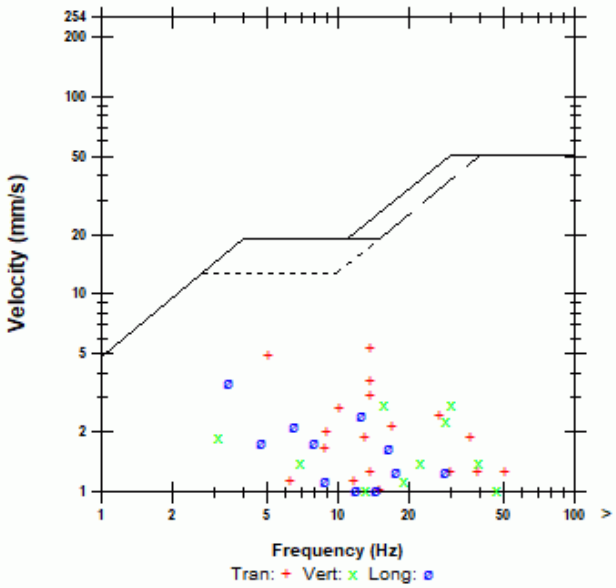
Extended Notes
Combo Mode August 12, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

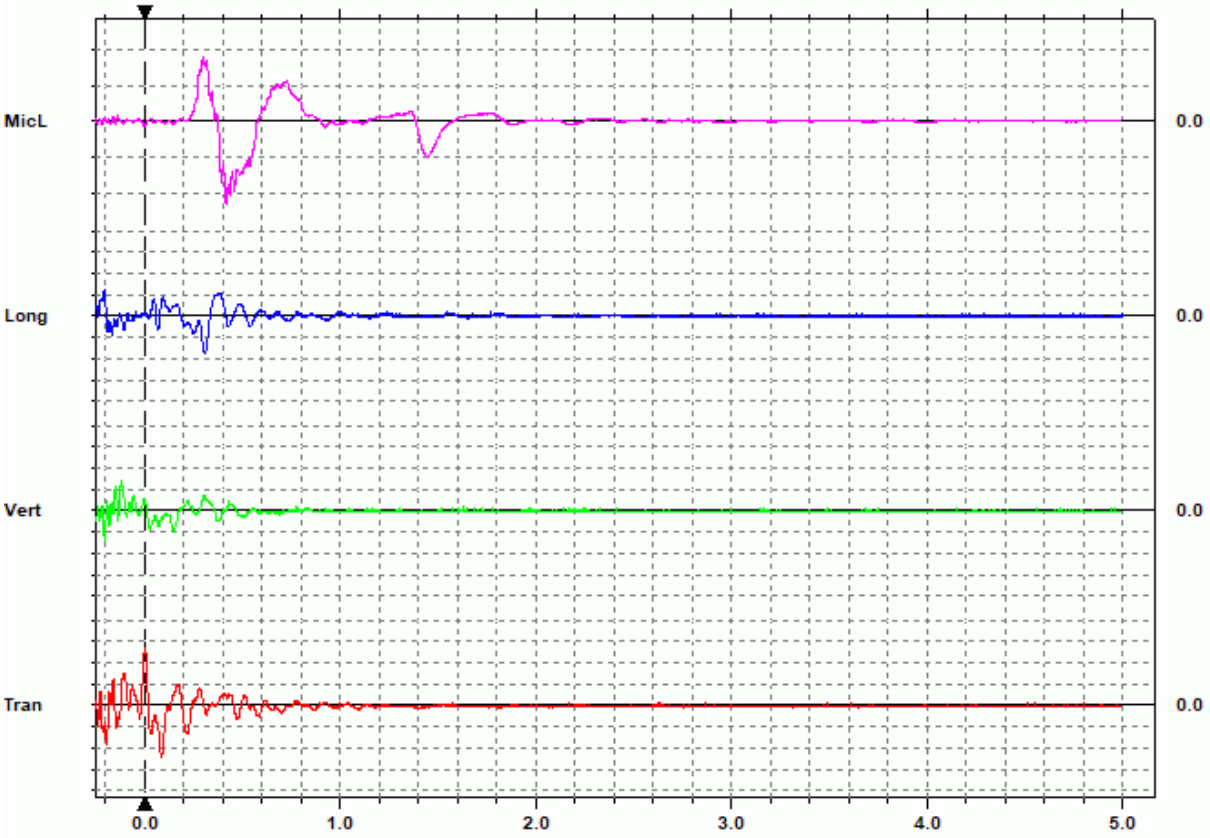
Microphone	Linear Weighting
PSPL	127.2 dB(L) at 0.420 sec.
ZC Freq	2.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.33	2.79	3.56	mm/s
ZC Freq	14	30	3.4	Hz
Time (Rel. to Trig)	0.003	-0.203	0.310	sec
Peak Acceleration	0.0795	0.0530	0.0398	g
Peak Displacement	0.109	0.0749	0.100	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.44 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:47:03 August 12, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IL49.6F0W
Job Number	8177		

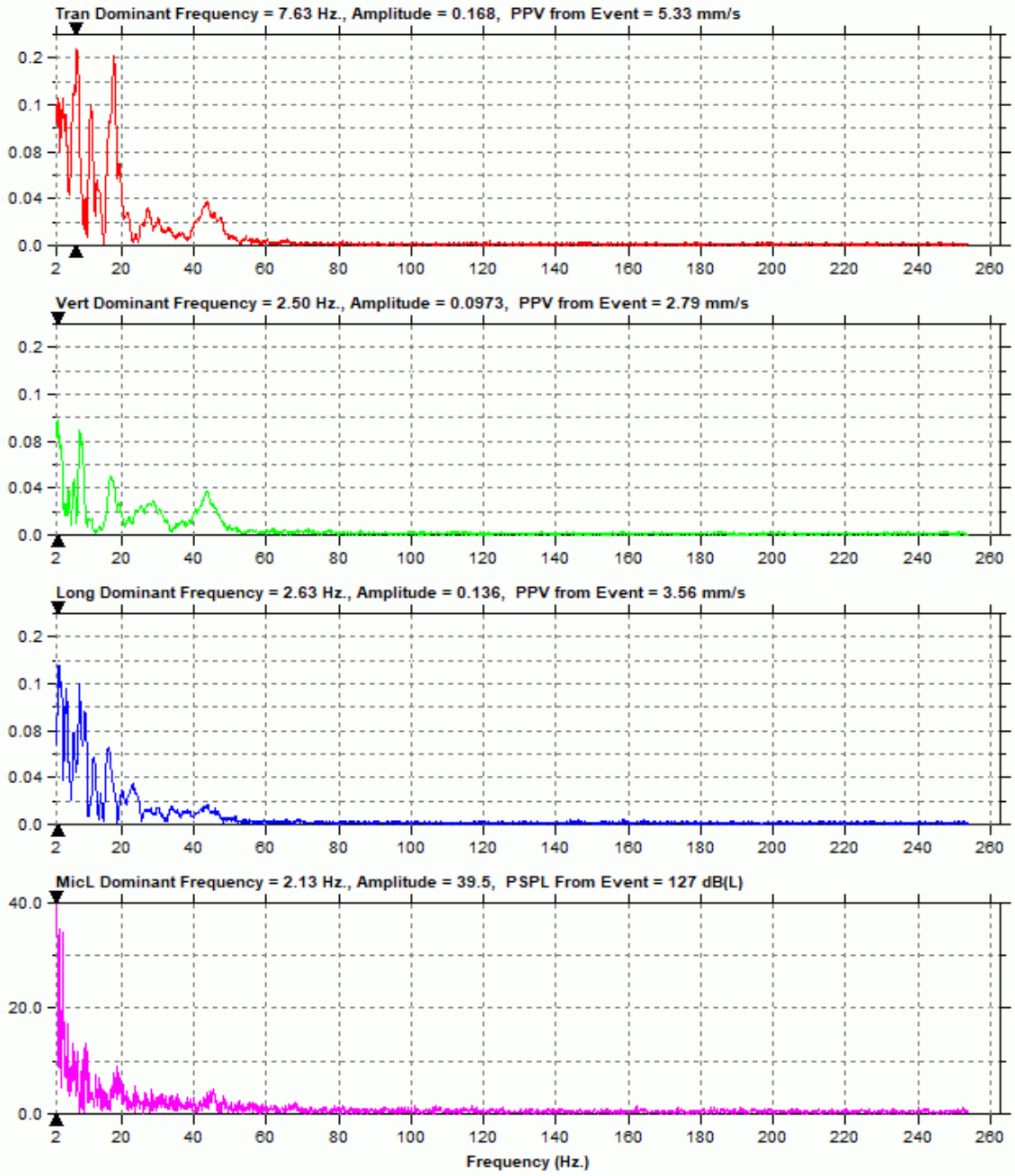
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 12, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:42:38 August 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263IL7Y.B20W

Post Event Notes

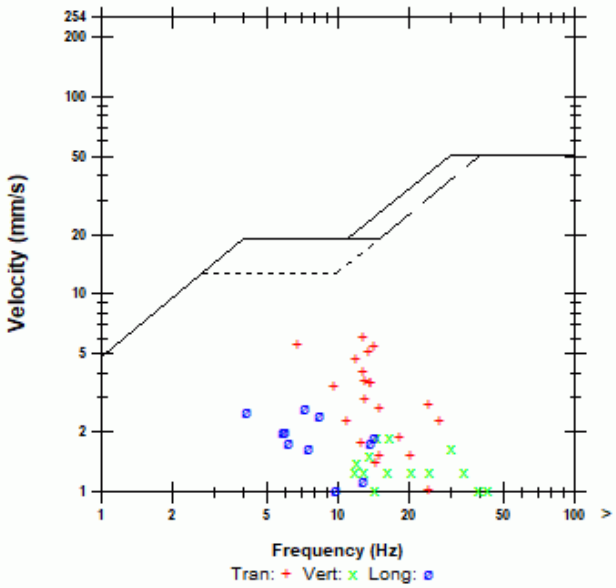
Extended Notes
Combo Mode August 14, 2020 05:17:05
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

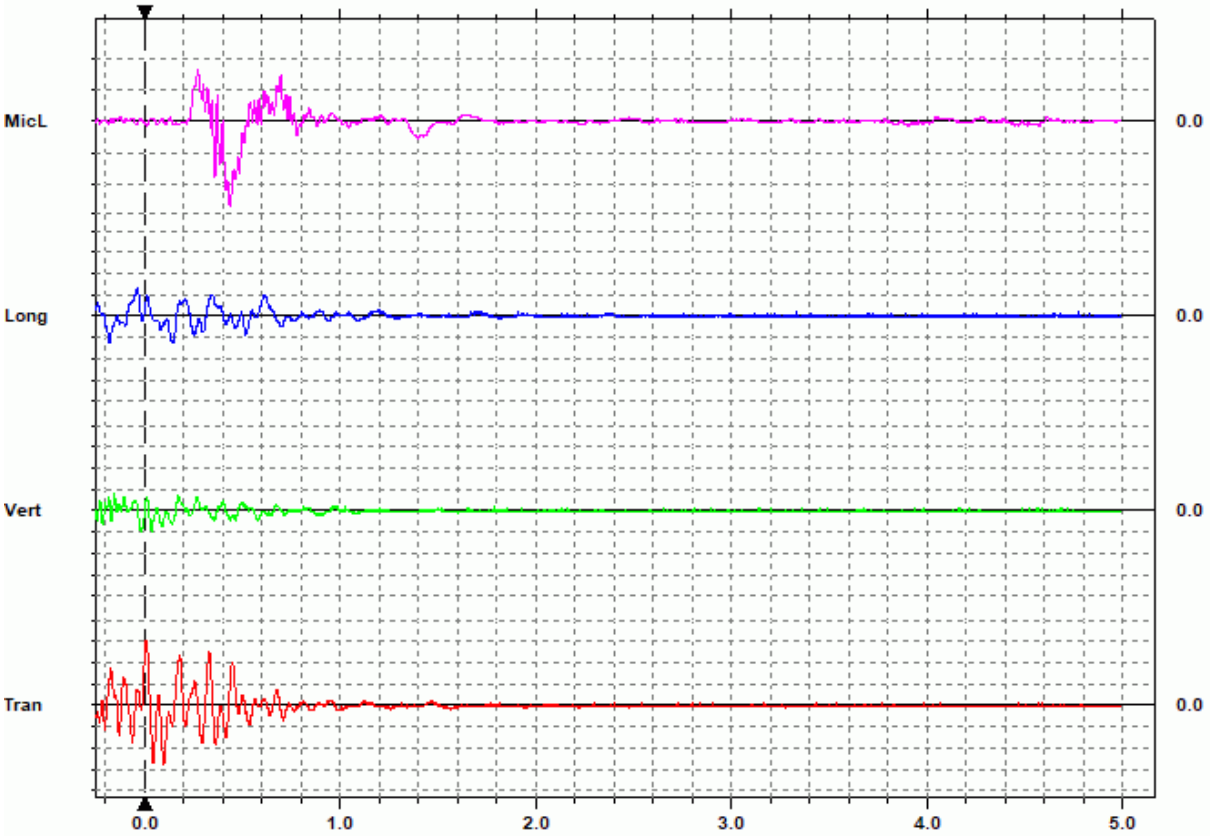
Microphone	Linear Weighting
PSPL	128.6 dB(L) at 0.436 sec.
ZC Freq	4.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.10	1.90	2.67	mm/s
ZC Freq	13	15	7.3	Hz
Time (Rel. to Trig)	0.005	-0.015	-0.037	sec
Peak Acceleration	0.0663	0.0530	0.0398	g
Peak Displacement	0.0890	0.0222	0.0614	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.42 mm/s At 0.009 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:42:38 August 14, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263IL7Y.B20W
Job Number	8177		

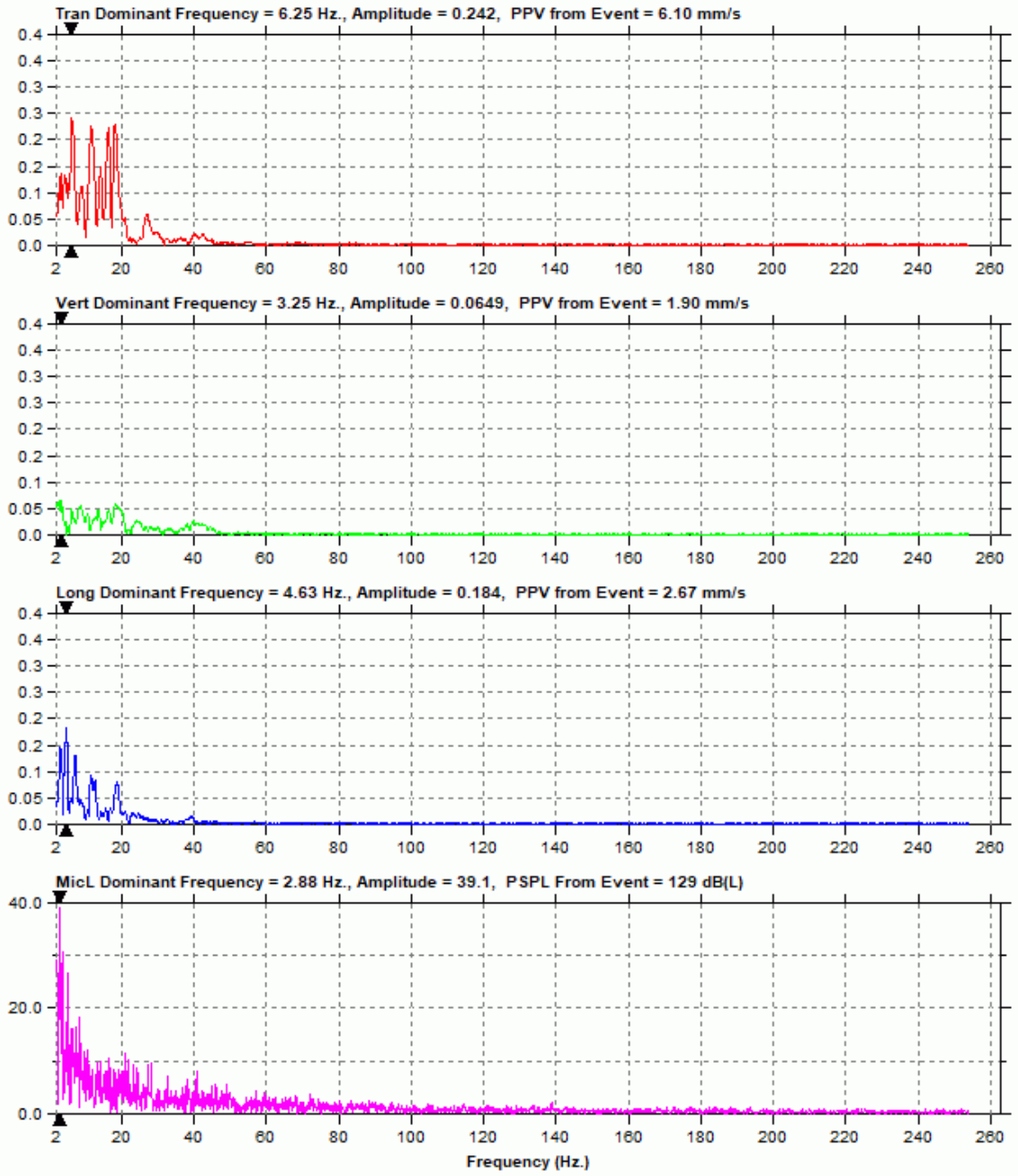
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 14, 2020 05:17:05
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:46 August 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	77 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE16263 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	R263ILFD.WM0W

Post Event Notes

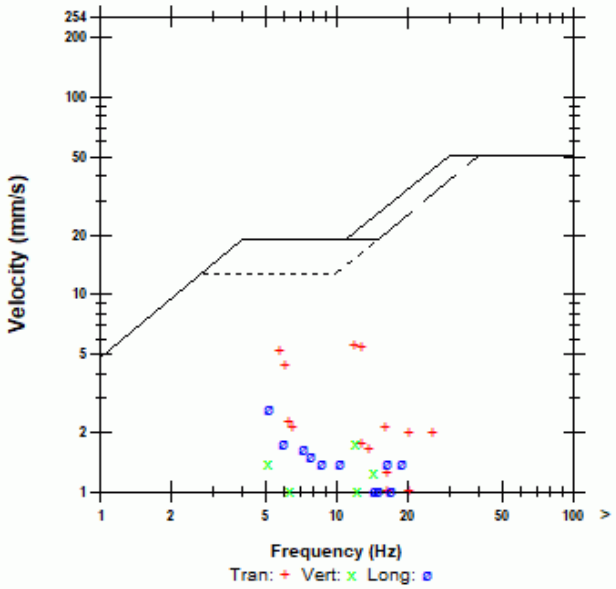
Extended Notes
Combo Mode August 18, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

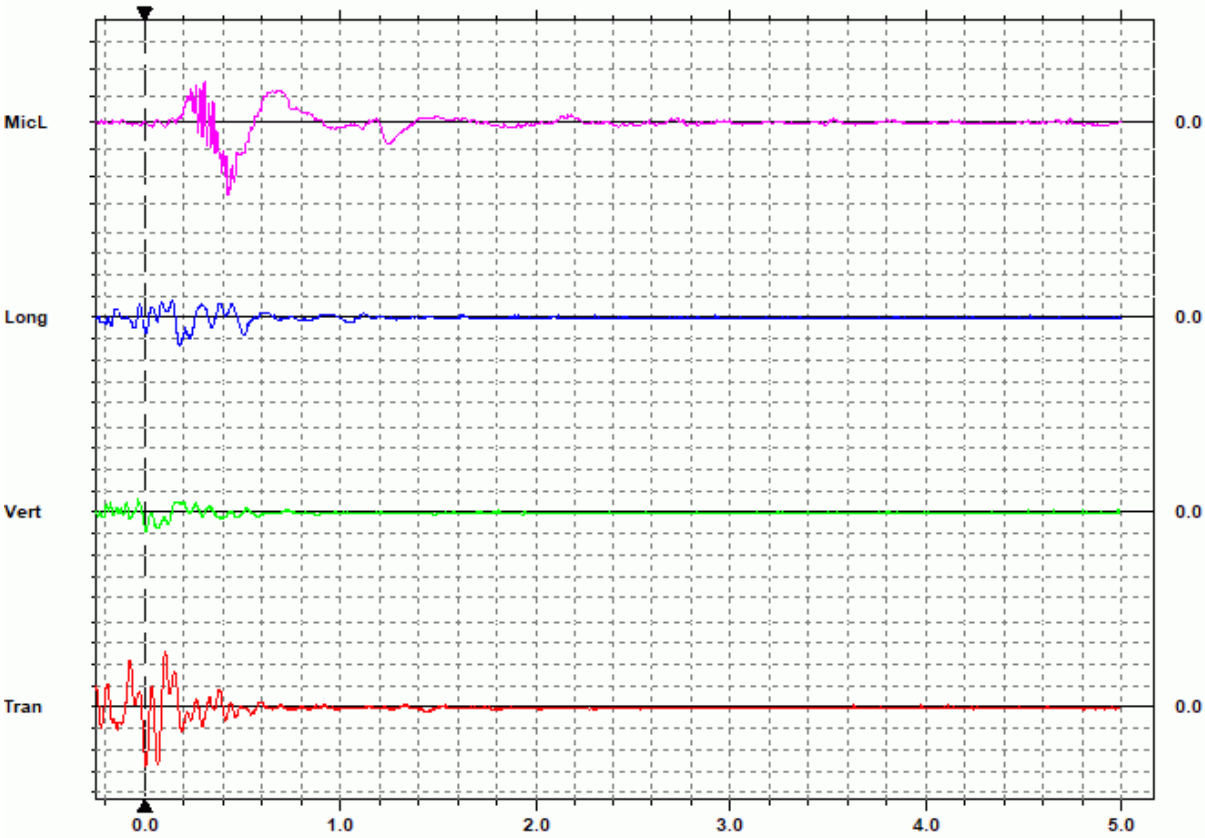
Microphone	Linear Weighting
PSPL	122.6 dB(L) at 0.425 sec.
ZC Freq	2.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.59	1.78	2.67	mm/s
ZC Freq	12	12	5.2	Hz
Time (Rel. to Trig)	0.005	0.004	0.178	sec
Peak Acceleration	0.0530	0.0398	0.0398	g
Peak Displacement	0.118	0.0454	0.0796	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.03 mm/s At 0.005 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:46 August 18, 2020	**Serial Number**	BE16263 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	R263ILFD.WM0W
Job Number	8177		

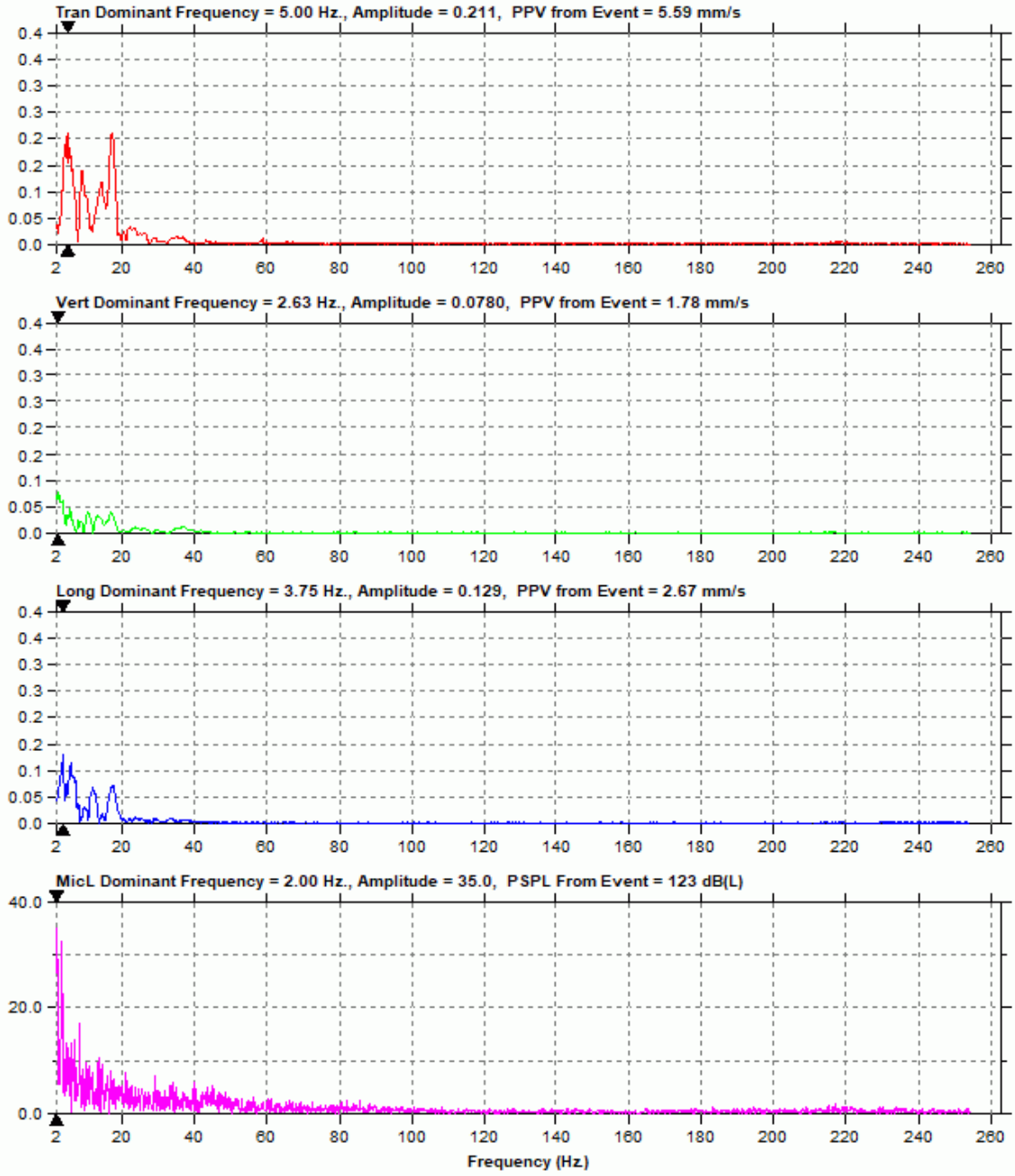
Notes

Location: 77 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 18, 2020 05:16:47
Geophone is sandbagged along the Western wall in the backyard of 77 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 18, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:48:46 August 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IKWU.LA0W

Post Event Notes

Extended Notes

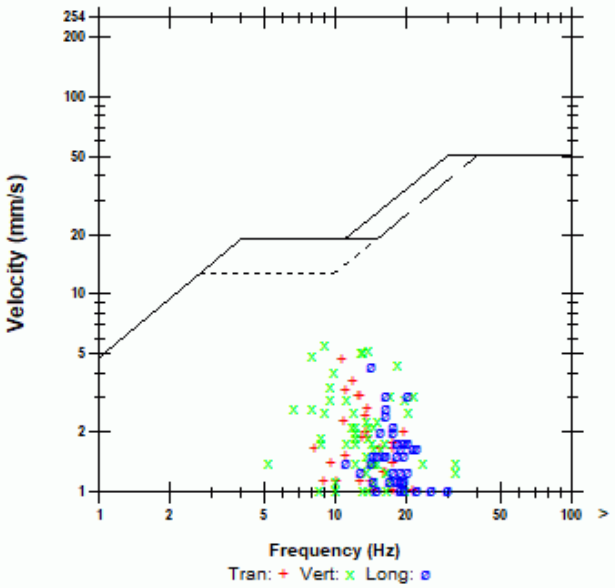
Combo Mode August 8, 2020 15:40:14
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

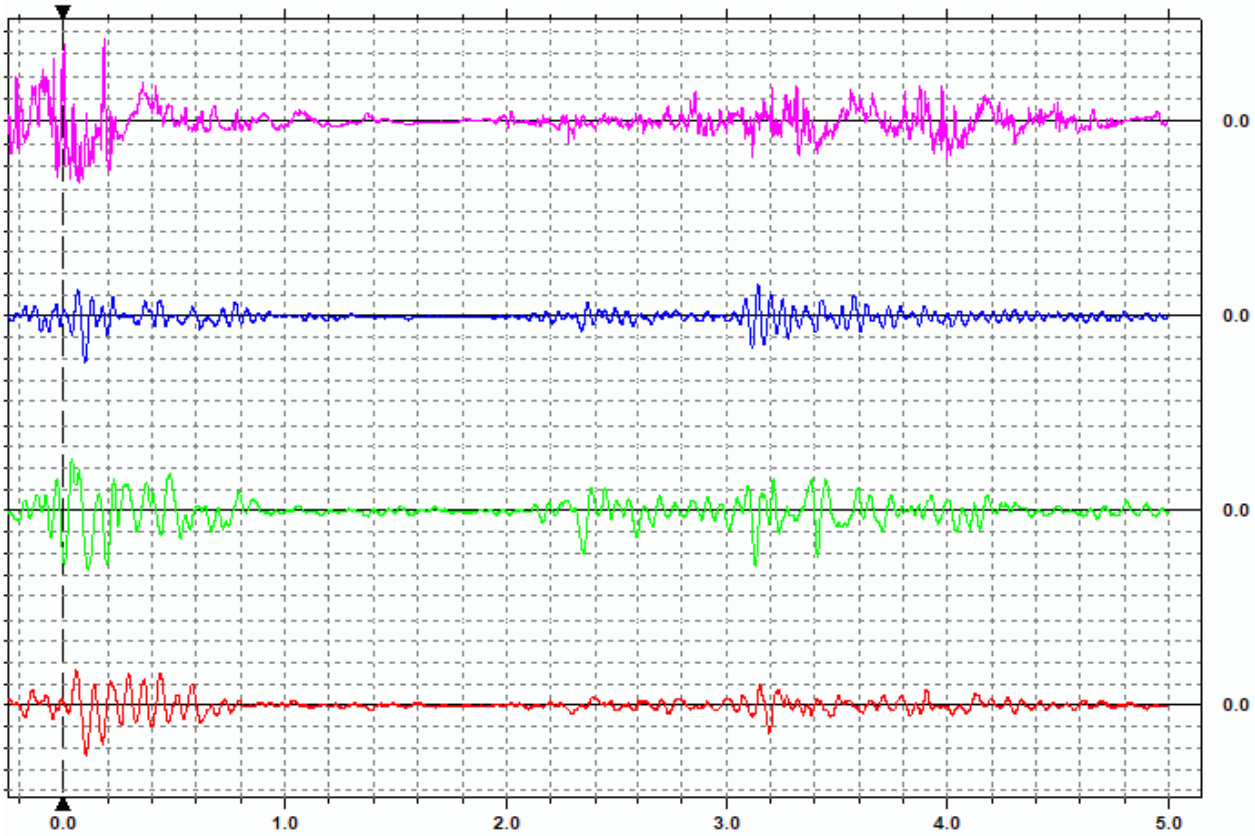
Microphone	Linear Weighting
PSPL	131.3 dB(L) at 0.183 sec.
ZC Freq	27 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	5.59	4.32	mm/s
ZC Freq	11	9.0	14	Hz
Time (Rel. to Trig)	0.101	0.107	0.096	sec
Peak Acceleration	0.0398	0.0663	0.0398	g
Peak Displacement	0.0654	0.0987	0.0478	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.78 mm/s At 0.101 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:48:46 August 8, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IKWU.LA0W
Job Number	8177		

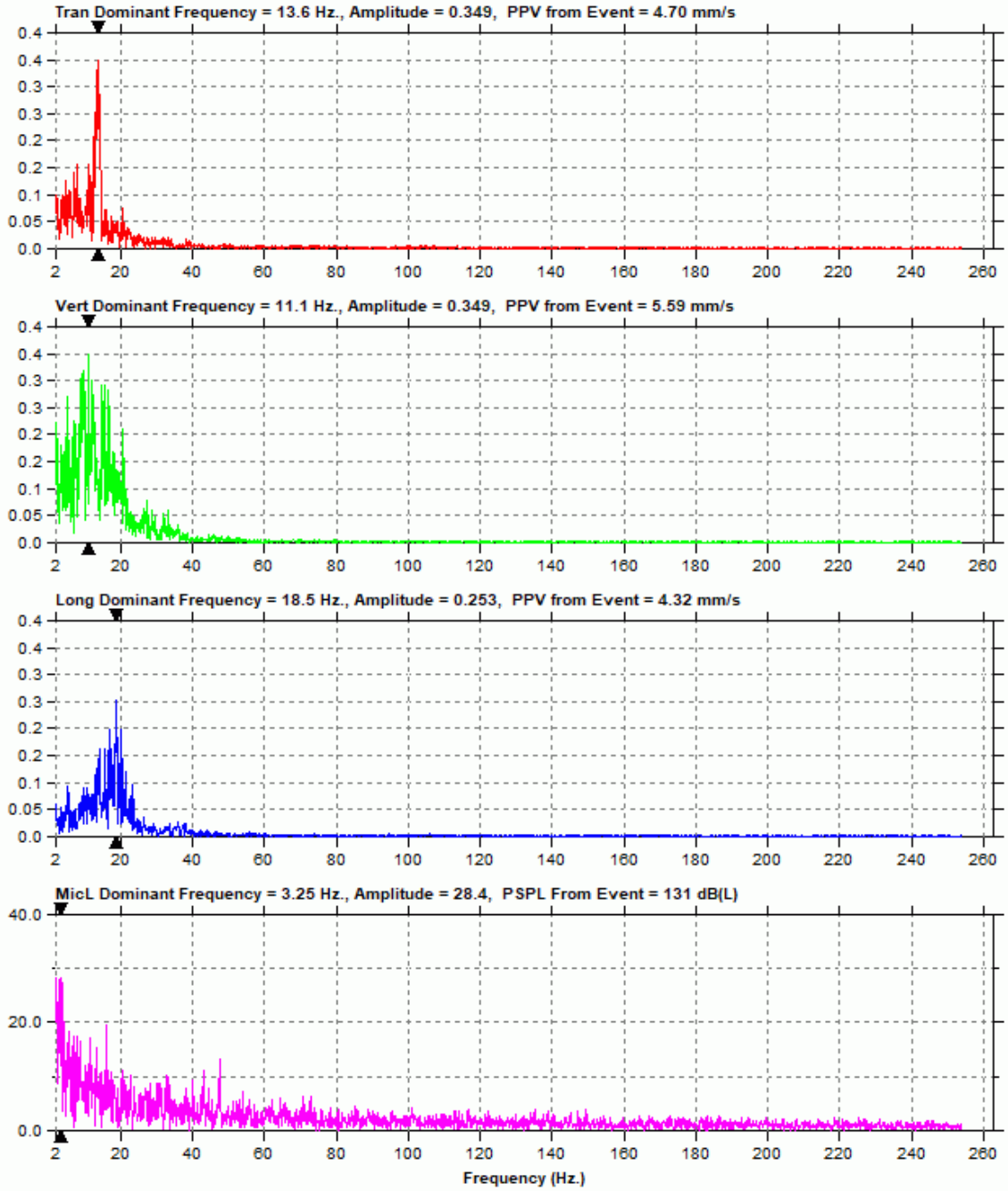
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 8, 2020 15:40:14
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:49:39 August 10, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IL0P.IR0W

