

Date/Time

Long at 13:04:53 February 1, 2017

Trigger Source Range Record Time

Geo: 0.810 mm/s Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Post Event Notes Customer Site Blast ID Monitor Location

Serial Number

Battery Level

File Name

BlakeBrook

BLA 17 MP#1 (484 nimbin RD)

6.0 Volts

Unit Calibration May 6, 2015 by Saros (Int)

O456GQUV.050

Lucas Flanagan

BE13456 V 10.72-1.1 Minimate Blaster

Extended Notes

Linear Weighting Microphone

PSPL

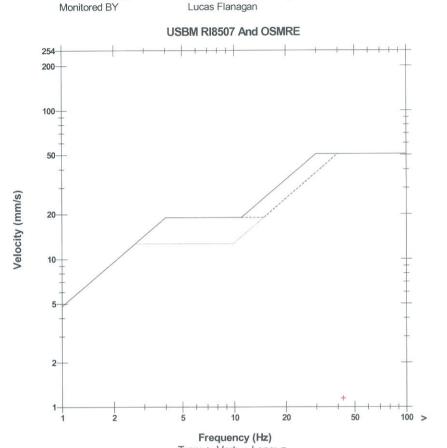
109.9 dB(L) 6.25 pa.(L) at 1.797 sec

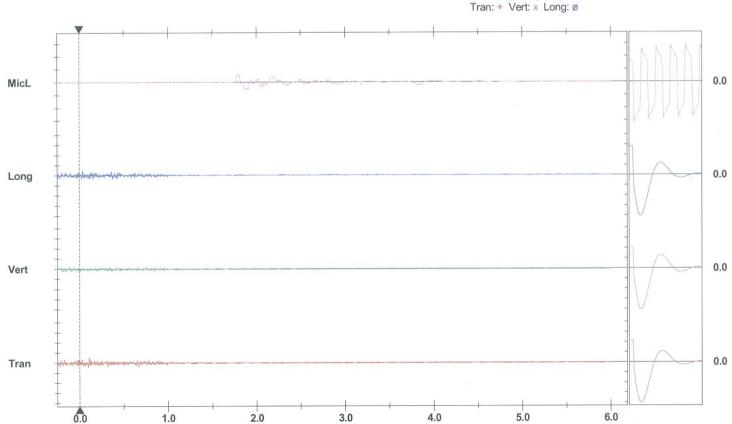
ZC Freq 8.8 Hz

Channel Test Passed (Freq = 20.1 Hz Amp = 454 mv)

	Tran	Vert	Long	
PPV	1.14	0.508	0.889	mm/s
ZC Freq	43	21	47	Hz
Time (Rel. to Trig)	0.110	-0.189	0.038	sec
Peak Acceleration	0.0265	0.0265	0.0265	g
Peak Displacement	0.00484	0.00415	0.00310	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.4	7.6	Hz
Overswing Ratio	3.8	3.2	3.6	

Peak Vector Sum 1.18 mm/s at 0.110 sec





Trigger =

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div



Date/Time Trigger Source Geo: 0.810 mm/s

Tran at 13:04:53 February 1, 2017

Range Record Time

Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Post Event Notes Blast ID

Customer Site

Serial Number

Battery Level

File Name

BlakeBrook **BLA 17**

Monitor Location Monitored BY

MP#2 (356-387 Boorie Creek RD)

