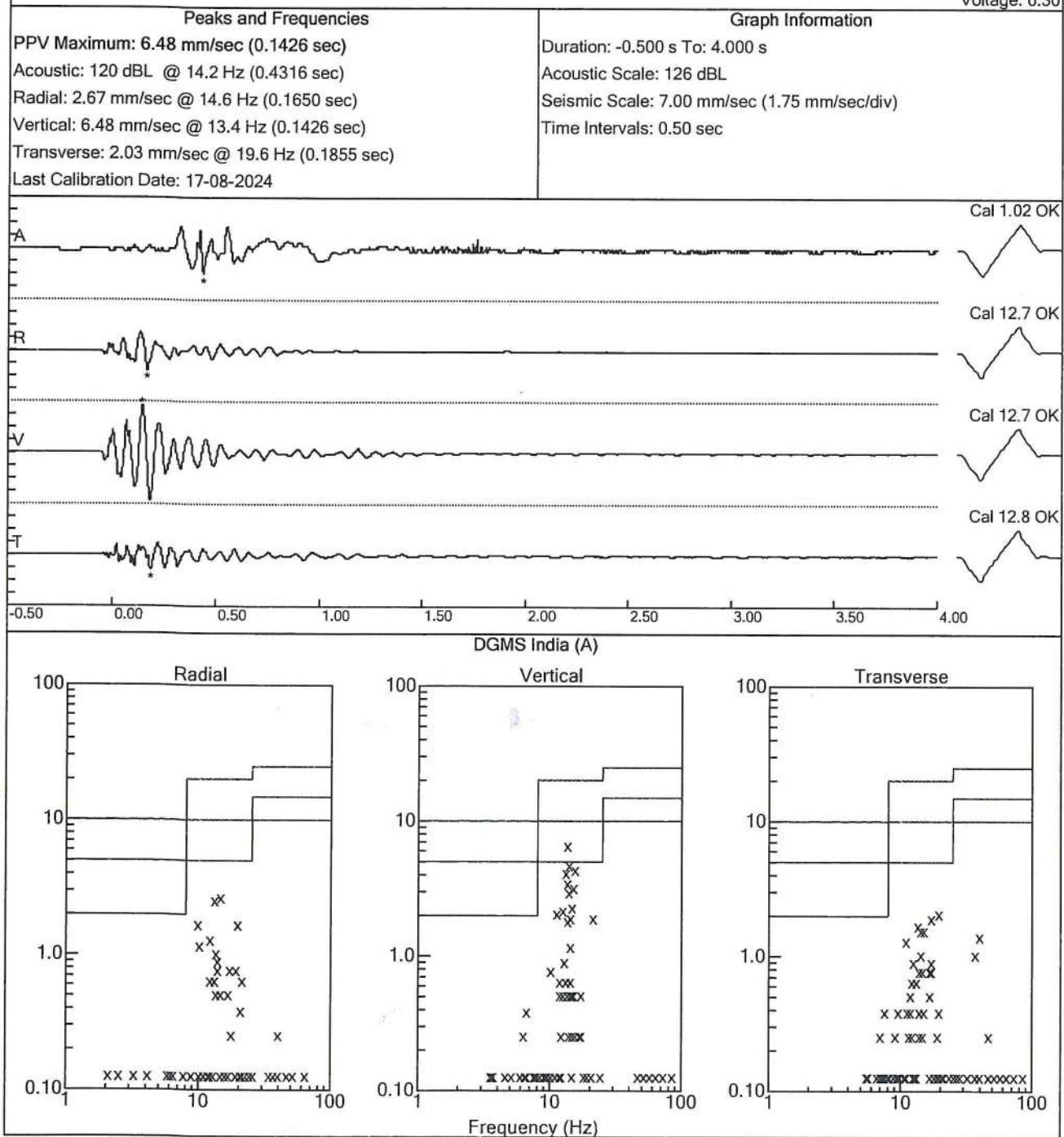


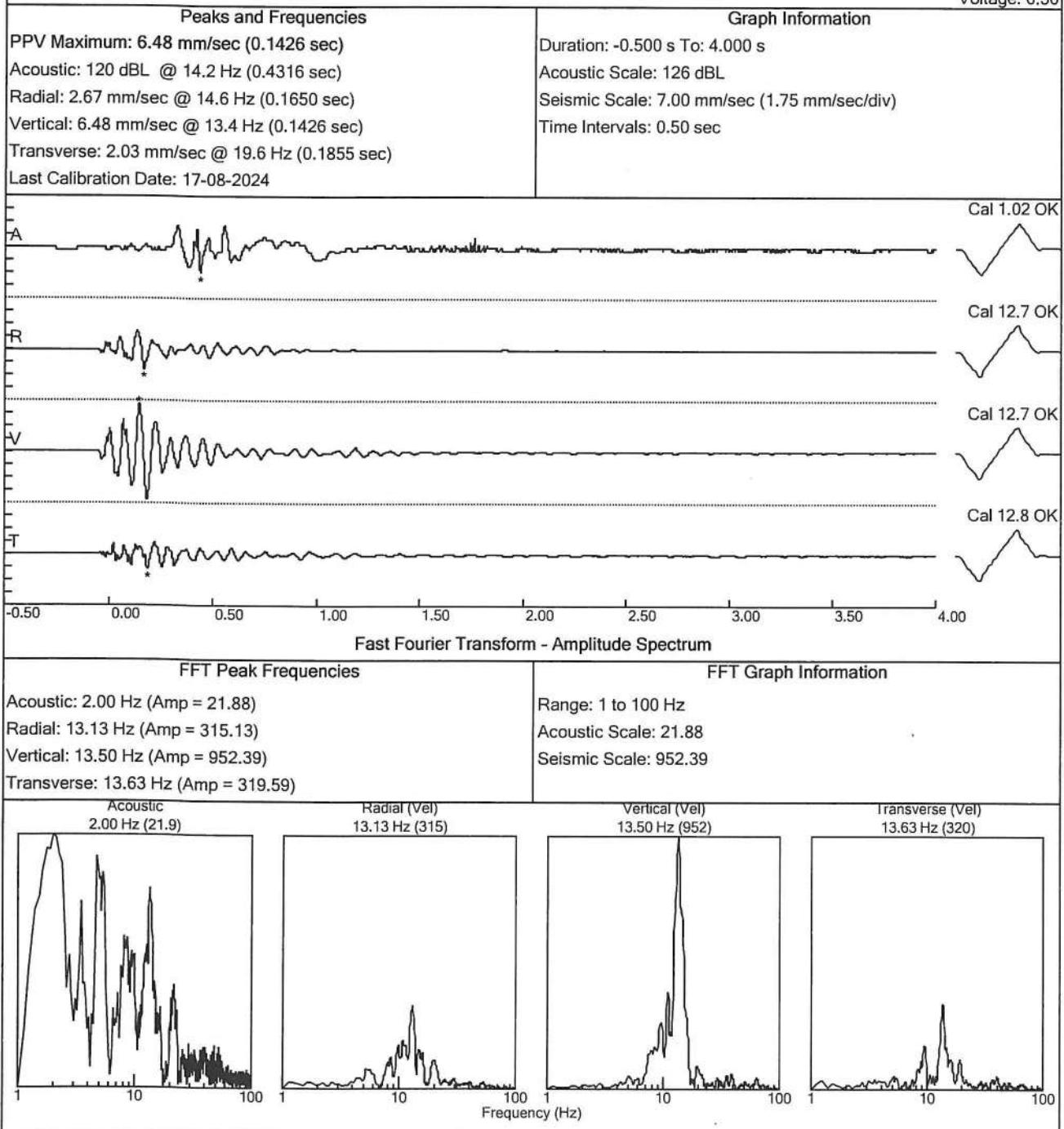
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221424201.dtb
Number: 201
Date and Time: 04-10-2024 14:24:00
SN: 6351
Seismic Trigger: 2.54 mm/sec
Air Trigger: 142 dB
Sample Rate: 1024
Duration: 4 Seconds
Pre-Trigger: 0.5 Second
Seismic Range: 63.5 in/s
Acoustic Range: 142 dB
Gain: 2.0x
Voltage: 6.30



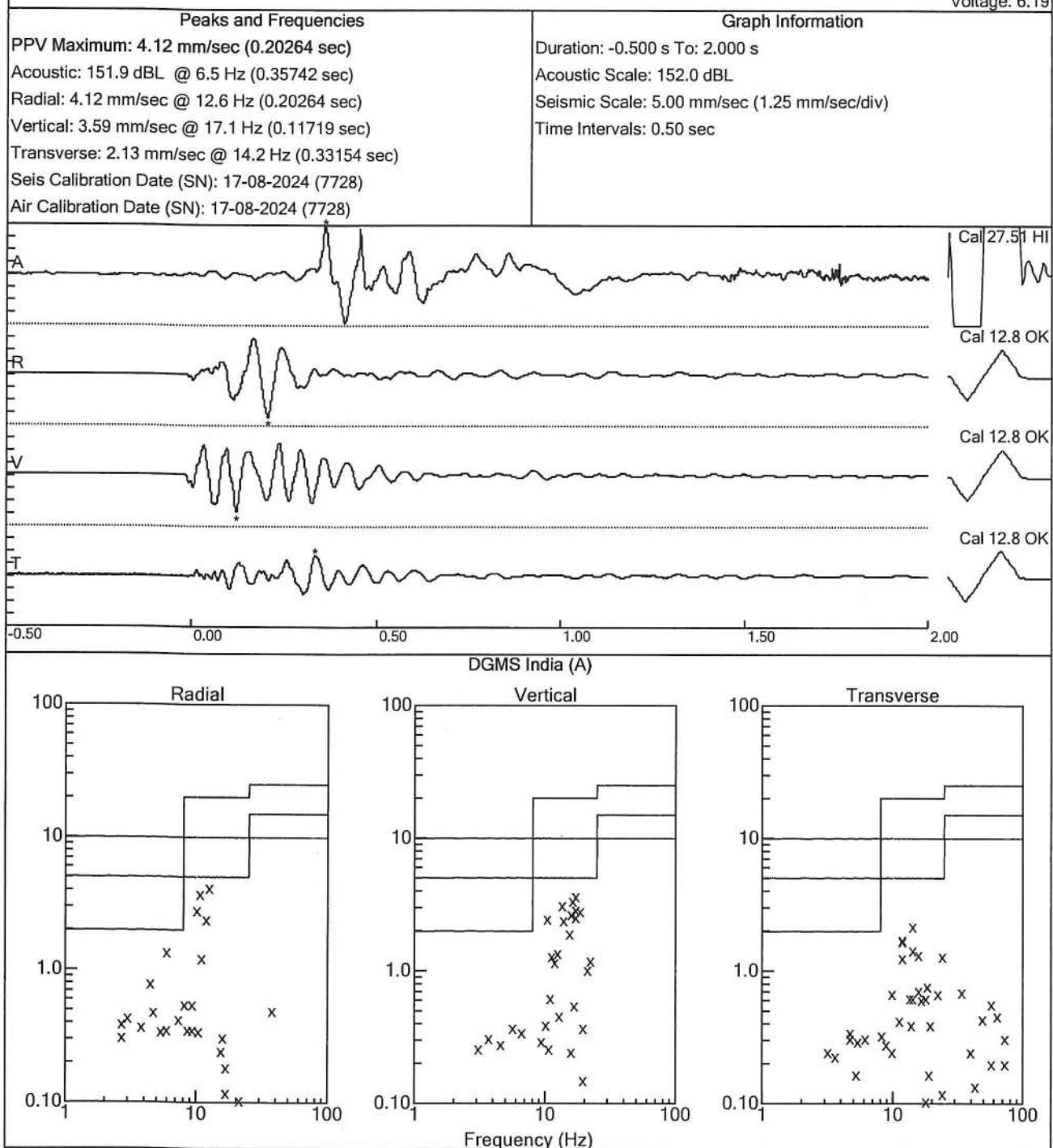
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221424201.dtb
Number: 201
Date and Time: 04-10-2024 14:24:00
SN: 6351
Seismic Trigger: 2.54 mm/sec
Air Trigger: 142 dB
Sample Rate: 1024
Duration: 4 Seconds
Pre-Trigger: 0.5 Second
Seismic Range: 63.5 in/s
Acoustic Range: 142 dB
Gain: 2.0x
Voltage: 6.30



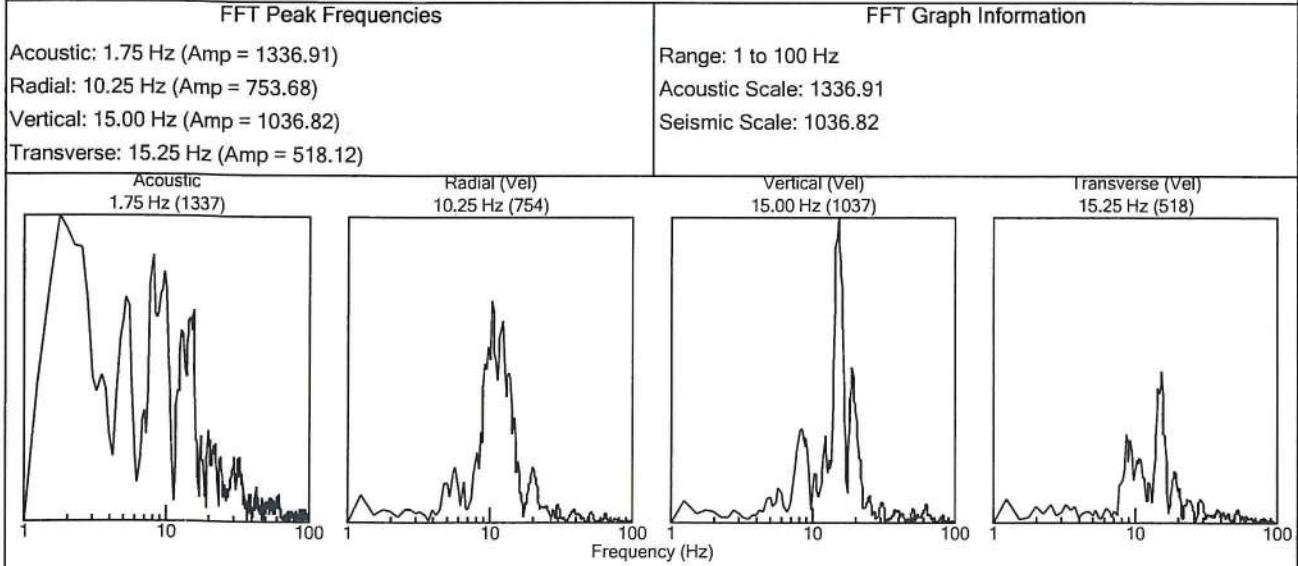
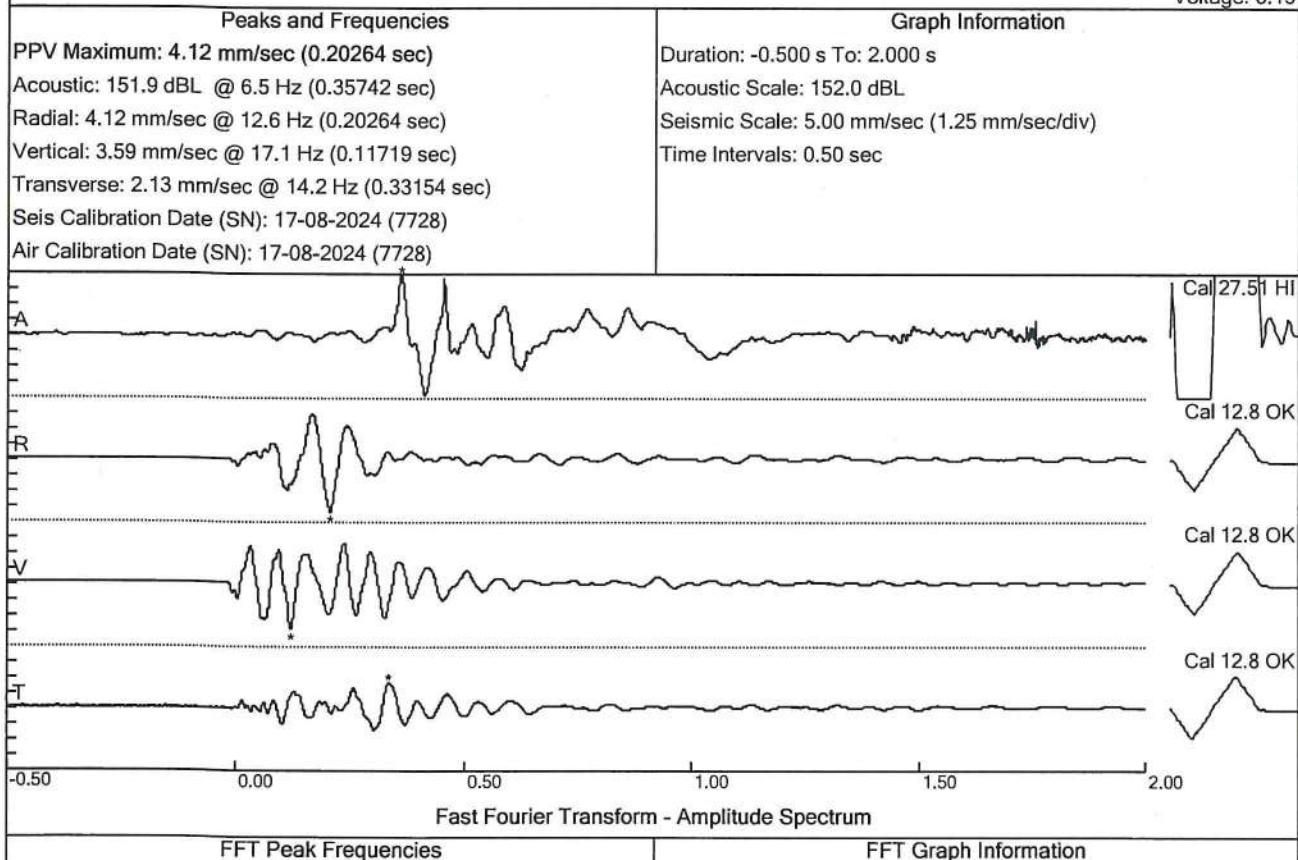
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha31z42z.evt
Number: 0107
Date and Time: 04-10-2024 14:25:28
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 2 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.19