Post Event Notes

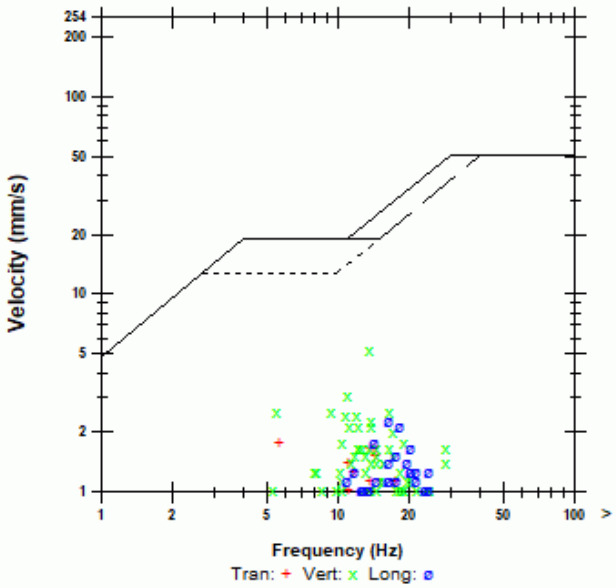
Extended Notes
Combo Mode August 10, 2020 17:22:28
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

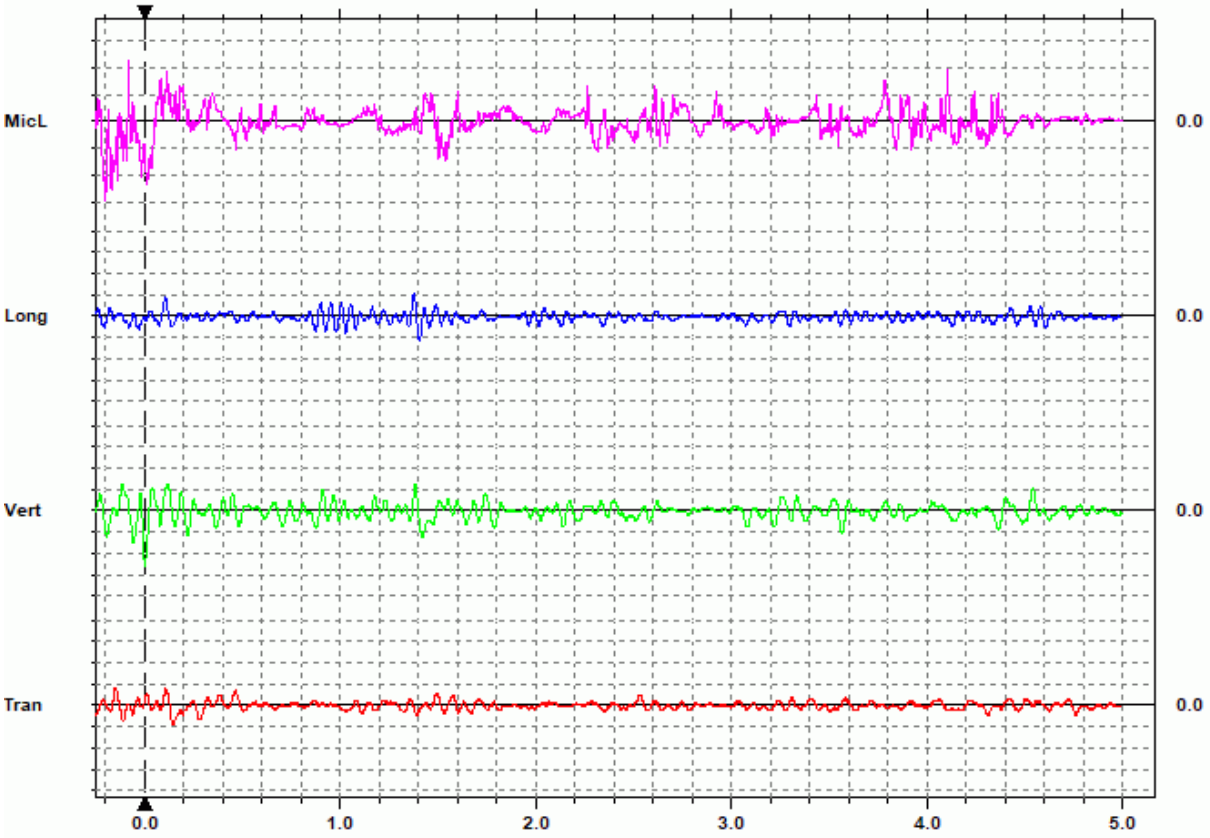
Microphone	Linear Weighting
PSPL	123.4 dB(L) at -0.198 sec.
ZC Freq	12 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	1.78	5.21	2.29	mm/s
ZC Freq	5.7	13	17	Hz
Time (Rel. to Trig)	0.145	0.002	1.404	sec
Peak Acceleration	0.0265	0.0530	0.0398	g
Peak Displacement	0.0395	0.0607	0.0229	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.25 mm/s At 0.003 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: August 10, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 17:49:39 August 10, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IL0P.IR0W
Job Number	8177		

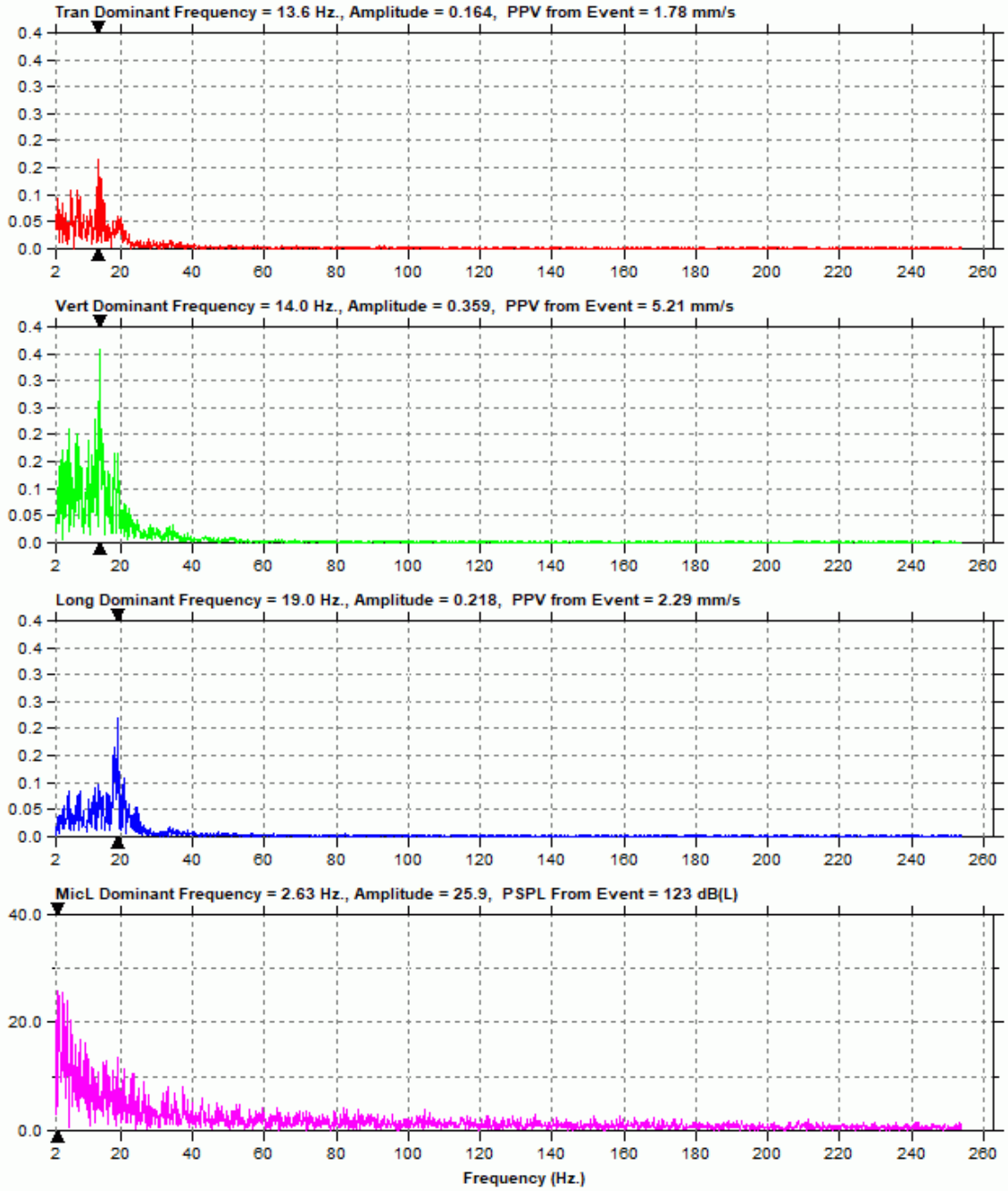
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 10, 2020 17:22:28
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 10, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:54 August 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IL7Y.JU0W

Post Event Notes

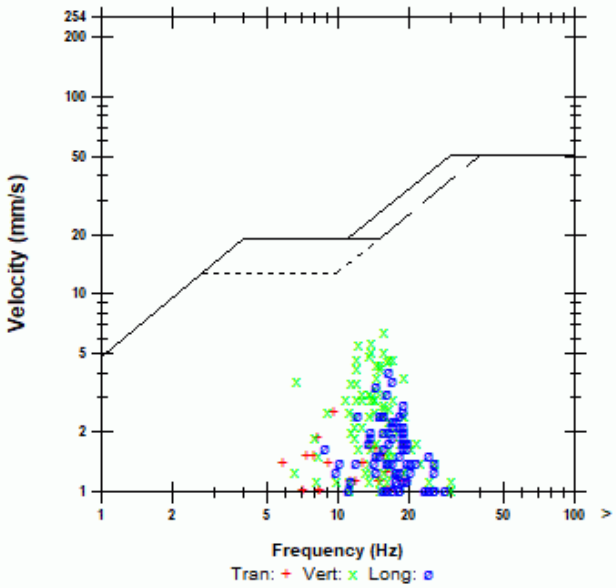
Extended Notes
Combo Mode August 14, 2020 15:39:12
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

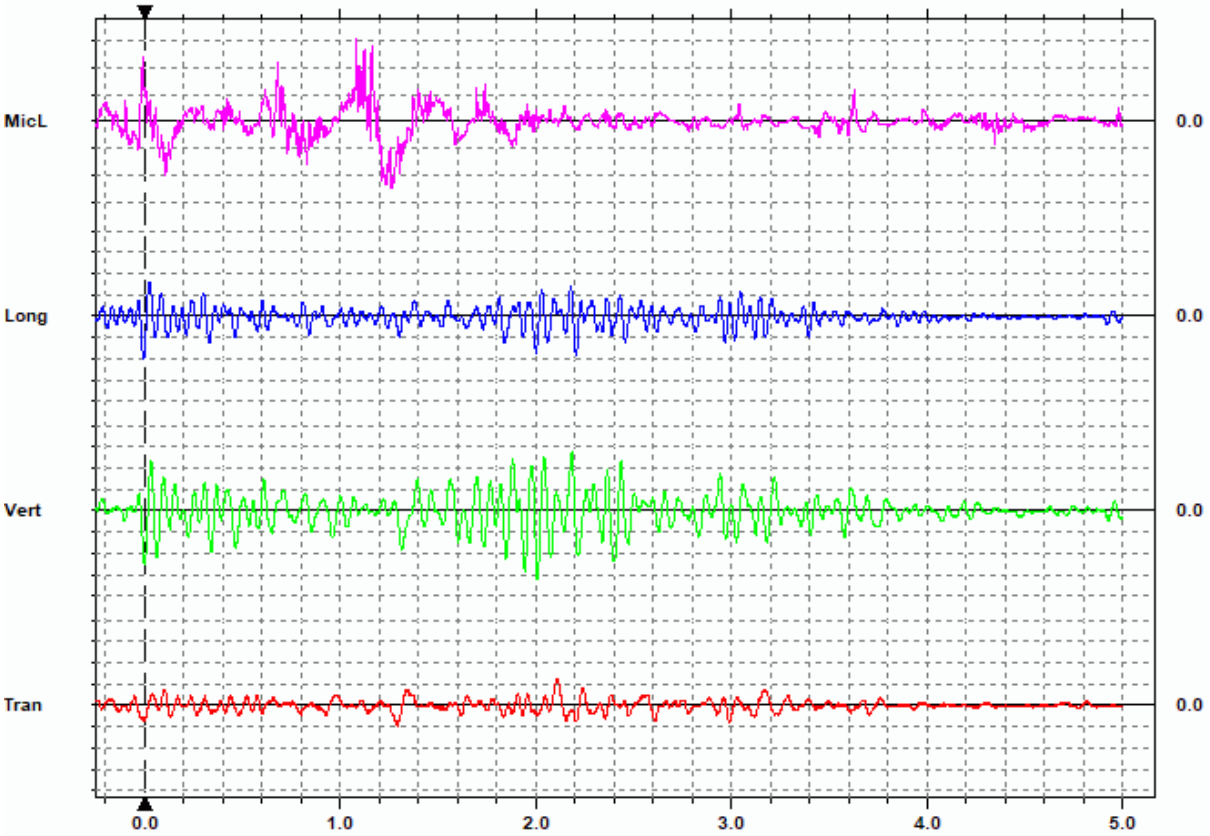
Microphone	Linear Weighting
PSPL	129.8 dB(L) at 1.085 sec.
ZC Freq	3.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.54	6.48	4.06	mm/s
ZC Freq	9.7	16	17	Hz
Time (Rel. to Trig)	2.110	2.010	-0.004	sec
Peak Acceleration	0.0265	0.0795	0.0530	g
Peak Displacement	0.0416	0.0691	0.0399	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.06 mm/s At 2.010 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: August 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:47:54 August 14, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IL7Y.JU0W
Job Number	8177		

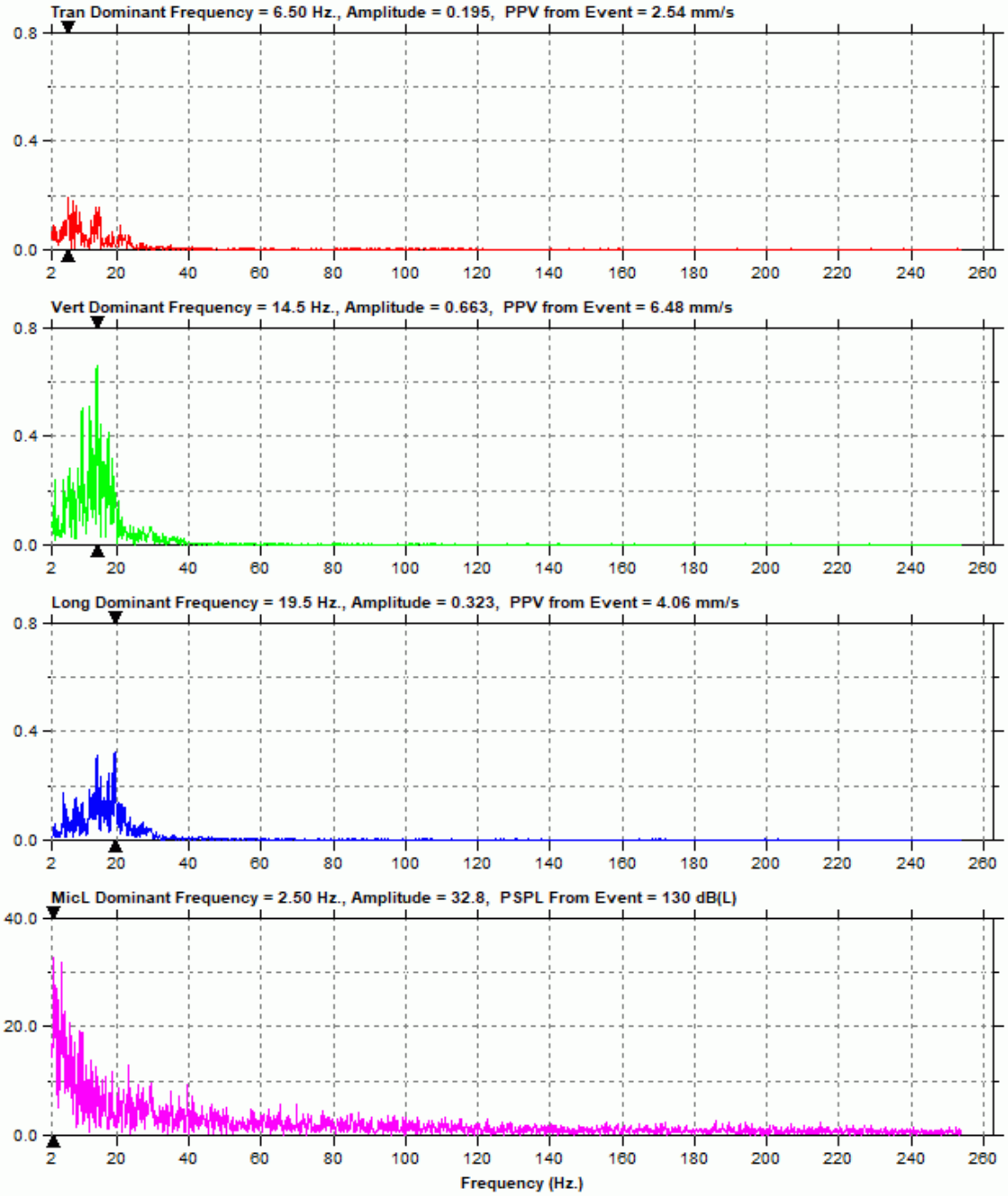
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode August 14, 2020 15:39:12
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: August 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units

West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
8-Sep-20	WCRR-153	16:02	1.78mm/s	122.1dB(L)	1.52mm/s	115.6dB(L)	7.92mm/s	121.8dB(L)	0.51mm/s	126.8dB(L)	2.92mm/s	124.2dB(L)	1.14mm/s	115.2dB(L)	0.76mm/s	116.7dB(L)
9-Sep-20	WCRR-154	16:04	1.02mm/s	114.6dB(L)	2.41mm/s	119.9dB(L)	2.29mm/s	115.7dB(L)	0.51mm/s	104.2dB(L)	1.14mm/s	108.8dB(L)	0.64mm/s	107.5dB(L)	0.64mm/s	106.5dB(L)
10-Sep-20	WCRR-155	16:10	0.76mm/s	112.6dB(L)	1.52mm/s	118.7dB(L)	1.91mm/s	112.8dB(L)	0.51mm/s	102.8dB(L)	1.52mm/s	106.0dB(L)	0.64mm/s	106.5dB(L)	0.51mm/s	101.9dB(L)
11-Sep-20	WCRR-156	16:06	0.76mm/s	121.7dB(L)	1.40mm/s	114.0dB(L)	2.41mm/s	109.9dB(L)	0.38mm/s	110.6dB(L)	1.52mm/s	115.4dB(L)	0.64mm/s	104.9dB(L)	0.64mm/s	110.2dB(L)
		16:20	0.38mm/s	115.9dB(L)	0.89mm/s	112.6dB(L)	1.14mm/s	106.5dB(L)	0.25mm/s	121.3dB(L)	1.02mm/s	115.6dB(L)	0.38mm/s	104.9dB(L)	0.25mm/s	110.6dB(L)
12-Sep-20	WCRR-157	16:04	2.79mm/s	123.7dB(L)	1.27mm/s	111.8dB(L)	9.40mm/s	128.3dB(L)	0.51mm/s	109.2dB(L)	8.76mm/s	115.9dB(L)	1.78mm/s	115.2dB(L)	1.27mm/s	111.2dB(L)
14-Sep-20	WCRR-158	16:04	2.79mm/s	122.9dB(L)	1.02mm/s	114.4dB(L)	10.80mm/s	128.5dB(L)	0.38mm/s	112.6dB(L)	5.46mm/s	116.5dB(L)	1.14mm/s	116.7dB(L)	0.89mm/s	112.8dB(L)
15-Sep-20	WCRR-159	16:07	3.30mm/s	124.5dB(L)	1.14mm/s	112.0dB(L)	18.00mm/s	128.6dB(L)	0.51mm/s	112.6dB(L)	6.22mm/s	120.5dB(L)	1.27mm/s	119.7dB(L)	1.65mm/s	114.4dB(L)
16-Sep-20	WCRR-160	16:12	4.19mm/s	117.6dB(L)	0.76mm/s	111.5dB(L)	13.84mm/s	121.8dB(L)	0.51mm/s	106.5dB(L)	3.30mm/s	113.1dB(L)	1.14mm/s	110.2dB(L)	1.27mm/s	107.5dB(L)
18-Sep-20	WCRR-161	16:00	3.05mm/s	118.2dB(L)	0.64mm/s	110.2dB(L)	12.10mm/s	121.7dB(L)	0.38mm/s	102.8dB(L)	6.10mm/s	111.8dB(L)	0.89mm/s	111.8dB(L)	1.02mm/s	104.9dB(L)
19-Sep-20	WCRR-162	16:06	1.78mm/s	116.6dB(L)	0.76mm/s	108.0dB(L)	2.92mm/s	119.1dB(L)	0.51mm/s	104.9dB(L)	4.19mm/s	113.1dB(L)	0.76mm/s	112.3dB(L)	0.89mm/s	108.4dB(L)
22-Sep-20	WCRR-163	16:05	2.54mm/s	118.1dB(L)	0.64mm/s	109.2dB(L)	6.98mm/s	125.1dB(L)	0.64mm/s	107.0dB(L)	5.97mm/s	112.8dB(L)	1.65mm/s	113.1dB(L)	1.65mm/s	107.5dB(L)
23-Sep-20	WCRR-164	16:01	1.52mm/s	120.5dB(L)	0.51mm/s	112.8dB(L)	8.64mm/s	125.6dB(L)	0.25mm/s	107.5dB(L)	3.68mm/s	114.0dB(L)	0.76mm/s	112.0dB(L)	0.51mm/s	107.0dB(L)
24-Sep-20	WCRR-165	16:05	1.14mm/s	128.4dB(L)	0.76mm/s	125.0dB(L)	4.95mm/s	119.1dB(L)	0.25mm/s	133.8dB(L)	0.64mm/s	119.3dB(L)	0.51mm/s	122.7dB(L)	0.38mm/s	116.9dB(L)
25-Sep-20	WCRR-166	17:20	3.94mm/s	120.2dB(L)	0.51mm/s	109.2dB(L)	6.60mm/s	124.6dB(L)	0.64mm/s	111.8dB(L)	10.90mm/s	116.3dB(L)	1.78mm/s	115.9dB(L)	1.40mm/s	110.9dB(L)
28-Sep-20	WCRR-167	16:06	1.02mm/s	122.3dB(L)	2.03mm/s	123.1dB(L)	2.29mm/s	120.0dB(L)	0.38mm/s	120.1dB(L)	0.76mm/s	124.5dB(L)	0.51mm/s	114.0dB(L)	0.64mm/s	113.1dB(L)
29-Sep-20	WCRR-168	18:06	0.76mm/s	112.0dB(L)	1.14mm/s	114.4dB(L)	2.16mm/s	113.1dB(L)	0.25mm/s	101.9dB(L)	0.51mm/s	107.5dB(L)	0.38mm/s	106.5dB(L)	0.51mm/s	104.2dB(L)
30-Sep-20	WCRR-169	16:00	0.64mm/s	112.6dB(L)	1.40mm/s	117.5dB(L)	1.91mm/s	115.4dB(L)	0.25mm/s	101.0dB(L)	0.38mm/s	108.4dB(L)	0.38mm/s	107.5dB(L)	0.38mm/s	103.5dB(L)

Permanent Monitoring Units

Crestmont			90 Valley Ridge Heights NW		254 Crestridge Place SW		148 Valley Meadow Close NW		Calgary Climbing Center
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	
2-Sep-20	CM-07	18:00							0.47mm/s
3-Sep-20	CM-08	16:28							0.68mm/s
4-Sep-20	CM-09	18:24							0.54mm/s

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Tran At 16:00:59 September 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IMI9.TN0W

Post Event Notes

Extended Notes

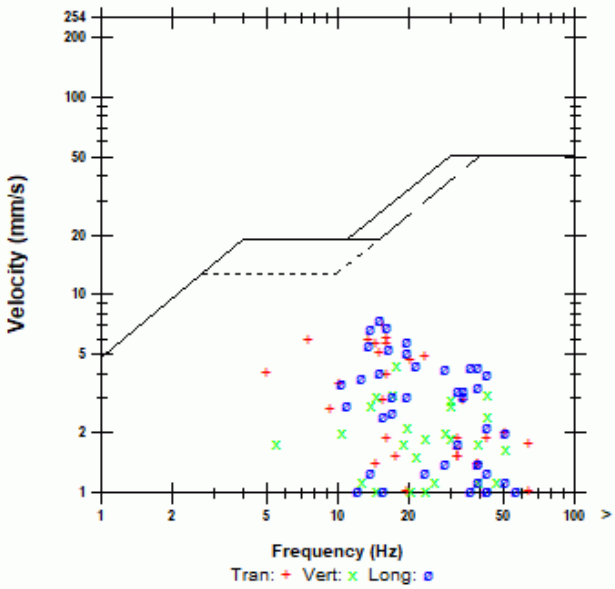
Combo Mode September 8, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

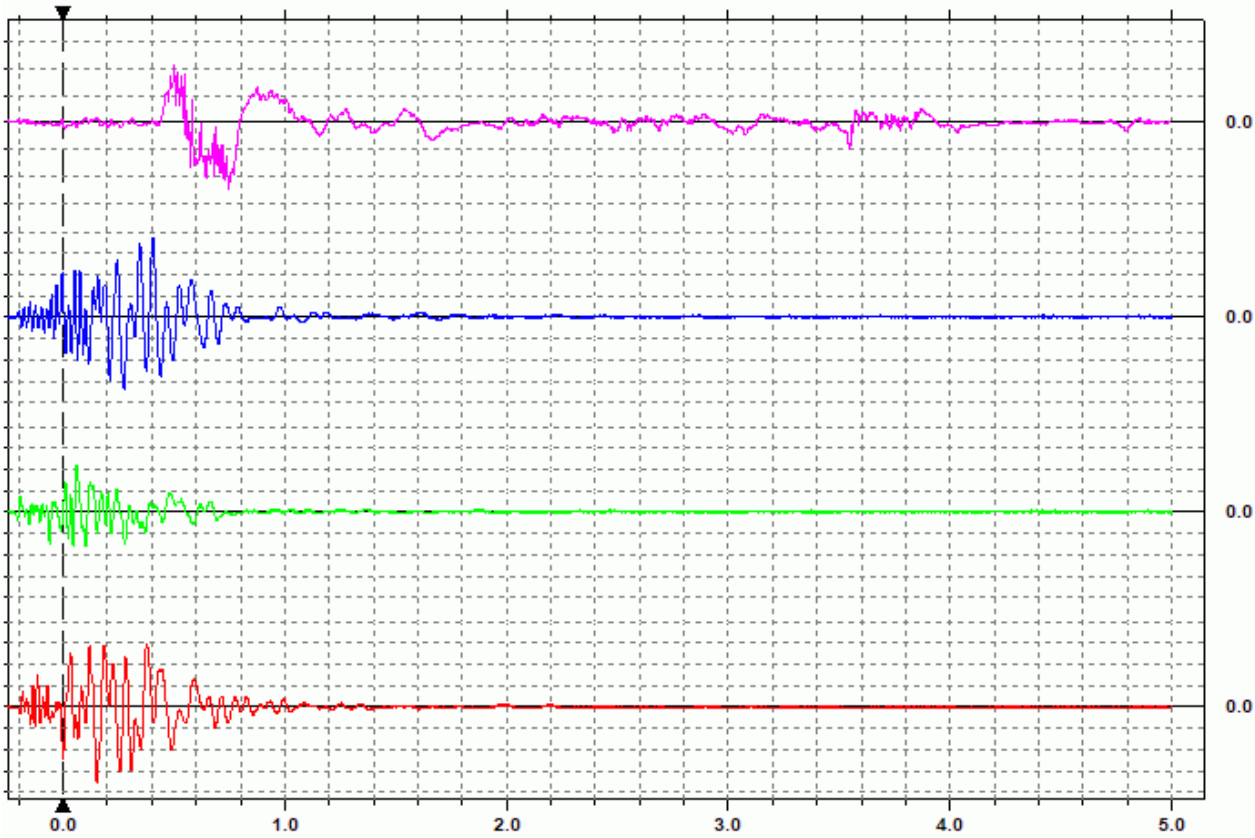
Microphone	Linear Weighting
PSPL	24.5 pa.(L) at 0.747 sec.
ZC Freq	2.9 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.11	4.44	7.49	mm/s
ZC Freq	16	18	15	Hz
Time (Rel. to Trig)	0.151	0.061	0.404	sec
Peak Acceleration	0.0928	0.0795	0.106	g
Peak Displacement	0.101	0.0477	0.0747	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.92 mm/s At 0.375 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:00:59 September 8, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IMI9.TN0W
Job Number	8177		

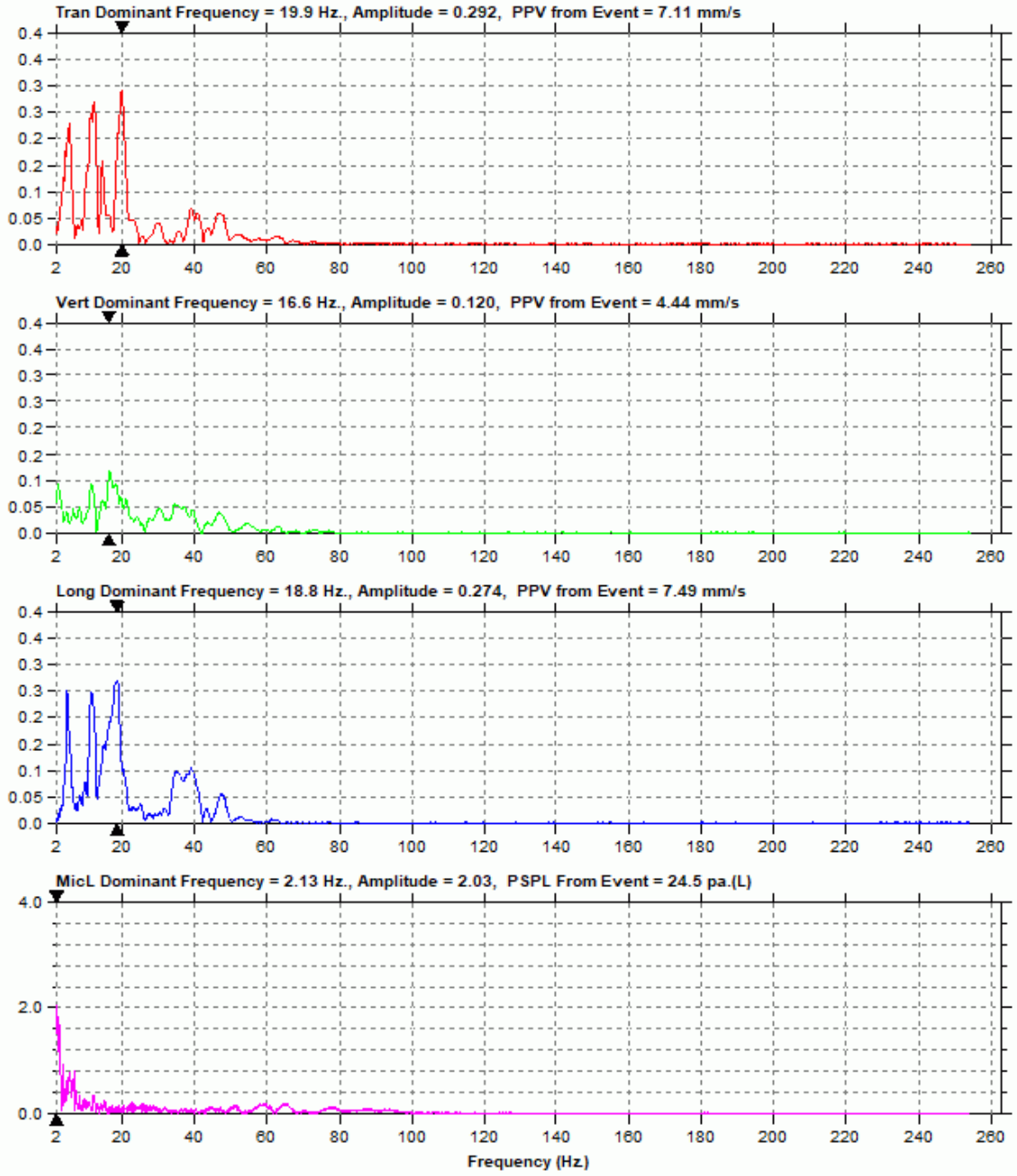
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 8, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:36 September 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IMPO.KC0W

Post Event Notes

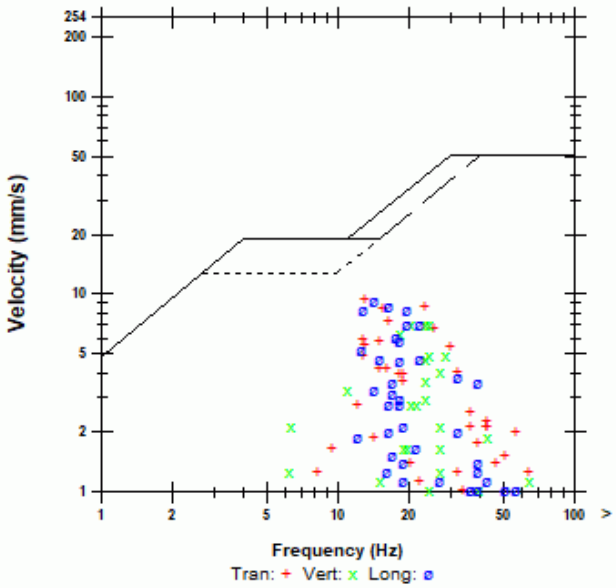
Extended Notes
Combo Mode September 12, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

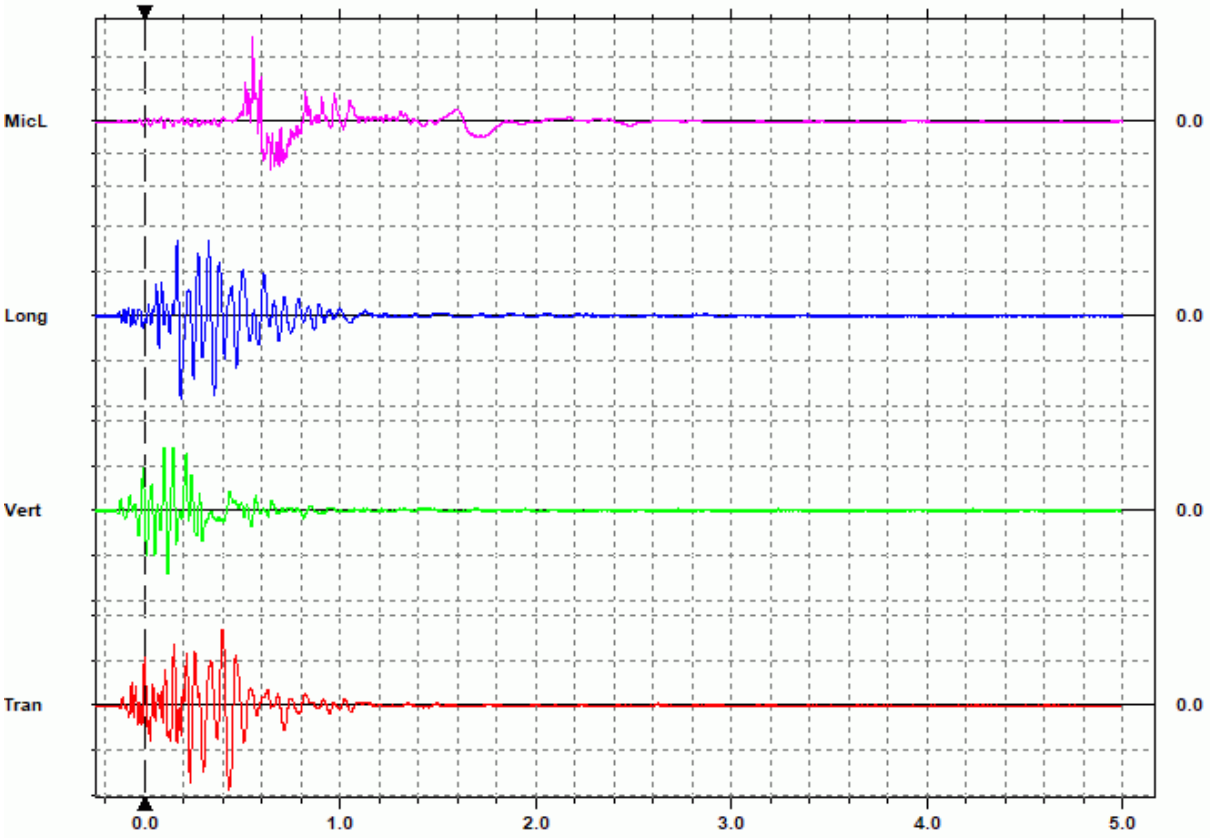
Microphone	Linear Weighting
PSPL	51.8 pa.(L) at 0.555 sec.
ZC Freq	15 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.40	7.11	9.27	mm/s
ZC Freq	13	20	14	Hz
Time (Rel. to Trig)	0.433	0.148	0.187	sec
Peak Acceleration	0.146	0.133	0.159	g
Peak Displacement	0.121	0.0495	0.0853	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 9.84 mm/s At 0.187 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: September 12, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:36 September 12, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IMPO.KC0W
Job Number	8177		