BE13371 V 10.72-1.1 Minimate Blaster

Lucas Flanagan

6.2 Volts Unit Calibration May 20, 2016 by Saros (Int)

TEMP.EVT

Extended Notes

Linear Weighting Microphone

PSPL

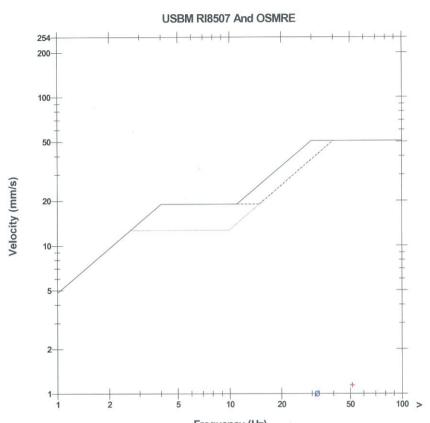
101.9 dB(L) 2.50 pa.(L) at 2.022 sec

ZC Freq 4.9 Hz

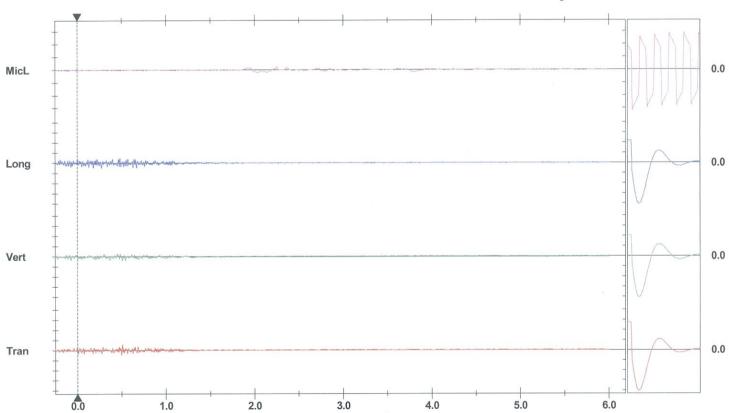
Channel Test Passed (Freq = 20.5 Hz Amp = 475 mv)

	Tran	Vert	Long	
PPV	1.14	0.762	1.02	mm/s
ZC Freq	51	30	32	Hz
Time (Rel. to Trig)	0.509	0.506	0.273	sec
Peak Acceleration	0.0398	0.0265	0.0265	g
Peak Displacement	0.00347	0.00502	0.00477	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.4	7.4	7.5	Hz
Overswing Ratio	3.8	3.5	3.5	

Peak Vector Sum 1.38 mm/s at 0.509 sec



Frequency (Hz) Tran: + Vert: x Long: Ø



Trigger =

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div

Blast Number: BLA 18
Location: Main pit
Time: 13:11

Date: 23/03/2017

Monitor Location: 356-387 Boorie Creek Rd

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Brenton Oppermann

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13456
next Calibration due 20-May-17

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 18
Location: Main Pit
Time: 13:11

Date: 23/03/2017
Monitor Location: 484 Nimbin Rd

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Brenton Oppermann

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 500m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13371 next Calibration due 20-May-17

^{*} Monitor log Shows No Event trigger at time of blast



MARCH

Long at 13:11:00 February 23, 2017 Geo: 0.810 mm/s Date/Time

Trigger Source Geo: 254 mm/s Range Record Time

Notes

6.0 sec at 1024 sps

File Name **Post Event Notes Customer Site**

Serial Number

Battery Level

Blake Brook BLA 18 Blast ID MP#3 464-528 Nimbin Rd

6.2 Volts

Unit Calibration March 4, 2016 by Saros (Int)

N705GRZT.UR0

Monitor Location Monitored by Brenton Oppermann

Extended Notes

Microphone Linear Weighting 109.5 dB(L) at 2.299 sec PSPL

ZC Freq 3.8 Hz

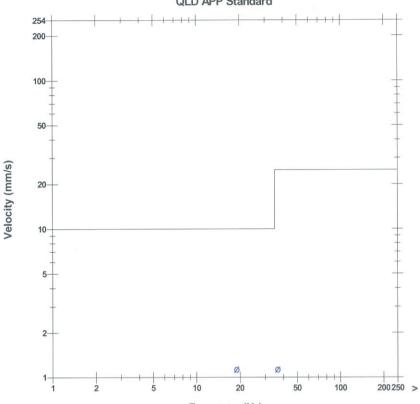
Channel Test Passed (Freq = 20.1 Hz Amp = 519 mv)

	Tran	Vert	Long	
PPV	0.762	0.635	1.14	mm/s
ZC Freq	32	26	37	Hz
Time (Rel. to Trig)	0.461	1.139	0.004	sec
Peak Acceleration	0.0398	0.0133	0.0265	g
Peak Displacement	0.00453	0.00527	0.00943	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.4	7.3	Hz
Overswing Ratio	3.7	3.4	3.7	