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha31z42z.evt
Number: 0107
Date and Time: 04-10-2024 14:25:28
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 2 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dBL
Voltage: 6.19

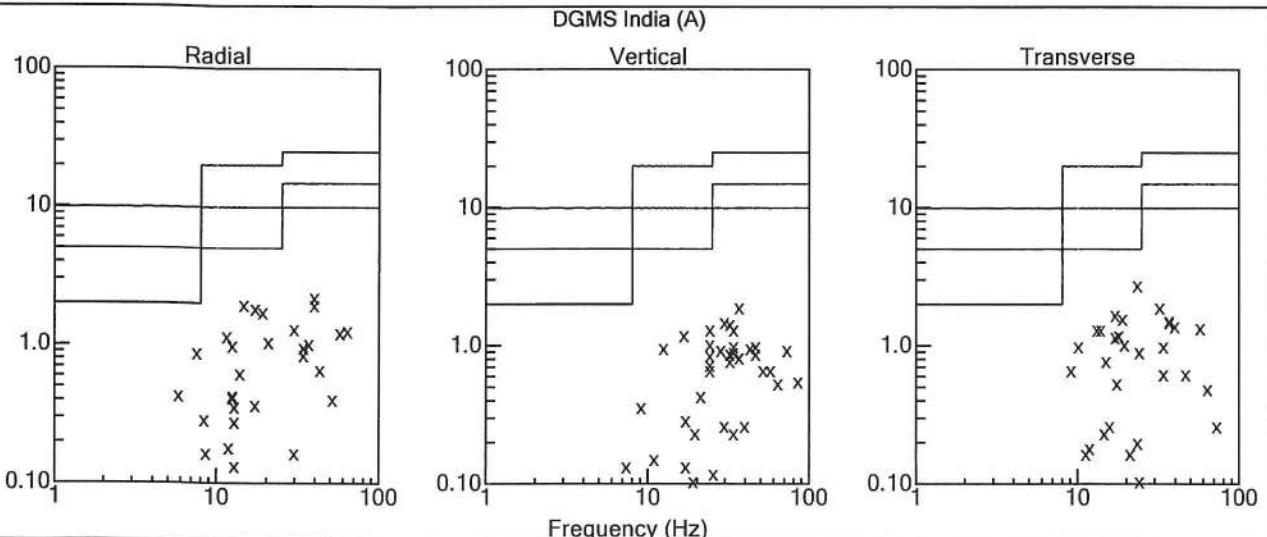
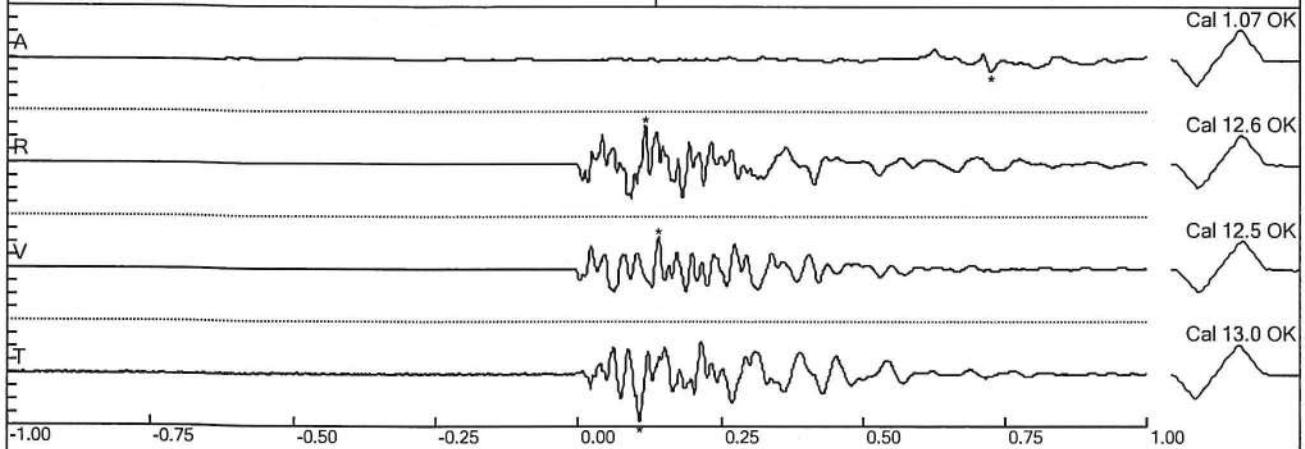


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha321o5h.evt
Number: 0197
Date and Time: 04-10-2024 14:26:20
SN: 7729
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26

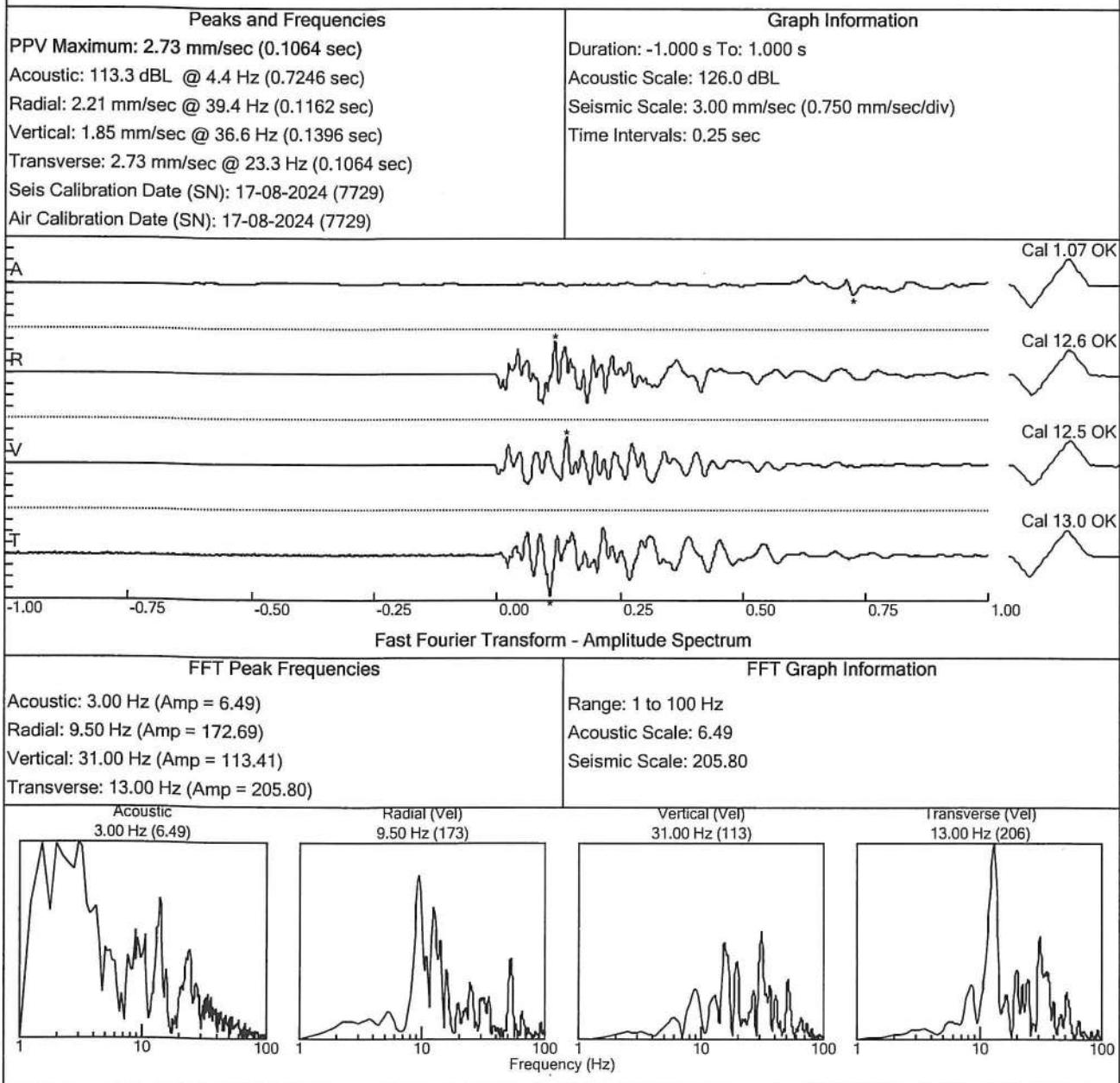
Peaks and Frequencies	
PPV Maximum: 2.73 mm/sec	(0.1064 sec)
Acoustic: 113.3 dB	BL @ 4.4 Hz (0.7246 sec)
Radial: 2.21 mm/sec	@ 39.4 Hz (0.1162 sec)
Vertical: 1.85 mm/sec	@ 36.6 Hz (0.1396 sec)
Transverse: 2.73 mm/sec	@ 23.3 Hz (0.1064 sec)
Seis Calibration Date (SN):	17-08-2024 (7729)
Air Calibration Date (SN):	17-08-2024 (7729)

Graph Information	
Duration:	-1.000 s To: 1.000 s
Acoustic Scale:	126.0 dB
Seismic Scale:	3.00 mm/sec (0.750 mm/sec/div)
Time Intervals:	0.25 sec



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

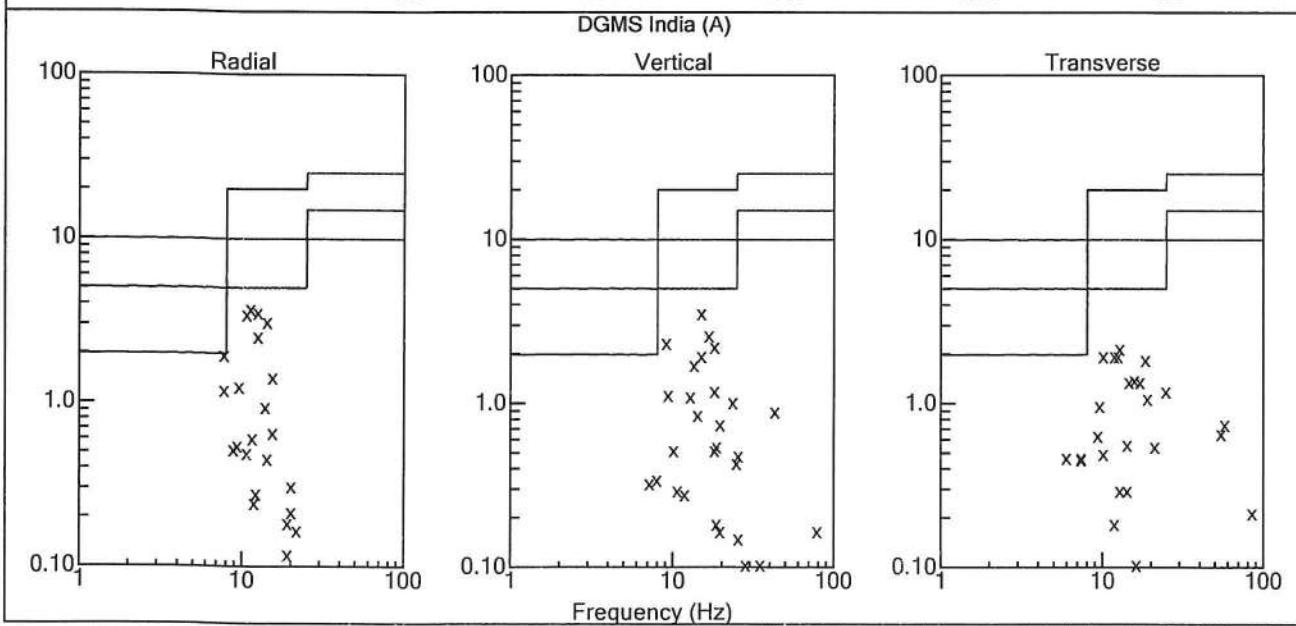
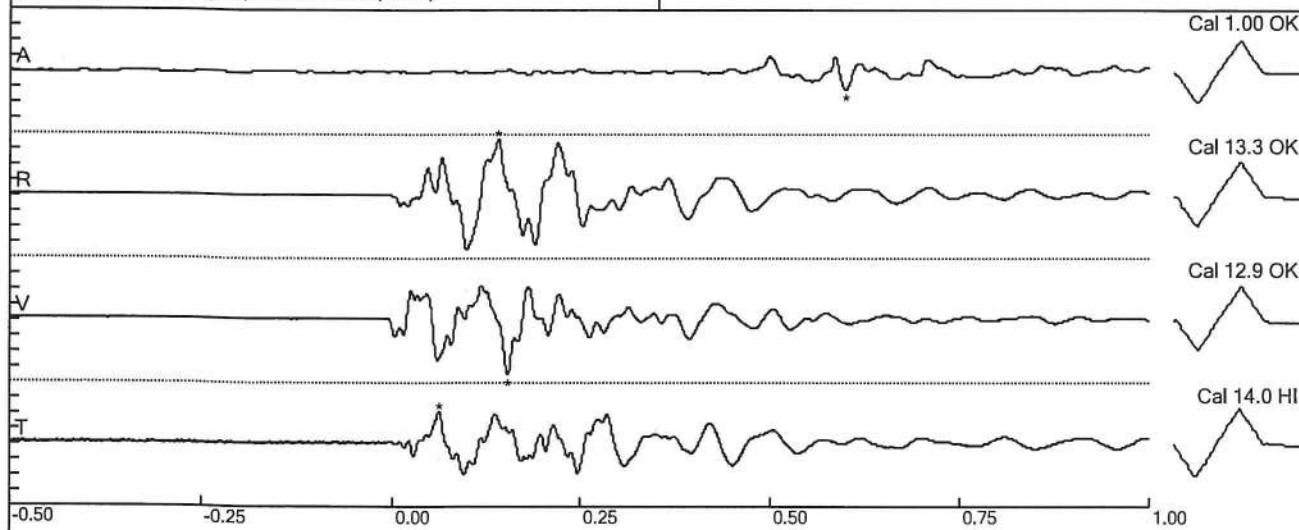
File: ha321o5h.evt
Number: 0197
Date and Time: 04-10-2024 14:26:20
SN: 7729
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