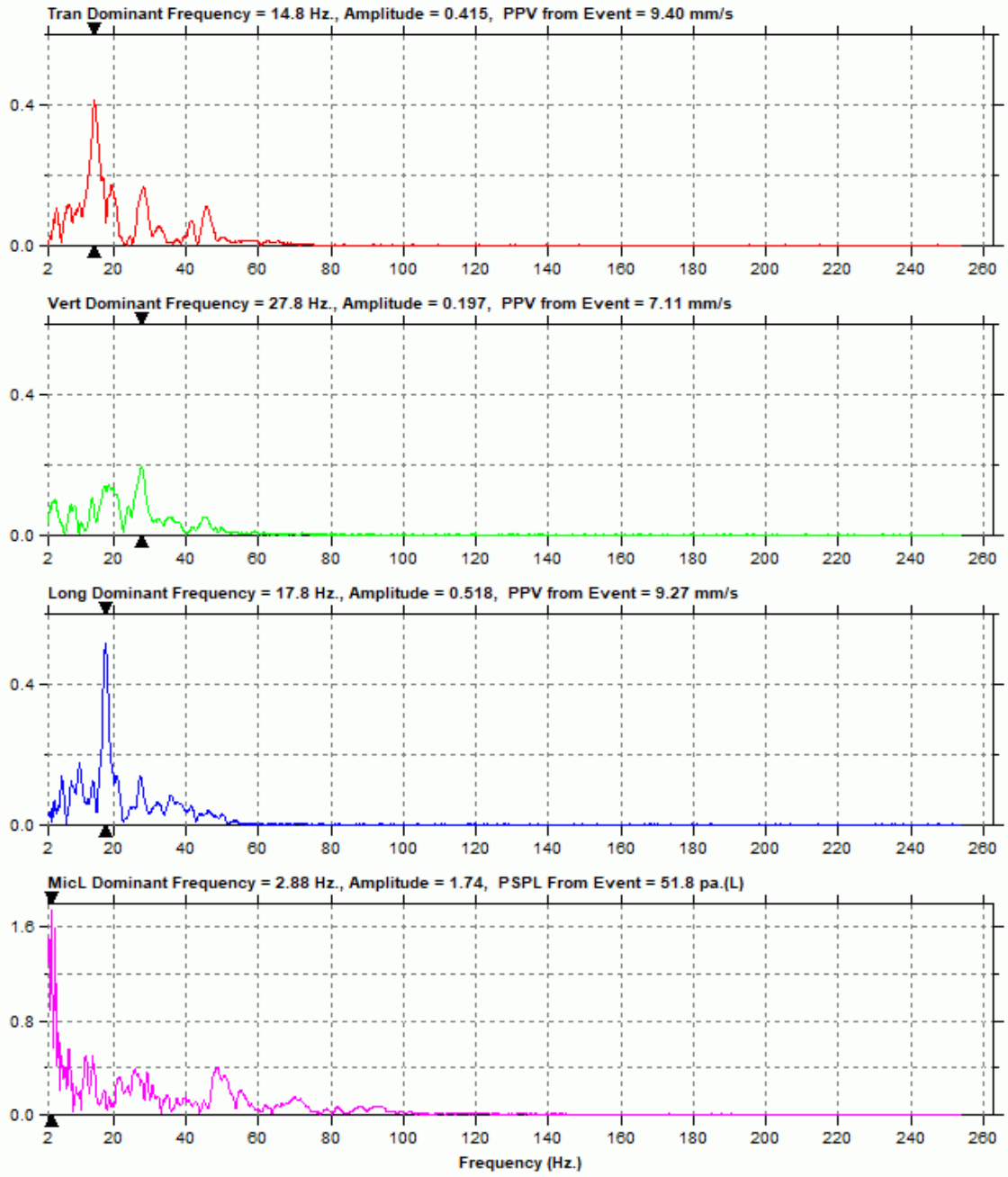
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 12, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:02 September 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IMTD.VE0W

Post Event Notes

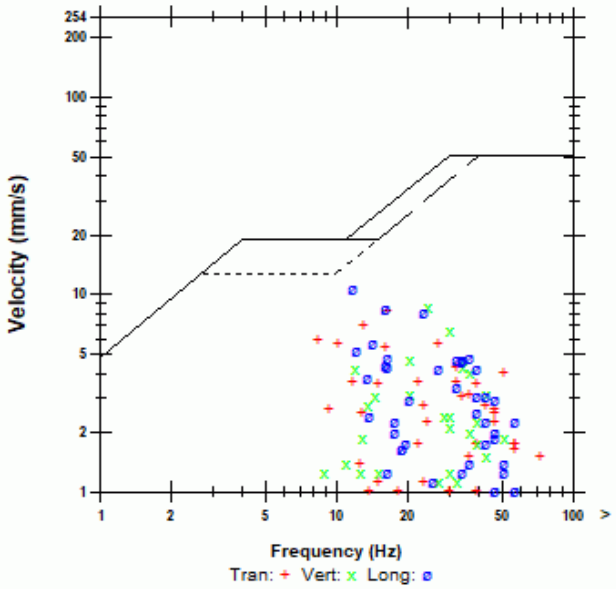
Extended Notes
Combo Mode September 14, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

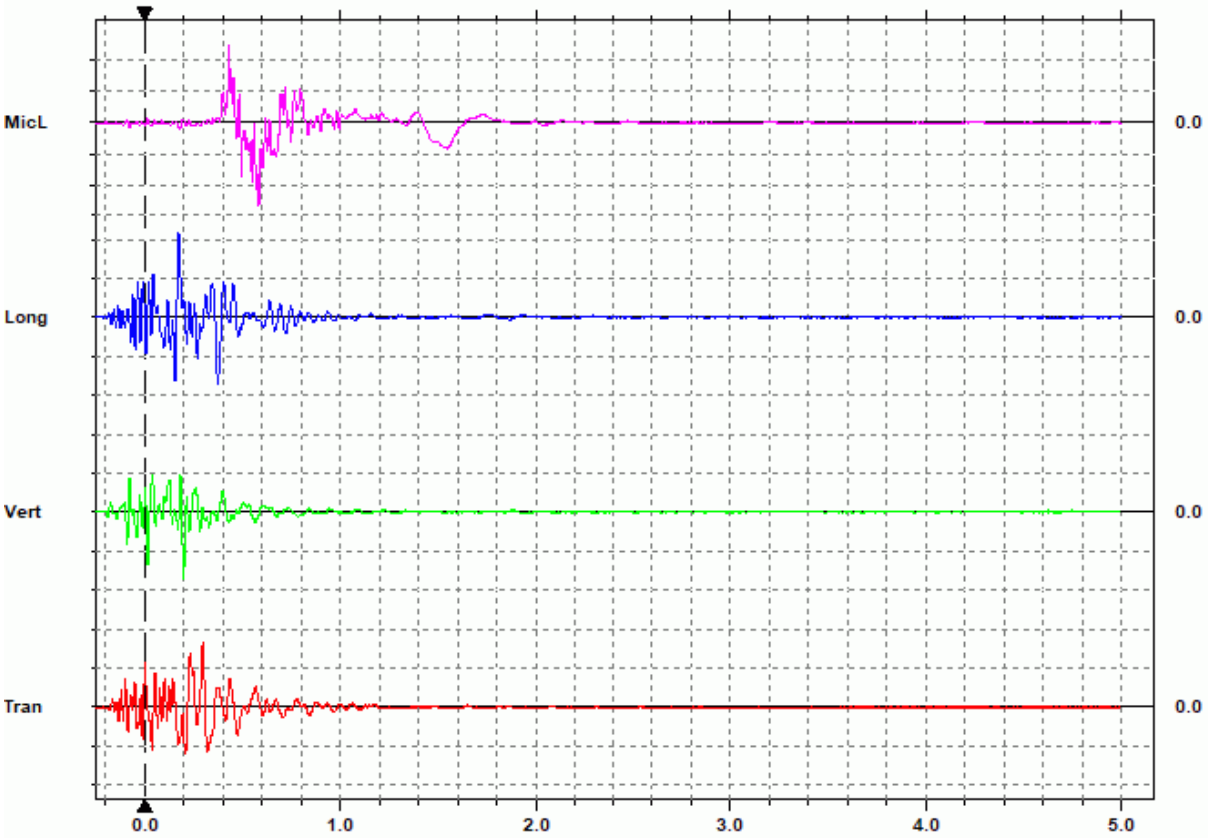
Microphone	Linear Weighting
PSPL	53.5 pa.(L) at 0.583 sec.
ZC Freq	9.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	8.38	8.64	10.8	mm/s
ZC Freq	17	24	12	Hz
Time (Rel. to Trig)	0.298	0.198	0.174	sec
Peak Acceleration	0.146	0.146	0.172	g
Peak Displacement	0.103	0.0520	0.101	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.8 mm/s At 0.174 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: September 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:02:02 September 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IMTD.VE0W
Job Number	8177		

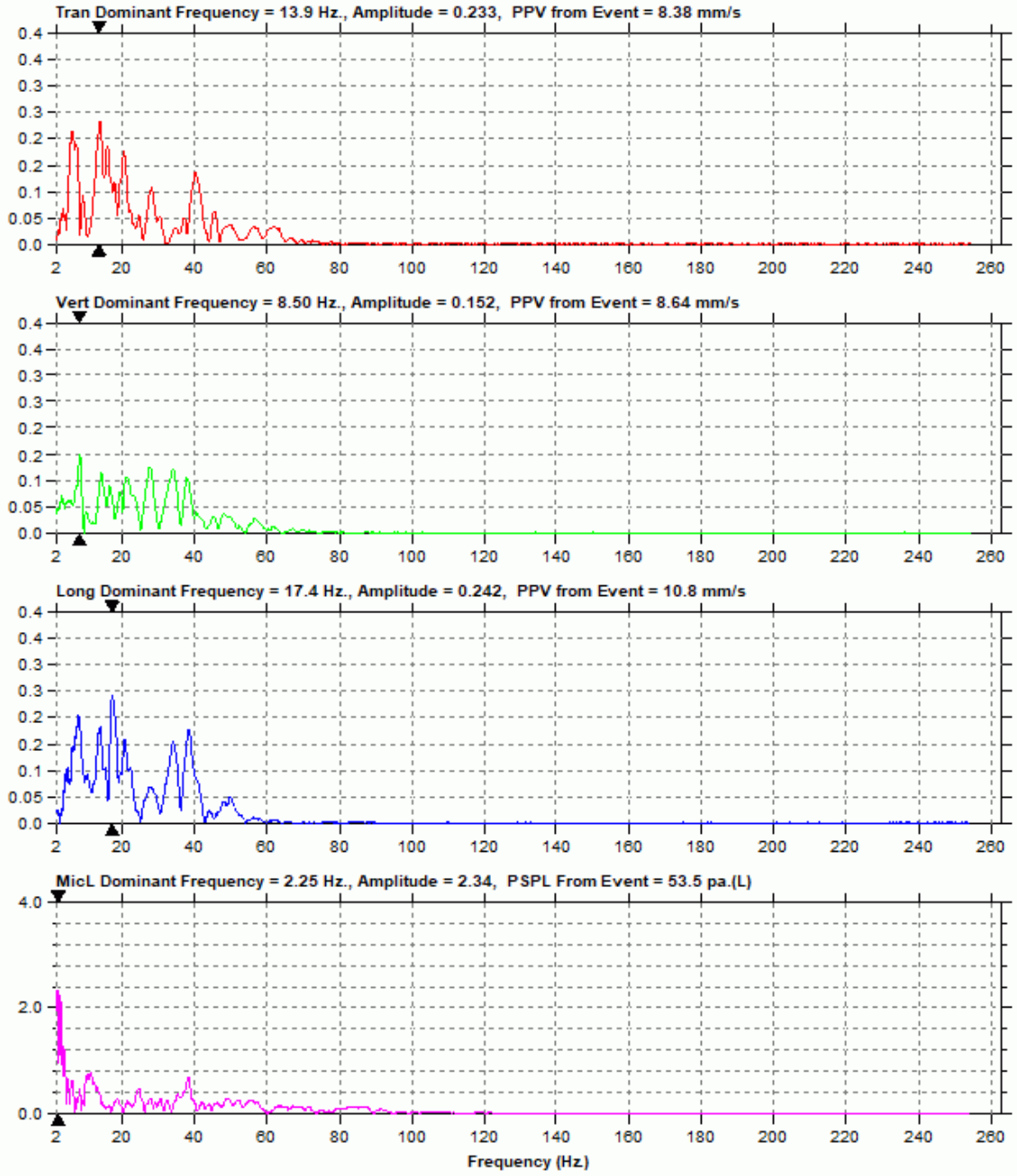
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 14, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 14, 2020 (V - 10.72)

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EXPLOTECH

Date/Time	Vert At 16:05:24 September 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IMV8.P00W

Post Event Notes

Extended Notes

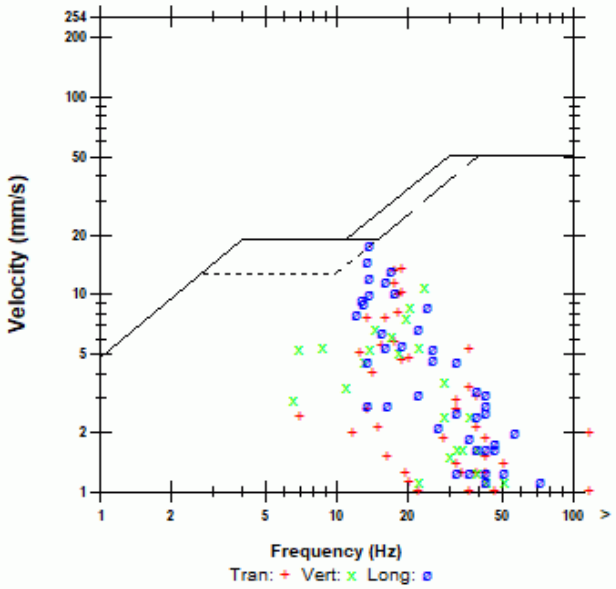
Combo Mode September 15, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

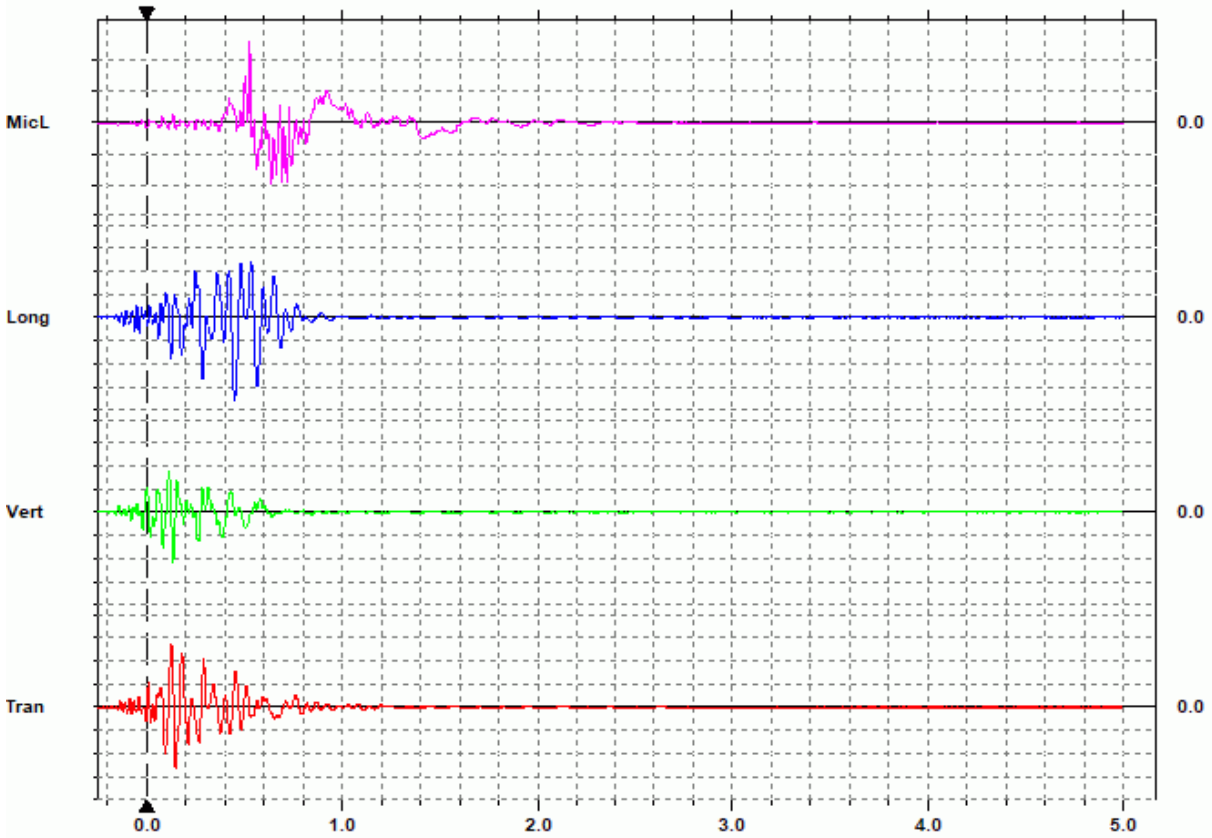
Microphone	Linear Weighting
PSPL	53.8 pa.(L) at 0.527 sec.
ZC Freq	27 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	13.7	10.9	18.0	mm/s
ZC Freq	19	23	14	Hz
Time (Rel. to Trig)	0.127	0.137	0.451	sec
Peak Acceleration	0.225	0.172	0.172	g
Peak Displacement	0.116	0.0895	0.202	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 19.3 mm/s At 0.452 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: September 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:05:24 September 15, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IMV8.P00W
Job Number	8177		

Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 15, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes

Created: September 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:10:47 September 16, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IMX3.LZ0W

Post Event Notes

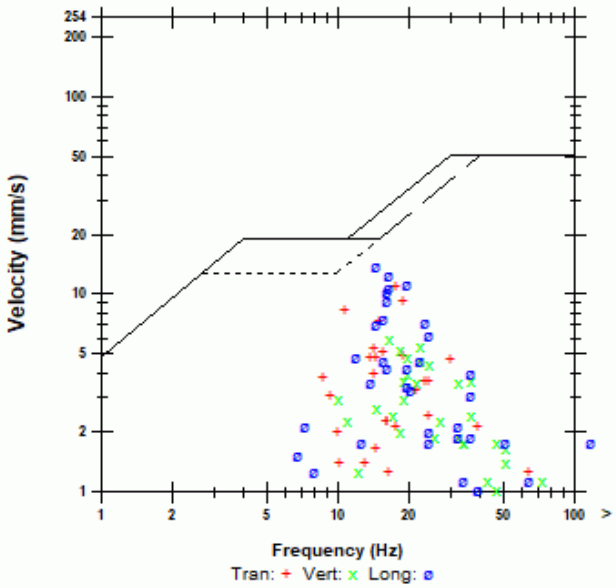
Extended Notes
Combo Mode September 16, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

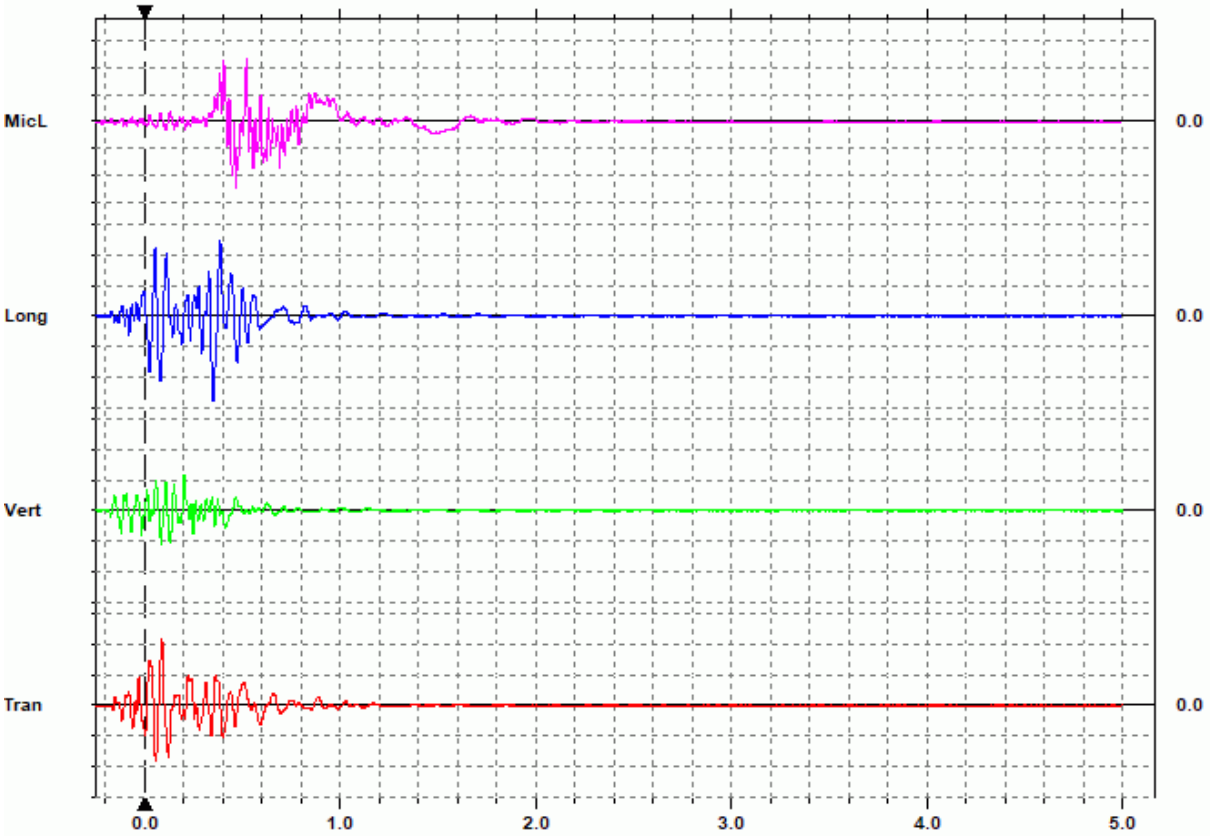
Microphone	Linear Weighting
PSPL	24.5 pa.(L) at 0.467 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	10.9	5.97	13.8	mm/s
ZC Freq	18	17	15	Hz
Time (Rel. to Trig)	0.088	0.202	0.350	sec
Peak Acceleration	0.146	0.106	0.186	g
Peak Displacement	0.0925	0.0418	0.144	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 14.9 mm/s At 0.054 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:10:47 September 16, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IMX3.LZ0W
Job Number	8177		

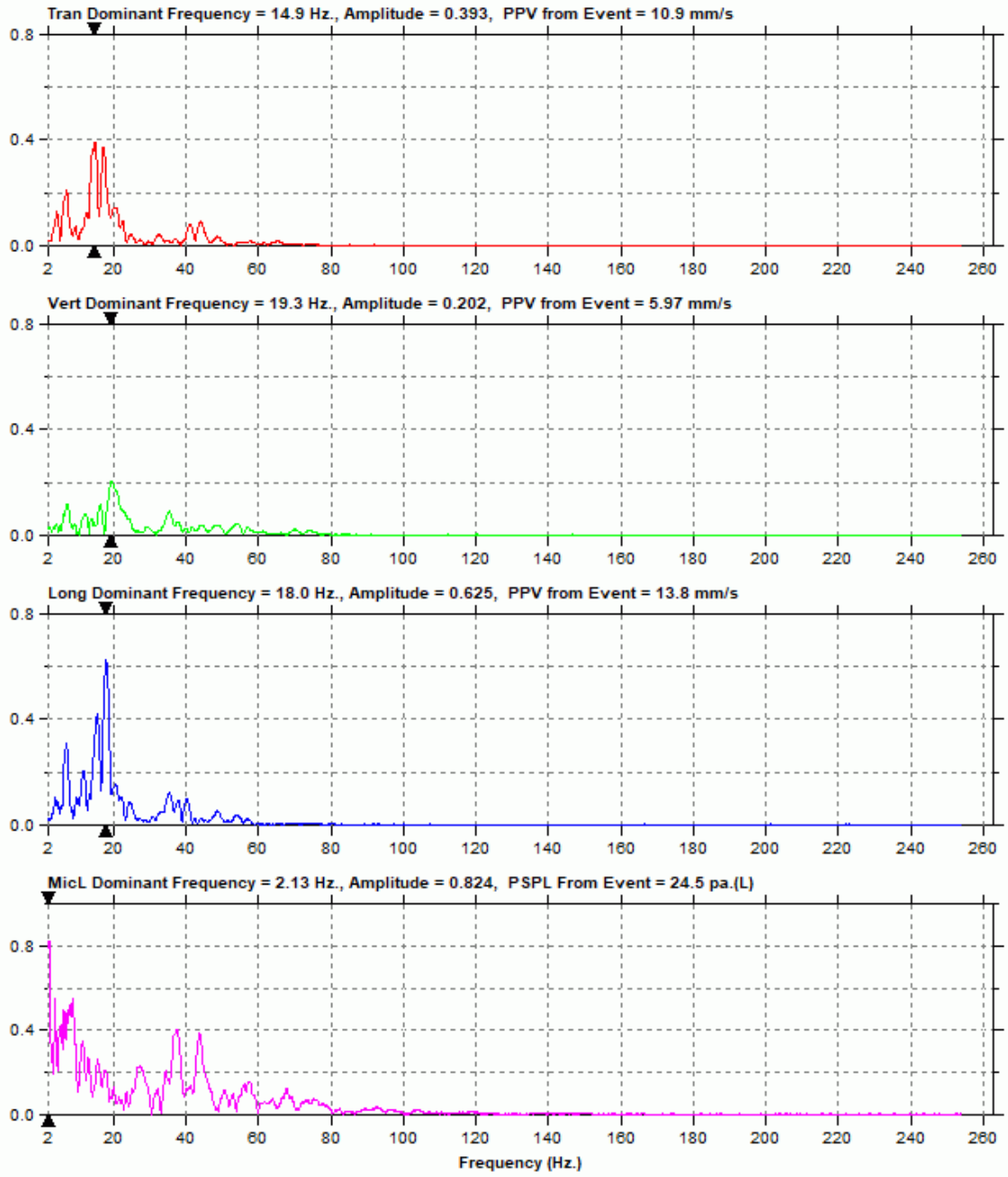
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 16, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 16, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:05 September 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IN0S.CT0W

Post Event Notes

Extended Notes

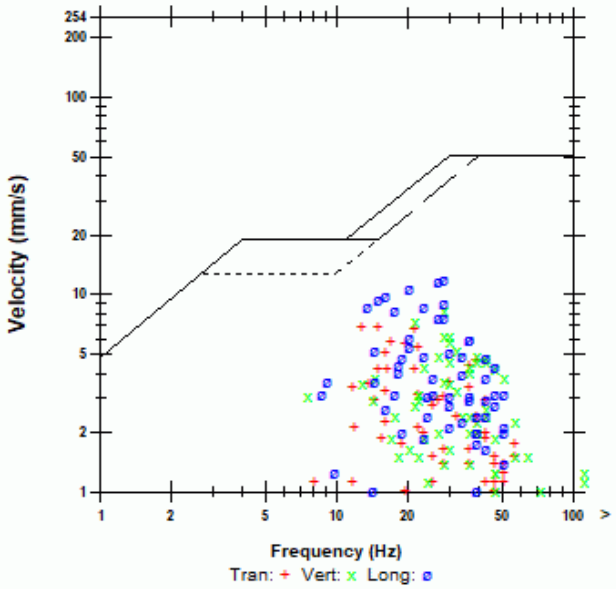
Combo Mode September 18, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

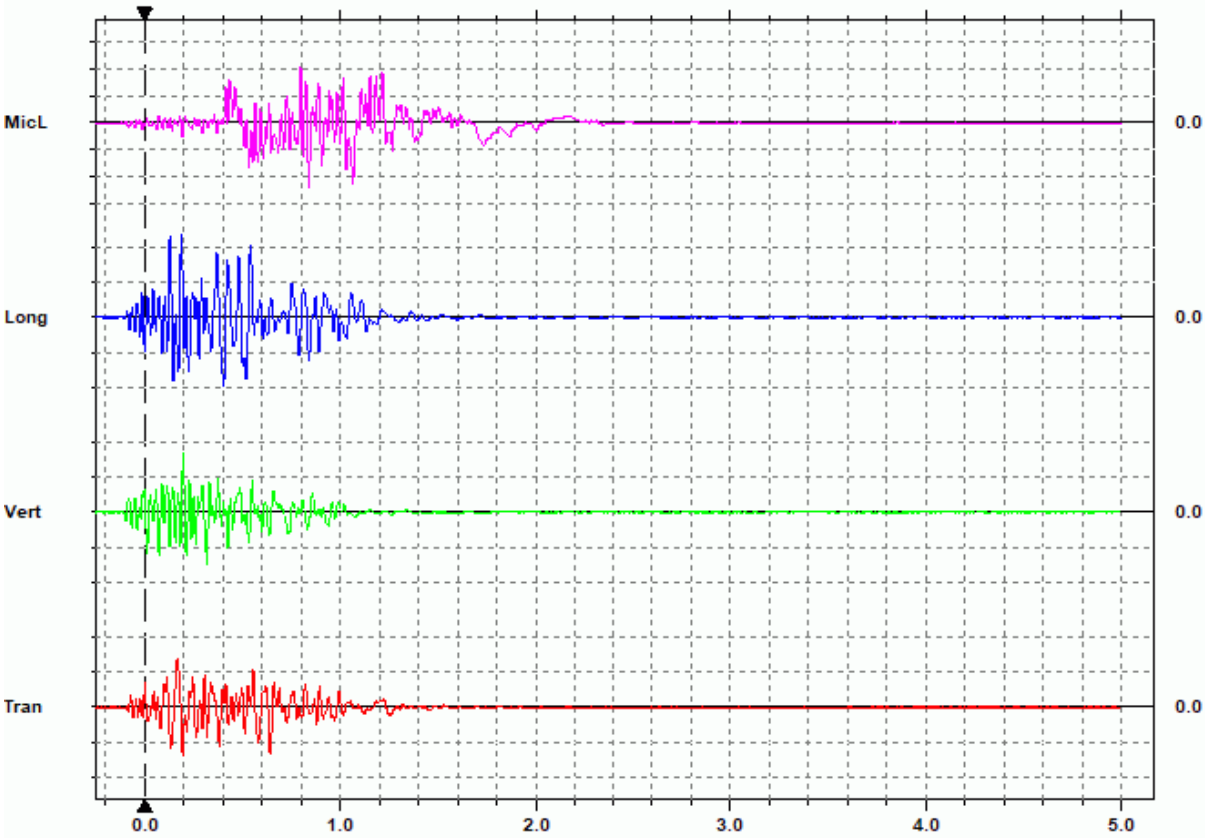
Microphone	Linear Weighting
PSPL	24.3 pa.(L) at 0.839 sec.
ZC Freq	30 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.86	8.38	12.1	mm/s
ZC Freq	15	28	28	Hz
Time (Rel. to Trig)	0.166	0.196	0.187	sec
Peak Acceleration	0.119	0.146	0.225	g
Peak Displacement	0.0718	0.0446	0.107	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 13.5 mm/s At 0.130 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:05 September 18, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IN0S.CT0W
Job Number	8177		

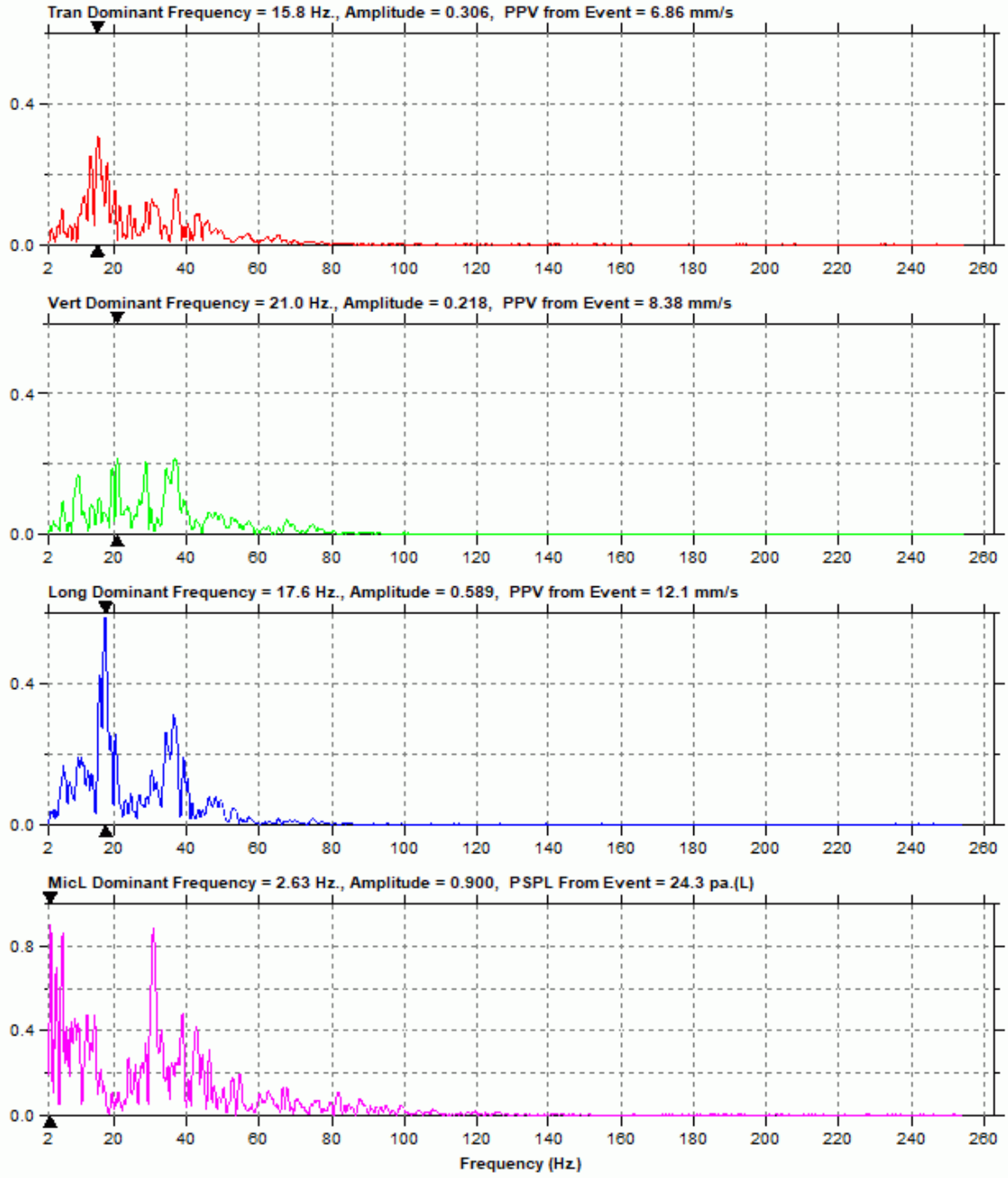
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 18, 2020 05:16:49
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:43 September 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IN87.8J0W