Peak Vector Sum 1.23 mm/s at 0.004 sec

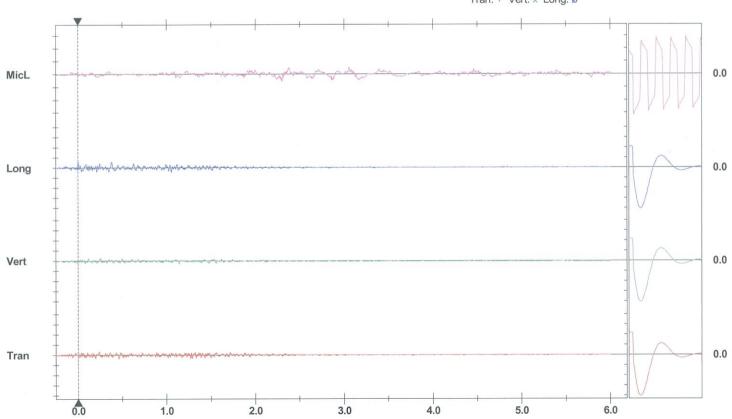


BE12705 V 10.72-1.1 Minimate Blaster



velole?

Frequency (Hz) Tran: + Vert: x Long: Ø



Trigger = ▶

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div

Blast Number:

BLA21 BLA22

Location:

Main pit

Time:

11.45

Date:

24/04/2017

Monitor Location:

484 Nimbin Road

Weather:

O/cast

NO TRIGGER REPORT

monitoring conducted by:

Brenton Oppermann

Geophone Trigger Level:

0.81 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.81mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number next Calibration due

BE13456 20-May-17

* Monitor log Shows No Event trigger at time of blast

Blast Number:

BLA 21 / BLA22

Location:

Main Pit

Time:

11.45

Date:

24/04/2017

Monitor Location:

533 Nimbin Rd

Weather:

o/cast

NO TRIGGER REPORT

monitoring conducted by:

Brenton Oppermann

Geophone Trigger Level:

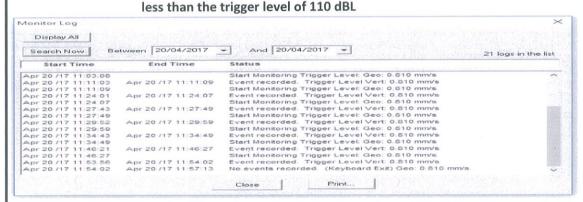
0.81 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from 500m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.81mm/s and that the blast over pressure was less



Instantel Minimate Blaster Serial Number next Calibration due

BE13371 20-May-17

* Monitor log Shows No Event trigger at time of blast



Date/Time

Vert at 12:32:08 May 25, 2017

Trigger Source Range Record Time

Geo: 0.810 mm/s Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Post Event Notes Customer Site

BE13456 V 10.72-1.1 Minimate Blaster

6.1 Volts

Battery Level Unit Calibration May 6, 2015 by Saros (Int)

File Name O456GWO2.TK0

Serial Number

Blast ID

BlakeBrook BLA 23

Monitor Location

#3(464-528 Nimbin RD)