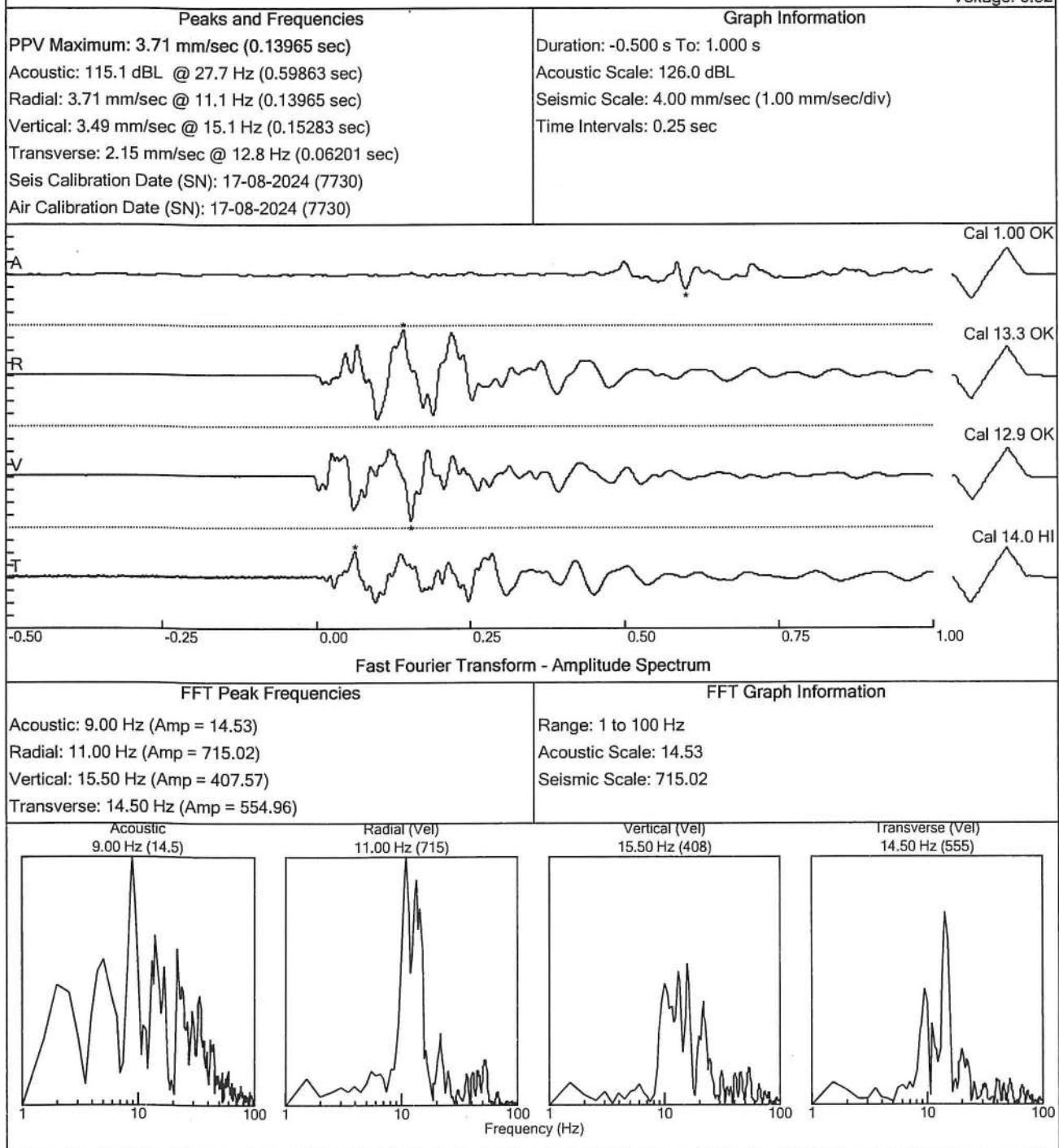
File: ha321k75.evt
Number: 0257
Date and Time: 04-10-2024 14:26:16
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.32

Peaks and Frequencies	Graph Information
PPV Maximum: 3.71 mm/sec (0.13965 sec)	Duration: -0.500 s To: 1.000 s
Acoustic: 115.1 dB @ 27.7 Hz (0.59863 sec)	Acoustic Scale: 126.0 dB
Radial: 3.71 mm/sec @ 11.1 Hz (0.13965 sec)	Seismic Scale: 4.00 mm/sec (1.00 mm/sec/div)
Vertical: 3.49 mm/sec @ 15.1 Hz (0.15283 sec)	Time Intervals: 0.25 sec
Transverse: 2.15 mm/sec @ 12.8 Hz (0.06201 sec)	
Seis Calibration Date (SN): 17-08-2024 (7730)	
Air Calibration Date (SN): 17-08-2024 (7730)	



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha321k75.evt
Number: 0257
Date and Time: 04-10-2024 14:26:16
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.32



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221434202.dtb

Number: 202

Date and Time: 04-10-2024 14:34:00

SN: 6351

Seismic Trigger: 2.54 mm/sec

Air Trigger: 142 dB

Sample Rate: 1024

Duration: 4 Seconds

Pre-Trigger: 0.5 Second

Seismic Range: 63.5 in/s

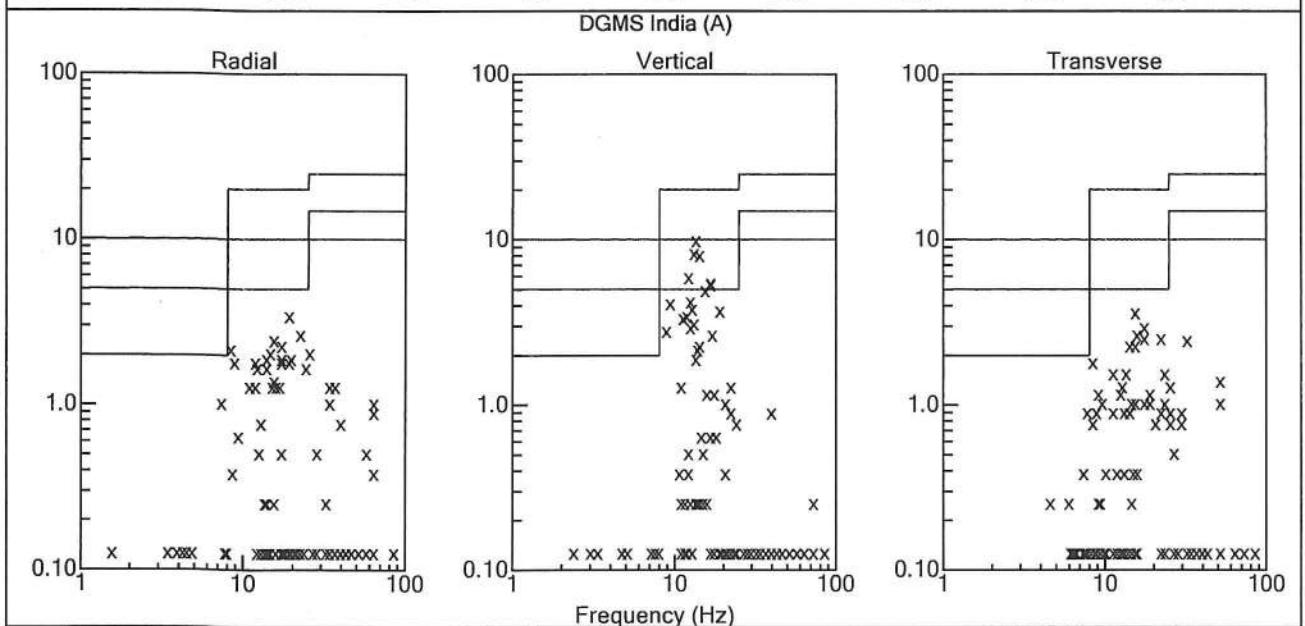
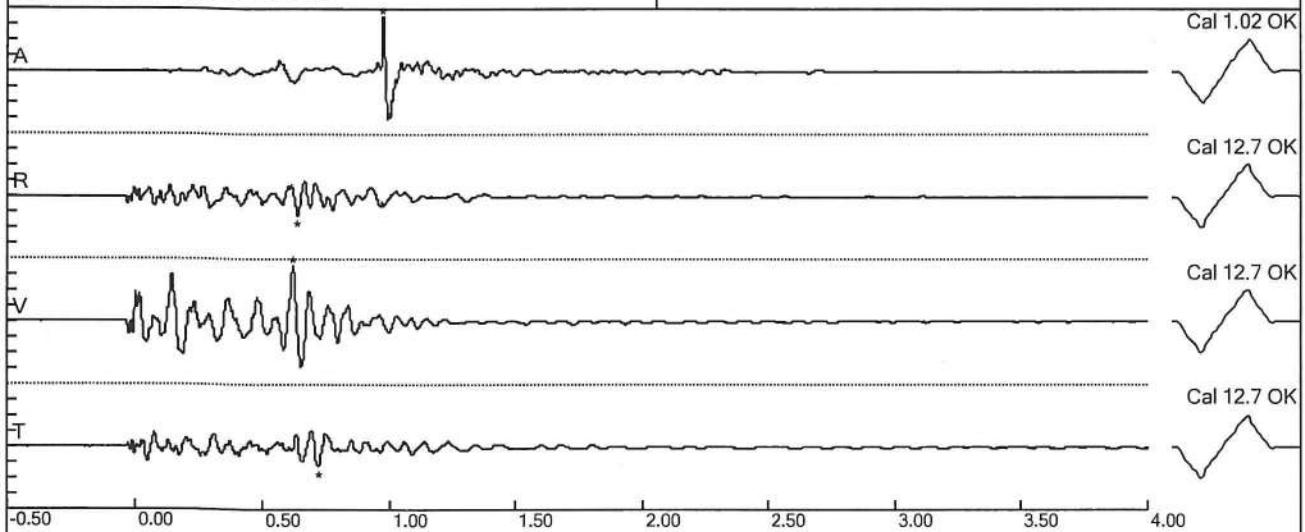
Acoustic Range: 142 dB

Gain: 2.0x

Voltage: 6.30

Peaks and Frequencies	
PPV Maximum: 9.91 mm/sec	(0.6152 sec)
Acoustic: 142 dB	@ 9.6 Hz (0.9668 sec)
Radial: 3.43 mm/sec	@ 18.9 Hz (0.6309 sec)
Vertical: 9.91 mm/sec	@ 13.4 Hz (0.6152 sec)
Transverse: 3.56 mm/sec	@ 15.5 Hz (0.7188 sec)
Last Calibration Date:	17-08-2024

Graph Information	
Duration: -0.500 s	To: 4.000 s
Acoustic Scale:	143 dB
Seismic Scale:	11.0 mm/sec (2.75 mm/sec/div)
Time Intervals:	0.50 sec



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221434202.dtb

Number: 202

Date and Time: 04-10-2024 14:34:00

SN: 6351

Seismic Trigger: 2.54 mm/sec

Air Trigger: 142 dB

Sample Rate: 1024

Duration: 4 Seconds

Pre-Trigger: 0.5 Second

Seismic Range: 63.5 in/s

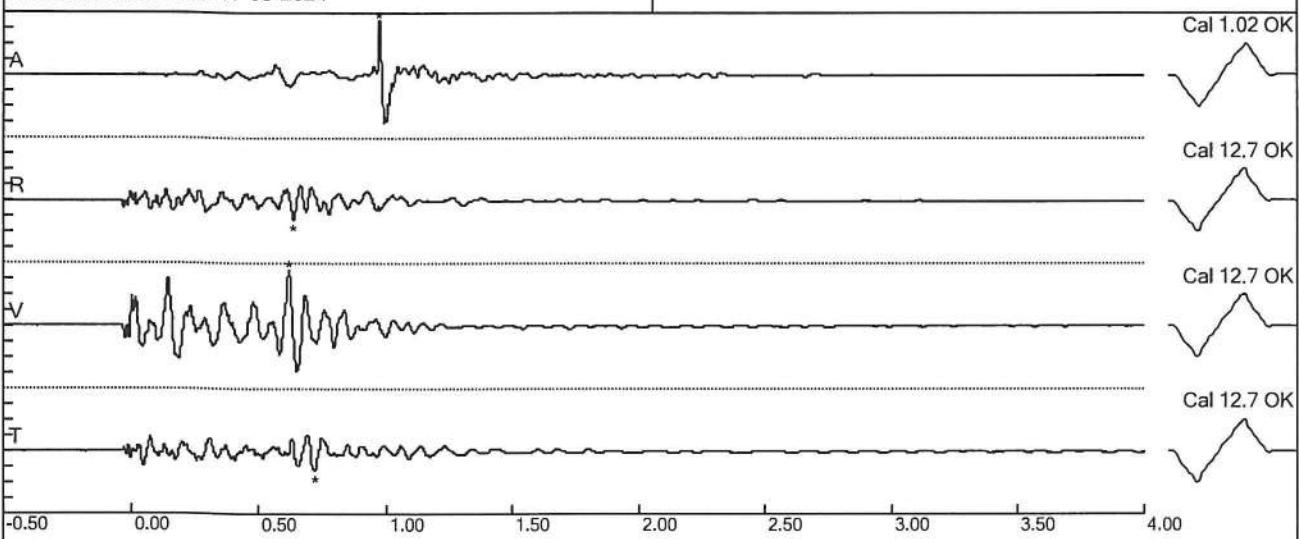
Acoustic Range: 142 dB

Gain: 2.0x

Voltage: 6.30

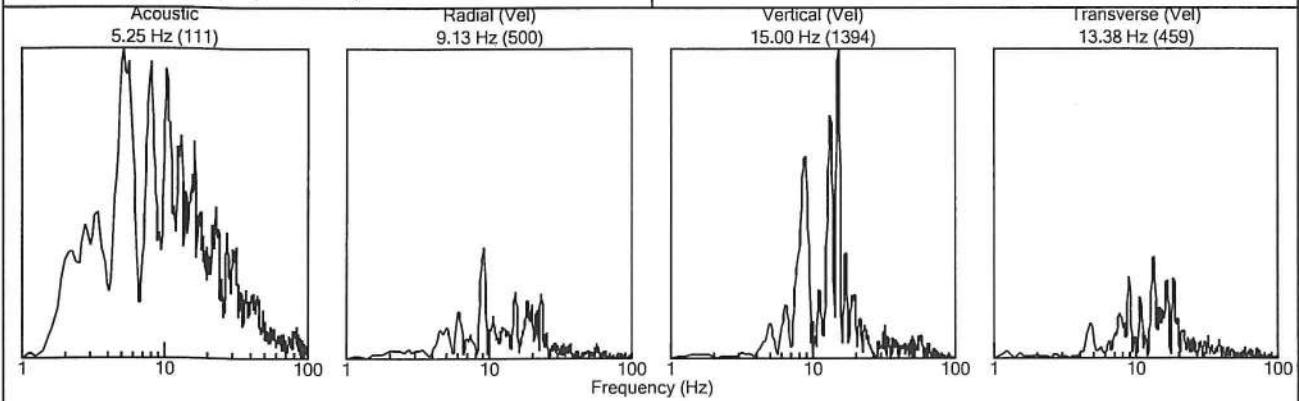
Peaks and Frequencies
PPV Maximum: 9.91 mm/sec (0.6152 sec)
Acoustic: 142 dB @ 9.6 Hz (0.9668 sec)
Radial: 3.43 mm/sec @ 18.9 Hz (0.6309 sec)
Vertical: 9.91 mm/sec @ 13.4 Hz (0.6152 sec)
Transverse: 3.56 mm/sec @ 15.5 Hz (0.7188 sec)
Last Calibration Date: 17-08-2024

Graph Information
Duration: -0.500 s To: 4.000 s
Acoustic Scale: 143 dB
Seismic Scale: 11.0 mm/sec (2.75 mm/sec/div)
Time Intervals: 0.50 sec



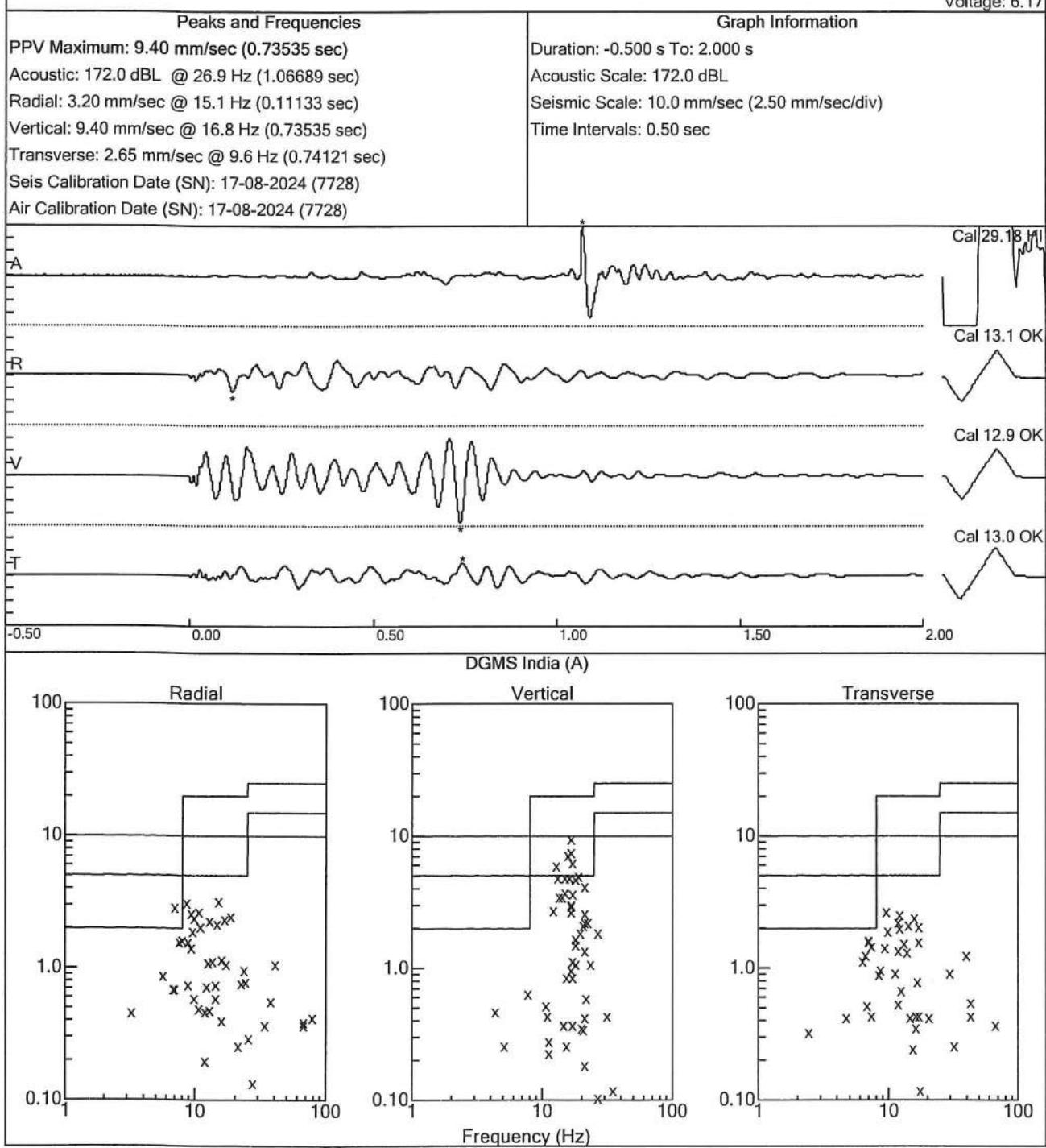
Fast Fourier Transform - Amplitude Spectrum