Post Event Notes

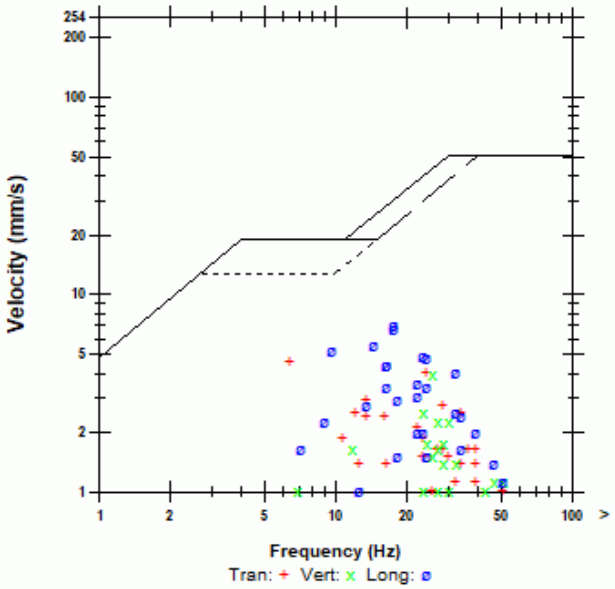
Extended Notes
Combo Mode September 22, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

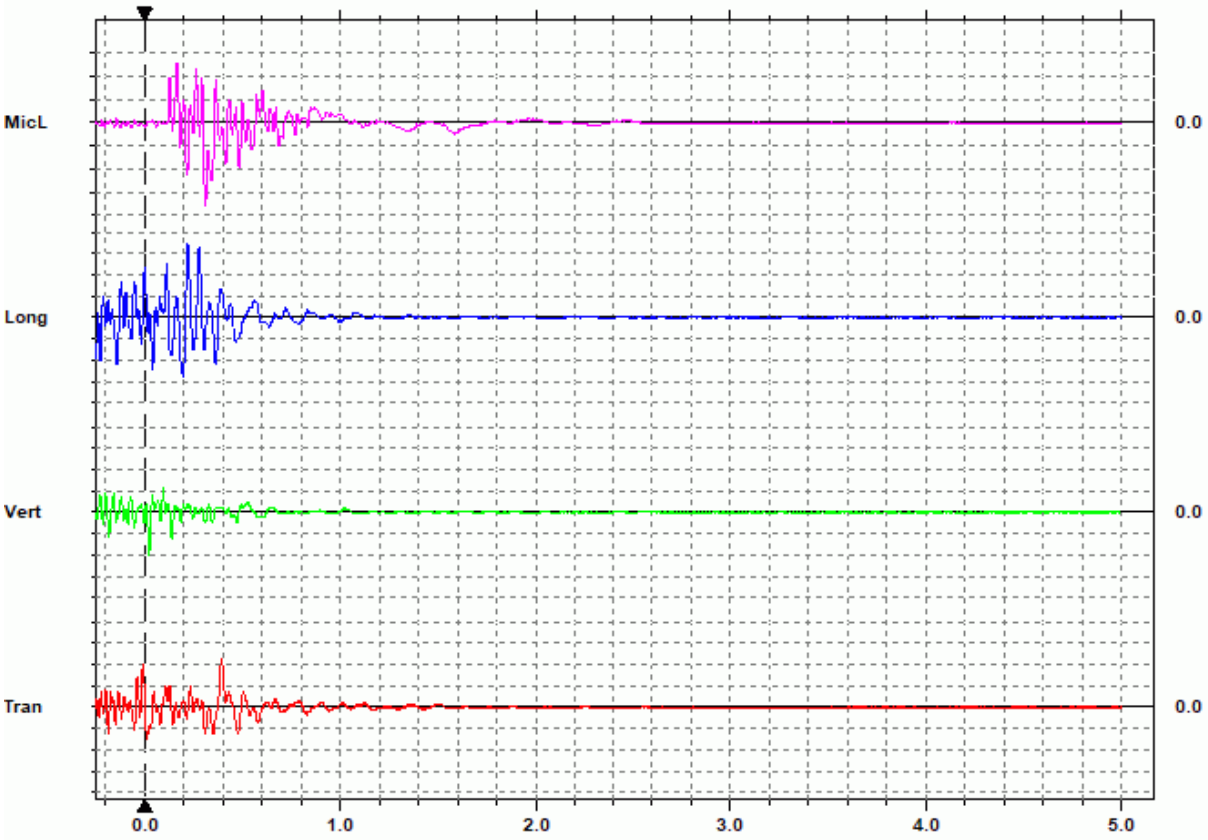
Microphone	Linear Weighting
PSPL	35.8 pa.(L) at 0.311 sec.
ZC Freq	8.8 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.57	3.94	6.98	mm/s
ZC Freq	6.4	26	18	Hz
Time (Rel. to Trig)	0.393	0.023	0.220	sec
Peak Acceleration	0.0663	0.0663	0.0928	g
Peak Displacement	0.0649	0.0236	0.0654	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.06 mm/s At 0.220 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:43 September 22, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IN87.8J0W
Job Number	8177		

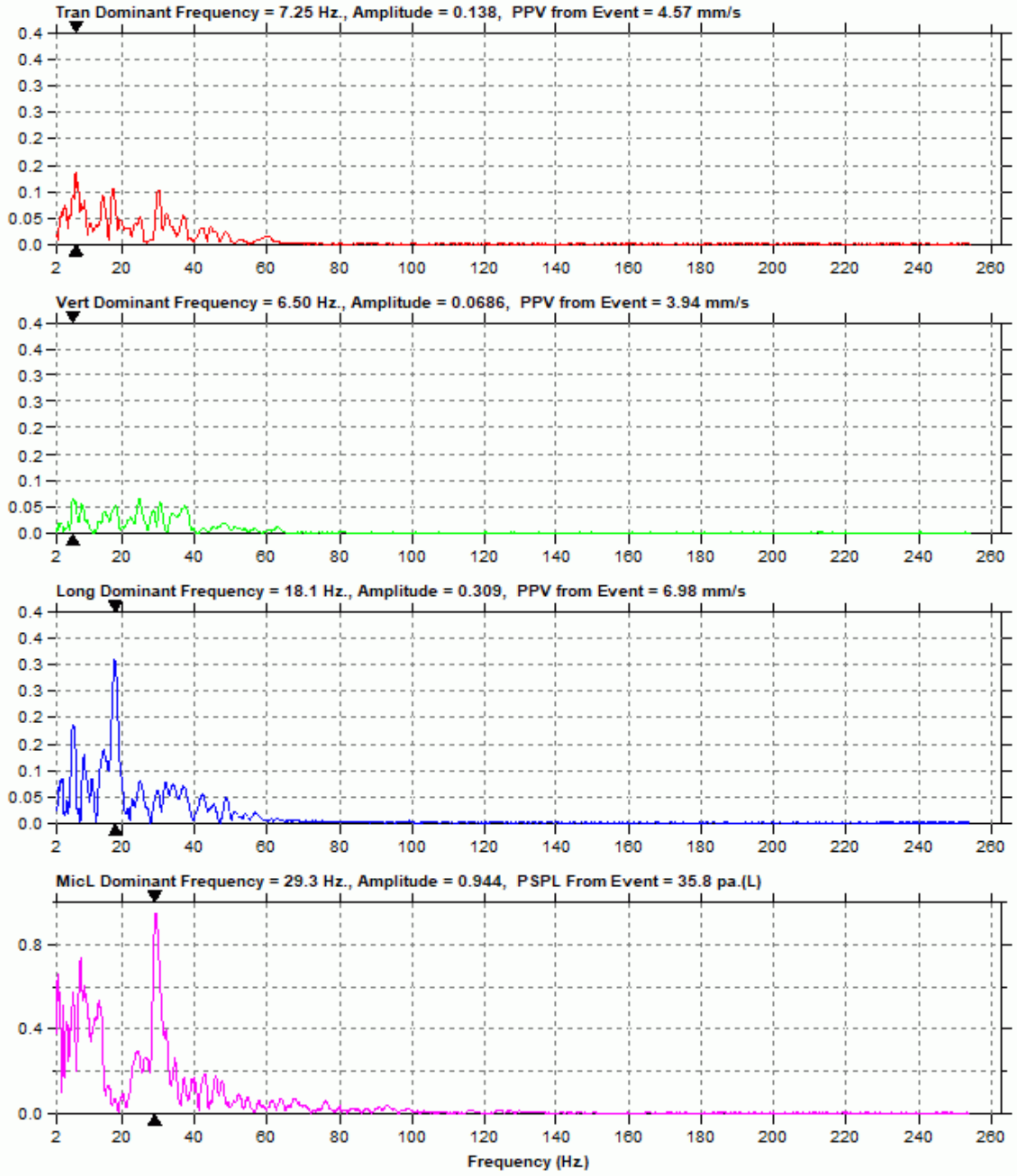
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 22, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:48 September 23, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251INA1.Q00W

Post Event Notes

Extended Notes

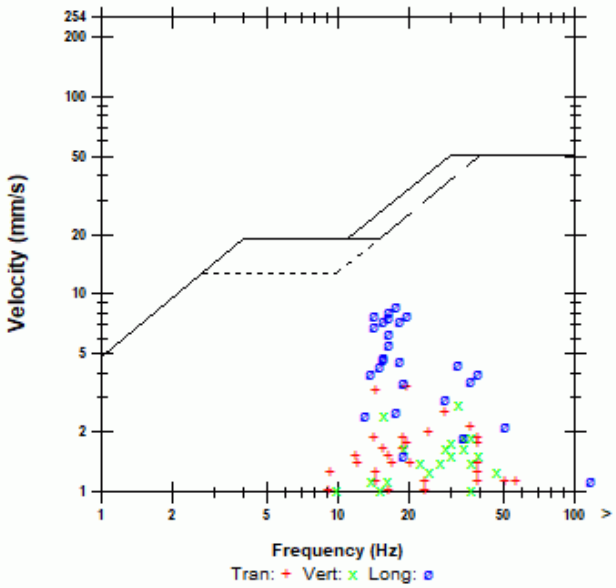
Combo Mode September 23, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

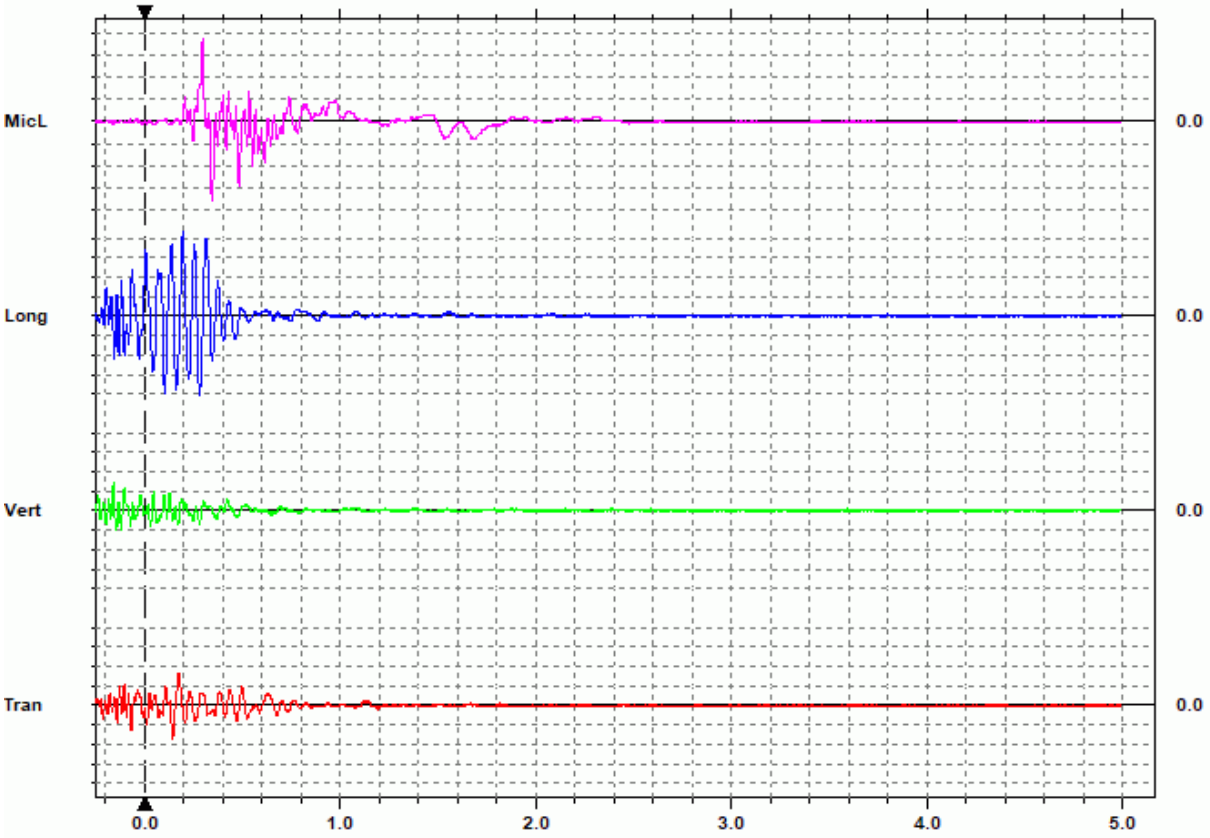
Microphone	Linear Weighting
PSPL	38.0 pa.(L) at 0.296 sec.
ZC Freq	9.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.43	2.79	8.64	mm/s
ZC Freq	20	32	18	Hz
Time (Rel. to Trig)	0.144	-0.160	0.193	sec
Peak Acceleration	0.0530	0.0530	0.119	g
Peak Displacement	0.0316	0.0169	0.0905	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.68 mm/s At 0.195 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 23, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:58:48 September 23, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251INA1.Q00W
Job Number	8177		

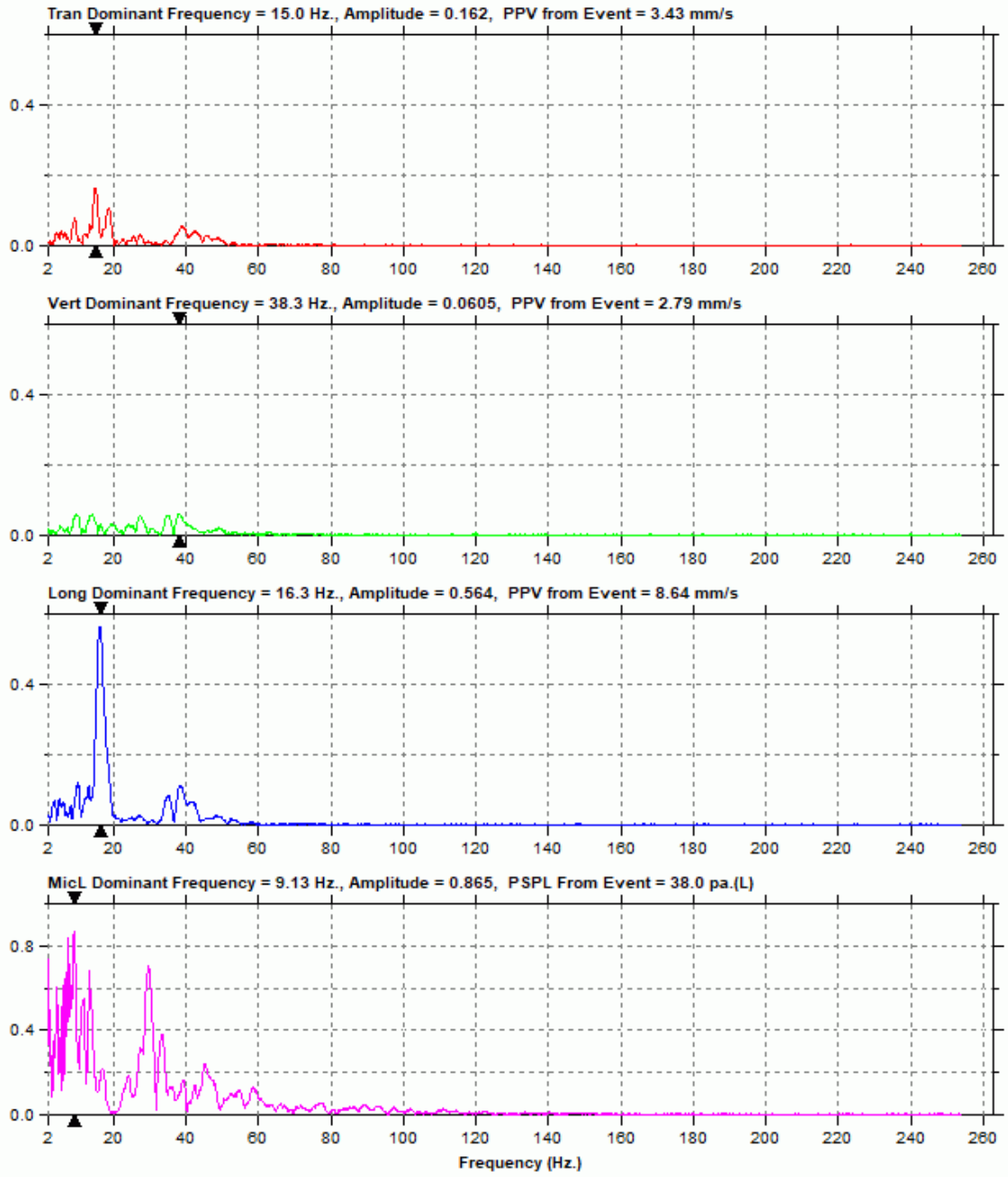
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 23, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 23, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:20:21 September 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251INDU.TX0W

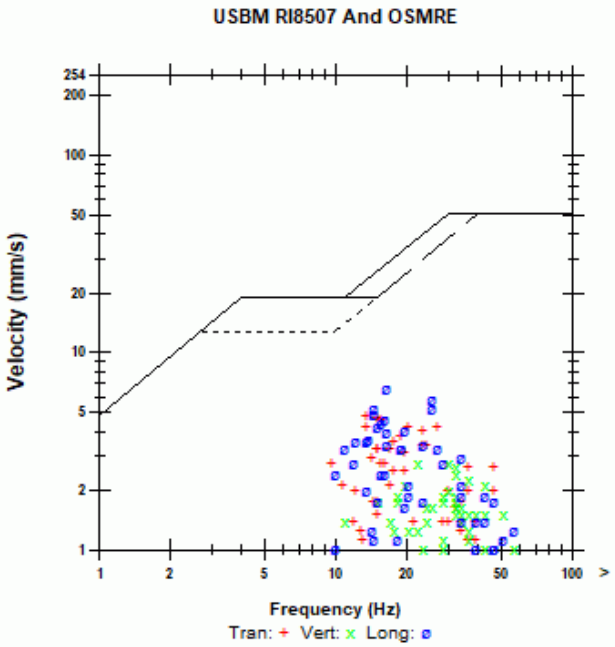
Post Event Notes

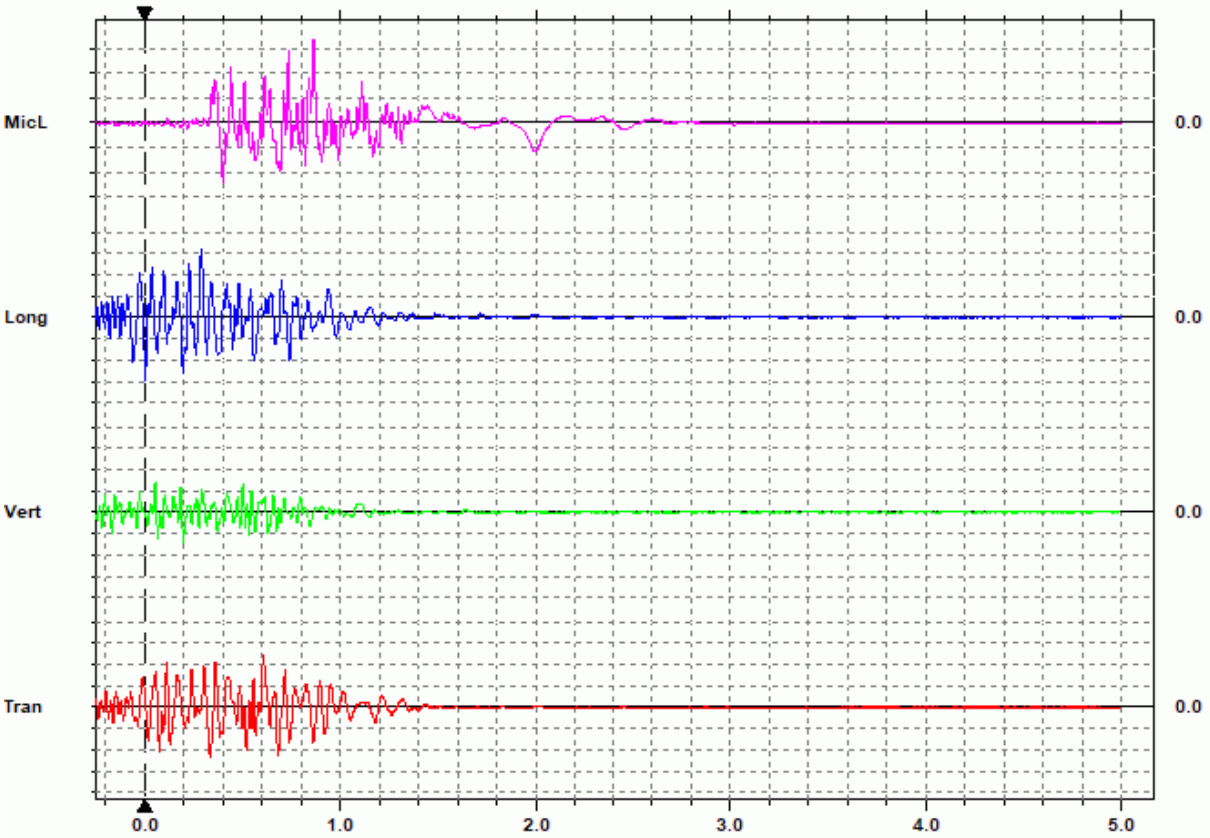
Extended Notes
Combo Mode September 25, 2020 05:17:15
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	124.6 dB(L) at 0.863 sec.
ZC Freq	11 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.83	2.79	6.60	mm/s
ZC Freq	13	30	17	Hz
Time (Rel. to Trig)	0.605	0.053	0.289	sec
Peak Acceleration	0.0795	0.0663	0.0928	g
Peak Displacement	0.0481	0.0213	0.0527	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.84 mm/s At 0.289 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 17:20:21 September 25, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251INDU.TX0W
Job Number	8177		

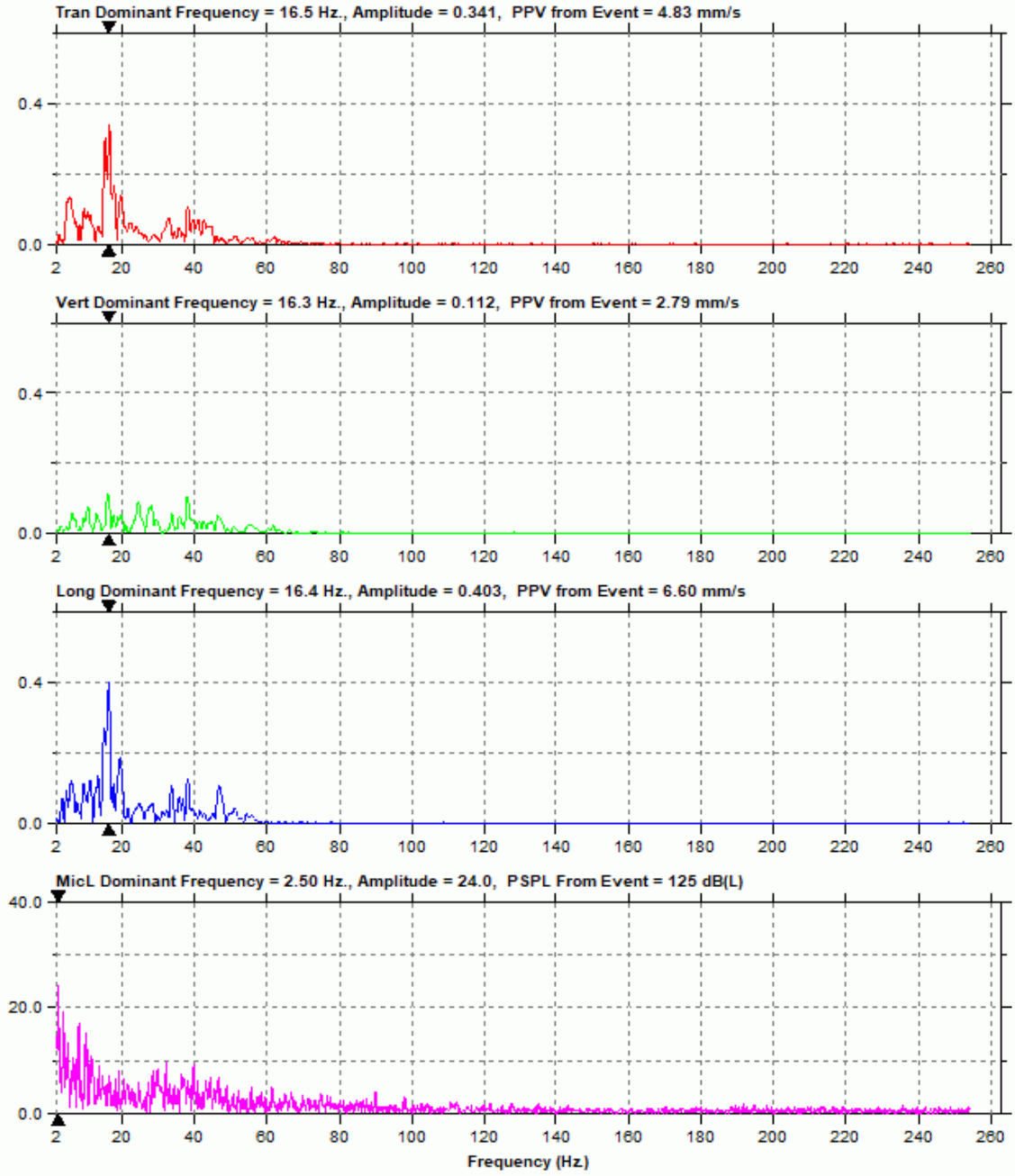
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 25, 2020 05:17:15
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:03:00 September 12, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IMPO.L00W

Post Event Notes

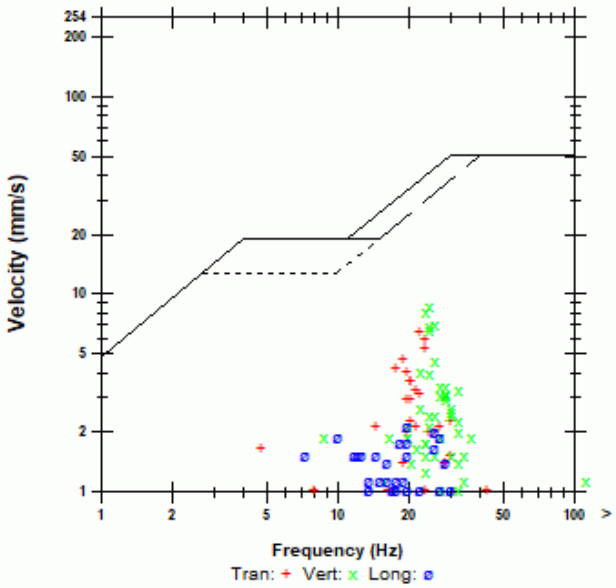
Extended Notes
Combo Mode September 12, 2020 05:25:09
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

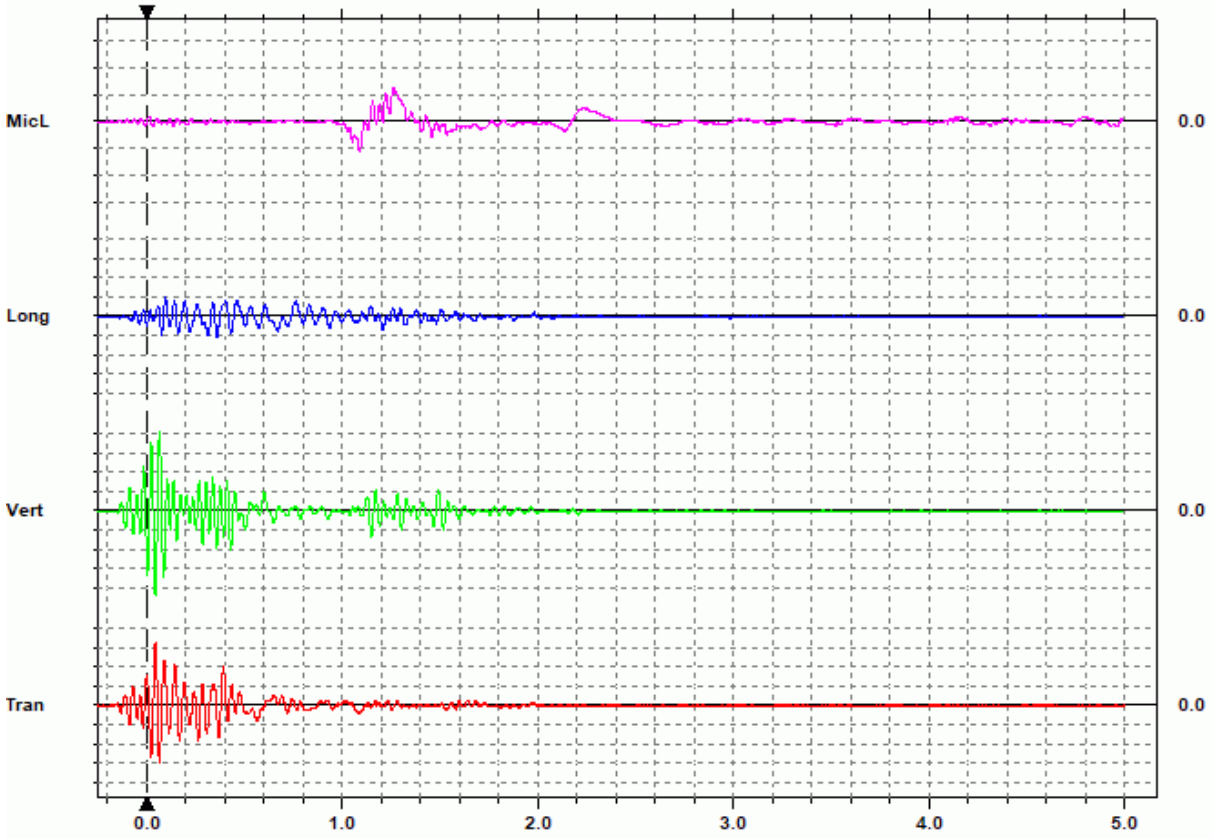
Microphone	Linear Weighting
PSPL	12.5 pa.(L) at 1.262 sec.
ZC Freq	4.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.48	8.76	2.16	mm/s
ZC Freq	22	24	20	Hz
Time (Rel. to Trig)	0.044	0.044	0.358	sec
Peak Acceleration	0.106	0.133	0.0398	g
Peak Displacement	0.0454	0.0583	0.0272	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.9 mm/s At 0.044 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:03:00 September 12, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IMPO.L00W
Job Number	8177		

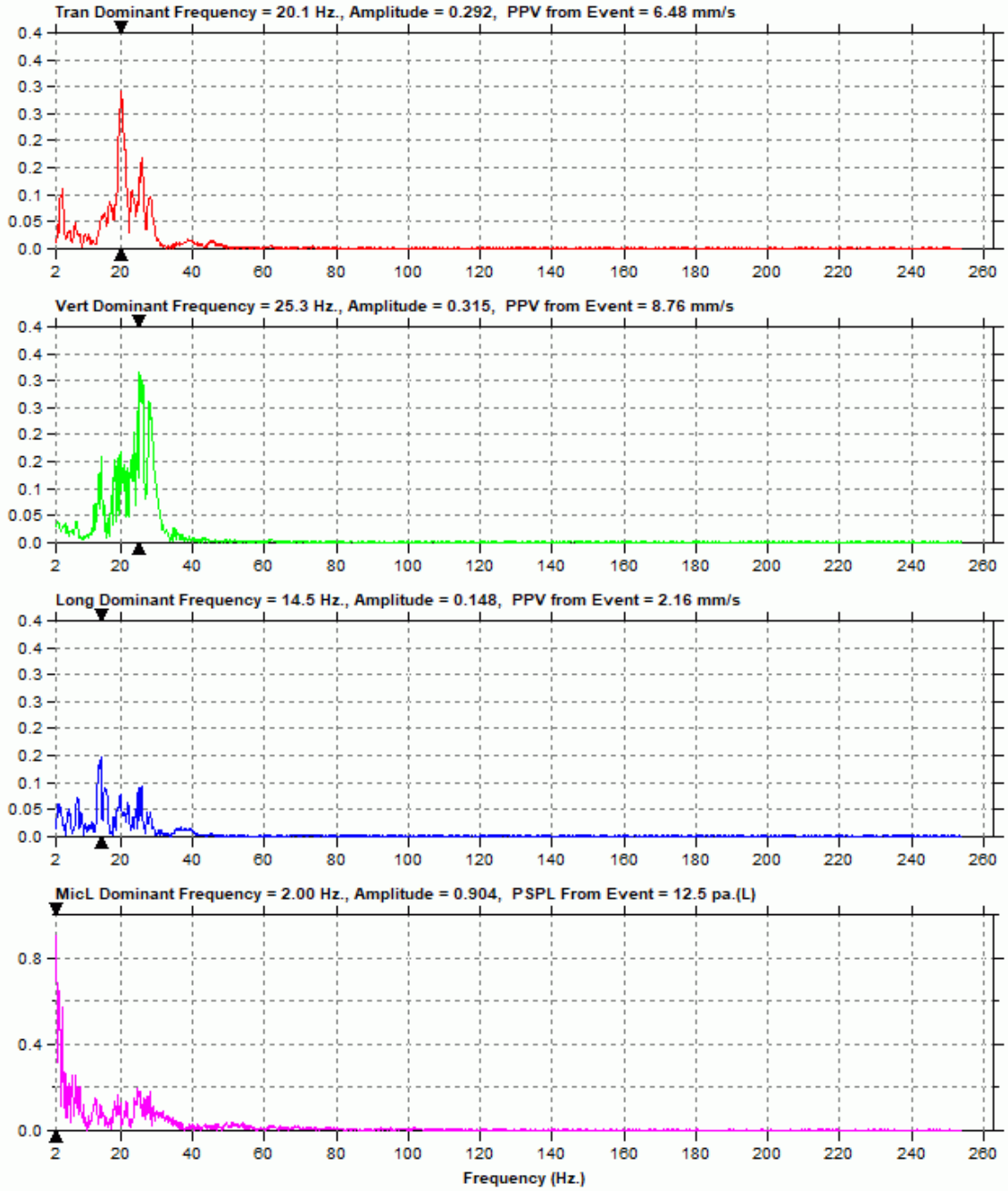
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 12, 2020 05:25:09
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 12, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:28 September 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IMTD.W40W