Peter Bradford

Extended Notes

Microphone PSPL

Linear Weighting 98.8 dB(L) at 1.510 sec

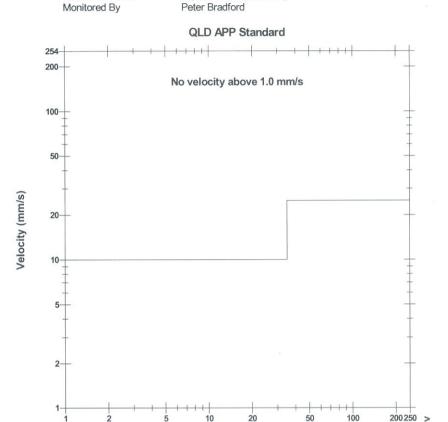
ZC Freq

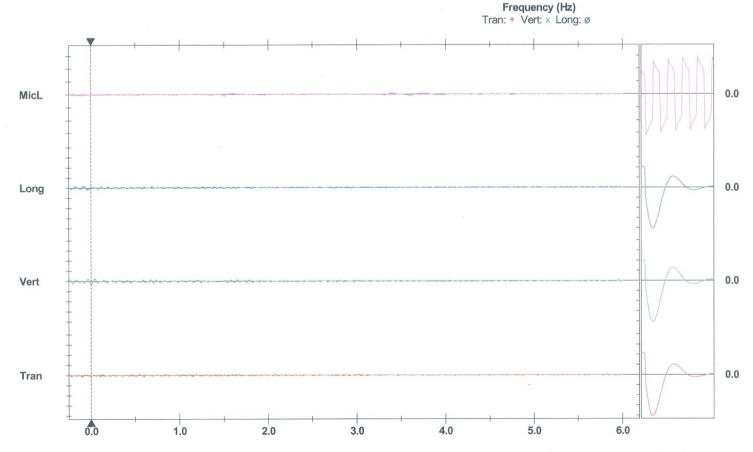
21 Hz

Channel Test Passed (Freq = 20.1 Hz Amp = 620 mv)

	Tran	Vert	Long	
PPV	0.254	0.762	0.381	mm/
ZC Freq	>100	16	24	Hz
Time (Rel. to Trig)	-0.226	0.000	-0.180	sec
Peak Acceleration	0.0133	0.0265	0.0133	g
Peak Displacement	0.00112	0.00819	0.00490	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.5	7.3	Hz
Overswing Ratio	4.0	3.3	3.8	

Peak Vector Sum 0.773 mm/s at 0.000 sec





Trigger = ▶

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div

Blast Number:

BLA 23

Location:

Main Pit

Time:

13:32 08

Date:

25/05/2017

Monitor Location:

356-387 Boorie Creek Rd

Weather:

Fine

NO TRIGGER REPORT

monitoring conducted by:

Peter Bradford

Geophone Trigger Level:

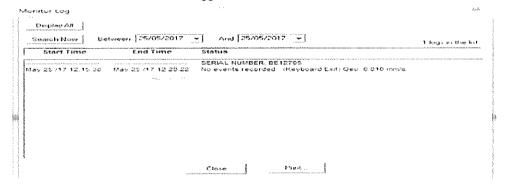
0.51 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from 1200m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number

BE12705

next Calibration due

4-Mar-17

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 23
Location: Main Pit
Time: 13:02 08
Date: 25/05/2017
Monitor Location: 484 Nimbin RD

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Peter Bradford

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 680m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number next Calibration due

BE13371 20-May-17

* Monitor log Shows No Event trigger at time of blast



Date/Time Range

Tran at 13:32:55 July 13: 2017 Trigger Source Geo: 0.810 mm/s, Mic: 110 dB(L)

Record Time 6.0 sec at 1024 sps

Notes

Geo: 254 mm/s

Serial Number BE13371 V 10.72-1 1 Minimate Blaster Battery Level 6.3 Volts

Unit Calibration June 1, 2017 by Saros Int.

_TEMP.EVT File Name

Post Event Notes

BlakeBrook Customer Site Blast ID BLA 25

Monitor Location 464-528 Nimbin Rd Monitored By Brad Markwell

Extended Notes

Microphone Linear Weighting 107.5 dB(L) at 2.337 sec PSPL

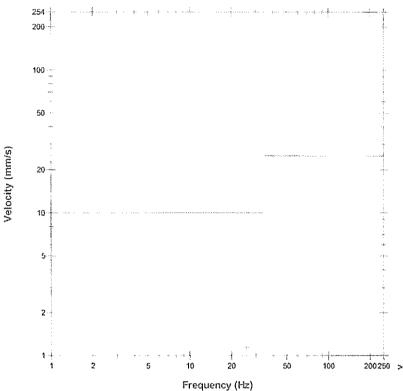
ZC Freq 3.5 Hz

Channel Test Passed (Freq = 20.1 Hz Amp = 578 mv)