FFT Peak Frequencies	FFT Graph Information
Acoustic: 5.25 Hz (Amp = 110.74)	Range: 1 to 100 Hz
Radial: 9.13 Hz (Amp = 500.47)	Acoustic Scale: 110.74
Vertical: 15.00 Hz (Amp = 1394.14)	Seismic Scale: 1394.14
Transverse: 13.38 Hz (Amp = 459.36)	



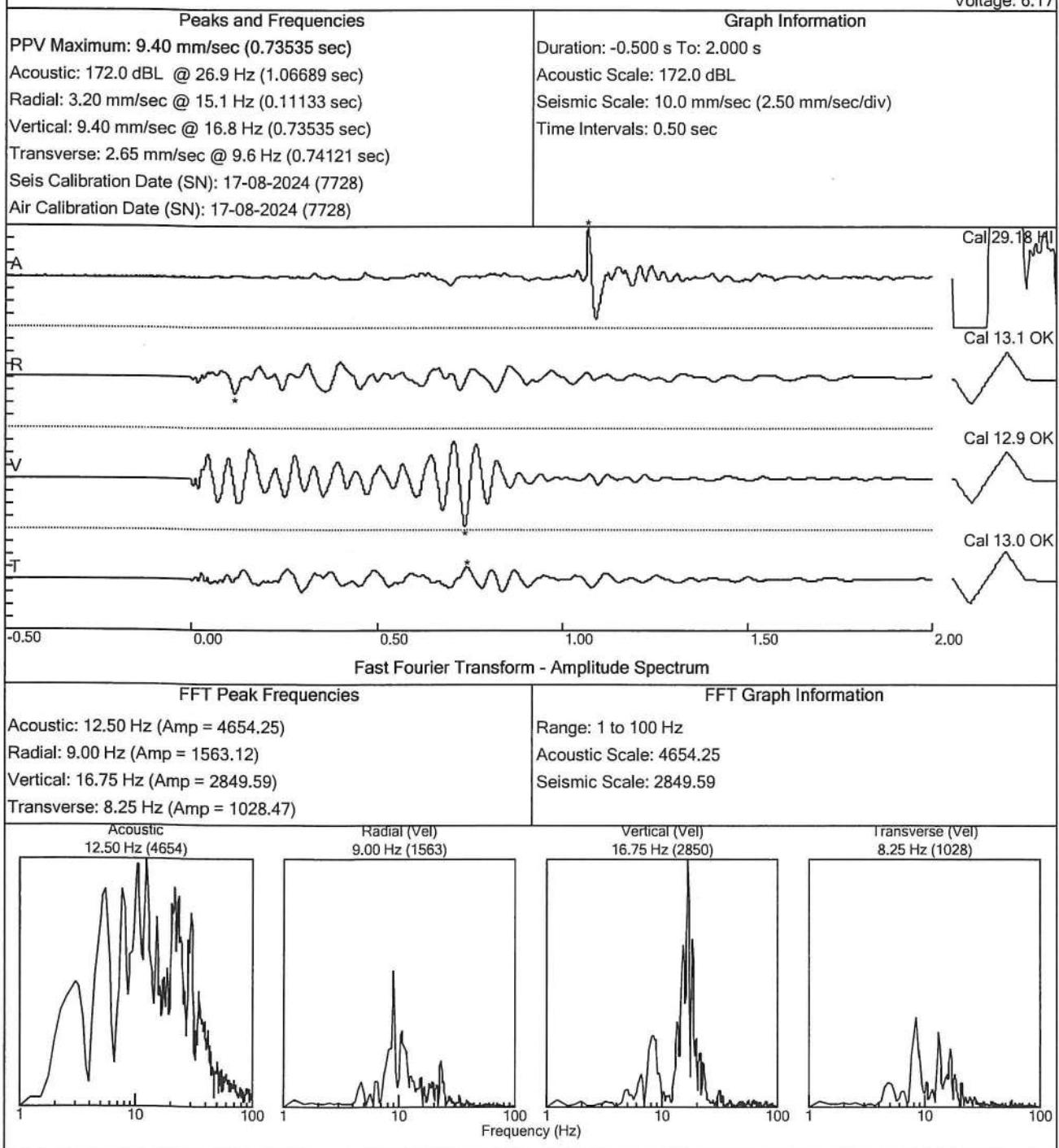
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha32q830.evt
Number: 0108
Date and Time: 04-10-2024 14:35:04
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 2 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.17



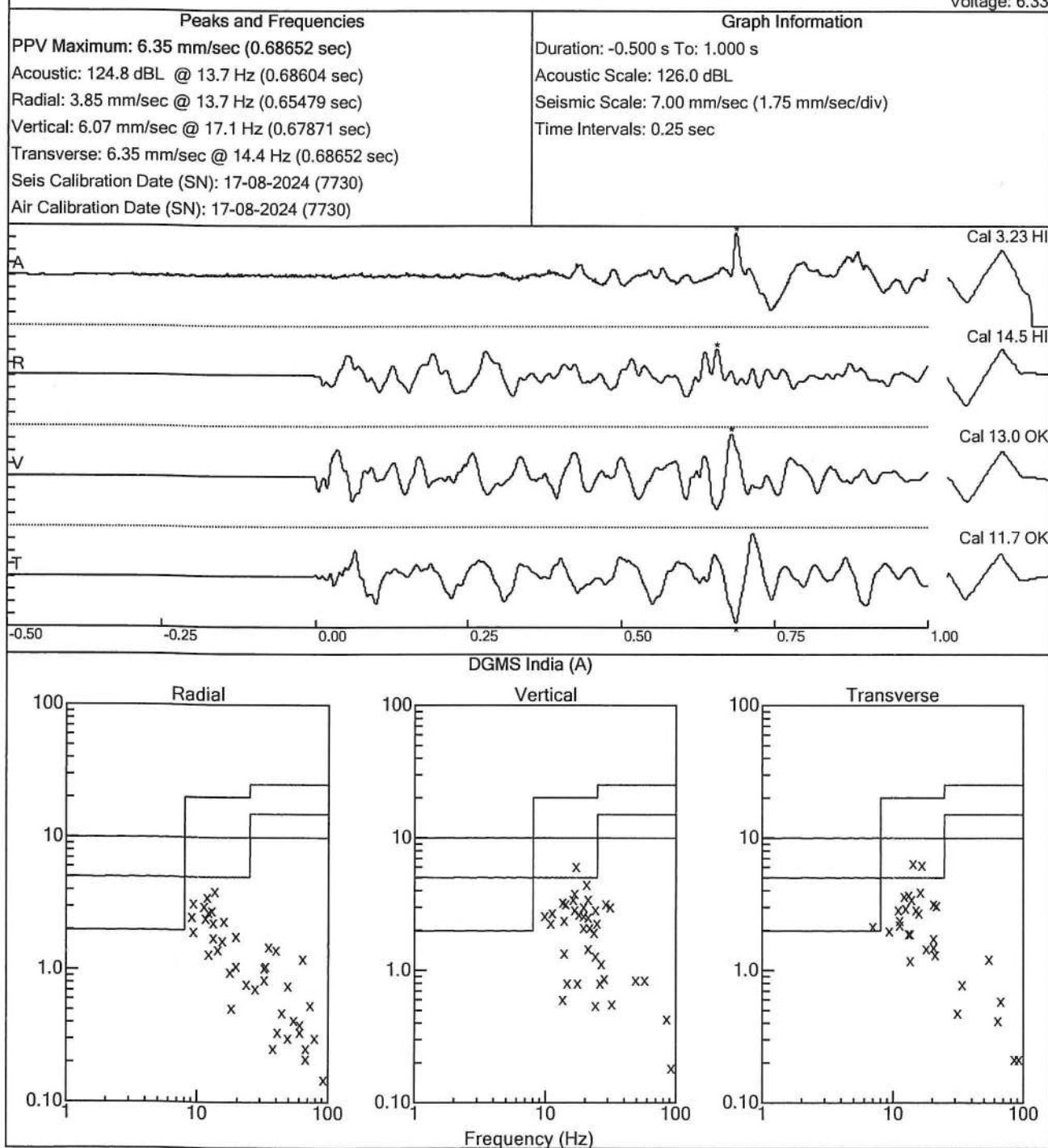
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha32q830.evt
Number: 0108
Date and Time: 04-10-2024 14:35:04
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 2 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.17



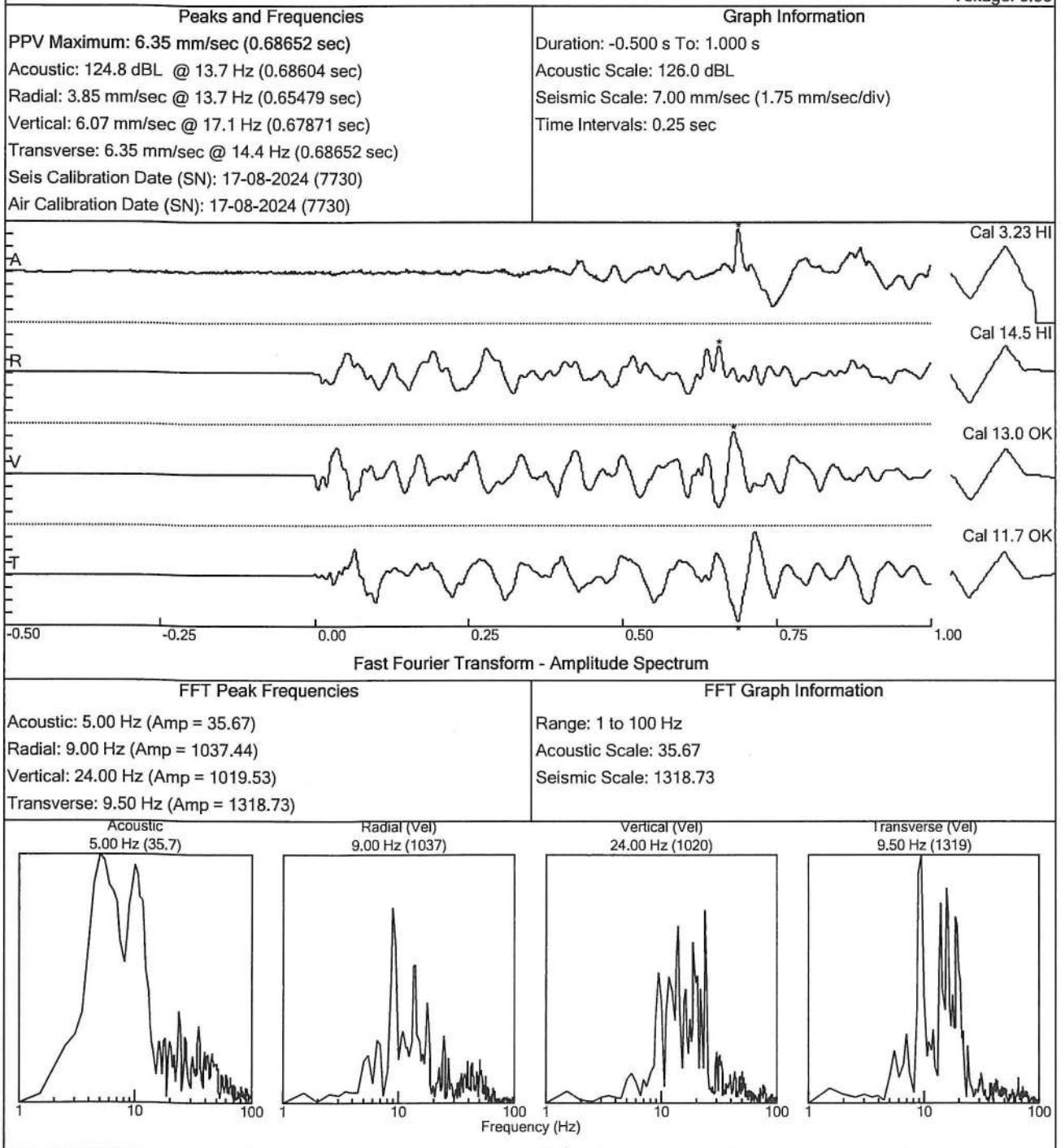
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha32rk76.evt
Number: 0258
Date and Time: 04-10-2024 14:35:52
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.33



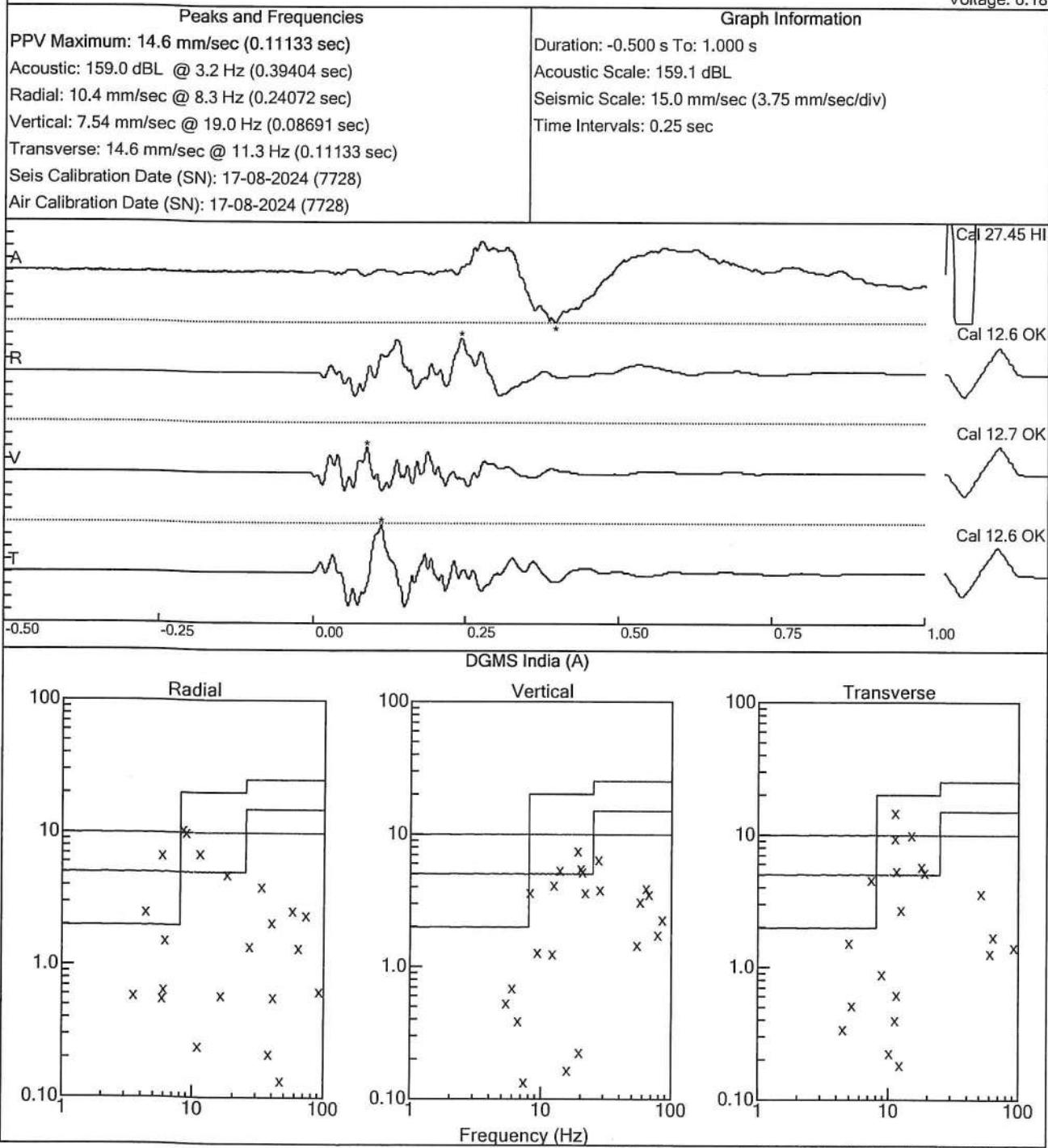
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha32rk76.evt
Number: 0258
Date and Time: 04-10-2024 14:35:52
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.33