Post Event Notes

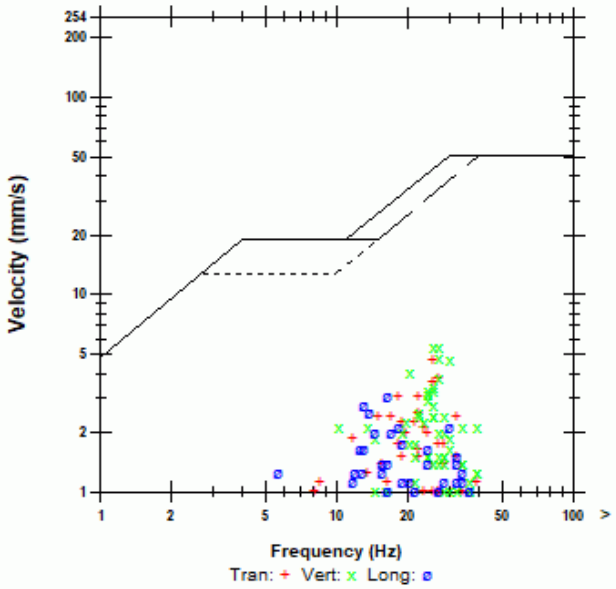
Extended Notes
Combo Mode September 14, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

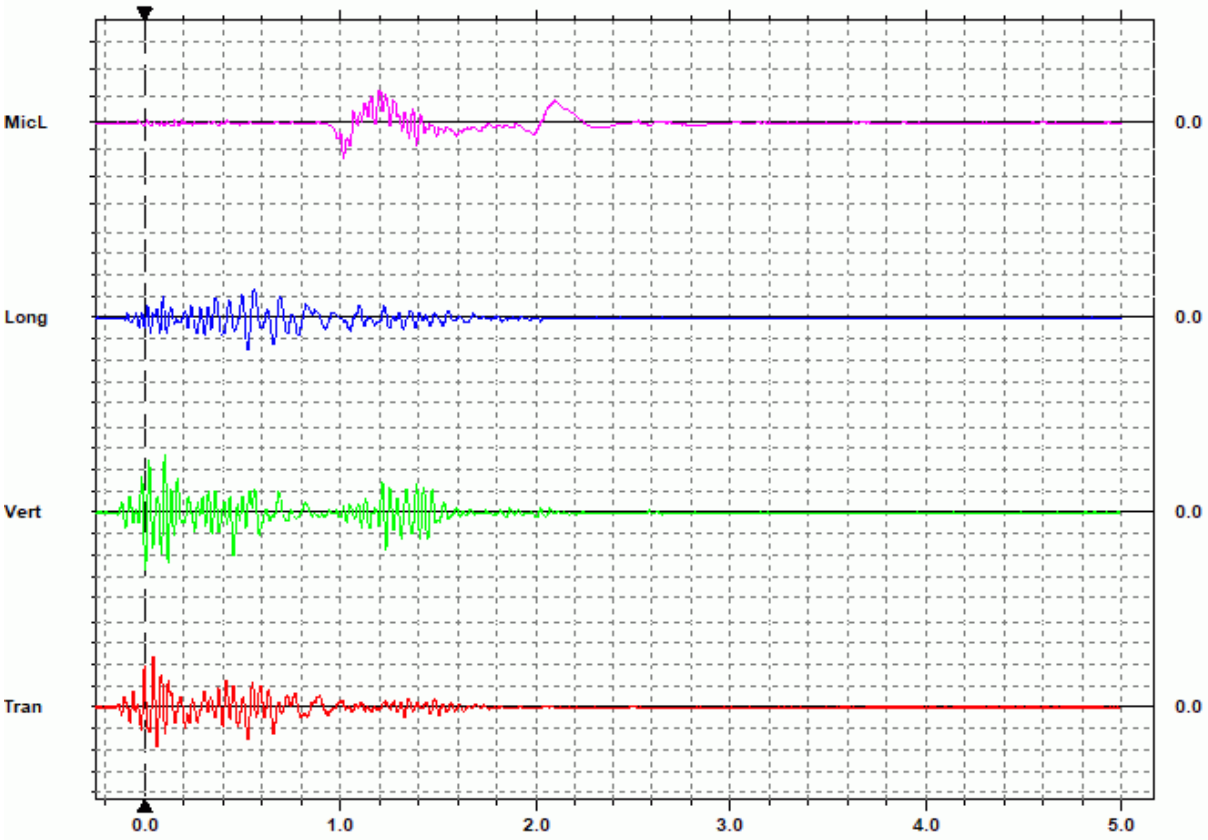
Microphone	Linear Weighting
PSPL	13.3 pa.(L) at 1.018 sec.
ZC Freq	4.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	5.46	3.05	mm/s
ZC Freq	26	26	17	Hz
Time (Rel. to Trig)	0.043	0.002	0.525	sec
Peak Acceleration	0.0795	0.0928	0.0398	g
Peak Displacement	0.0282	0.0347	0.0328	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.24 mm/s At 0.002 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:02:28 September 14, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IMTD.W40W
Job Number	8177		

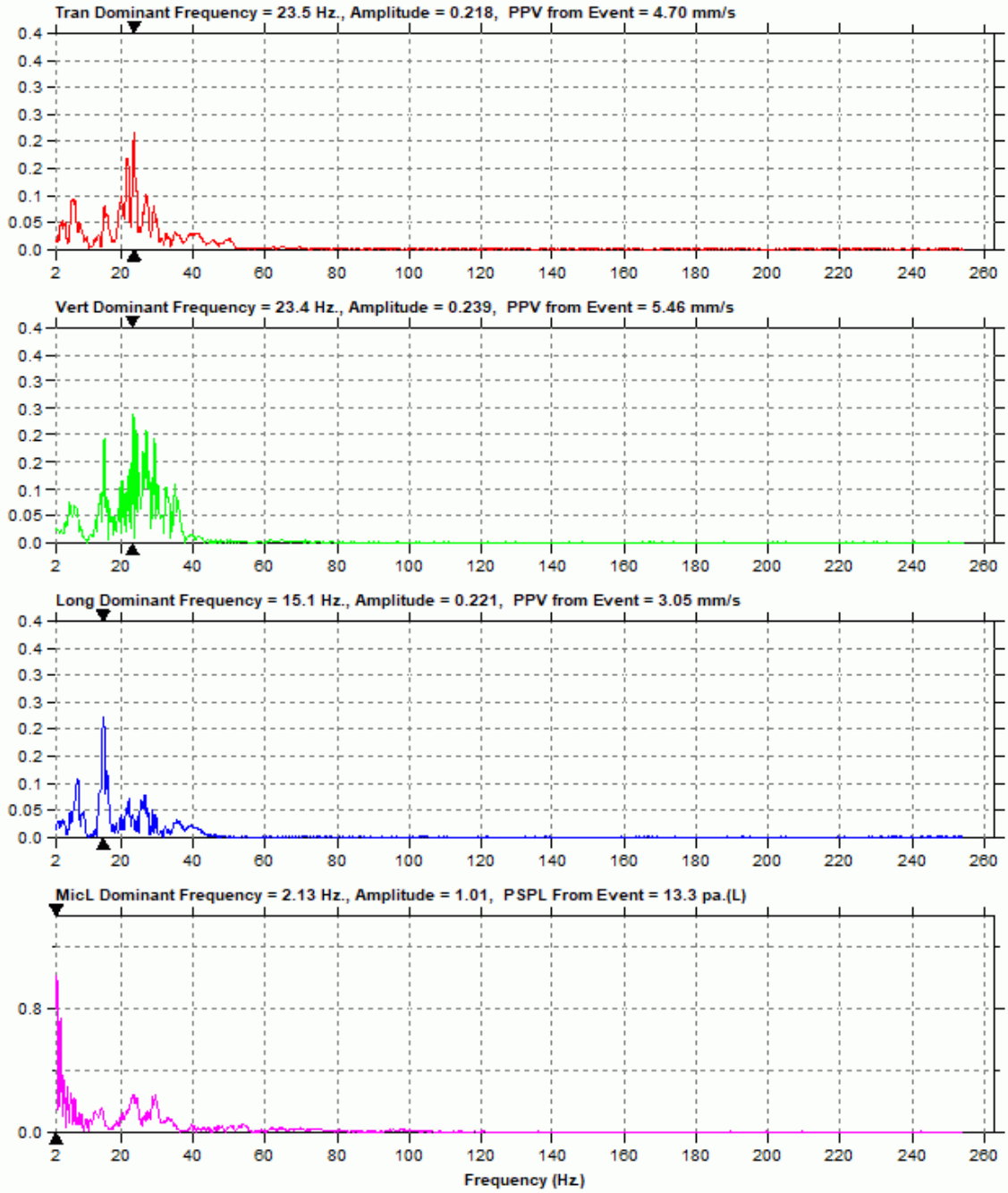
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 14, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:05:52 September 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IMV8.PS0W

Post Event Notes

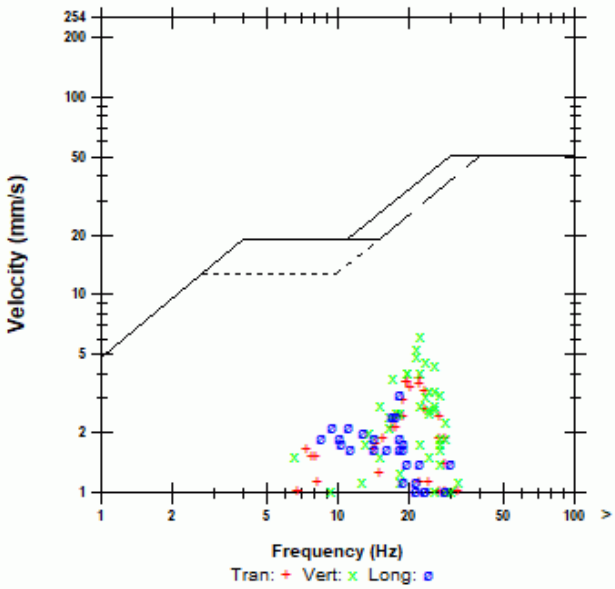
Extended Notes
Combo Mode September 15, 2020 14:11:25
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

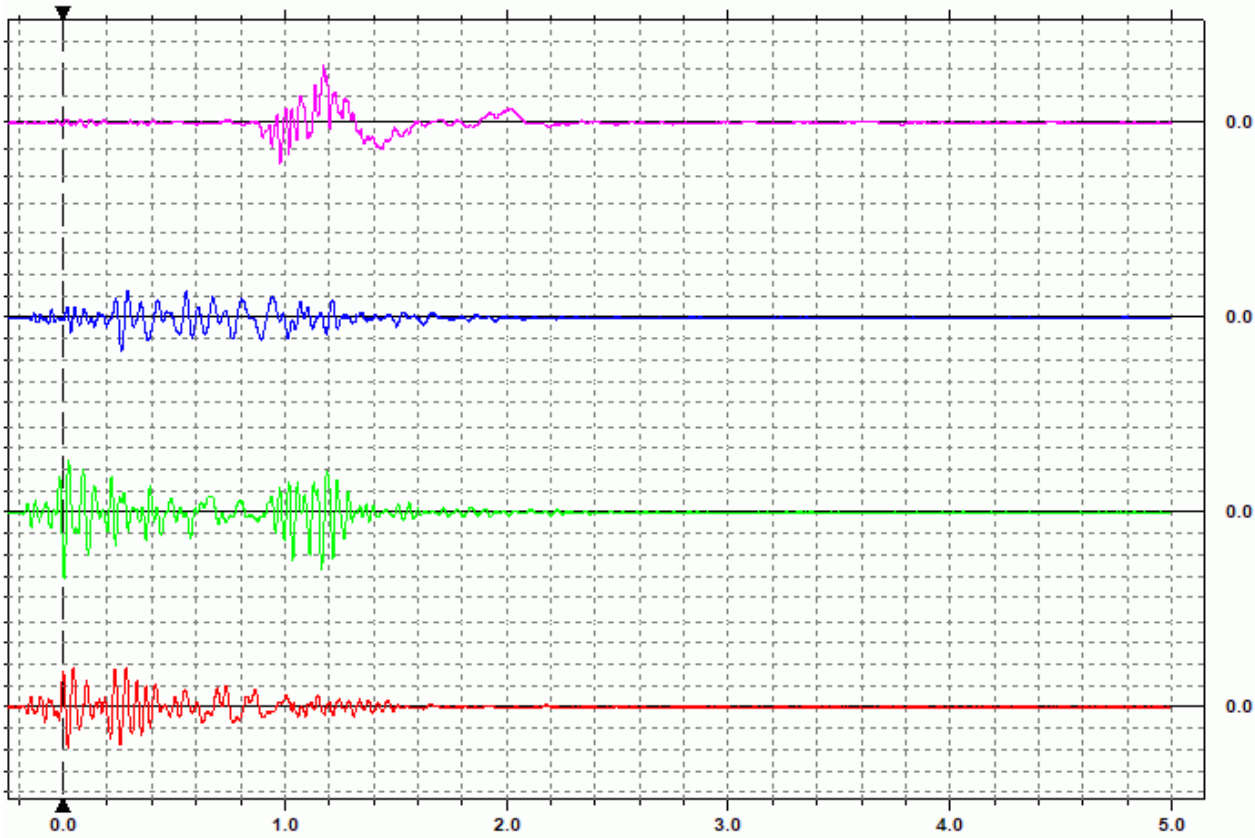
Microphone	Linear Weighting
PSPL	21.3 pa.(L) at 1.174 sec.
ZC Freq	6.7 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.81	6.22	3.17	mm/s
ZC Freq	22	22	18	Hz
Time (Rel. to Trig)	0.021	0.004	0.263	sec
Peak Acceleration	0.0663	0.0928	0.0530	g
Peak Displacement	0.0328	0.0423	0.0334	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.93 mm/s At 0.004 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:05:52 September 15, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IMV8.PS0W
Job Number	8177		

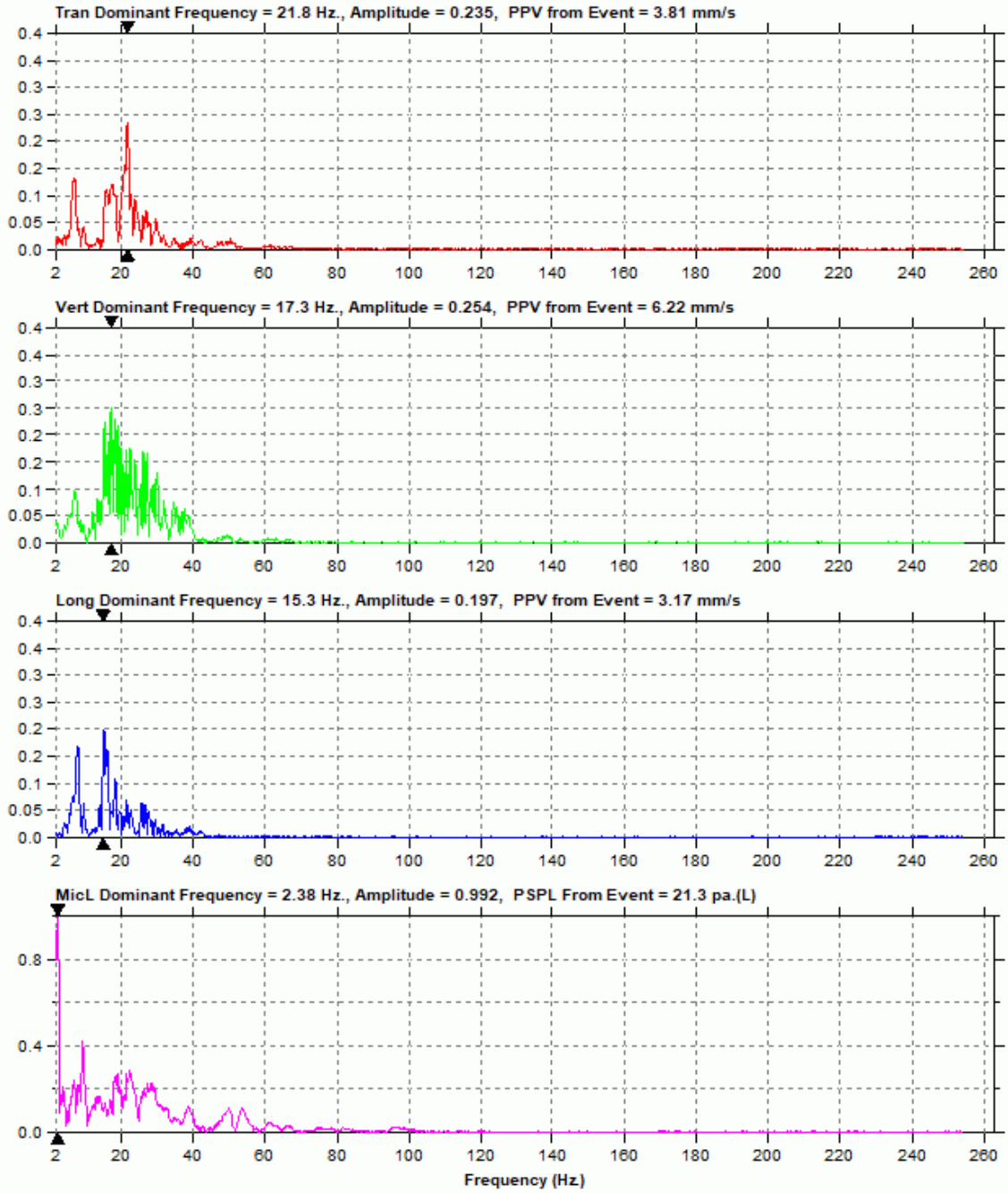
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 15, 2020 14:11:25
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:58:36 September 18, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.6 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IN0S.DO0W

Post Event Notes

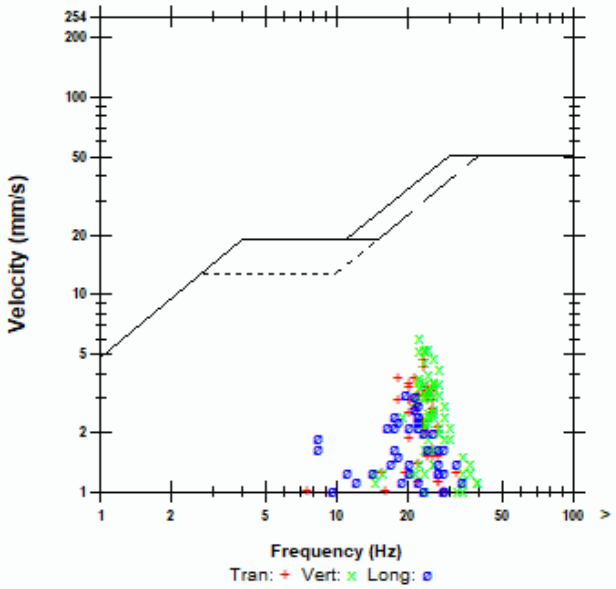
Extended Notes
Combo Mode September 18, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

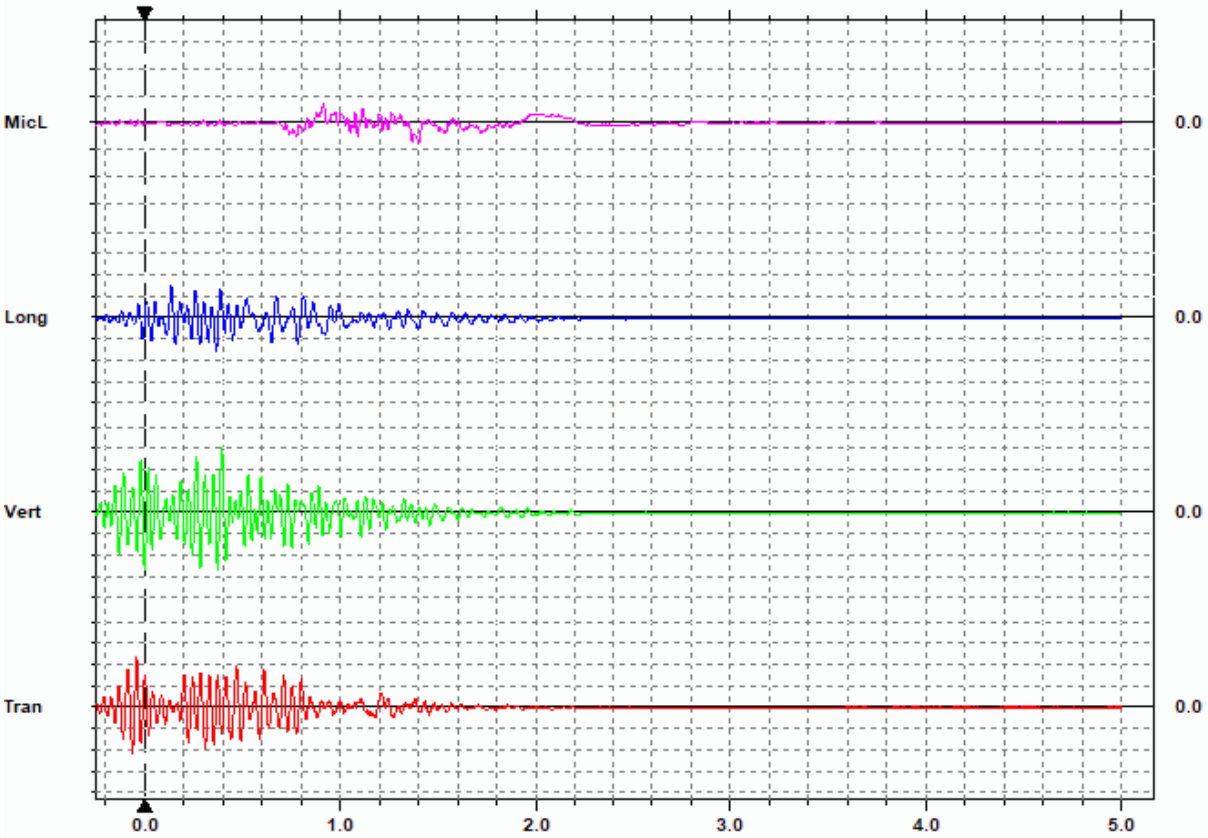
Microphone	Linear Weighting
PSPL	7.75 pa.(L) at 1.401 sec.
ZC Freq	8.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.70	6.10	3.17	mm/s
ZC Freq	23	22	20	Hz
Time (Rel. to Trig)	-0.038	0.396	0.368	sec
Peak Acceleration	0.0663	0.106	0.0530	g
Peak Displacement	0.0323	0.0446	0.0288	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.91 mm/s At 0.396 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:58:36 September 18, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.6 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IN0S.DO0W
Job Number	8177		

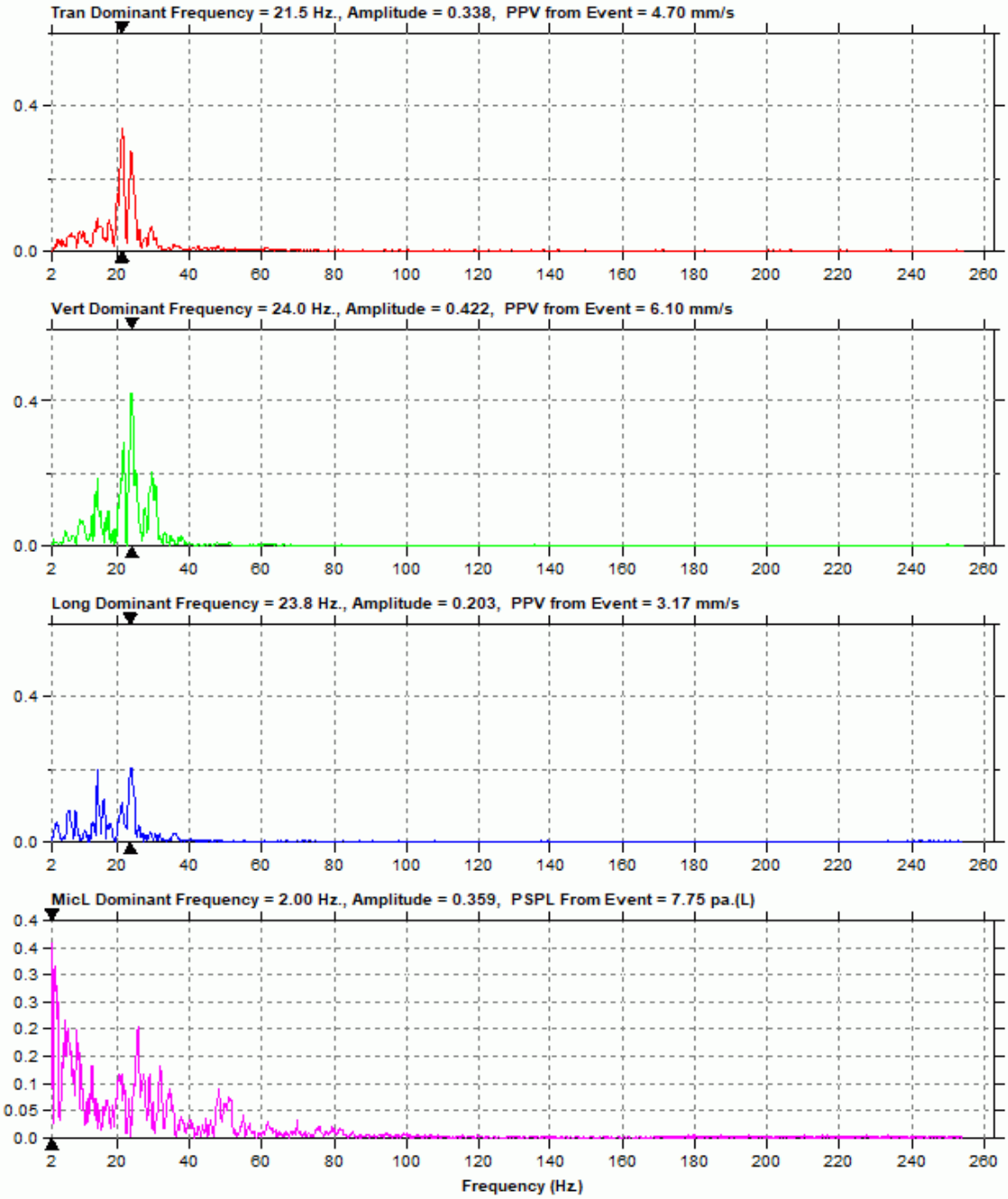
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 18, 2020 05:16:50
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 18, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:03:20 September 22, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028IN87.9K0W

Post Event Notes

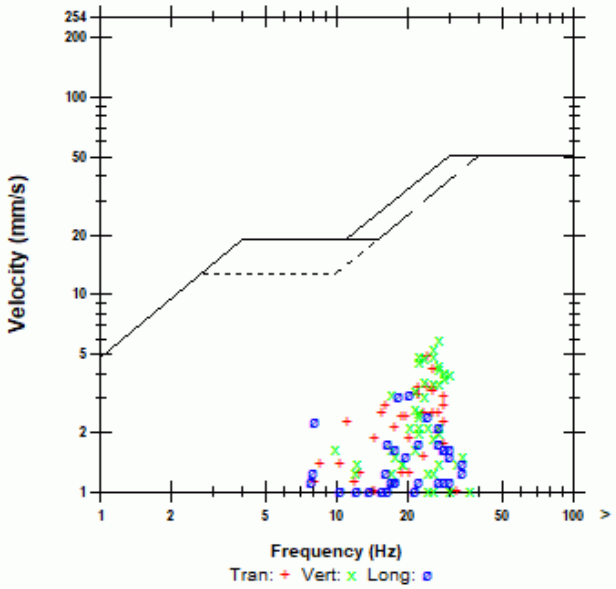
Extended Notes
Combo Mode September 22, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

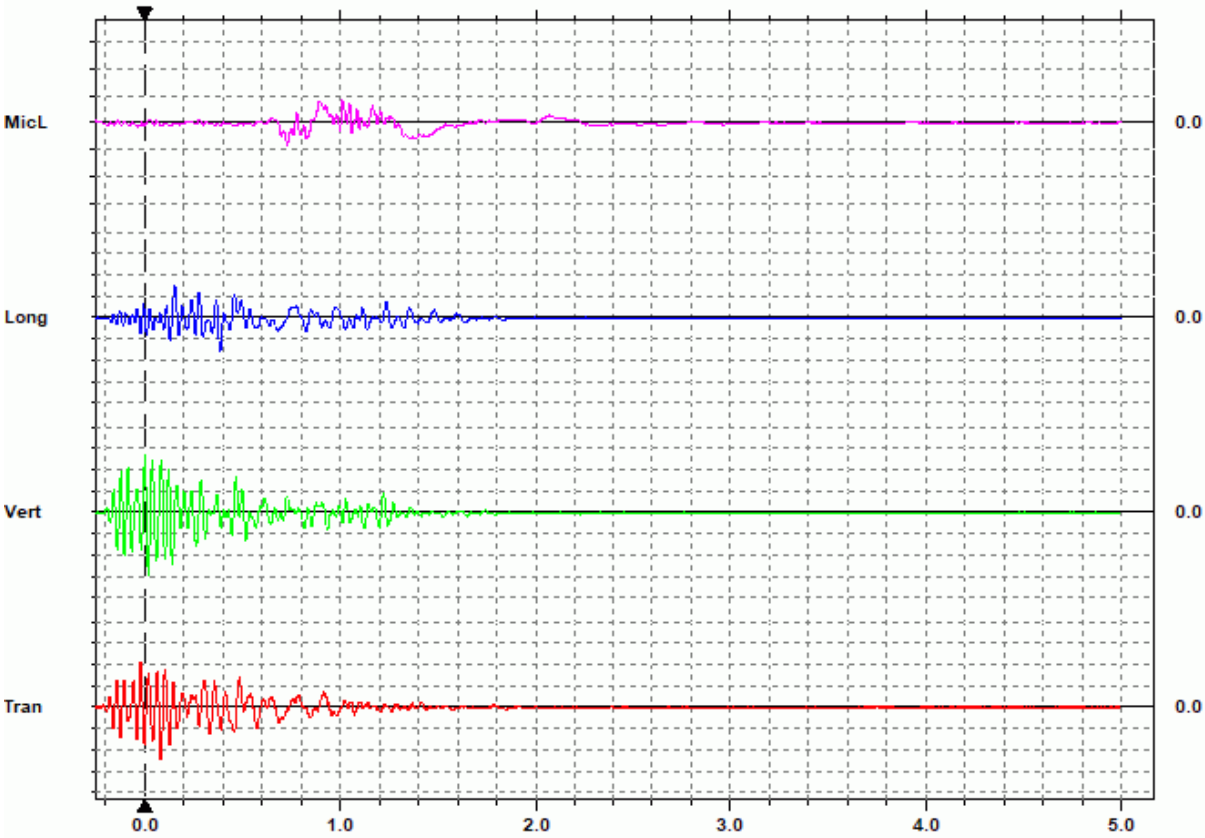
Microphone	Linear Weighting
PSPL	8.75 pa.(L) at 1.016 sec.
ZC Freq	17 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.95	5.97	3.17	mm/s
ZC Freq	24	27	20	Hz
Time (Rel. to Trig)	0.083	0.021	0.386	sec
Peak Acceleration	0.0795	0.106	0.0530	g
Peak Displacement	0.0335	0.0363	0.0379	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.93 mm/s At 0.084 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 22, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 16:03:20 September 22, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028IN87.9K0W
Job Number	8177		

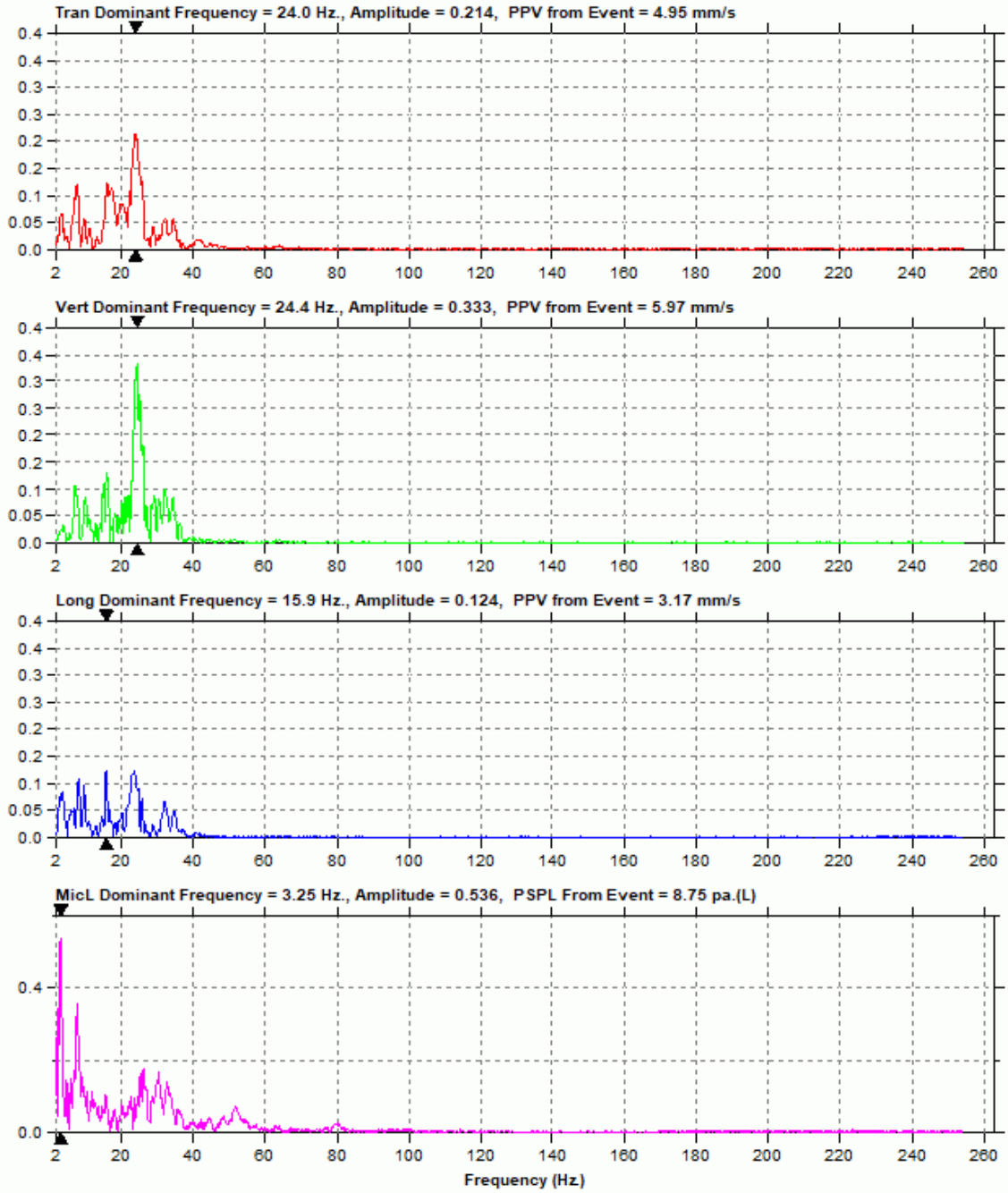
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 22, 2020 05:16:48
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 22, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 17:21:02 September 25, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	128 Cougarstone Manor SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE9028 V 10.72-8.17 MiniMate Plus
Battery Level	6.7 Volts
Unit Calibration	December 10, 2019 by Instantel
File Name	K028INDU.V20W