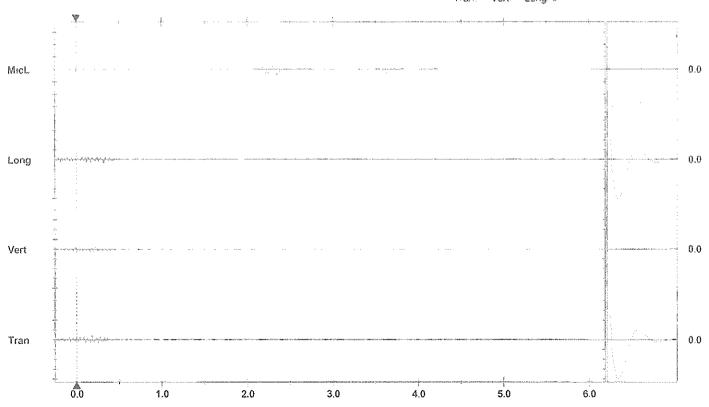
	Tran	Vert	Long	
PPV	1 14	0.635	0.889	mm/s
ZC Freq	26	30	30	Hz
Time (Rel. to Trig)	0.182	0.201	0.319	sec
Peak Acceleration	0.0265	0.0265	0.0265	g
Peak Displacement	0.00657	0.00415	0.00428	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.0	3.6	3.6	

Peak Vector Sum 1.20 mm/s at 0.182 sec





Tran: " Vert: " Long: Ø



Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div



Date/Time

Tran at 13:32:25 July 13, 2017 Trigger Source Geo: 0.810 mm/s, Mic: 110 dB(L)

Range Record Time

Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Post Event Notes Customer Site Blast ID

Serial Number

BE12705 V 10.72-1.1 Minimate Blaster

6.1 Volts

Battery Level Unit Calibration April 10, 2017 by Saros (Int)

TEMP.EVT File Name

> BlakeBrook BLA 25

Monitor Location

Monitored By

356-387 Boorie Creek RD Brad Markwell

Extended Notes

Microphone

PSPL

Linear Weighting 109.5 dB(L) at -0.005 sec

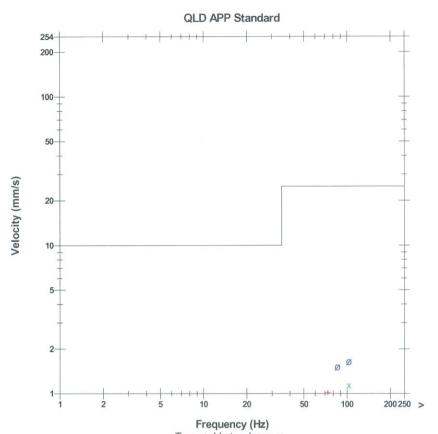
ZC Freq

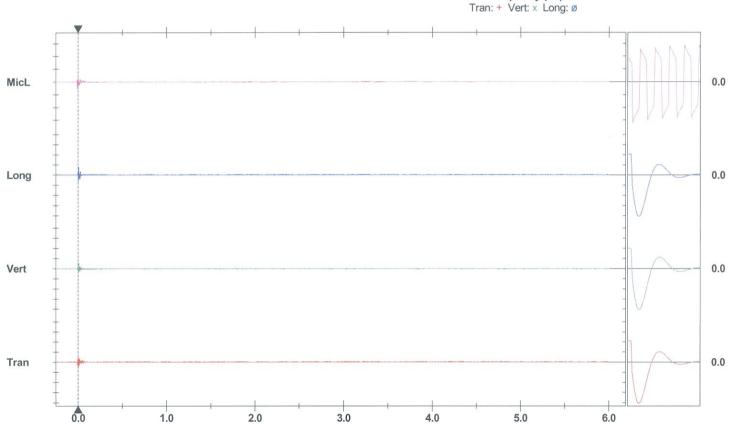
>100 Hz

Channel Test Passed (Freq = 20.1 Hz Amp = 596 mv)

	Tran	Vert	Long	
PPV	1.02	1.14	1.65	mm/s
ZC Freq	73	>100	>100	Hz
Time (Rel. to Trig)	0.001	0.010	0.010	sec
Peak Acceleration	0.0663	0.0795	0.106	g
Peak Displacement	0.00229	0.00167	0.00248	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.4	7.5	Hz
Overswing Ratio	4.0	3.7	3.9	