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

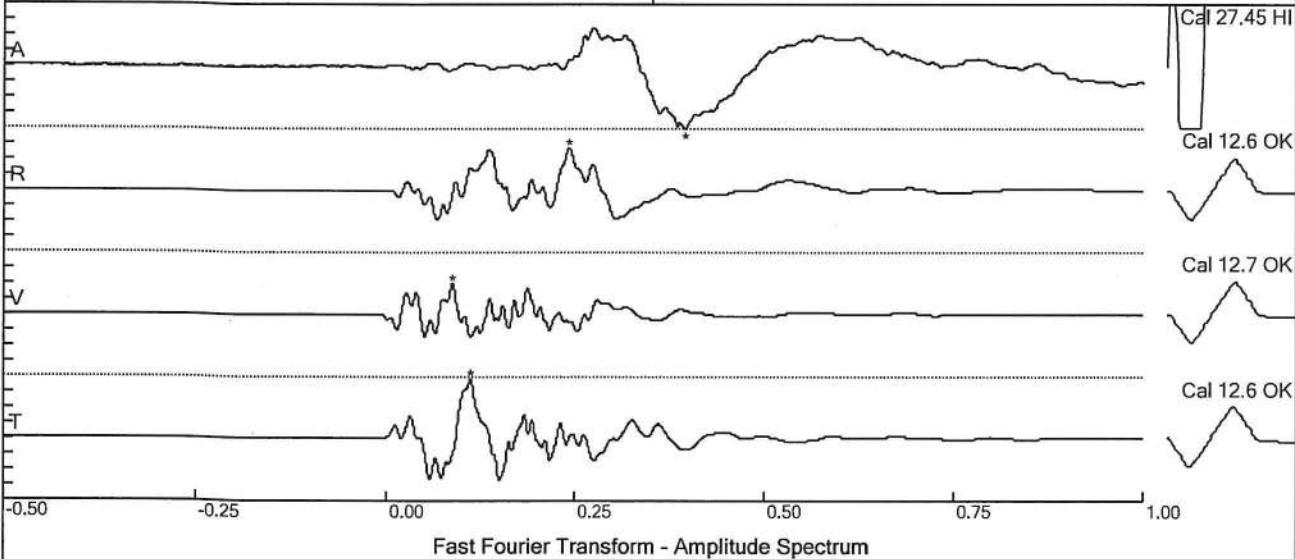
File: rw39y03x.evt
Number: 0141
Date and Time: 04-10-2024 15:28:56
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

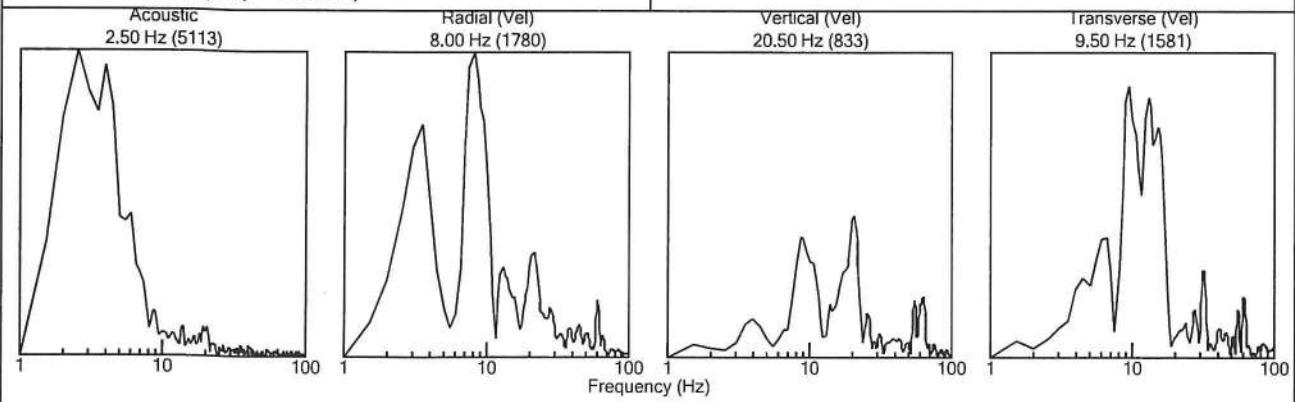
File: rw39y03x.evt
Number: 0141
Date and Time: 04-10-2024 15:28:56
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

Peaks and Frequencies	Graph Information
PPV Maximum: 14.6 mm/sec (0.11133 sec) Acoustic: 159.0 dB @ 3.2 Hz (0.39404 sec) Radial: 10.4 mm/sec @ 8.3 Hz (0.24072 sec) Vertical: 7.54 mm/sec @ 19.0 Hz (0.08691 sec) Transverse: 14.6 mm/sec @ 11.3 Hz (0.11133 sec) Seis Calibration Date (SN): 17-08-2024 (7728) Air Calibration Date (SN): 17-08-2024 (7728)	Duration: -0.500 s To: 1.000 s Acoustic Scale: 159.1 dB Seismic Scale: 15.0 mm/sec (3.75 mm/sec/div) Time Intervals: 0.25 sec



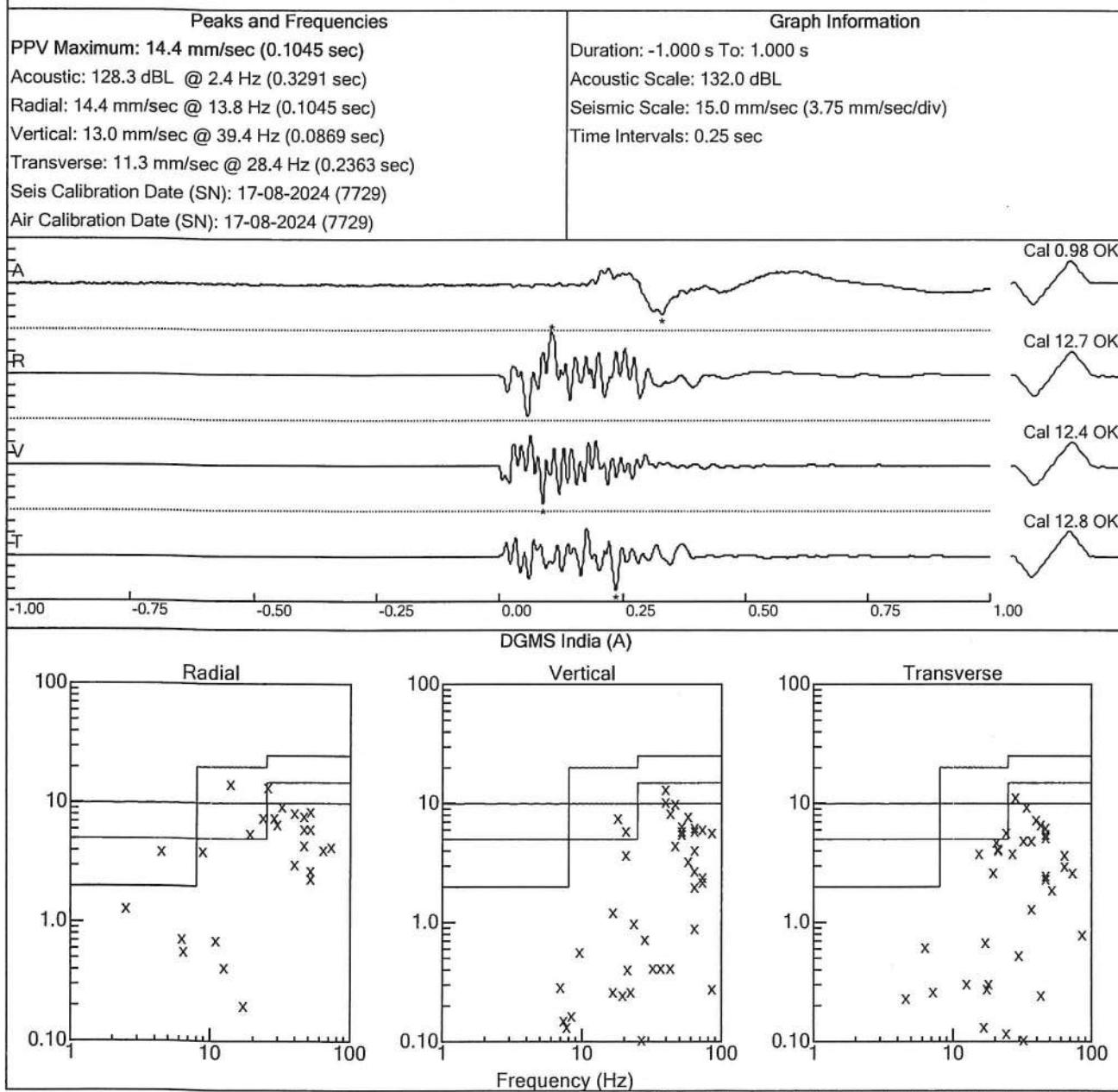
Fast Fourier Transform - Amplitude Spectrum

FFT Peak Frequencies	FFT Graph Information
Acoustic: 2.50 Hz (Amp = 5113.23) Radial: 8.00 Hz (Amp = 1779.85) Vertical: 20.50 Hz (Amp = 833.49) Transverse: 9.50 Hz (Amp = 1580.95)	Range: 1 to 100 Hz Acoustic Scale: 5113.23 Seismic Scale: 1779.85



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0q7v.evt
Number: 0283
Date and Time: 04-10-2024 15:29:55
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

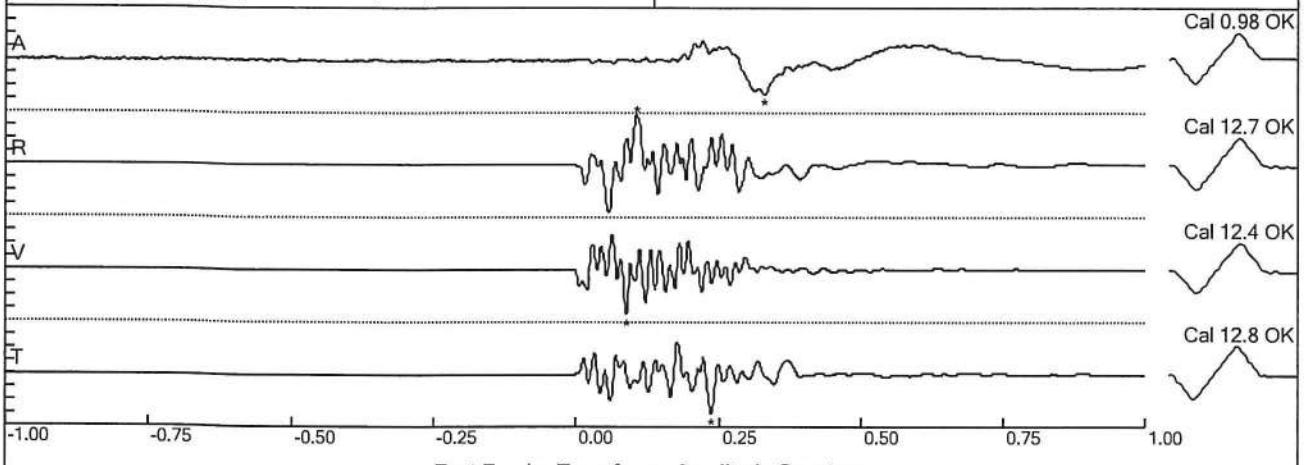


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0q7v.evt
Number: 0283
Date and Time: 04-10-2024 15:29:55
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

Peaks and Frequencies
PPV Maximum: 14.4 mm/sec (0.1045 sec)
Acoustic: 128.3 dB @ 2.4 Hz (0.3291 sec)
Radial: 14.4 mm/sec @ 13.8 Hz (0.1045 sec)
Vertical: 13.0 mm/sec @ 39.4 Hz (0.0869 sec)
Transverse: 11.3 mm/sec @ 28.4 Hz (0.2363 sec)
Seis Calibration Date (SN): 17-08-2024 (7729)
Air Calibration Date (SN): 17-08-2024 (7729)

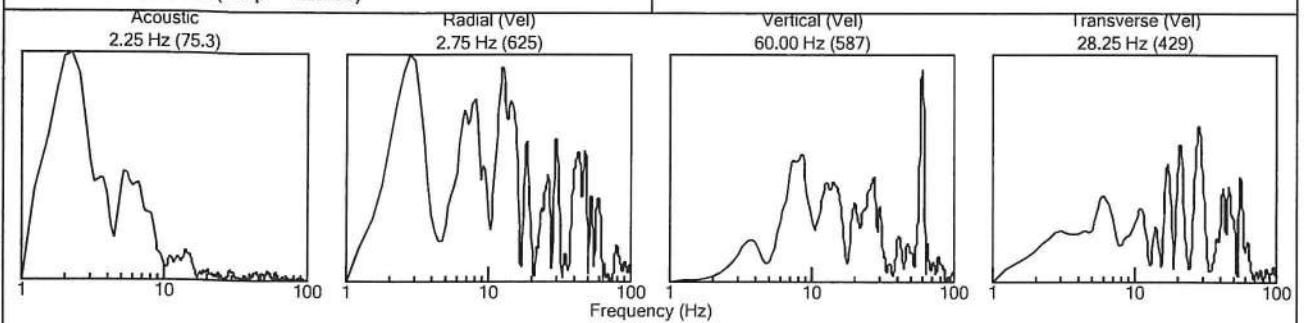
Graph Information
Duration: -1.000 s To: 1.000 s
Acoustic Scale: 132.0 dB
Seismic Scale: 15.0 mm/sec (3.75 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

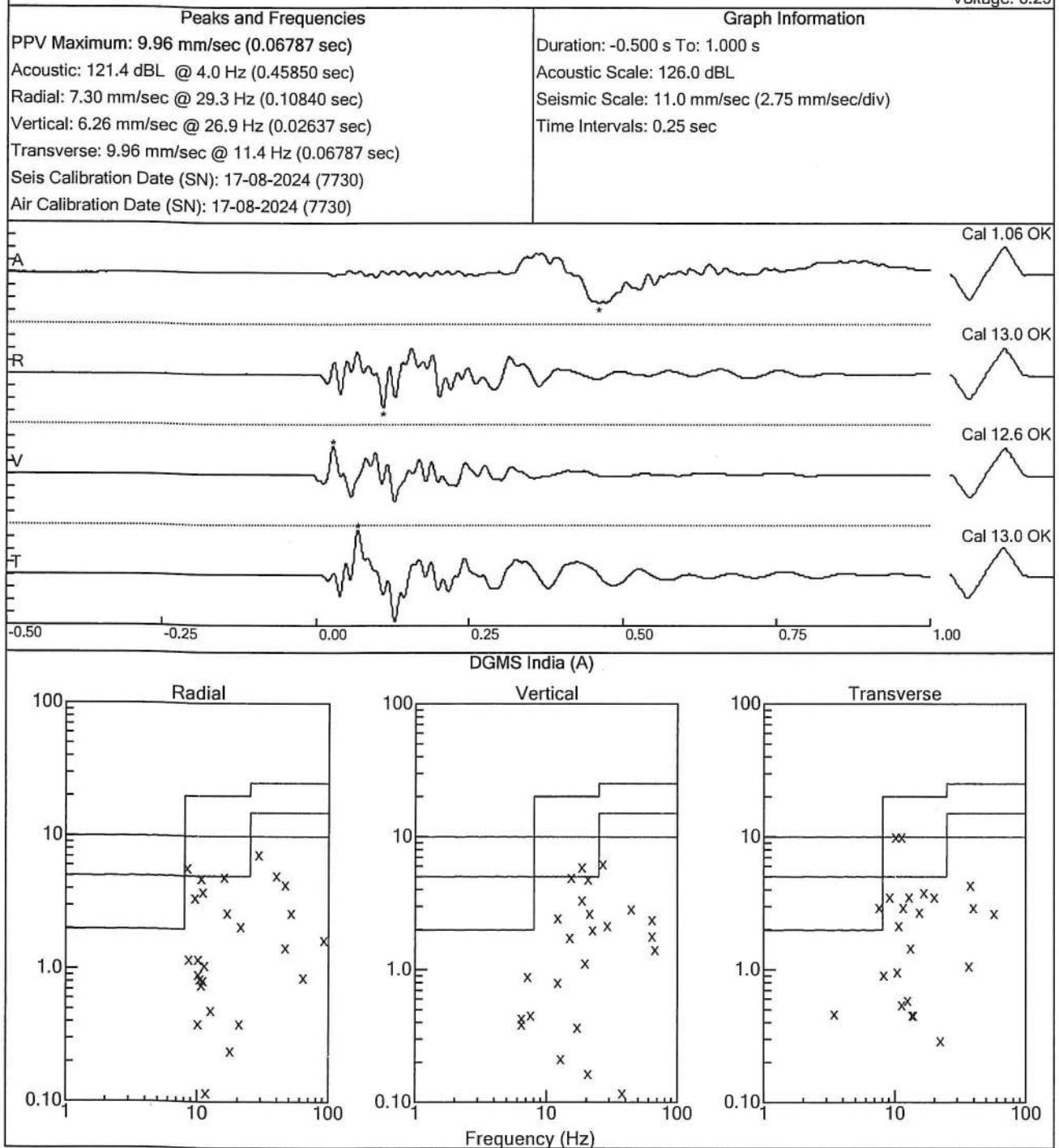
FFT Peak Frequencies
Acoustic: 2.25 Hz (Amp = 75.27)
Radial: 2.75 Hz (Amp = 625.10)
Vertical: 60.00 Hz (Amp = 586.63)
Transverse: 28.25 Hz (Amp = 429.09)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 75.27
Seismic Scale: 625.10



Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad

File: rw3a0i92.evt
Number: 0326
Date and Time: 04-10-2024 15:29:46
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29

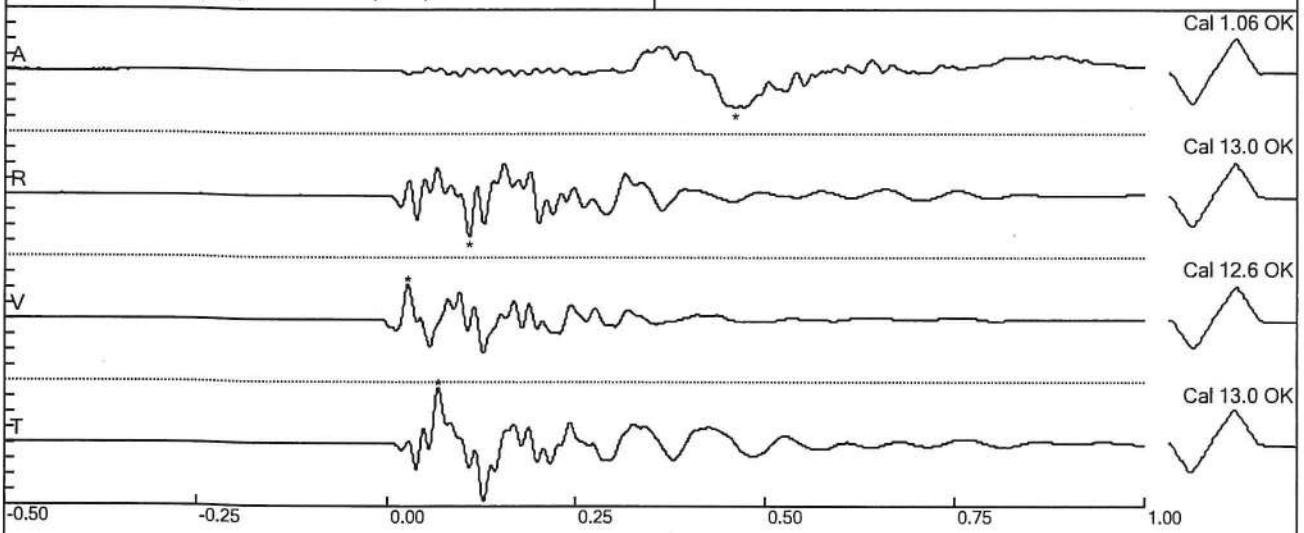


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0i92.evt
Number: 0326
Date and Time: 04-10-2024 15:29:46
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29

Peaks and Frequencies
PPV Maximum: 9.96 mm/sec (0.06787 sec)
Acoustic: 121.4 dB @ 4.0 Hz (0.45850 sec)
Radial: 7.30 mm/sec @ 29.3 Hz (0.10840 sec)
Vertical: 6.26 mm/sec @ 26.9 Hz (0.02637 sec)
Transverse: 9.96 mm/sec @ 11.4 Hz (0.06787 sec)
Seis Calibration Date (SN): 17-08-2024 (7730)
Air Calibration Date (SN): 17-08-2024 (7730)

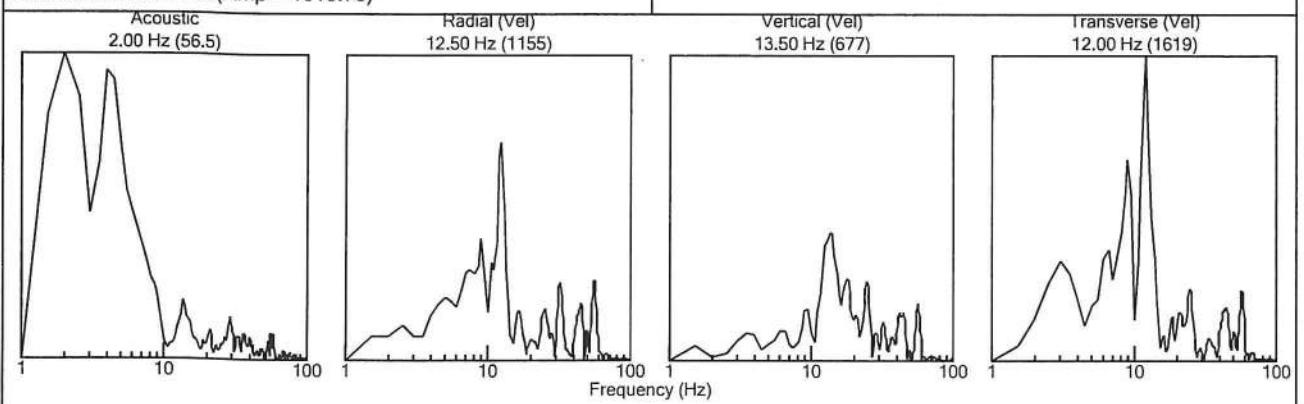
Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 126.0 dB
Seismic Scale: 11.0 mm/sec (2.75 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

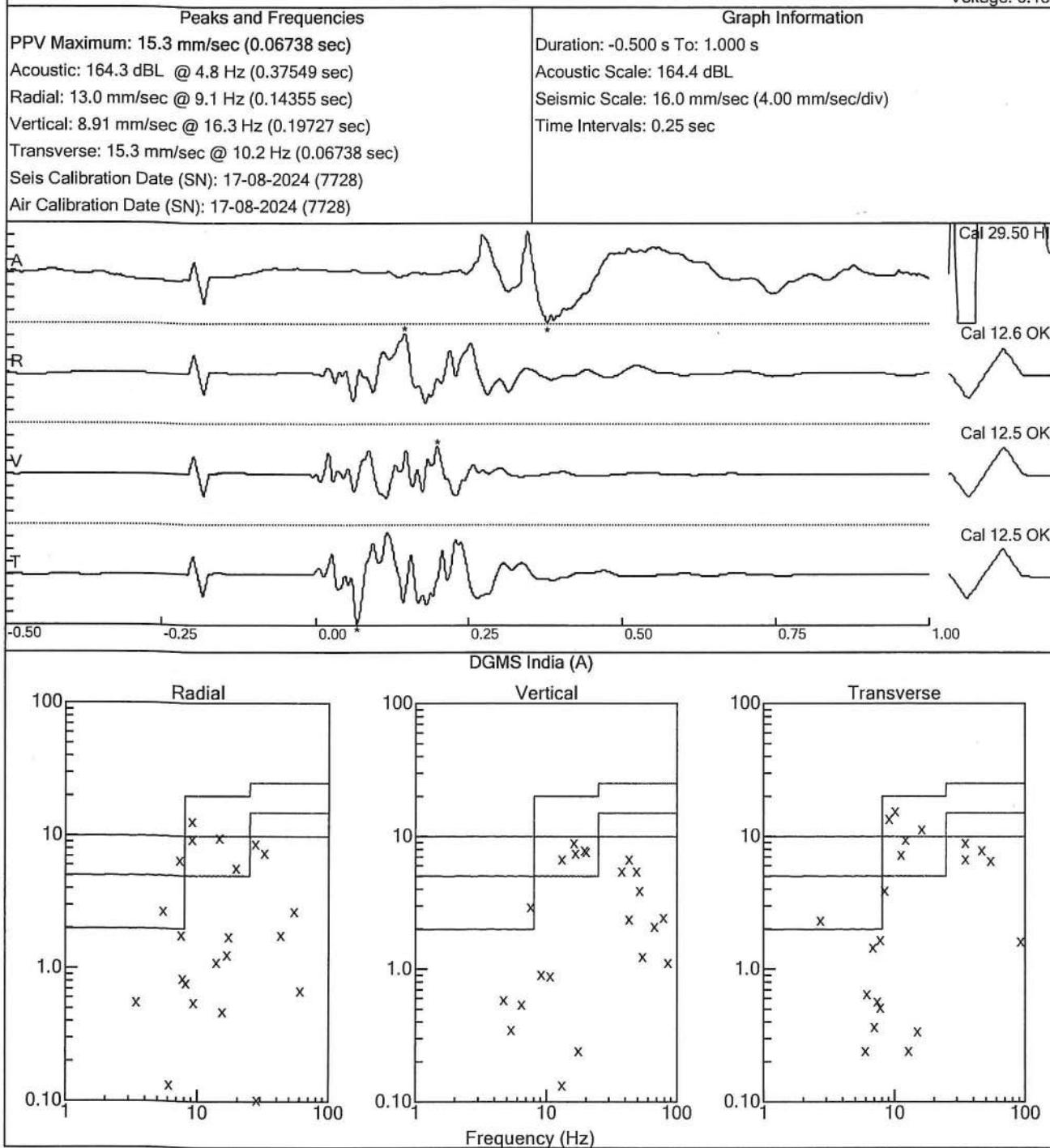
FFT Peak Frequencies
Acoustic: 2.00 Hz (Amp = 56.53)
Radial: 12.50 Hz (Amp = 1154.93)
Vertical: 13.50 Hz (Amp = 677.01)
Transverse: 12.00 Hz (Amp = 1618.73)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 56.53
Seismic Scale: 1618.73



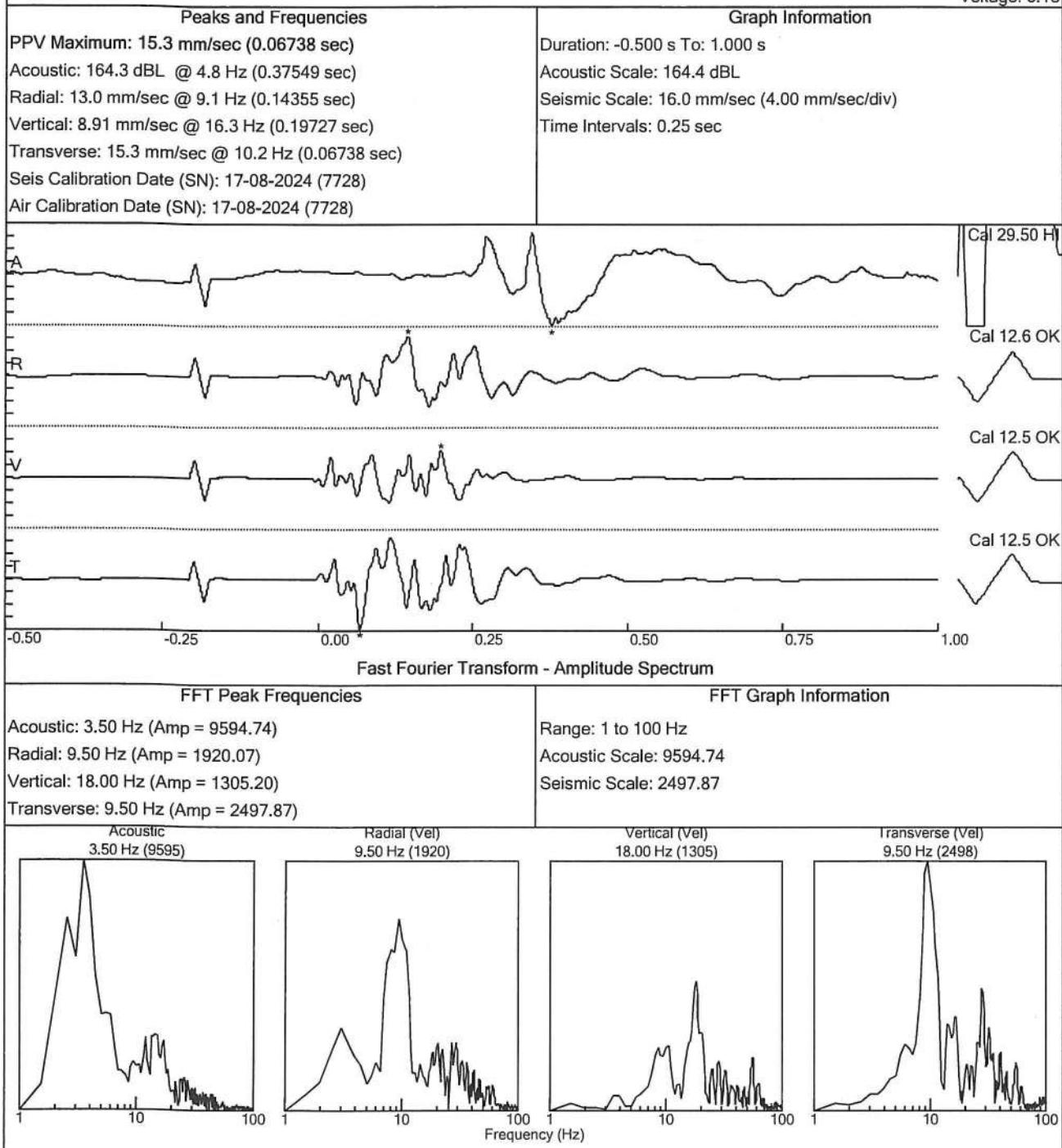
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39y23y.evt
Number: 0142
Date and Time: 04-10-2024 15:28:58
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18



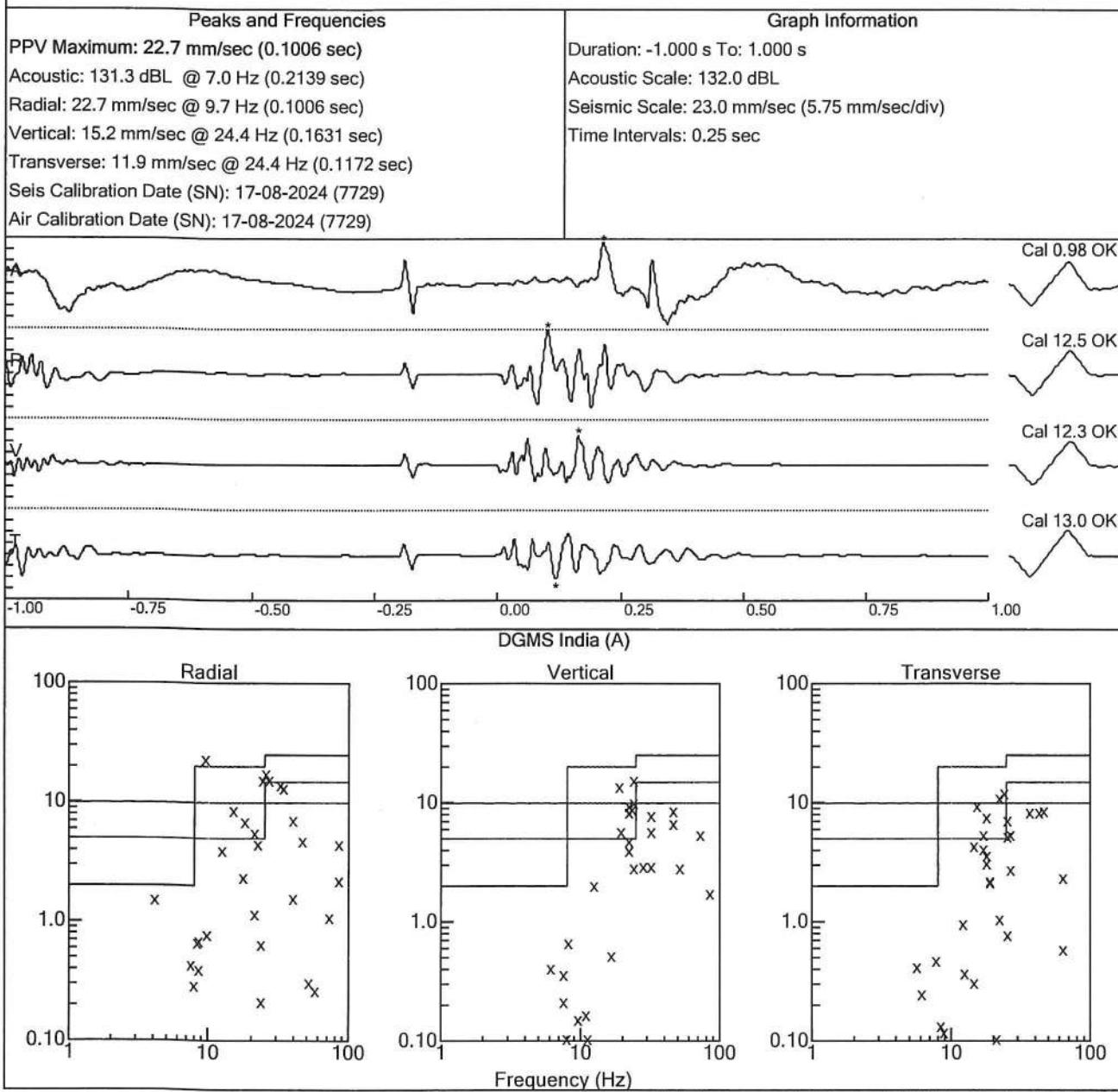
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39y23y.evt
Number: 0142
Date and Time: 04-10-2024 15:28:58
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18



Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad

File: rw3a0s7w.evt
Number: 0284
Date and Time: 04-10-2024 15:29:56
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

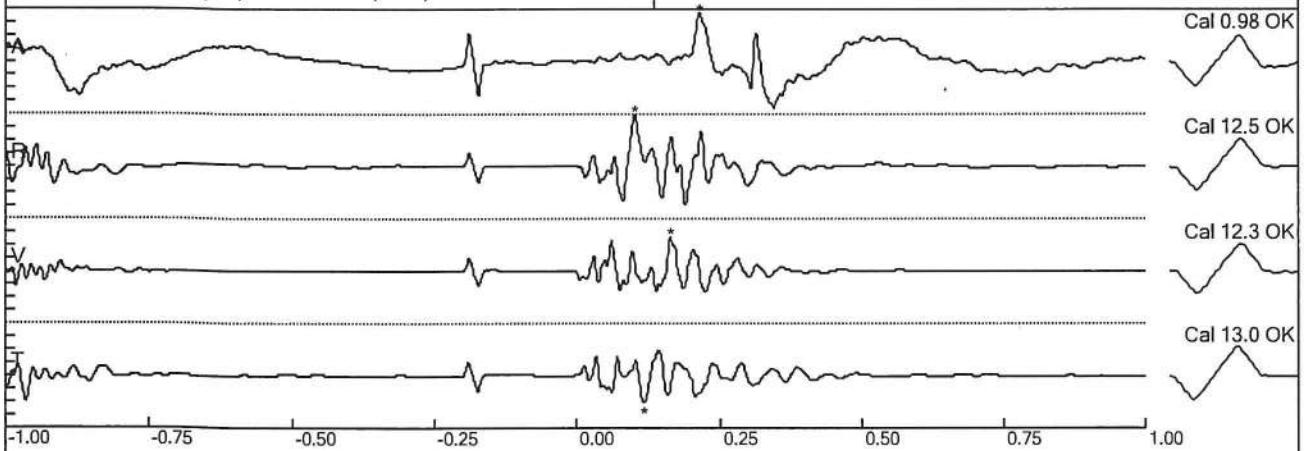


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0s7w.evt
Number: 0284
Date and Time: 04-10-2024 15:29:56
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

Peaks and Frequencies
PPV Maximum: 22.7 mm/sec (0.1006 sec)
Acoustic: 131.3 dB @ 7.0 Hz (0.2139 sec)
Radial: 22.7 mm/sec @ 9.7 Hz (0.1006 sec)
Vertical: 15.2 mm/sec @ 24.4 Hz (0.1631 sec)
Transverse: 11.9 mm/sec @ 24.4 Hz (0.1172 sec)
Seis Calibration Date (SN): 17-08-2024 (7729)
Air Calibration Date (SN): 17-08-2024 (7729)

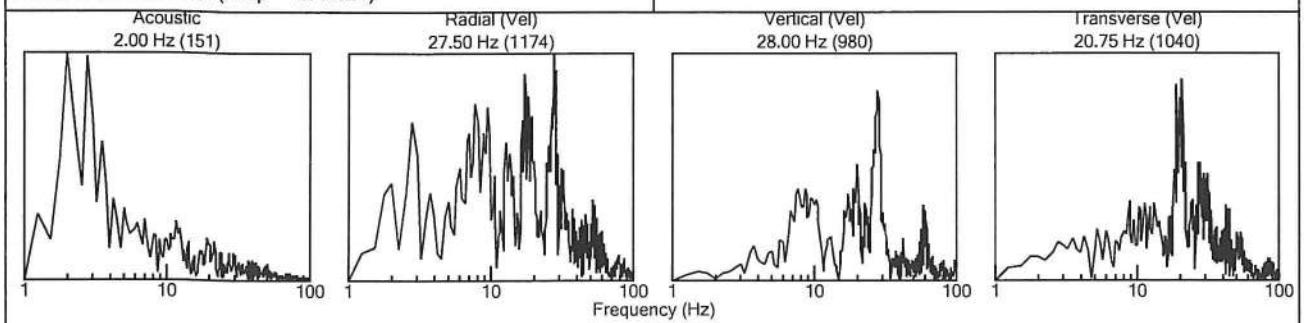
Graph Information
Duration: -1.000 s To: 1.000 s
Acoustic Scale: 132.0 dB
Seismic Scale: 23.0 mm/sec (5.75 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

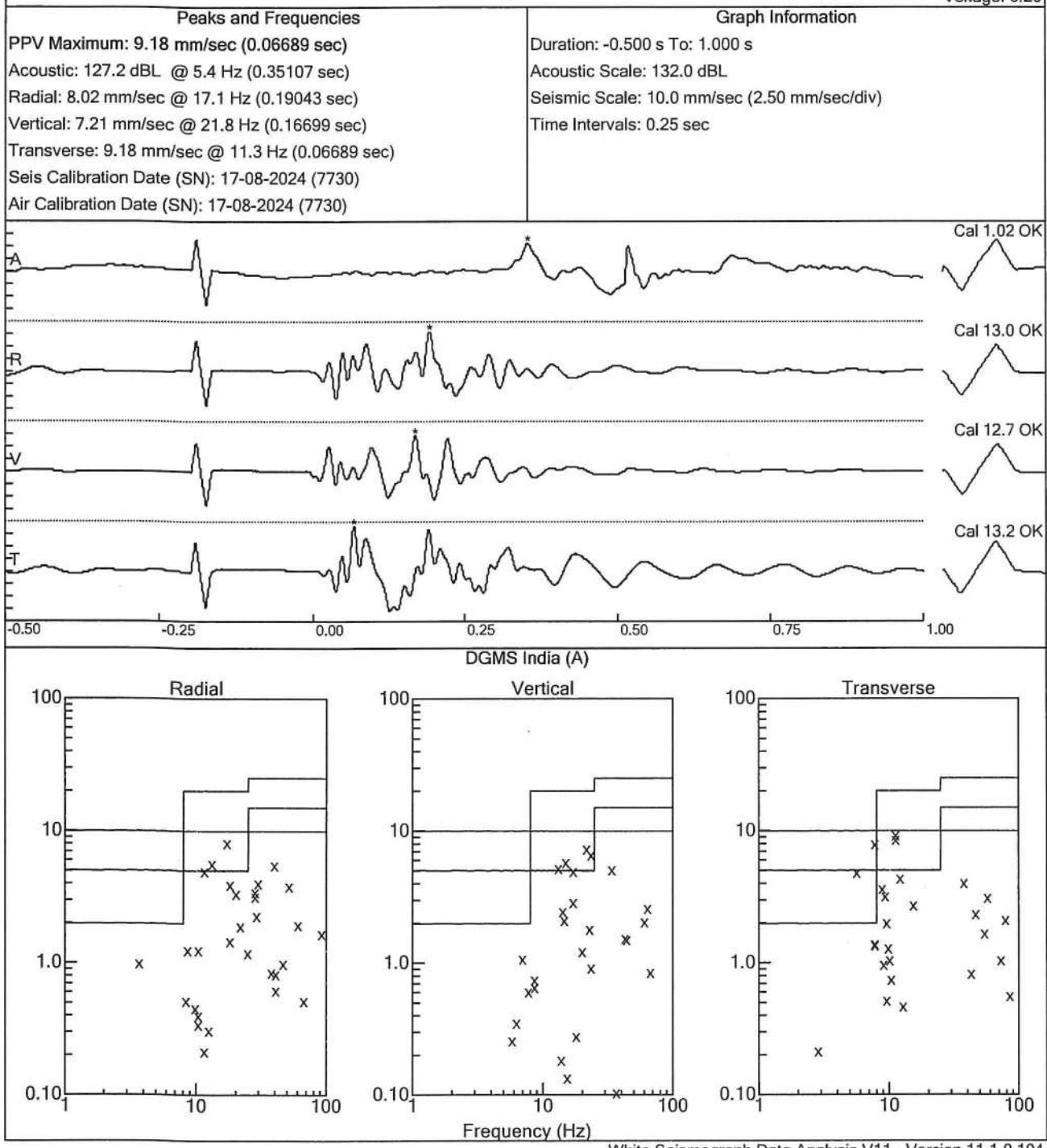
FFT Peak Frequencies
Acoustic: 2.00 Hz (Amp = 150.86)
Radial: 27.50 Hz (Amp = 1173.74)
Vertical: 28.00 Hz (Amp = 979.85)
Transverse: 20.75 Hz (Amp = 1040.24)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 150.86
Seismic Scale: 1173.74



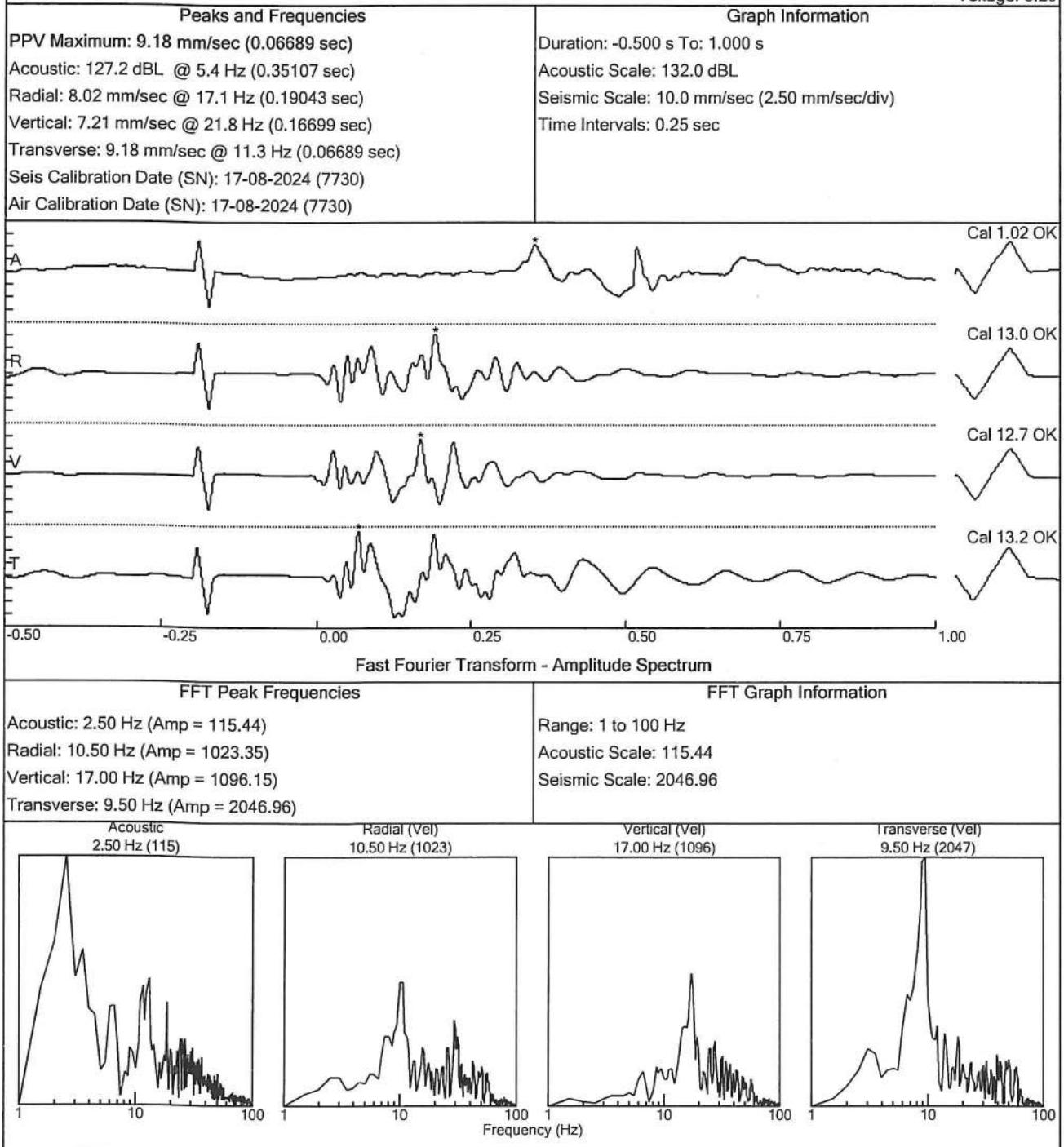
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0i93.evt
Number: 0327
Date and Time: 04-10-2024 15:29:47
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

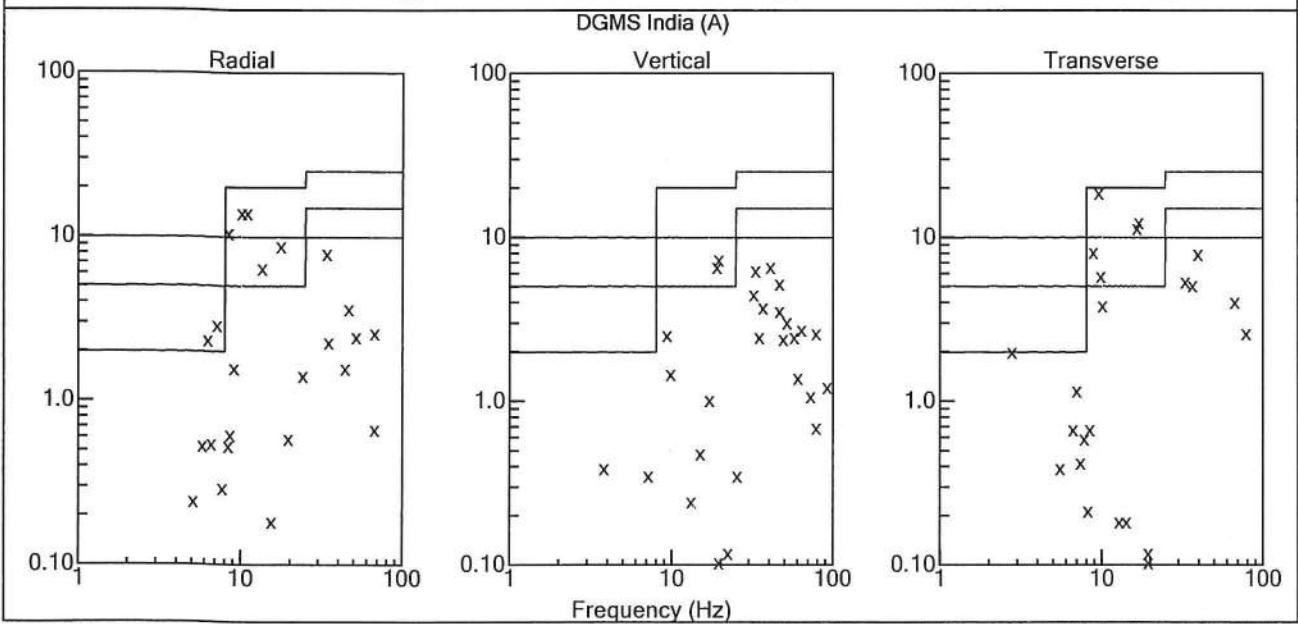
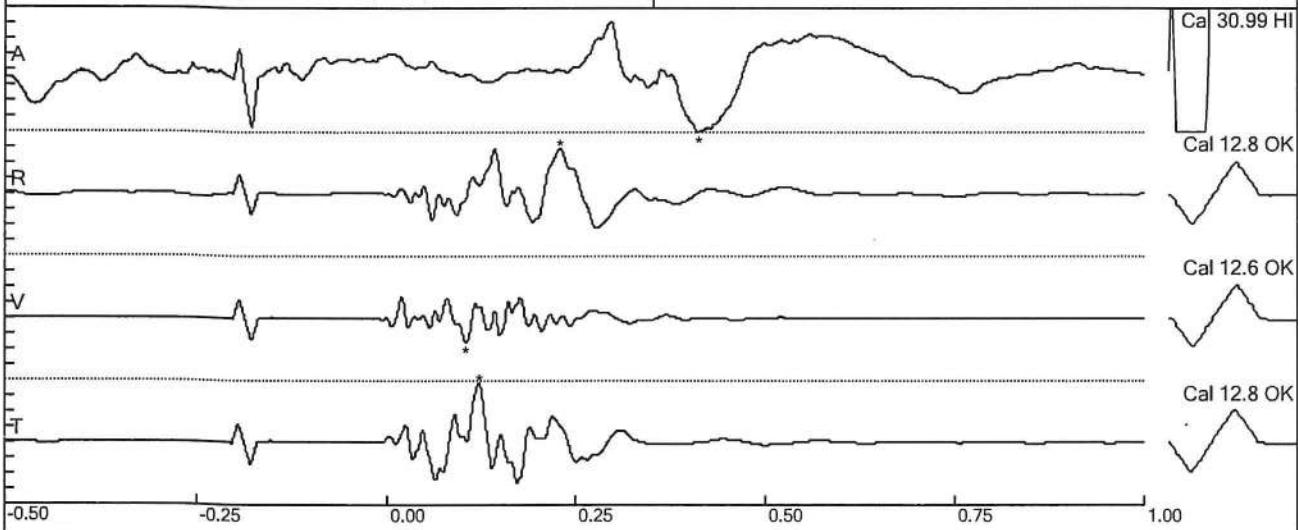
File: rw3a0i93.evt
Number: 0327
Date and Time: 04-10-2024 15:29:47
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39y23z.evt
Number: 0143
Date and Time: 04-10-2024 15:28:59
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