Post Event Notes

Extended Notes

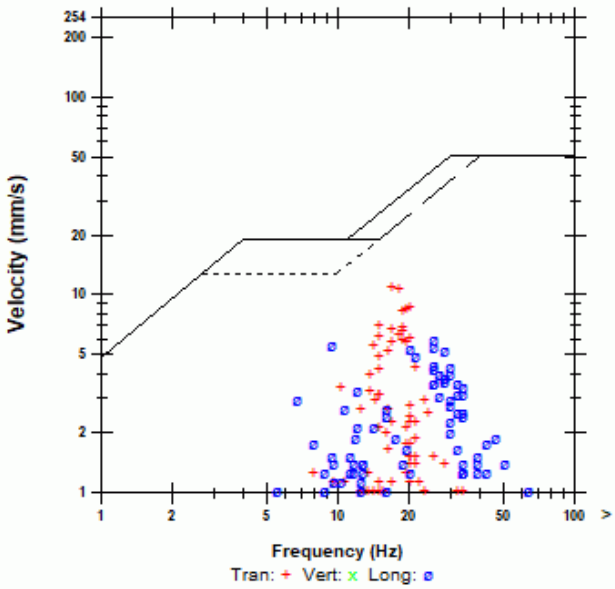
Combo Mode September 25, 2020 09:42:03
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

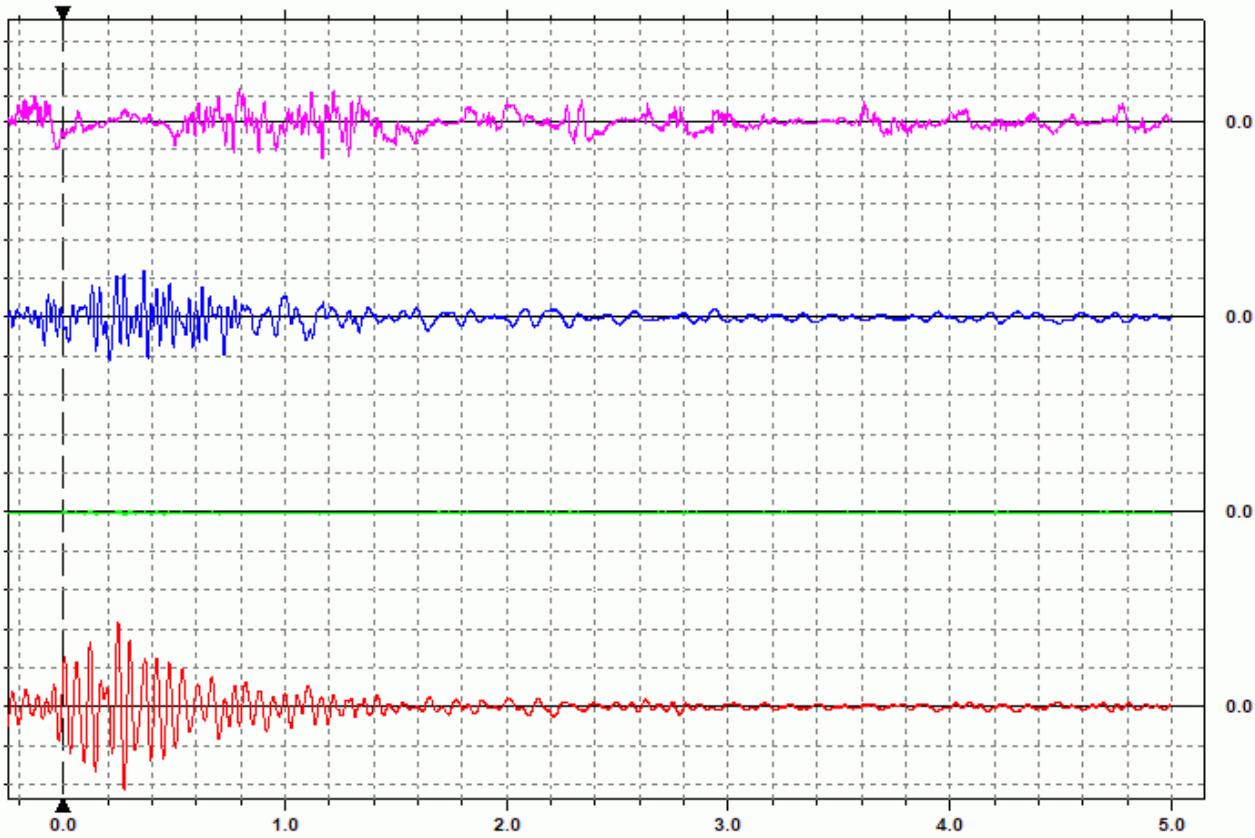
Microphone	Linear Weighting
PSPL	116.3 dB(L) at 1.168 sec.
ZC Freq	34 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	10.9	0.254	5.97	mm/s
ZC Freq	17	>100	26	Hz
Time (Rel. to Trig)	0.246	0.097	0.363	sec
Peak Acceleration	0.133	0.0265	0.106	g
Peak Displacement	0.0993	0.00050	0.0698	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 12.0 mm/s At 0.275 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: September 25, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 17:21:02 September 25, 2020	**Serial Number**	BE9028 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.7 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	December 10, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	K028INDU.V20W
Job Number	8177		

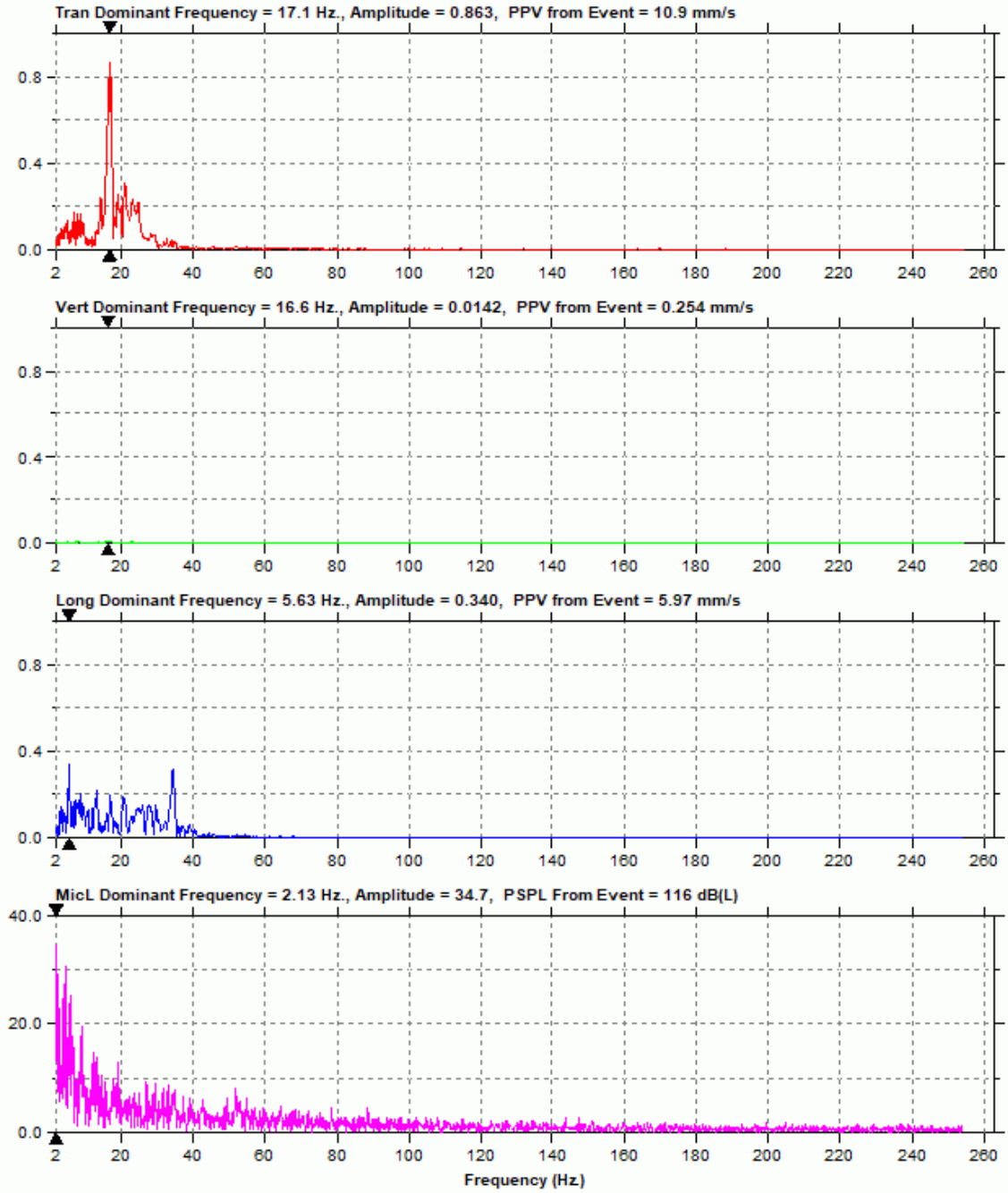
Notes

Location: 128 Cougarstone Manor SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode September 25, 2020 09:42:03
Geophone is sandbagged in the backyard of 128 Cougarstone Manor SW adjacent ongoing blasting operations.

Post Event Notes



Created: September 25, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	Blast no.	Blast time:	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP	PPV	AOP
1-Oct-20	WCRR-170	16:02	1.02mm/s	117.9dB(L)	0.89mm/s	115.0dB(L)	4.45mm/s	123.3dB(L)	0.38mm/s	107.5dB(L)	0.76mm/s	112.0dB(L)	0.51mm/s	111.2dB(L)	0.38mm/s	108.0dB(L)
2-Oct-20	WCRR-171	16:11	1.27mm/s	118.8dB(L)	1.02mm/s	115.2dB(L)	4.06mm/s	121.4dB(L)	0.25mm/s	106.0dB(L)	0.76mm/s	115.4dB(L)	0.38mm/s	114.6dB(L)	0.51mm/s	109.2dB(L)
3-Oct-20	WCRR-172	16:00	2.41mm/s	119.2dB(L)	2.03mm/s	125.6dB(L)	5.08mm/s	121.8dB(L)	0.76mm/s	108.8dB(L)	1.91mm/s	116.1dB(L)	1.14mm/s	114.6dB(L)	0.76mm/s	111.5dB(L)
6-Oct-20	WCRR-173	16:02	1.91mm/s	120.8dB(L)	1.65mm/s	120.9dB(L)	4.95mm/s	123.3dB(L)	0.51mm/s	108.0dB(L)	1.14mm/s	115.4dB(L)	0.89mm/s	114.6dB(L)	0.76mm/s	112.3dB(L)
7-Oct-20	WCRR-174	16:06	3.05mm/s	122.4dB(L)	2.54mm/s	124.6dB(L)	9.02mm/s	126.8dB(L)	0.64mm/s	109.5dB(L)	1.78mm/s	117.6dB(L)	1.40mm/s	114.6dB(L)	0.76mm/s	109.9dB(L)
8-Oct-20	WCRR-175	16:06	3.05mm/s	122.7dB(L)	2.03mm/s	118.3dB(L)	9.52mm/s	124.7dB(L)	0.51mm/s	113.1dB(L)	1.91mm/s	114.6dB(L)	1.27mm/s	115.7dB(L)	1.14mm/s	114.6dB(L)
9-Oct-20	WCRR-176	15:53	1.65mm/s	117.1dB(L)	1.27mm/s	112.6dB(L)	5.84mm/s	121.4dB(L)	0.38mm/s	107.5dB(L)	1.14mm/s	112.3dB(L)	0.76mm/s	110.2dB(L)	0.51mm/s	109.2dB(L)
13-Oct-20	WCRR-177	16:06	2.16mm/s	119.7dB(L)	2.03mm/s	120.6dB(L)	4.70mm/s	123.4dB(L)	0.38mm/s	110.6dB(L)	1.27mm/s	115.9dB(L)	1.02mm/s	115.9dB(L)	0.76mm/s	111.2dB(L)
14-Oct-20	WCRR-178	16:10	2.29mm/s	120.1dB(L)	2.54mm/s	121.1dB(L)	11.30mm/s	125.3dB(L)	0.51mm/s	112.0dB(L)	1.53mm/s	115.6dB(L)	0.89mm/s	115.7dB(L)	0.76mm/s	112.0dB(L)
15-Oct-20	WCRR-179	16:02	3.30mm/s	119.3dB(L)	0.76mm/s	112.0dB(L)	7.11mm/s	125.1dB(L)	0.38mm/s	108.0dB(L)	1.27mm/s	111.8dB(L)	1.02mm/s	113.3dB(L)	0.89mm/s	108.8dB(L)
17-Oct-20	WCRR-180	16:10	1.02mm/s	121.9dB(L)	0.51mm/s	117.8dB(L)	4.45mm/s	123.0dB(L)	0.25mm/s	111.5dB(L)	0.64mm/s	115.2dB(L)	0.38mm/s	117.6dB(L)	0.51mm/s	114.2dB(L)
20-Oct-20	WCRR-181	16:50	1.52mm/s	118.7dB(L)	1.91mm/s	120.8dB(L)	6.22mm/s	121.6dB(L)	0.38mm/s	104.9dB(L)	0.64mm/s	113.8dB(L)	0.64mm/s	112.0dB(L)	0.76mm/s	108.8dB(L)
21-Oct-20	WCRR-182	16:10	2.41mm/s	119.3dB(L)	0.64mm/s	110.6dB(L)	5.59mm/s	127.9dB(L)	0.51mm/s	109.2dB(L)	1.14mm/s	114.2dB(L)	1.14mm/s	115.6dB(L)	0.64mm/s	111.8dB(L)
23-Oct-20	WCRR-183	16:35	1.14mm/s	115.9dB(L)	0.76mm/s	117.4dB(L)	4.32mm/s	117.8dB(L)	0.25mm/s	95.9dB(L)	0.64mm/s	109.5dB(L)	0.51mm/s	108.0dB(L)	0.51mm/s	105.5dB(L)
29-Oct-20	WCRR-184	16:18	2.41mm/s	120.1dB(L)	1.52mm/s	115.0dB(L)	7.75mm/s	123.0dB(L)	0.38mm/s	109.9dB(L)	1.40mm/s	110.2dB(L)	0.89mm/s	115.0dB(L)	0.89mm/s	111.8dB(L)
30-Oct-20	WCRR-185	16:12	1.65mm/s	131.9dB(L)	0.64mm/s	118.7dB(L)	4.70mm/s	128.3dB(L)	0.38mm/s	136.3dB(L)	1.14mm/s	136.9dB(L)	0.64mm/s	126.8dB(L)	0.64mm/s	128.7dB(L)
31-Oct-20	WCRR-186	16:06	2.29mm/s	123.1dB(L)	0.51mm/s	117.5dB(L)	8.13mm/s	125.0dB(L)	0.38mm/s	126.8dB(L)	2.16mm/s	134.5dB(L)	0.76mm/s	120.9dB(L)	0.89mm/s	113.8dB(L)

**Click on a highlighted cell to view the seismograph report for the corresponding date and location.*

EXPLOTECH

Date/Time	Tran At 15:59:57 October 3, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251INSK.FX0W

Post Event Notes

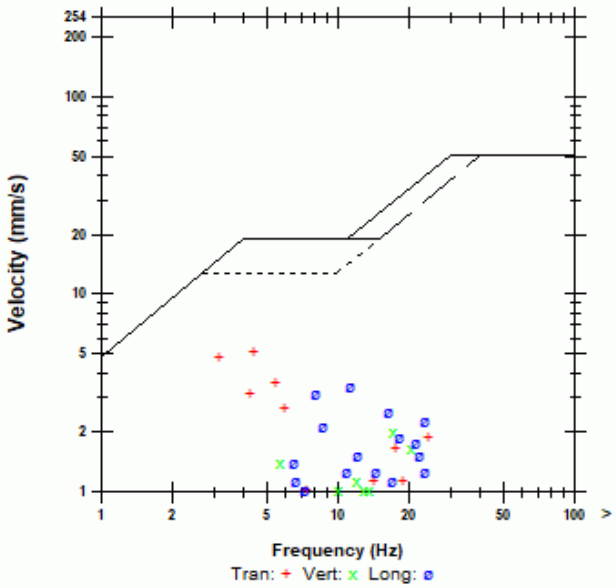
Extended Notes
Combo Mode October 3, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

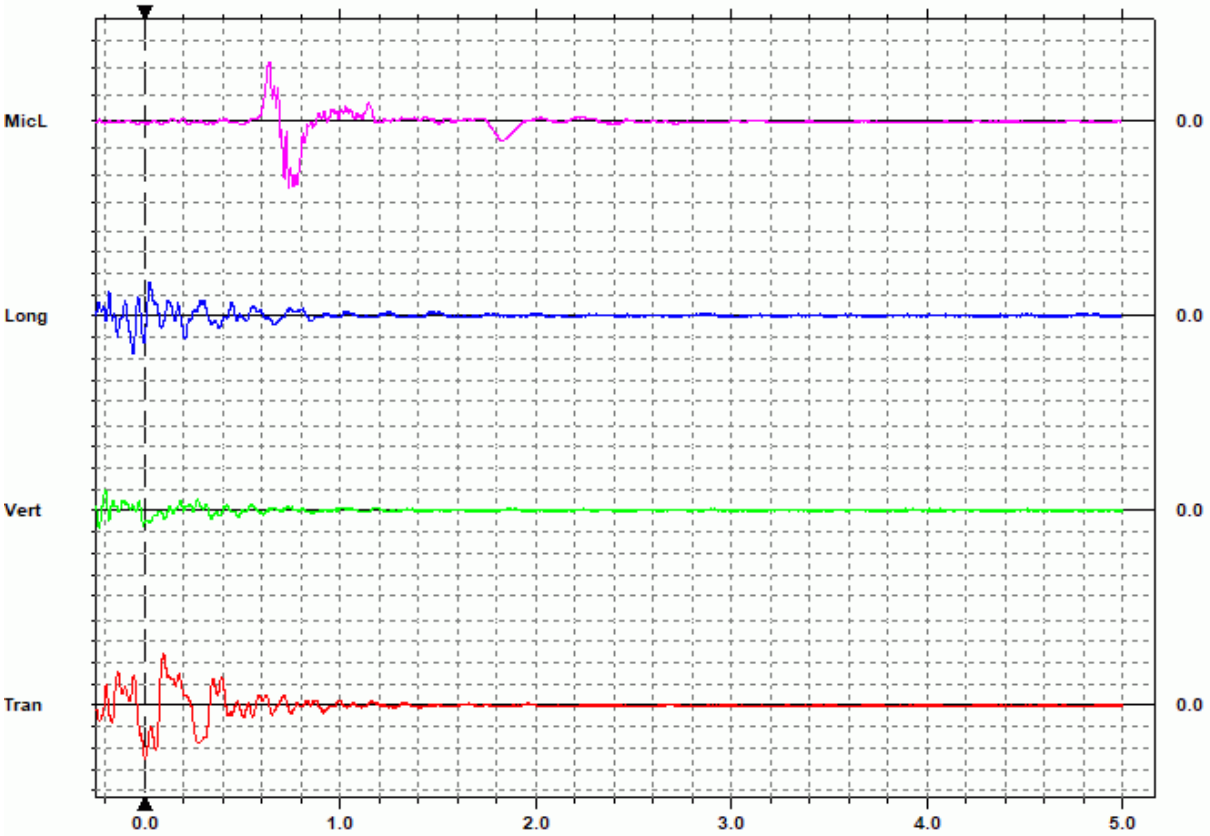
Microphone	Linear Weighting
PSPL	121.8 dB(L) at 0.737 sec.
ZC Freq	3.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.08	2.03	3.43	mm/s
ZC Freq	4.5	17	11	Hz
Time (Rel. to Trig)	0.001	-0.203	-0.061	sec
Peak Acceleration	0.0530	0.0265	0.0398	g
Peak Displacement	0.182	0.0358	0.0514	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.61 mm/s At 0.001 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 3, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:59:57 October 3, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251INSK.FX0W
Job Number	8177		

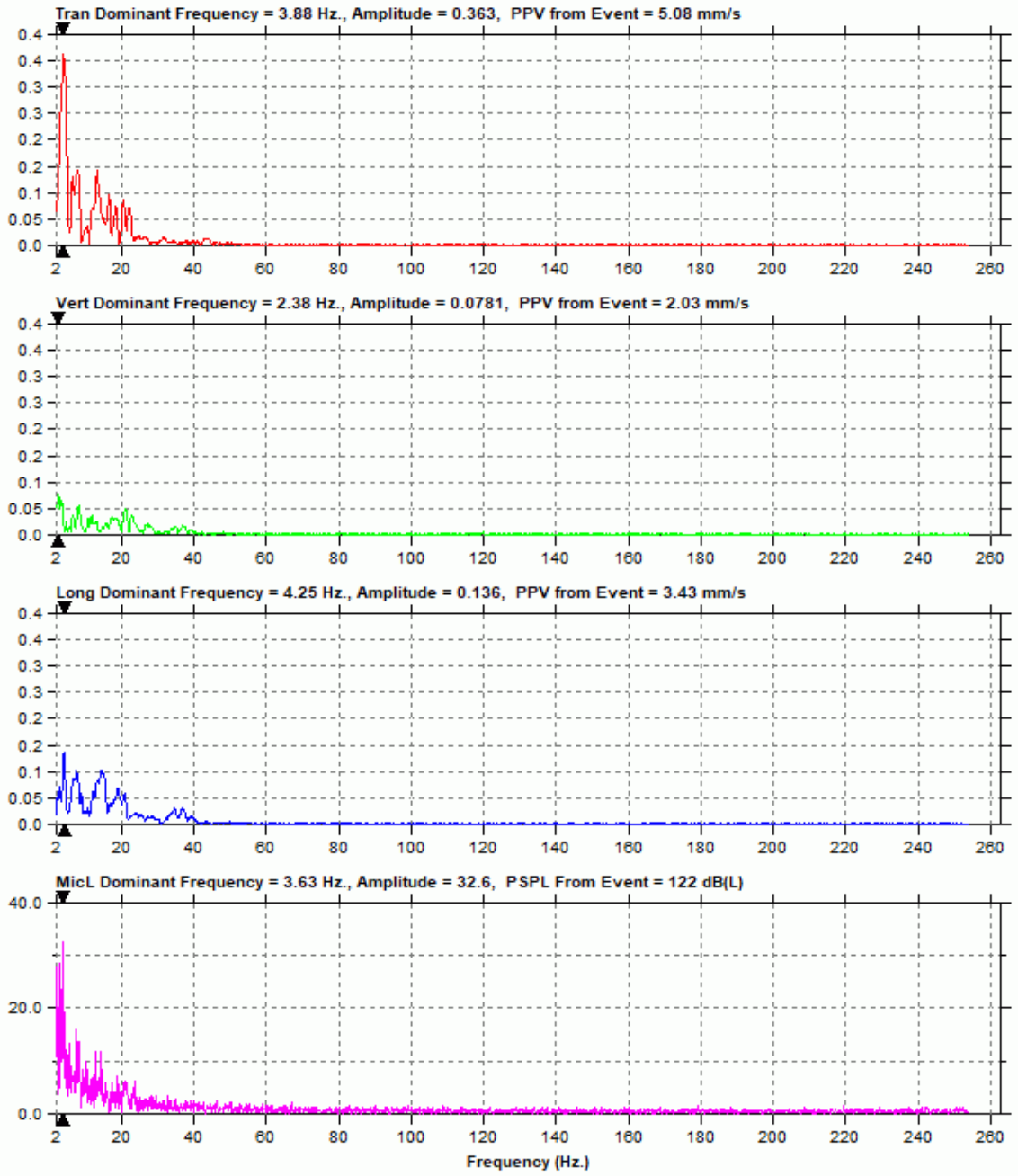
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 3, 2020 05:16:48
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 3, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:44 October 7, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251INZZ.8K0W

Post Event Notes

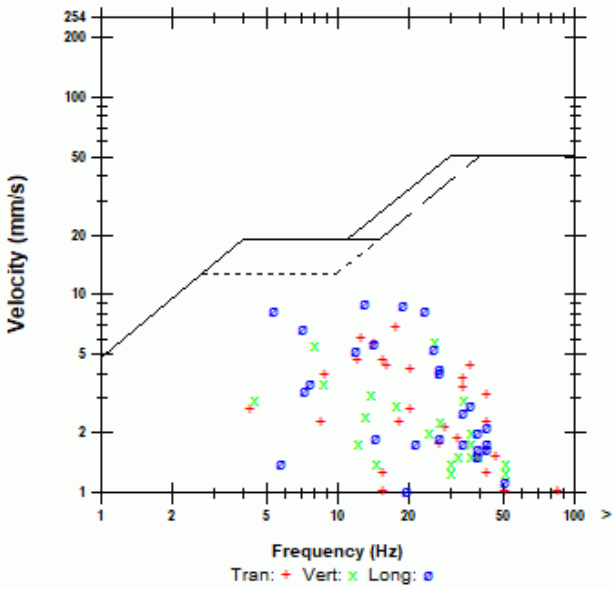
Extended Notes
Combo Mode October 7, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

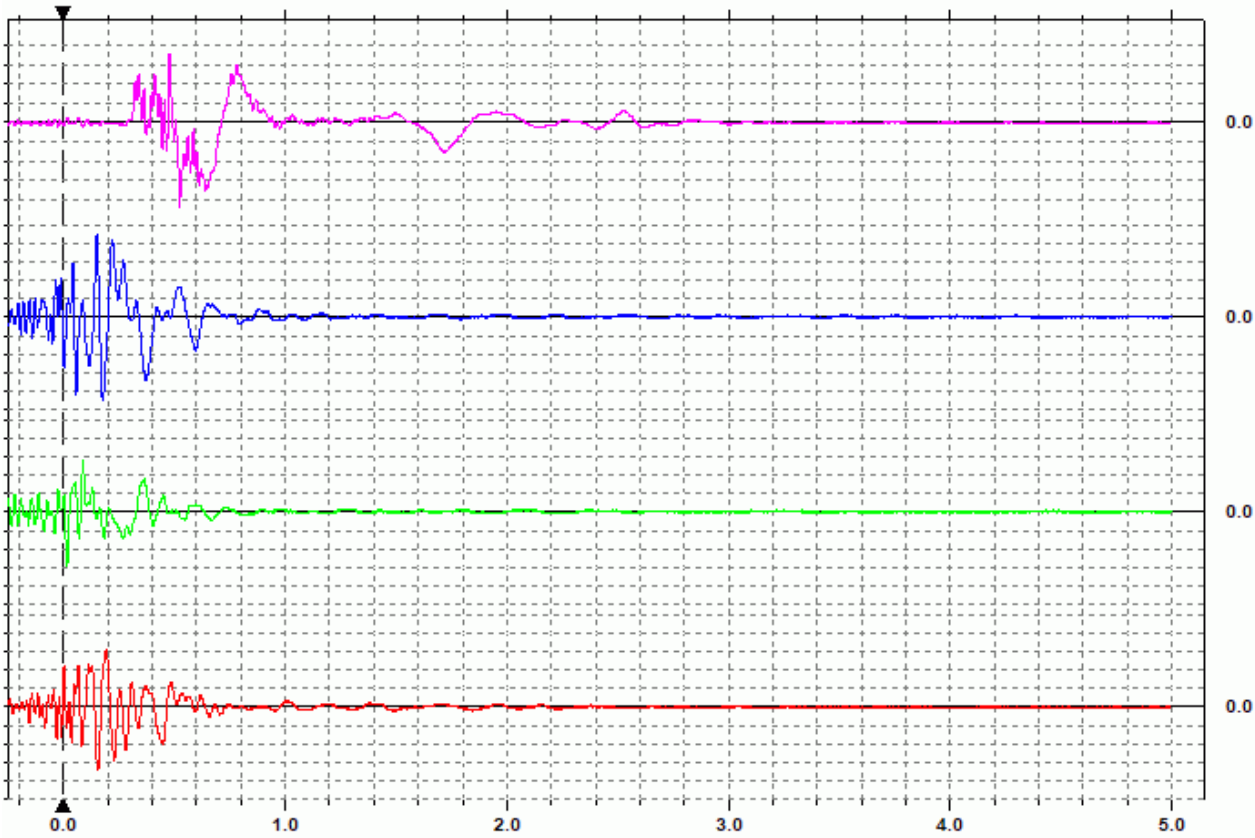
Microphone	Linear Weighting
PSPL	126.8 dB(L) at 0.524 sec.
ZC Freq	2.4 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.86	5.84	9.02	mm/s
ZC Freq	18	26	13	Hz
Time (Rel. to Trig)	0.153	0.015	0.177	sec
Peak Acceleration	0.106	0.0928	0.159	g
Peak Displacement	0.0815	0.0898	0.202	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.7 mm/s At 0.149 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 7, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:02:44 October 7, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251INZZ.8K0W
Job Number	8177		

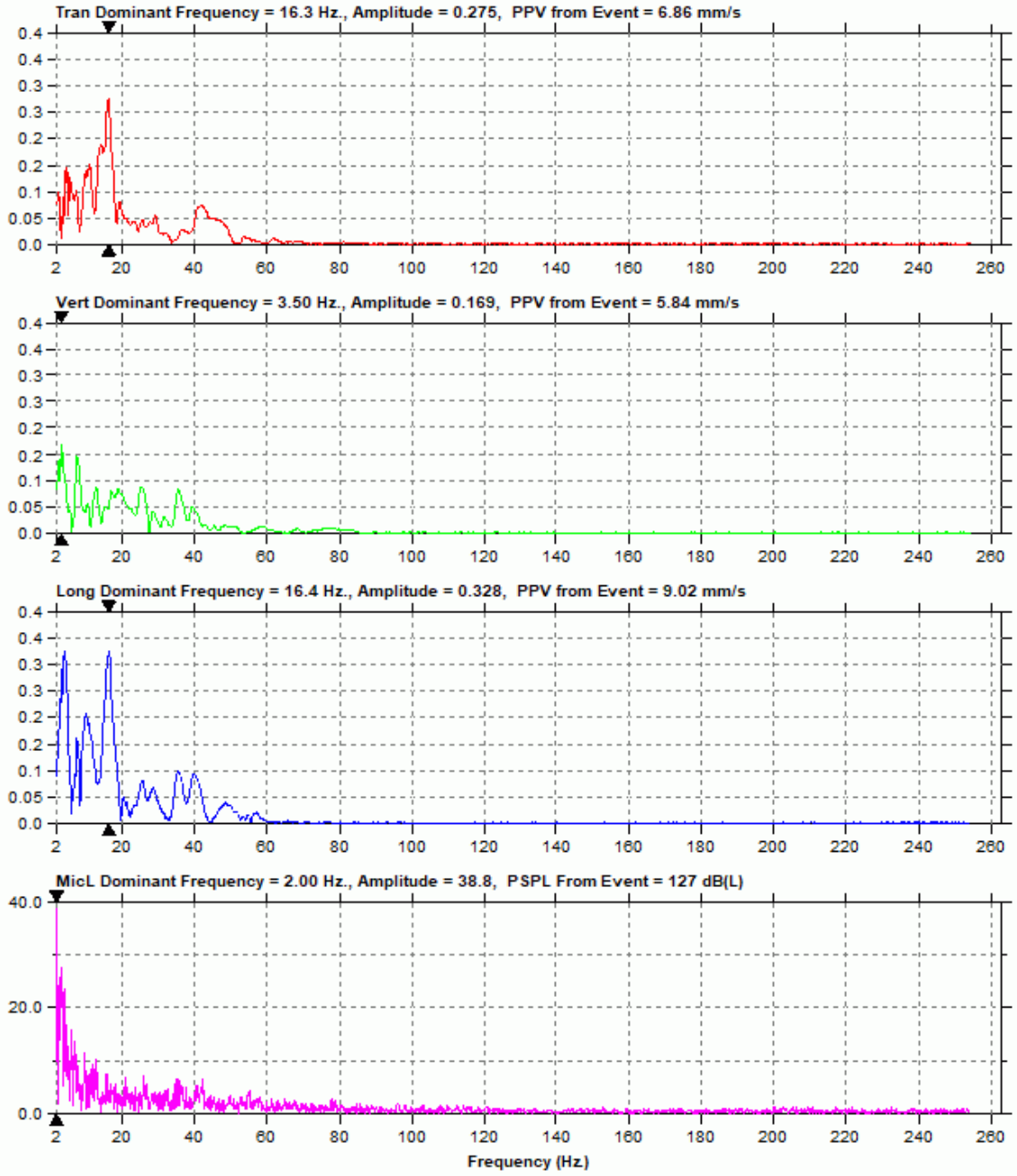
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 7, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 7, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:01:54 October 8, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IO1T.V60W

Post Event Notes

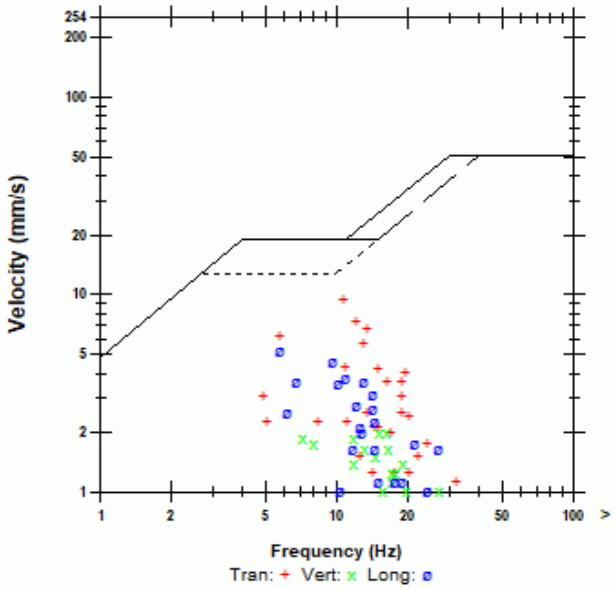
Extended Notes
Combo Mode October 8, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