Peak Vector Sum 2.04 mm/s at 0.010 sec





Trigger = ▶

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div



Long at 13:32:57 July 13, 2017 Date/Time Trigger Source Geo: 0.810 mm/s, Mic: 110 dB(L) Geo: 254 mm/s

Range Record Time

6.0 sec at 1024 sps

Notes

Extended Notes

Microphone Linear Weighting *106.5 dB(L) at 2.641 sec PSPL ZC Freq 6.5 Hz

Channel Test Passed (Freq = 20.5 Hz Amp = 579 mv)

	Tran	Vert	Long	
PPV	0.889	0.635	1.02	กการ
ZC Freq	27	26	16	H_Z
Time (Rel. to Trig)	0.185	0.097	0.497	sec
Peak Acceleration	0.0133	0.0133	0.0265	9
Peak Displacement	0.0115	0 00490	0.0117	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.2	7.5	7.3	Hz
Overswing Ratio	3.9	3.3	3.8	

Peak Vector Sum - 1 10 mm/s at 0.274 sec

Serial Number BE 13456 V 10.72-1.1 Minimate Biaster

Battery Level 6.2 Volts

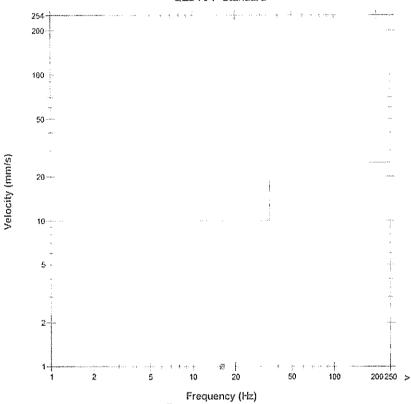
Unit Calibration June 1, 2017 by Saros Int.

TEMPLEVE File Name

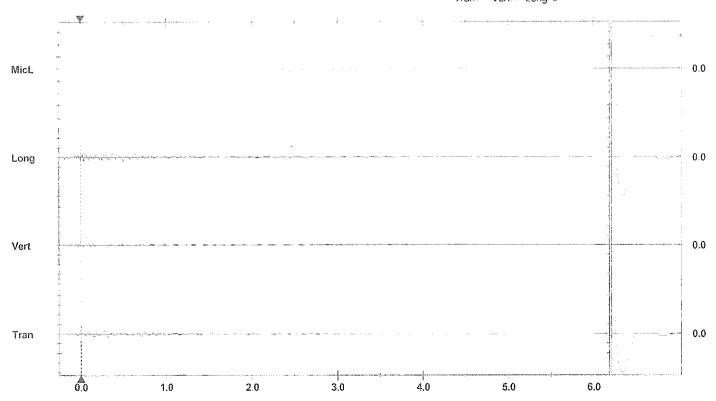
Post Event Notes

BlakeBrook Customer Site BLA 25 Blast ID 484 Nimbin Rd Monitor Location Monitored By Brad Markwell

OLD APP Standard



Tran: * Vert: * Long: Ø



Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div Trigger = I

Blakebrook

Blast Number:

BLA 26

Location:

Main Pit

Time:

12:06 49

Date:

4/08/2017

Monitor Location:

484 Nimbin Rd

Weather:

Fine

NO TRIGGER REPORT

monitoring conducted by:

Brad Markwell

Geophone Trigger Level:

0.51 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from 1100m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number next Calibration due

BE12705

10-Apr-18

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 26
Location: Main Pit
Time: 12:06
Date: 4/08/2017

Monitor Location: 464-528 Nimbin RD

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Brad Markwell

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 800m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13371
next Calibration due 10-Apr-18

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 26
Location: Main pit
Time: 12:06
Date: 4/08/2017

Monitor Location: 356-387 Boorie Creek Rd

Weather: Fine

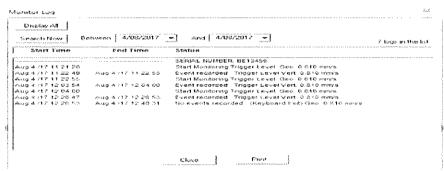
NO TRIGGER REPORT

monitoring conducted by: Brad Markwell

Geophone Trigger Level: 0.51 mm/s
Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 850m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13456 next Calibration due 1-Jun-18

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number:

BLA 27

Location:

Main pit

Time:

. 13:57:49 PM

Date:

9/10/2017

Monitor Location:

356-387 Boorie Creek Rd

Weather:

Fine

NO TRIGGER REPORT

monitoring conducted by:

Brad Markwell

Geophone Trigger Level:

0.51 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from 840m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number

BE13456

next Calibration due

1-Jun-18

^{*} Monitor log Shows No Event trigger at time of blast



Date/Time

Long at 13:57:46 October 9, 2017

Trigger Source Range Record Time

Geo: 0.810 mm/s Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Extended Notes

Linear Weighting 108.8 dB(L) at 2.411 sec Microphone PSPL

ZC Freq 2.8 Hz

Channel Test Passed (Freg = 20.1 Hz Amp = 498 mv)

	Tran	Vert	Long	
PPV	0.762	0.635	0.762	mm/s
ZC Freq	32	27	47	Hz
Time (Rel. to Trig)	0.193	0.343	0.000	sec
Peak Acceleration	0.0265	0.0133	0.0265	g
Peak Displacement	0.00391	0.00397	0.00341	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.4	7.5	7.5	Hz
Overswing Ratio	3.8	3.5	3.6	

Peak Vector Sum 0.916 mm/s at 0.256 sec

Serial Number BE13371 V 10.72-1.1 Minimate Blaster

Battery Level 6.3 Volts

Unit Calibration June 1, 2017 by Saros Int.

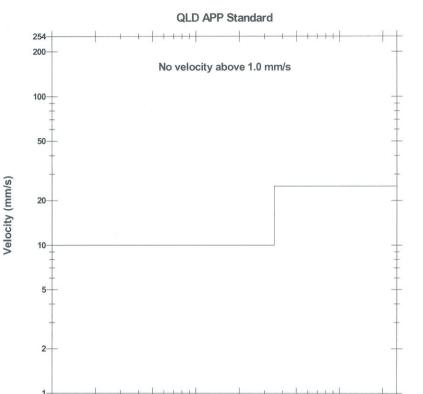
File Name TEMP.EVT

Post Event Notes Customer Site

Blast ID Monitor Location Monitored By

Blakebrook **BLA 27** 484 Nimbin RD

Brad Markwell



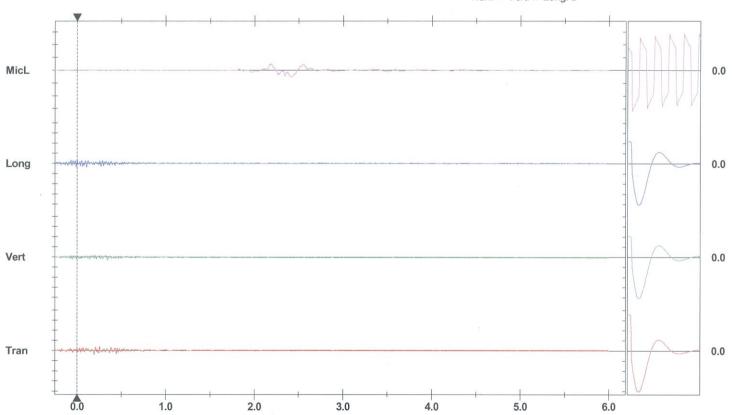
Frequency (Hz) Tran: + Vert: x Long: Ø

50

100

200250 >

10



Trigger =

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div



Date/Time

Long at 13:57:48 October 9, 2017

Trigger Source Range Record Time

Geo: 0.810 mm/s Geo: 254 mm/s

Notes

6.0 sec at 1024 sps

Extended Notes

Linear Weighting Microphone

PSPL

107.0 dB(L) at 2.094 sec

ZC Freq 9.8 Hz

Channel Test Passed (Freq = 20.1 Hz Amp = 467 mv)