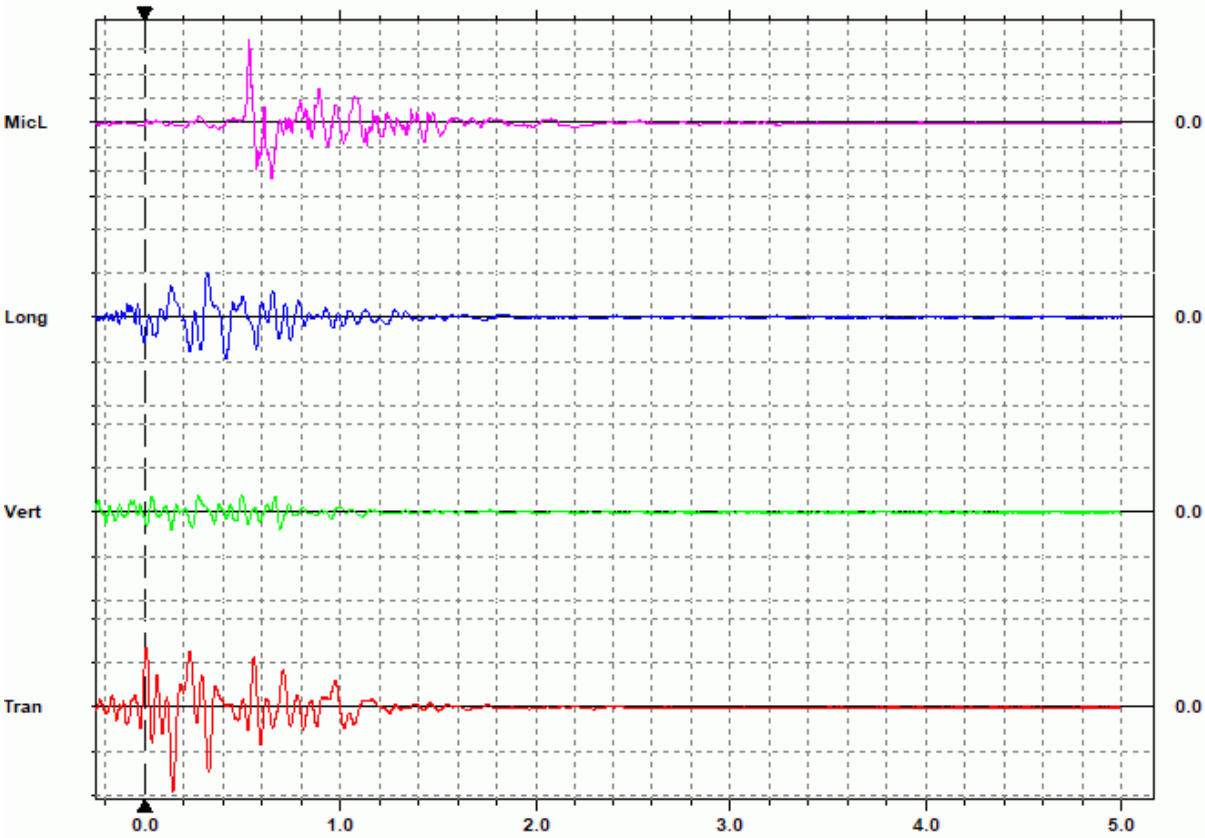
Microphone	Linear Weighting
PSPL	124.7 dB(L) at 0.535 sec.
ZC Freq	3.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	9.52	2.03	5.21	mm/s
ZC Freq	11	16	5.8	Hz
Time (Rel. to Trig)	0.144	0.135	0.319	sec
Peak Acceleration	0.0795	0.0265	0.0530	g
Peak Displacement	0.135	0.0332	0.0991	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 10.2 mm/s At 0.144 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 8, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:01:54 October 8, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IO1T.V60W
Job Number	8177		

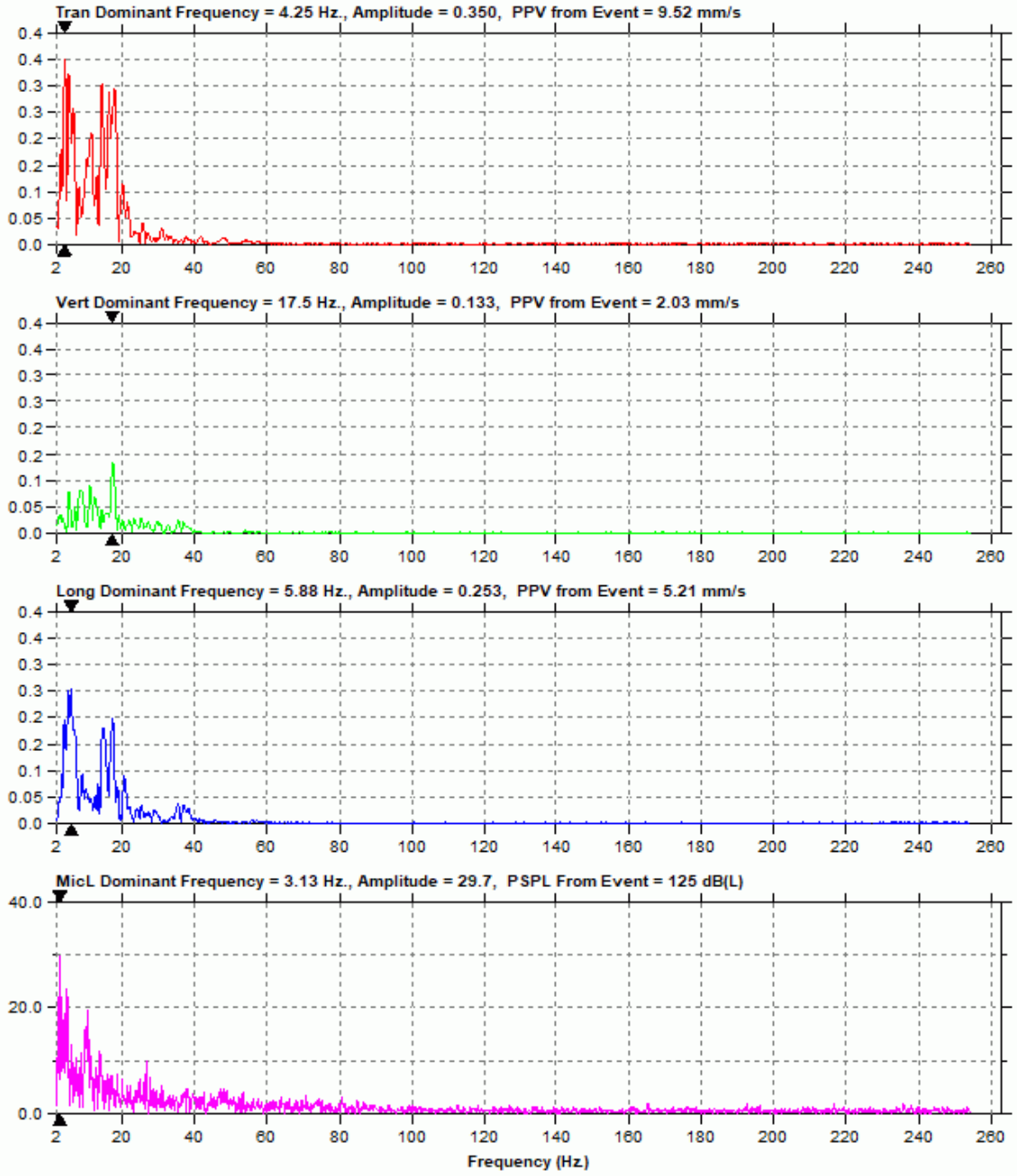
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 8, 2020 05:16:46
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 8, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:49:23 October 9, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.8 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IO3N.YB0W

Post Event Notes

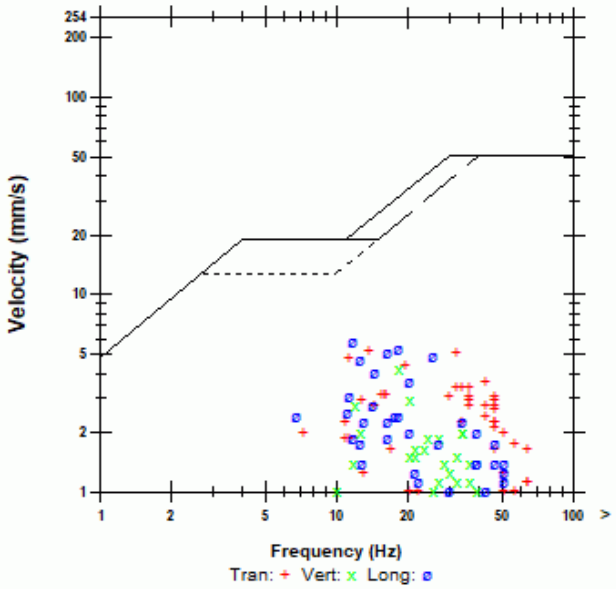
Extended Notes
Combo Mode October 9, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

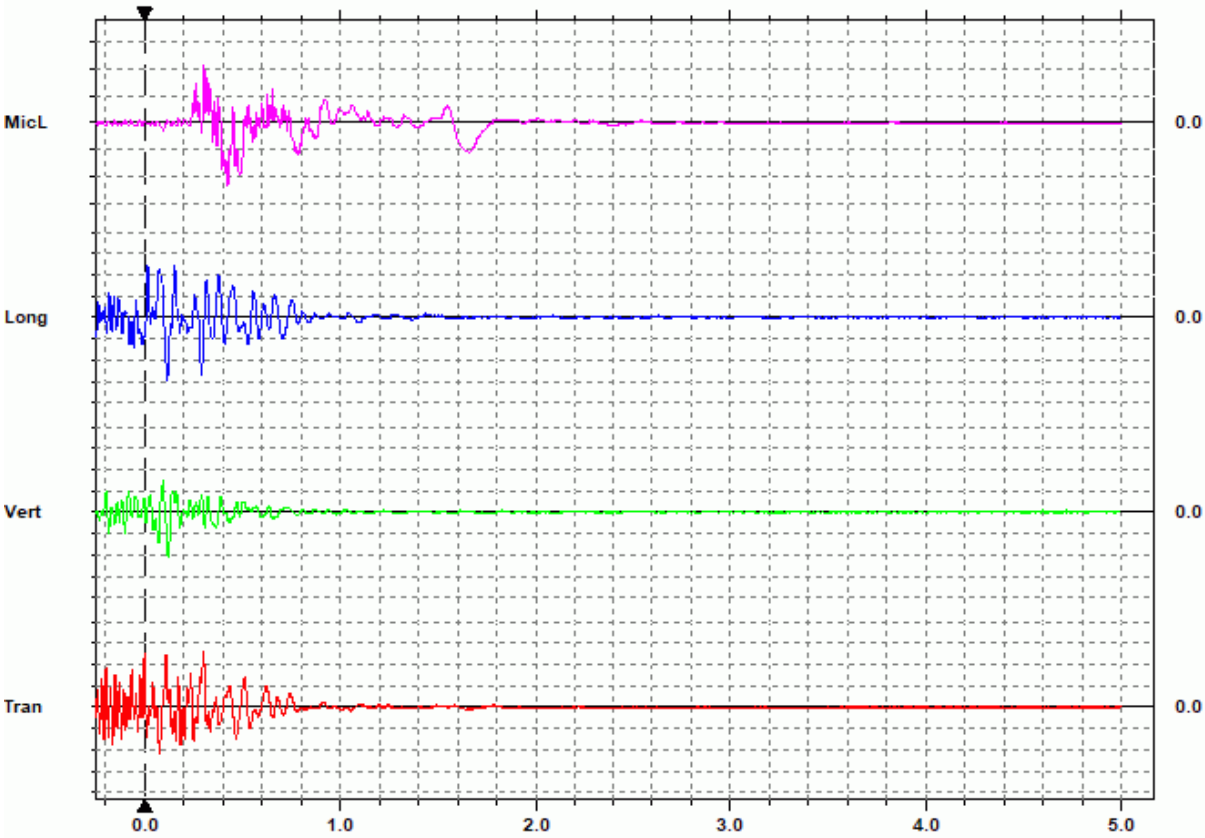
Microphone	Linear Weighting
PSPL	121.4 dB(L) at 0.425 sec.
ZC Freq	8.5 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	5.21	4.19	5.84	mm/s
ZC Freq	14	18	12	Hz
Time (Rel. to Trig)	0.302	0.122	0.117	sec
Peak Acceleration	0.106	0.0663	0.0795	g
Peak Displacement	0.0520	0.0332	0.0617	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.94 mm/s At 0.117 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 9, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 15:49:23 October 9, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.8 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IO3N.YB0W
Job Number	8177		

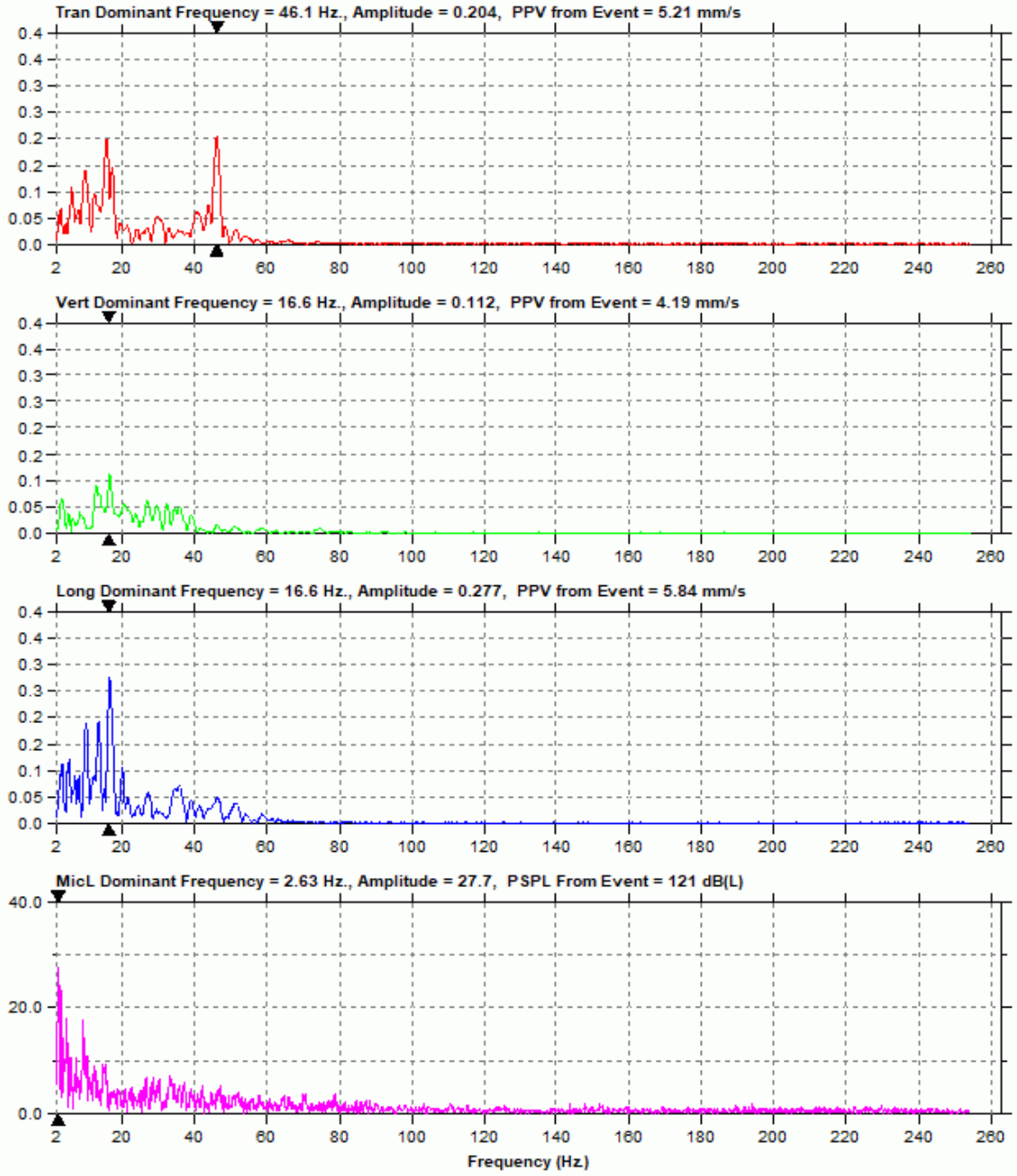
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 9, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 9, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:05:35 October 14, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IOCY.1B0W

Post Event Notes

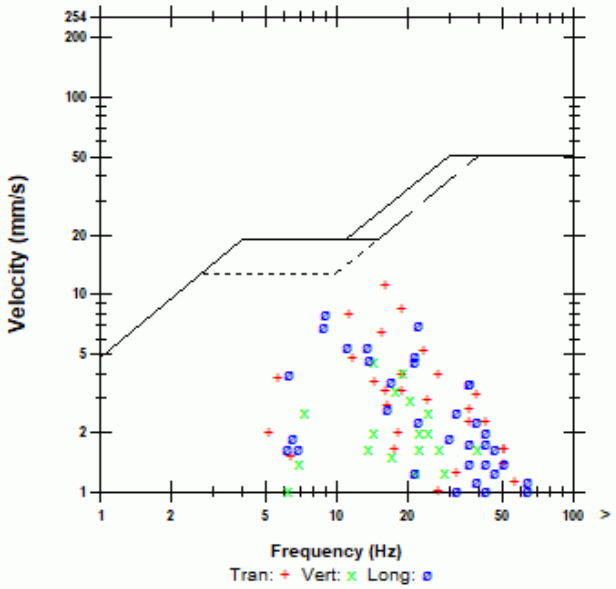
Extended Notes
Combo Mode October 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

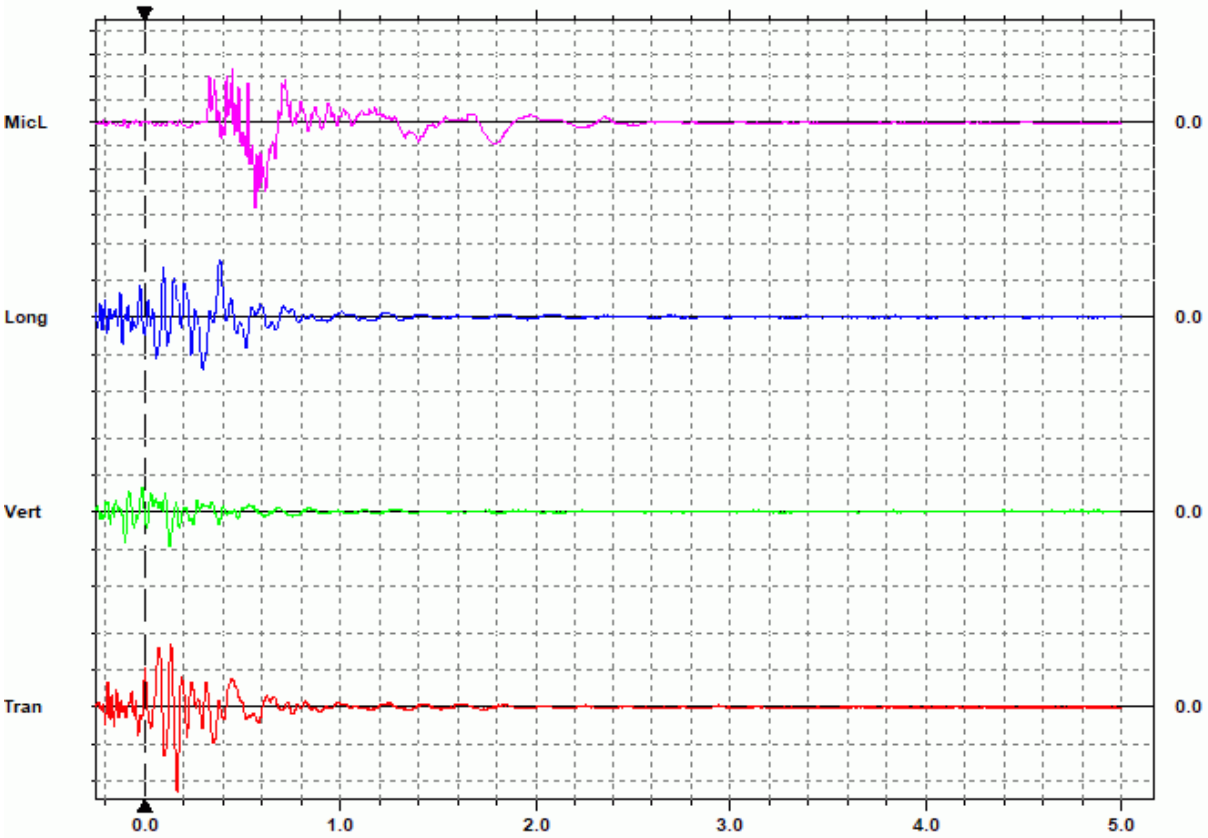
Microphone	Linear Weighting
PSPL	125.3 dB(L) at 0.565 sec.
ZC Freq	3.3 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	11.3	4.57	8.00	mm/s
ZC Freq	16	14	9.0	Hz
Time (Rel. to Trig)	0.165	0.126	0.384	sec
Peak Acceleration	0.119	0.0663	0.0928	g
Peak Displacement	0.103	0.0454	0.115	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 11.6 mm/s At 0.166 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 5.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 14, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:05:35 October 14, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IOCY.1B0W
Job Number	8177		

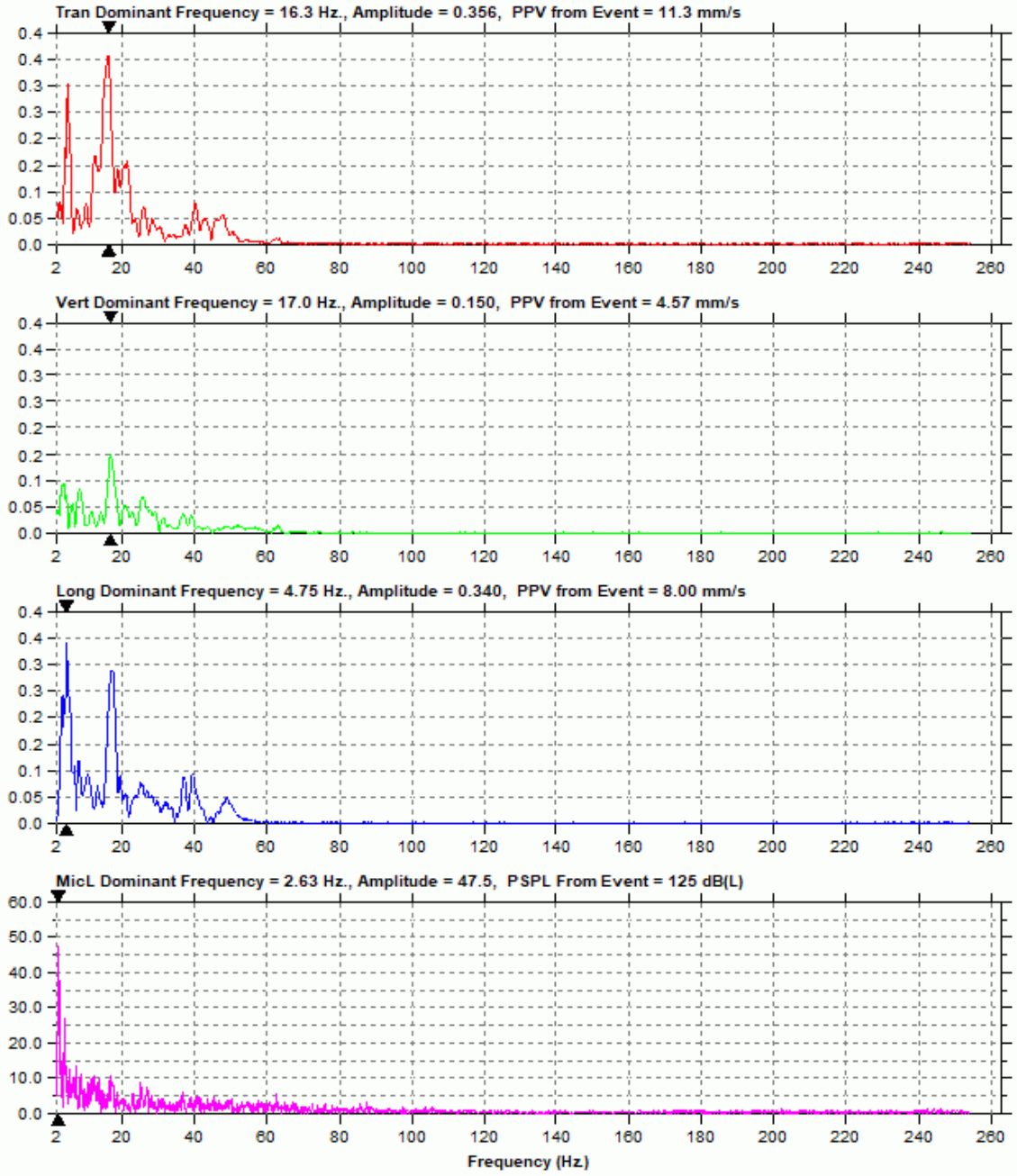
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 14, 2020 05:16:47
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 14, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:44 October 15, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IOES.C80W

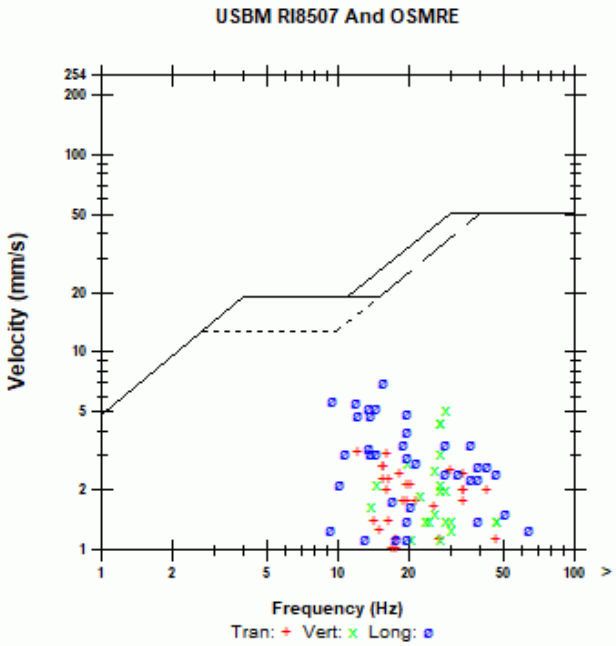
Post Event Notes

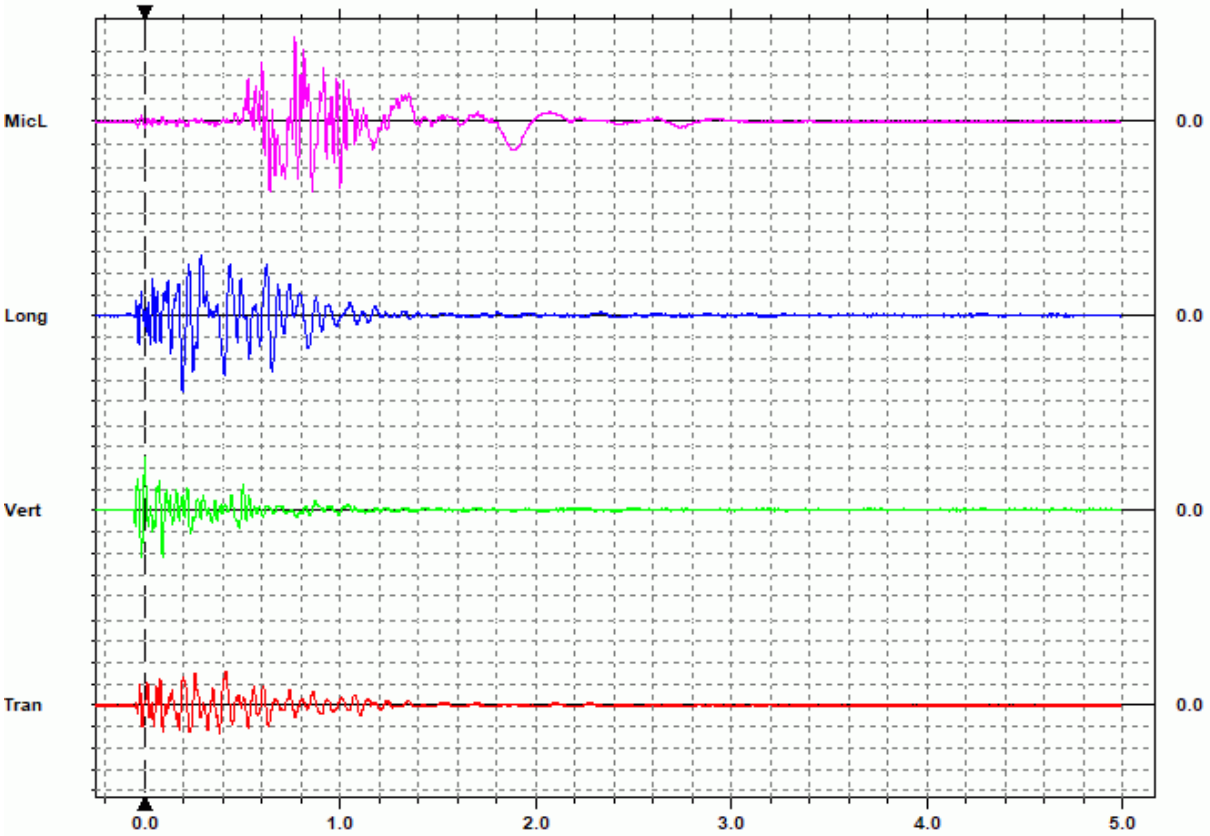
Extended Notes
Combo Mode October 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Microphone	Linear Weighting
PSPL	125.1 dB(L) at 0.768 sec.
ZC Freq	32 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	3.17	5.08	7.11	mm/s
ZC Freq	12	28	16	Hz
Time (Rel. to Trig)	0.415	0.001	0.192	sec
Peak Acceleration	0.0663	0.0928	0.0928	g
Peak Displacement	0.0402	0.0263	0.0748	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 7.75 mm/s At 0.194 sec.





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 15, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Vert At 15:57:44 October 15, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IOES.C80W
Job Number	8177		

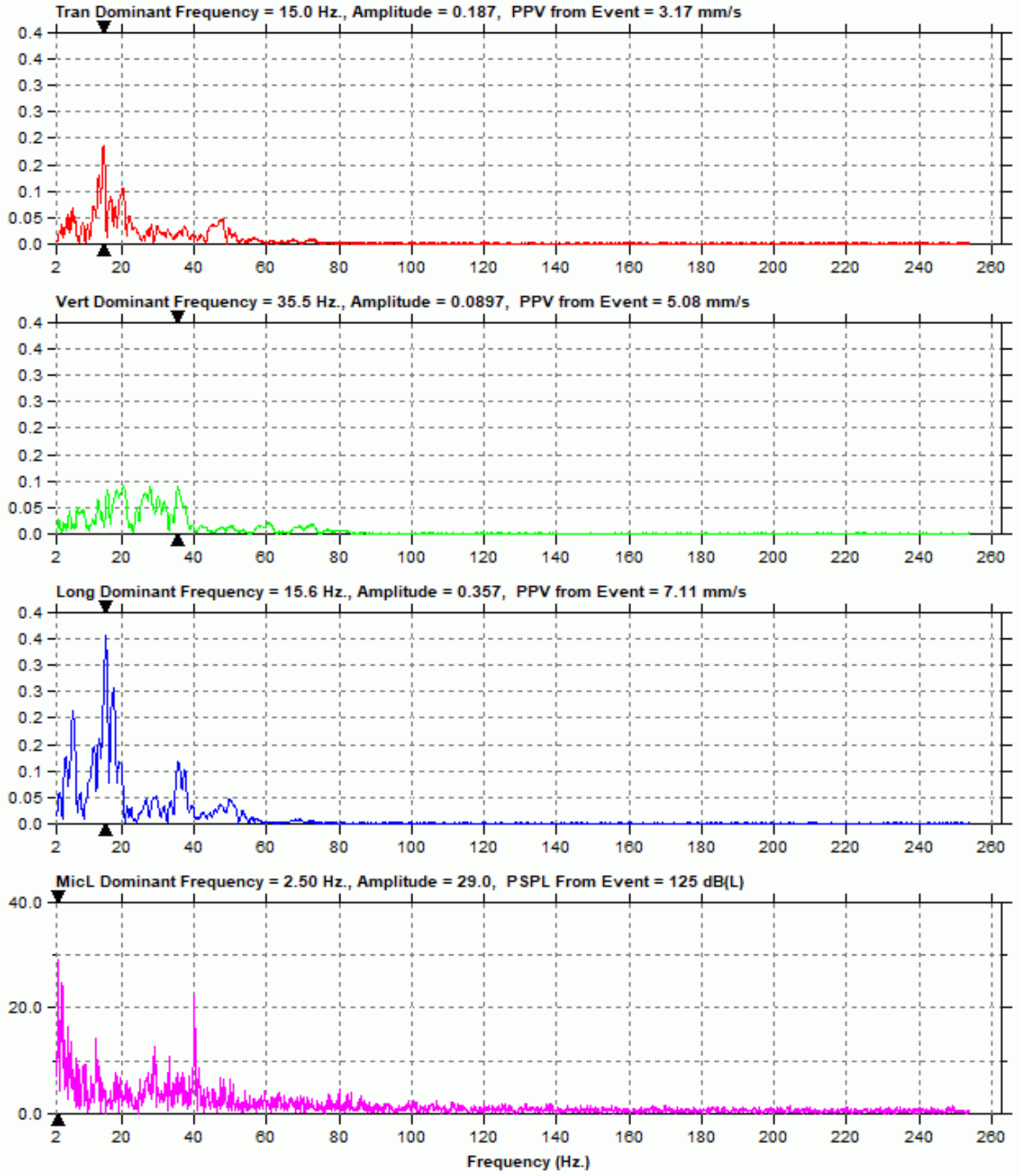
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 15, 2020 05:16:44
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 15, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:44:50 October 20, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IOO3.UQ0W

Post Event Notes

Extended Notes

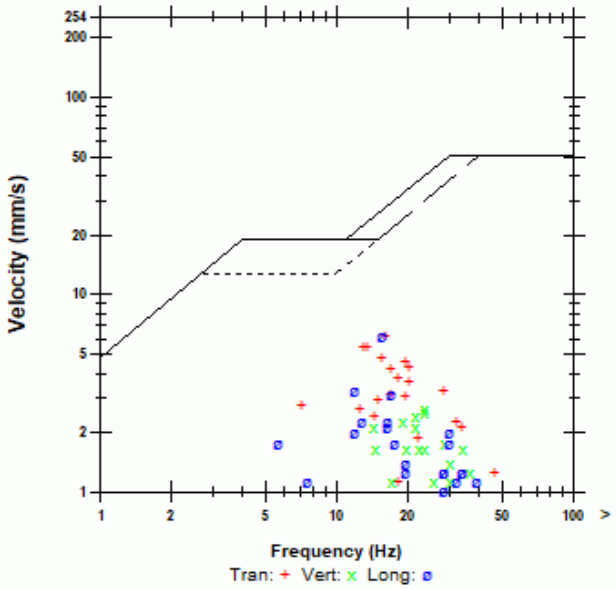
Combo Mode October 20, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

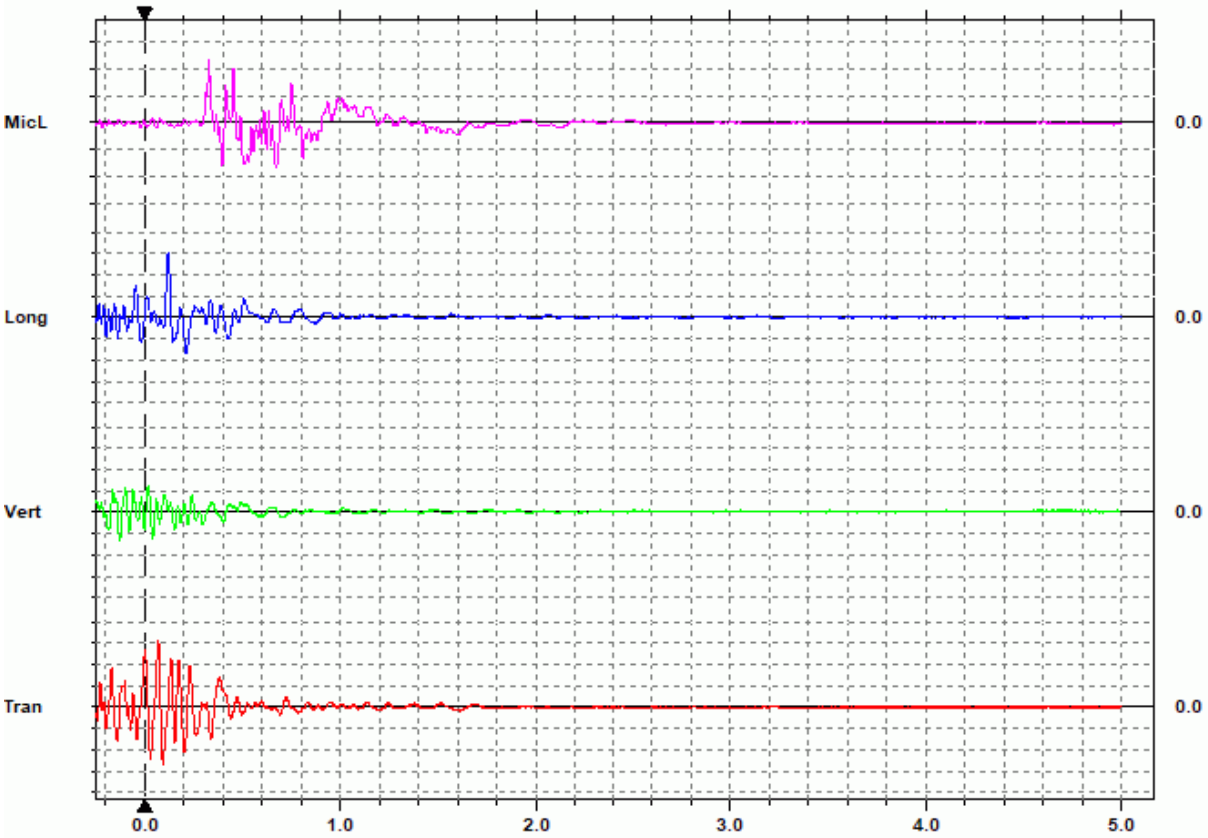
Microphone	Linear Weighting
PSPL	121.6 dB(L) at 0.329 sec.
ZC Freq	9.1 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	6.22	2.67	6.22	mm/s
ZC Freq	16	23	16	Hz
Time (Rel. to Trig)	0.070	-0.125	0.121	sec
Peak Acceleration	0.0795	0.0530	0.0663	g
Peak Displacement	0.0562	0.0229	0.0580	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 6.29 mm/s At 0.071 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 20, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Tran At 16:44:50 October 20, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IOO3.UQ0W
Job Number	8177		