	Tran	Vert	Long	
PPV	0.889	0.381	1.14	mm/s
ZC Freq	10	34	20	Hz
Time (Rel. to Trig)	0.422	-0.051	0.004	sec
Peak Acceleration	0.0133	0.0133	0.0133	g
Peak Displacement	0.0138	0.00260	0.0122	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.5	7.4	Hz
Overswing Ratio	3.8	3.5	3.8	

Peak Vector Sum 1.16 mm/s at 0.005 sec

Serial Number

BE12705 V 10.72-1.1 Minimate Blaster

5.9 Volts (Battery Low) **Battery Level**

Unit Calibration April 10, 2017 by Saros (Int) File Name TEMP.EVT

Post Event Notes

Customer Site

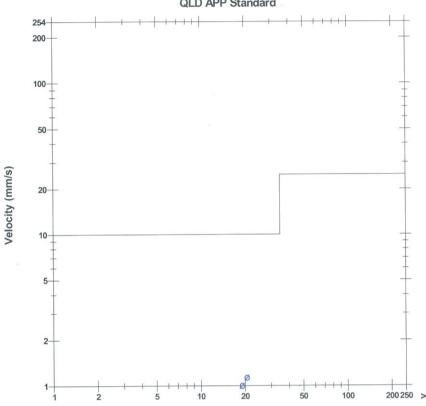
Blakebrook

Blast ID Monitor Location **BLA 27**

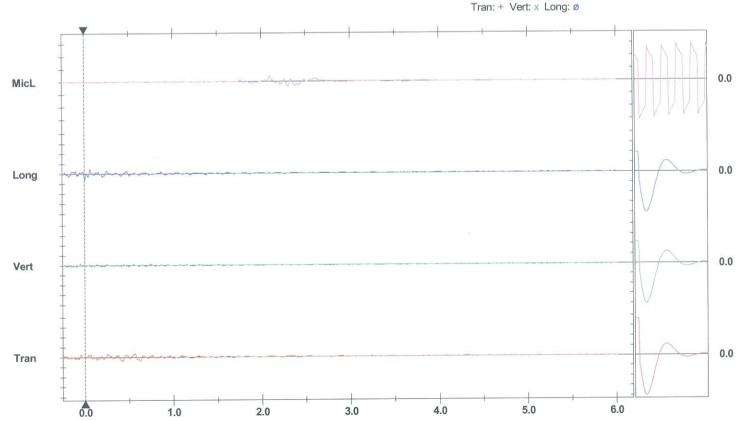
Monitored By

464-528 Nimbin Rd Brad Markwell





Frequency (Hz)



Trigger = ▶

Time Scale: 0.50 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div

Blast Number:

BLA 31

Location:

Mainpit

Time:

14:49.0

Date:

020/12/2017

Monitor Location:

484 Nimbin Rd

Weather:

Fine

NO TRIGGER REPORT

monitoring conducted by:

Brad Markwell

Geophone Trigger Level:

0.51 mm/s

Microphone Trigger level:

110 DBL

NOTES:.... This monitor was approximately from 1100m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number

BE12705

next Calibration due

10-Apr-18

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 31 Location: Main Pit

Time: 14:49:00 PM Date: 20/12/2017

Monitor Location: 464-528 Nimbin RD

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Brad Markwell

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 870m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13371 next Calibration due 10-Apr-18

^{*} Monitor log Shows No Event trigger at time of blast

Blast Number: BLA 31
Location: Main pit
Time: 14:49

Date: 20/12/2017

Monitor Location: 356-387 Boorie Creek Rd

Weather: Fine

NO TRIGGER REPORT

monitoring conducted by: Brad Markwell

Geophone Trigger Level: 0.51 mm/s Microphone Trigger level: 110 DBL

NOTES:.... This monitor was approximately from 850m

from the Blast. Donnelly blasting services advises that the Blast Viration Was lower than the trigger level of 0.51mm/s and that the blast over pressure was less less than the trigger level of 110 dBL



Instantel Minimate Blaster Serial Number BE13456 next Calibration due 1-Jun-18

^{*} Monitor log Shows No Event trigger at time of blast