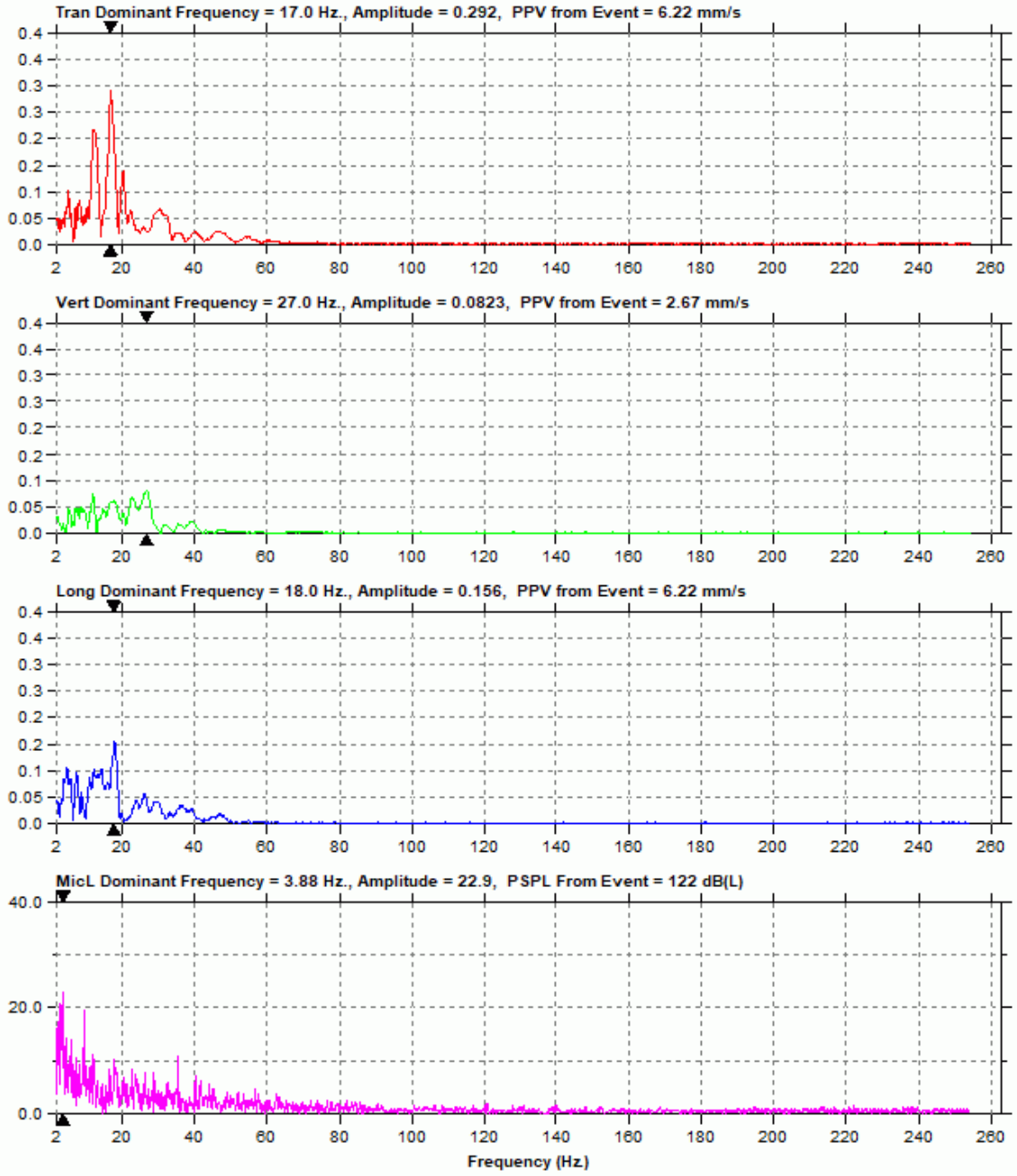
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 20, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 20, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:05:24 October 21, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	7.0 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IOPW.P00W

Post Event Notes

Extended Notes

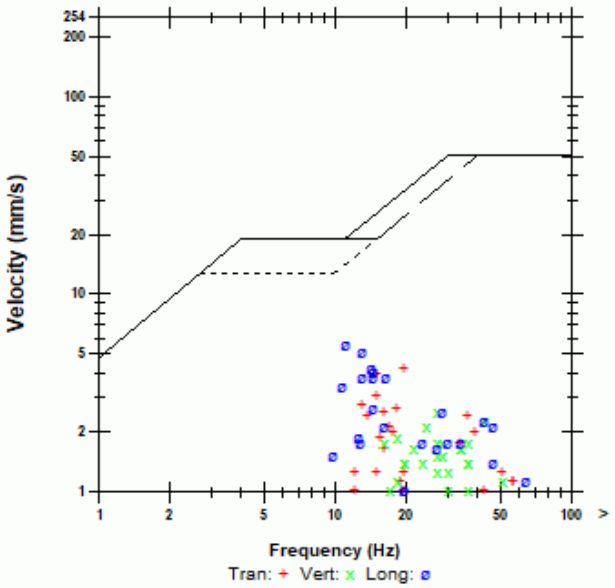
Combo Mode October 21, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

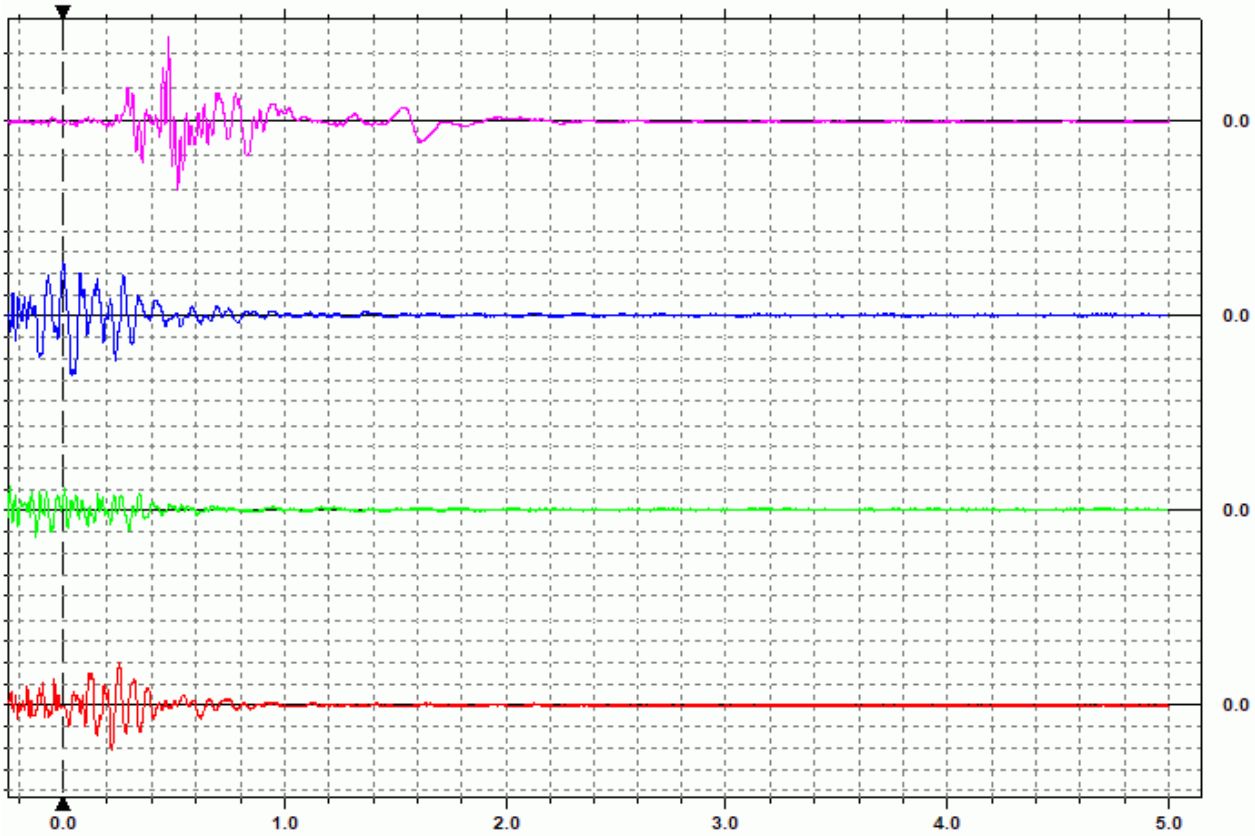
Microphone	Linear Weighting
PSPL	127.9 dB(L) at 0.477 sec.
ZC Freq	24 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	4.19	2.54	5.59	mm/s
ZC Freq	20	27	11	Hz
Time (Rel. to Trig)	0.221	-0.124	0.037	sec
Peak Acceleration	0.0663	0.0663	0.0795	g
Peak Displacement	0.0402	0.0184	0.0913	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 5.69 mm/s At 0.037 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div
Trigger =

Created: October 21, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:05:24 October 21, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	7.0 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IOPW.P00W
Job Number	8177		

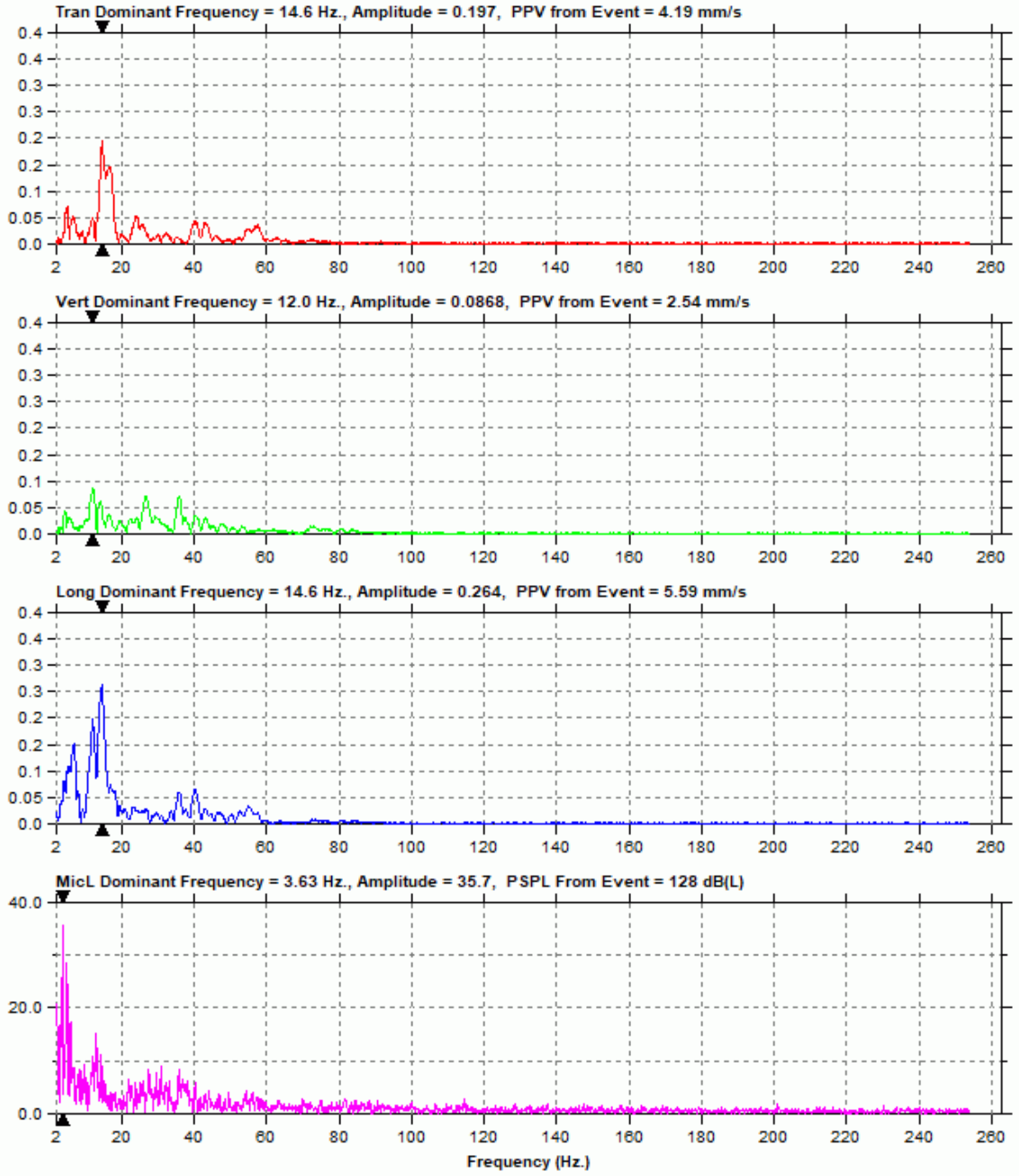
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 21, 2020 05:16:45
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 21, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:12:28 October 29, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177

Notes

Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IP4Q.CS0W

Post Event Notes

Extended Notes

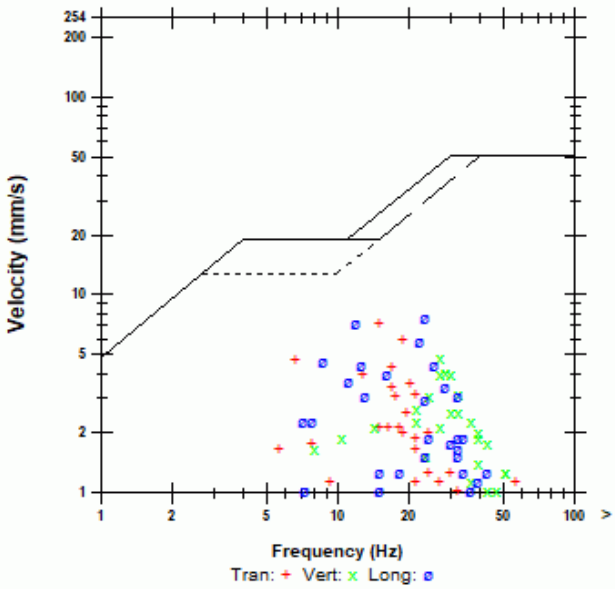
Combo Mode October 29, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

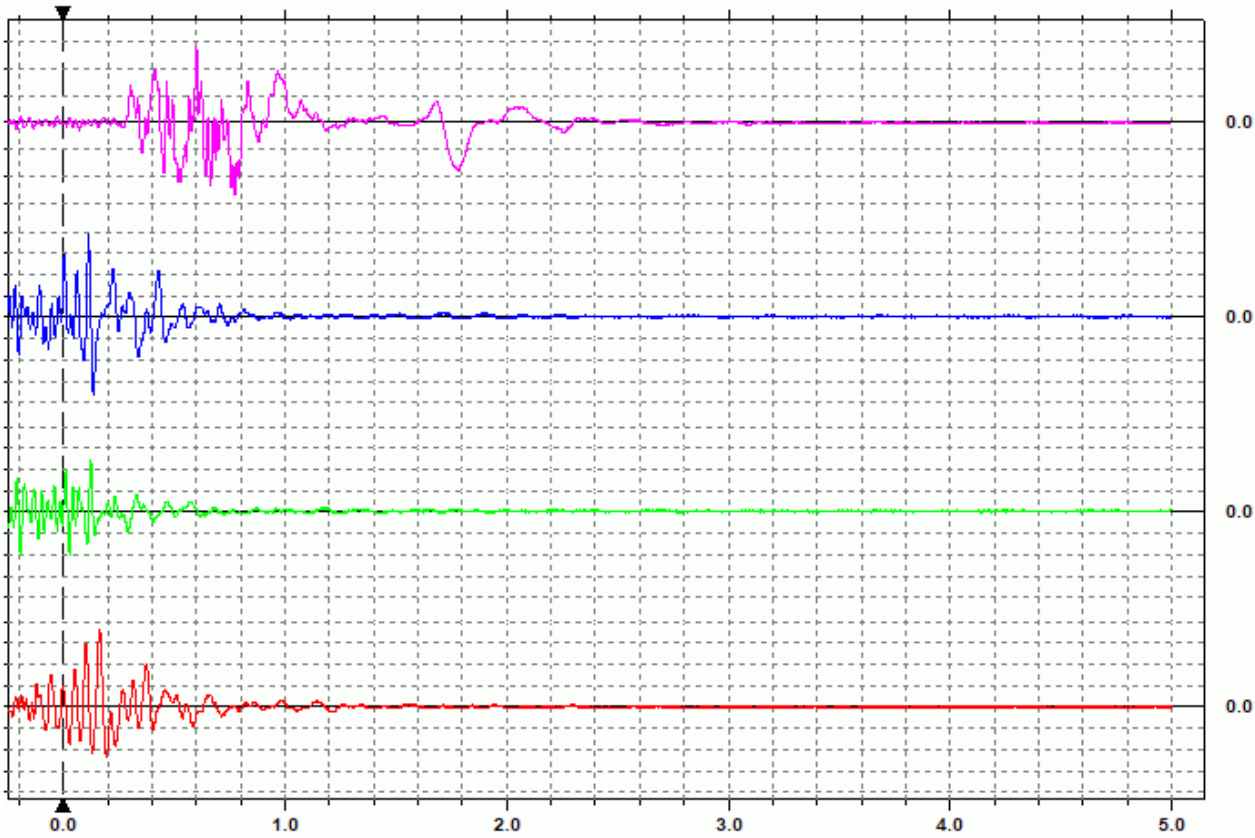
Microphone	Linear Weighting
PSPL	123.0 dB(L) at 0.600 sec.
ZC Freq	10 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	7.24	4.83	7.75	mm/s
ZC Freq	15	27	23	Hz
Time (Rel. to Trig)	0.162	0.123	0.112	sec
Peak Acceleration	0.0795	0.0795	0.119	g
Peak Displacement	0.0950	0.0275	0.0704	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.30 mm/s At 0.135 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 29, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 16:12:28 October 29, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IP4Q.CS0W
Job Number	8177		

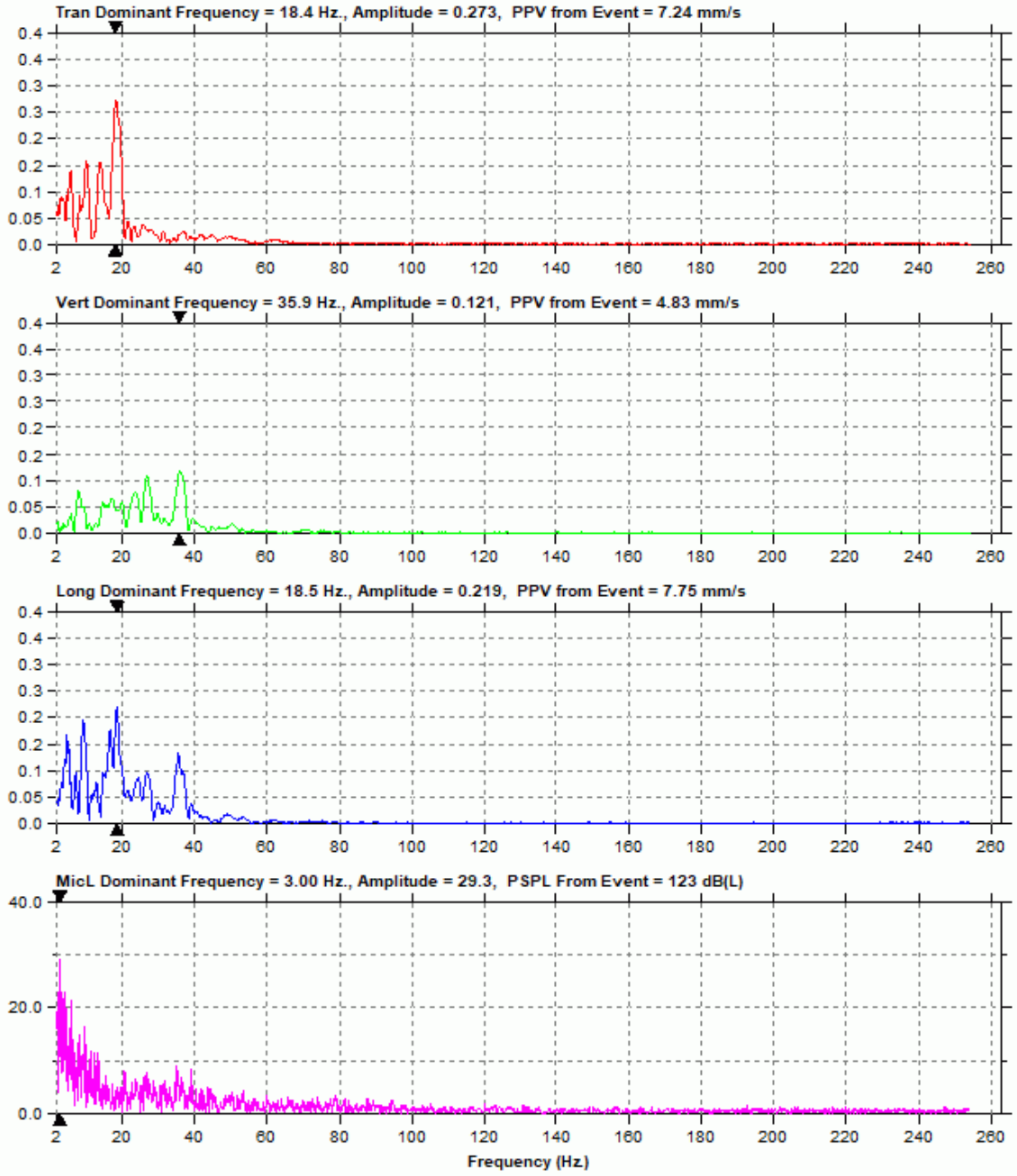
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 29, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 29, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:23 October 31, 2020
Trigger Source	Geo: 5.00 mm/s
Range	Geo: 254 mm/s
Sample Rate	5.0 sec. At 1024 Sps
Job Number	8177
Notes	
Location:	97 Cougar Ridge Close SW, Calgary, AB
Client:	McCaw's Drilling and Blasting
User Name:	Explotech Engineering Ltd.
General:	Sandbagged on ground

Serial Number	BE11251 V 10.72-8.17 MiniMate Plus
Battery Level	6.9 Volts
Unit Calibration	October 23, 2019 by Instantel
File Name	M251IP8F.2Z0W

Post Event Notes

Extended Notes

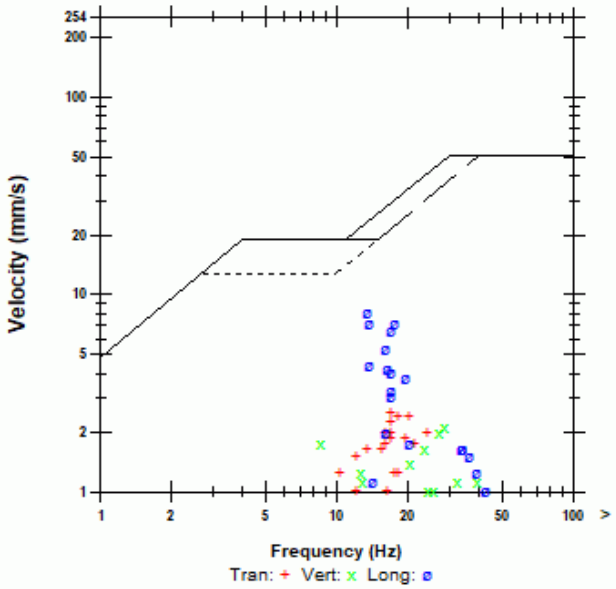
Combo Mode October 31, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

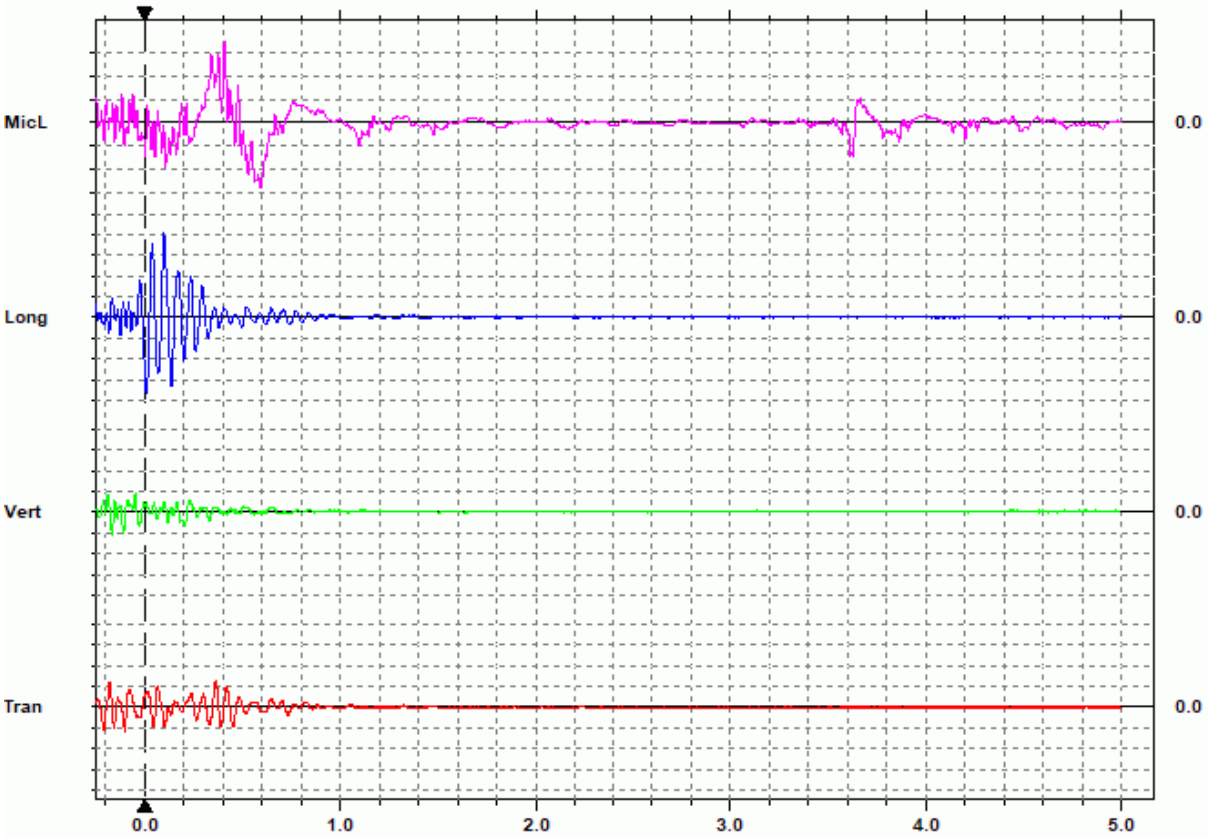
Microphone	Linear Weighting
PSPL	125.0 dB(L) at 0.409 sec.
ZC Freq	3.2 Hz.
Channel Test	Disabled

	Tran	Vert	Long	
PPV	2.54	2.16	8.13	mm/s
ZC Freq	17	28	13	Hz
Time (Rel. to Trig)	0.360	-0.167	0.098	sec
Peak Acceleration	0.0398	0.0530	0.0928	g
Peak Displacement	0.0241	0.0251	0.0851	mm
Sensor Check	Disabled	Disabled	Disabled	

Peak Vector Sum 8.37 mm/s At 0.099 sec.

USBM RI8507 And OSMRE





Time(Seconds) 0.20 sec/div **Amplitude** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div
Trigger =

Created: October 31, 2020 (V - 10.72) Format (c) 2006-2014 Xmark Corporation

EXPLOTECH

Date/Time	Long At 15:59:23 October 31, 2020	**Serial Number**	BE11251 V 10.72-8.17 MiniMate Plus
Trigger Source	Geo: 5.00 mm/s	**Battery Level**	6.9 Volts
Range	Geo: 254 mm/s	**Unit Calibration**	October 23, 2019 by Instantel
Sample Rate	5.0 sec. At 1024 Sps	**File Name**	M251IP8F.2Z0W
Job Number	8177		

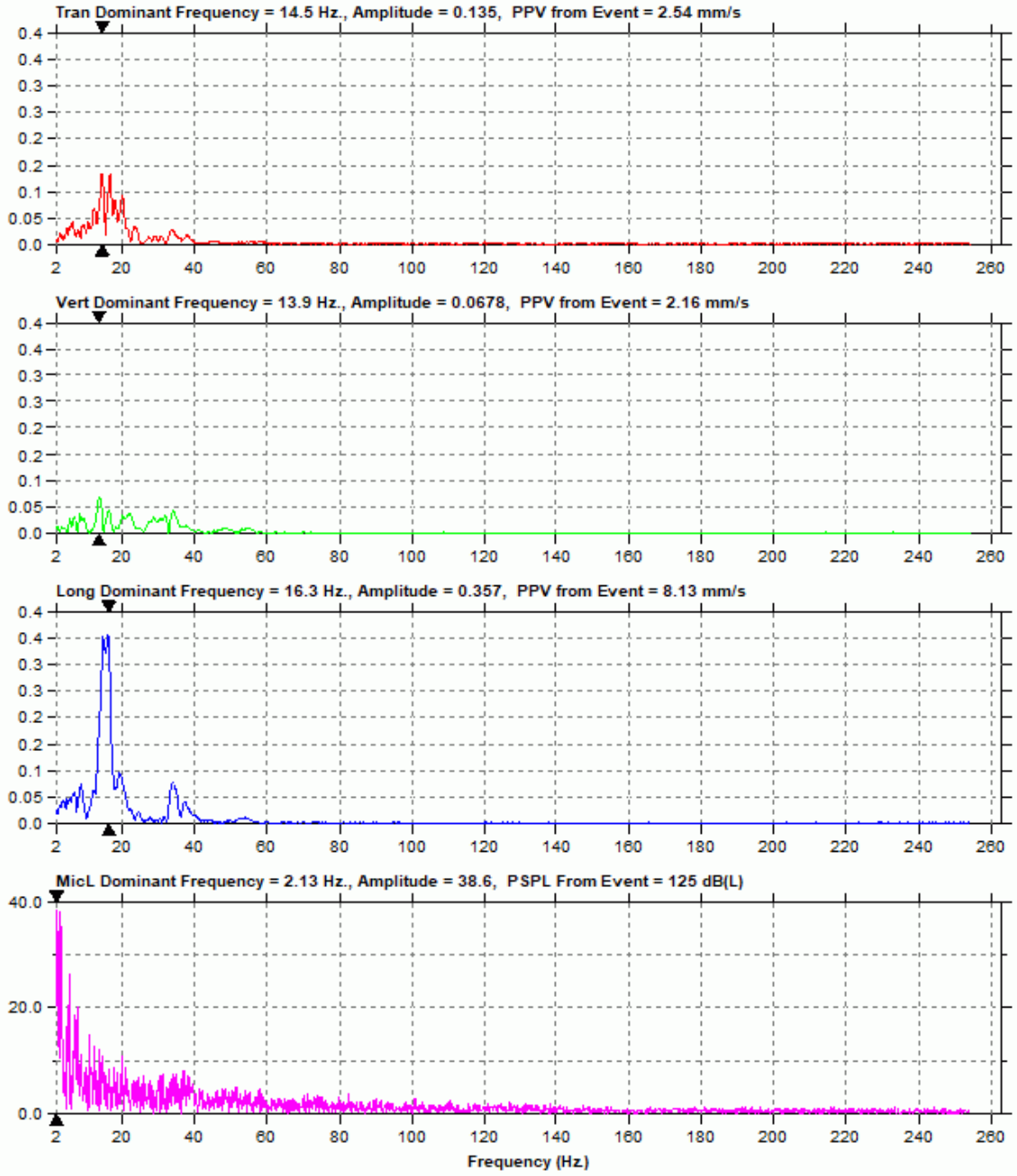
Notes

Location: 97 Cougar Ridge Close SW, Calgary, AB
Client: McCaw's Drilling and Blasting
User Name: Explotech Engineering Ltd.
General: Sandbagged on ground

Extended Notes

Combo Mode October 31, 2020 05:16:50
Geophone is sandbagged under the stairs of the backyard deck at 97 Cougar Ridge Close SW adjacent ongoing blasting operations.

Post Event Notes



Created: October 31, 2020 (V - 10.72)

Format (c) 2006-2014 Xmark Corporation

Permanent Monitoring Units																
West Calgary Ring Road			92 Cougarstone Manor SW, Calgary, AB		9555 2 Avenue SW, Calgary, AB		97 Cougar Ridge Close SW, Calgary, AB		130 Cougarstone Close SW, Calgary, AB		128 Cougarstone Manor SW, Calgary, AB		152 Cougarstone Common SW, Calgary, AB		135 Cougarstone Common SW, Calgary, AB	
Blast Date:	**Blast no.**	**Blast time:**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**	**PPV**	**AOP**
3-Nov-20	**WCRR-187**	16:22	1.14mm/s	123.4dB(L)	1.52mm/s	121.9dB(L)	2.92mm/s	119.4dB(L)	0.25mm/s	136.1dB(L)	0.76mm/s	138.4dB(L)	0.64mm/s	120.1dB(L)	0.38mm/s	122.7dB(L)
6-Nov-20	**WCRR-188**	16:11	1.27mm/s	118.1dB(L)	1.27mm/s	119.3dB(L)	3.68mm/s	120.8dB(L)	0.38mm/s	108.8dB(L)	1.02mm/s	112.6dB(L)	1.52mm/s	112.0dB(L)	0.76mm/s	108.8dB(L)
20-Nov-20	**WCRR-189**	16:05	1.52mm/s	117.2dB(L)	1.52mm/s	115.2dB(L)	2.79mm/s	118.7dB(L)	0.38mm/s	112.7dB(L)	0.64mm/s	112.3dB(L)	0.51mm/s	116.9dB(L)	0.38mm/s	108.4dB(L)
21-Nov-20	**WCRR-190**	16:09	1.65mm/s	118.1dB(L)	1.14mm/s	121.9dB(L)	3.30mm/s	114.8dB(L)	Communication with monitor interrupted		0.76mm/s	123.4dB(L)	0.64mm/s	114.8dB(L)	0.38mm/s	114.0dB(L)

Please note: None of the controlled blasts in November generated ground vibrations of a sufficient amplitude to produce a seismograph waveform report.