Peaks and Frequencies	Graph Information
PPV Maximum: 18.3 mm/sec (0.12109 sec)	Duration: -0.500 s To: 1.000 s
Acoustic: 161.3 dB @ 4.6 Hz (0.41016 sec)	Acoustic Scale: 161.3 dB
Radial: 14.0 mm/sec @ 10.0 Hz (0.22754 sec)	Seismic Scale: 19.0 mm/sec (4.75 mm/sec/div)
Vertical: 7.18 mm/sec @ 19.7 Hz (0.10303 sec)	Time Intervals: 0.25 sec
Transverse: 18.3 mm/sec @ 9.7 Hz (0.12109 sec)	
Seis Calibration Date (SN): 17-08-2024 (7728)	
Air Calibration Date (SN): 17-08-2024 (7728)	

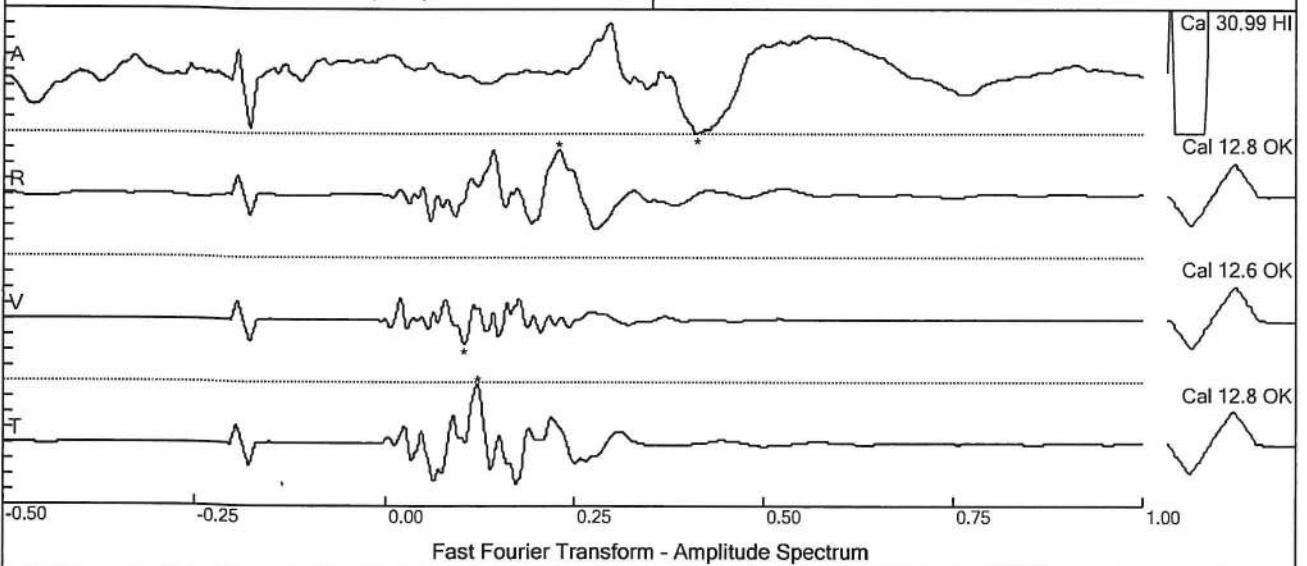


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39y23z.evt
Number: 0143
Date and Time: 04-10-2024 15:28:59
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

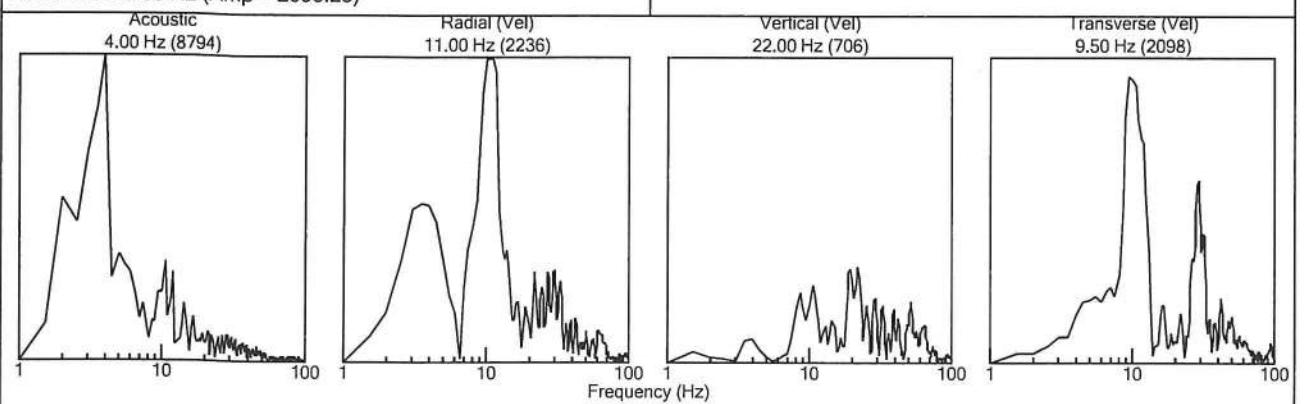
Peaks and Frequencies
PPV Maximum: 18.3 mm/sec (0.12109 sec)
Acoustic: 161.3 dB @ 4.6 Hz (0.41016 sec)
Radial: 14.0 mm/sec @ 10.0 Hz (0.22754 sec)
Vertical: 7.18 mm/sec @ 19.7 Hz (0.10303 sec)
Transverse: 18.3 mm/sec @ 9.7 Hz (0.12109 sec)
Seis Calibration Date (SN): 17-08-2024 (7728)
Air Calibration Date (SN): 17-08-2024 (7728)

Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 161.3 dB
Seismic Scale: 19.0 mm/sec (4.75 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

FFT Peak Frequencies	FFT Graph Information
Acoustic: 4.00 Hz (Amp = 8794.11)	Range: 1 to 100 Hz
Radial: 11.00 Hz (Amp = 2235.93)	Acoustic Scale: 8794.11
Vertical: 22.00 Hz (Amp = 706.06)	Seismic Scale: 2235.93
Transverse: 9.50 Hz (Amp = 2098.28)	

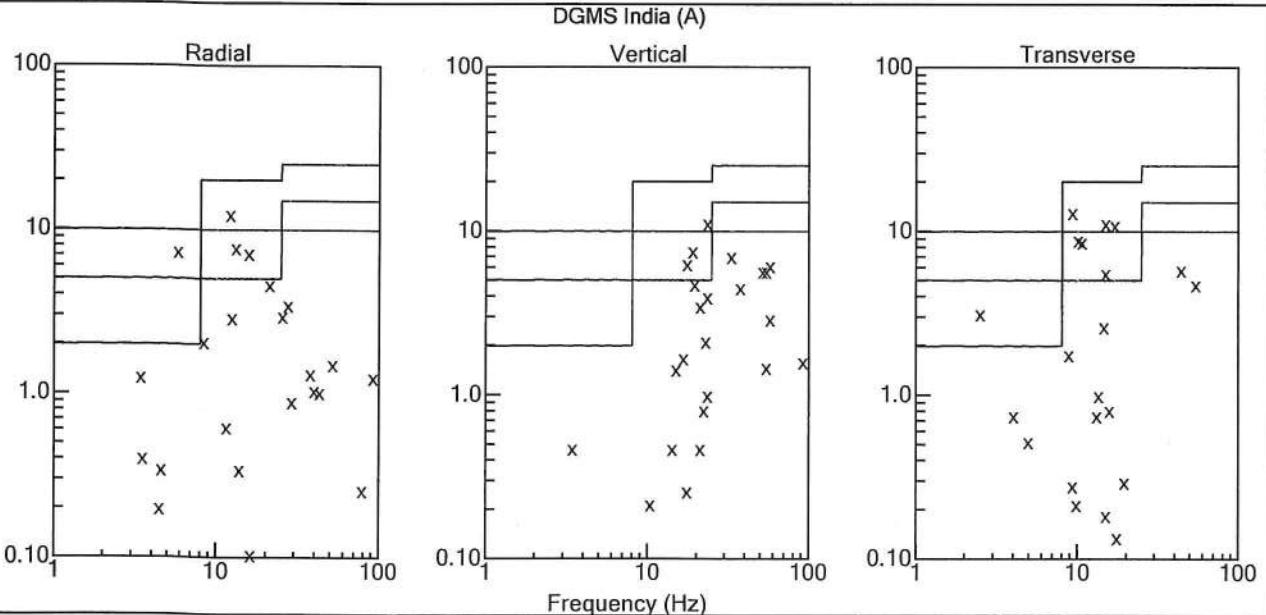
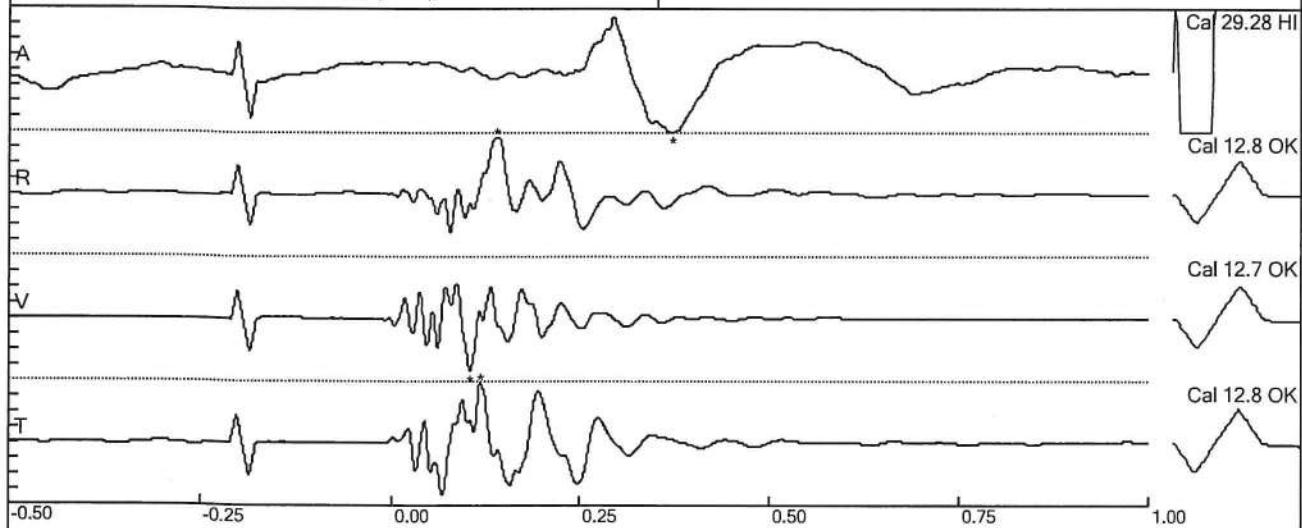


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39z840.evt
Number: 0144
Date and Time: 04-10-2024 15:29:00
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

Peaks and Frequencies
PPV Maximum: 12.7 mm/sec (0.11768 sec)
Acoustic: 162.0 dB @ 4.6 Hz (0.37061 sec)
Radial: 12.1 mm/sec @ 12.2 Hz (0.13867 sec)
Vertical: 10.9 mm/sec @ 23.3 Hz (0.10400 sec)
Transverse: 12.7 mm/sec @ 9.3 Hz (0.11768 sec)
Seis Calibration Date (SN): 17-08-2024 (7728)
Air Calibration Date (SN): 17-08-2024 (7728)

Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 162.0 dB
Seismic Scale: 13.0 mm/sec (3.25 mm/sec/div)
Time Intervals: 0.25 sec

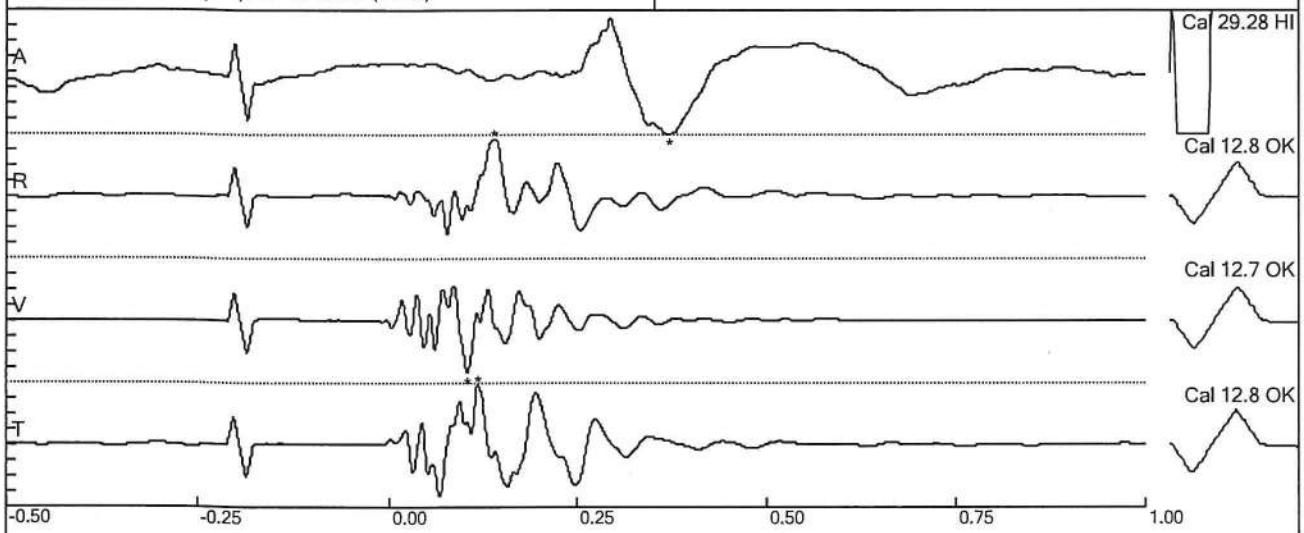


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39z840.evt
Number: 0144
Date and Time: 04-10-2024 15:29:00
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

Peaks and Frequencies
PPV Maximum: 12.7 mm/sec (0.11768 sec)
Acoustic: 162.0 dB @ 4.6 Hz (0.37061 sec)
Radial: 12.1 mm/sec @ 12.2 Hz (0.13867 sec)
Vertical: 10.9 mm/sec @ 23.3 Hz (0.10400 sec)
Transverse: 12.7 mm/sec @ 9.3 Hz (0.11768 sec)
Seis Calibration Date (SN): 17-08-2024 (7728)
Air Calibration Date (SN): 17-08-2024 (7728)

Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 162.0 dB
Seismic Scale: 13.0 mm/sec (3.25 mm/sec/div)
Time Intervals: 0.25 sec

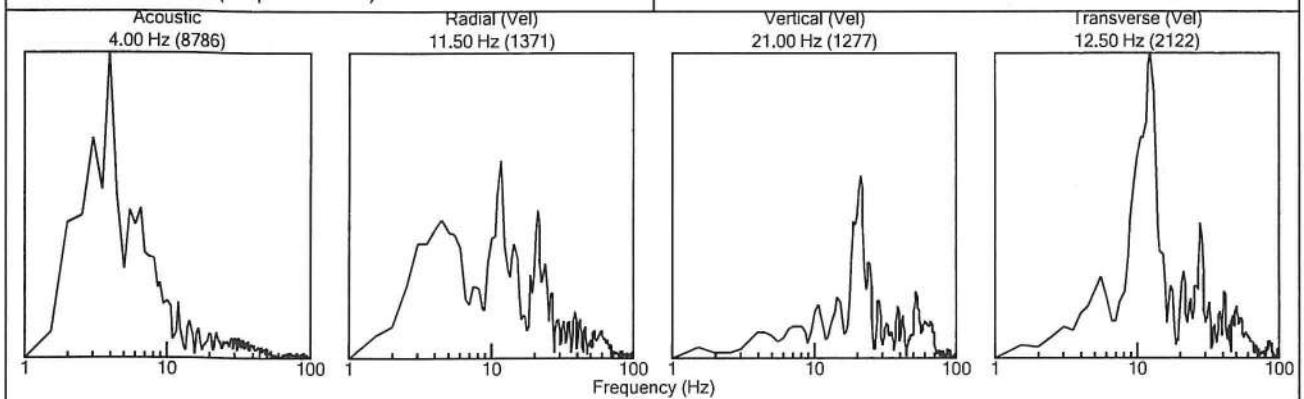


Fast Fourier Transform - Amplitude Spectrum

FFT Peak Frequencies
Acoustic: 4.00 Hz (Amp = 8786.20)
Radial: 11.50 Hz (Amp = 1370.61)
Vertical: 21.00 Hz (Amp = 1277.12)
Transverse: 12.50 Hz (Amp = 2121.91)

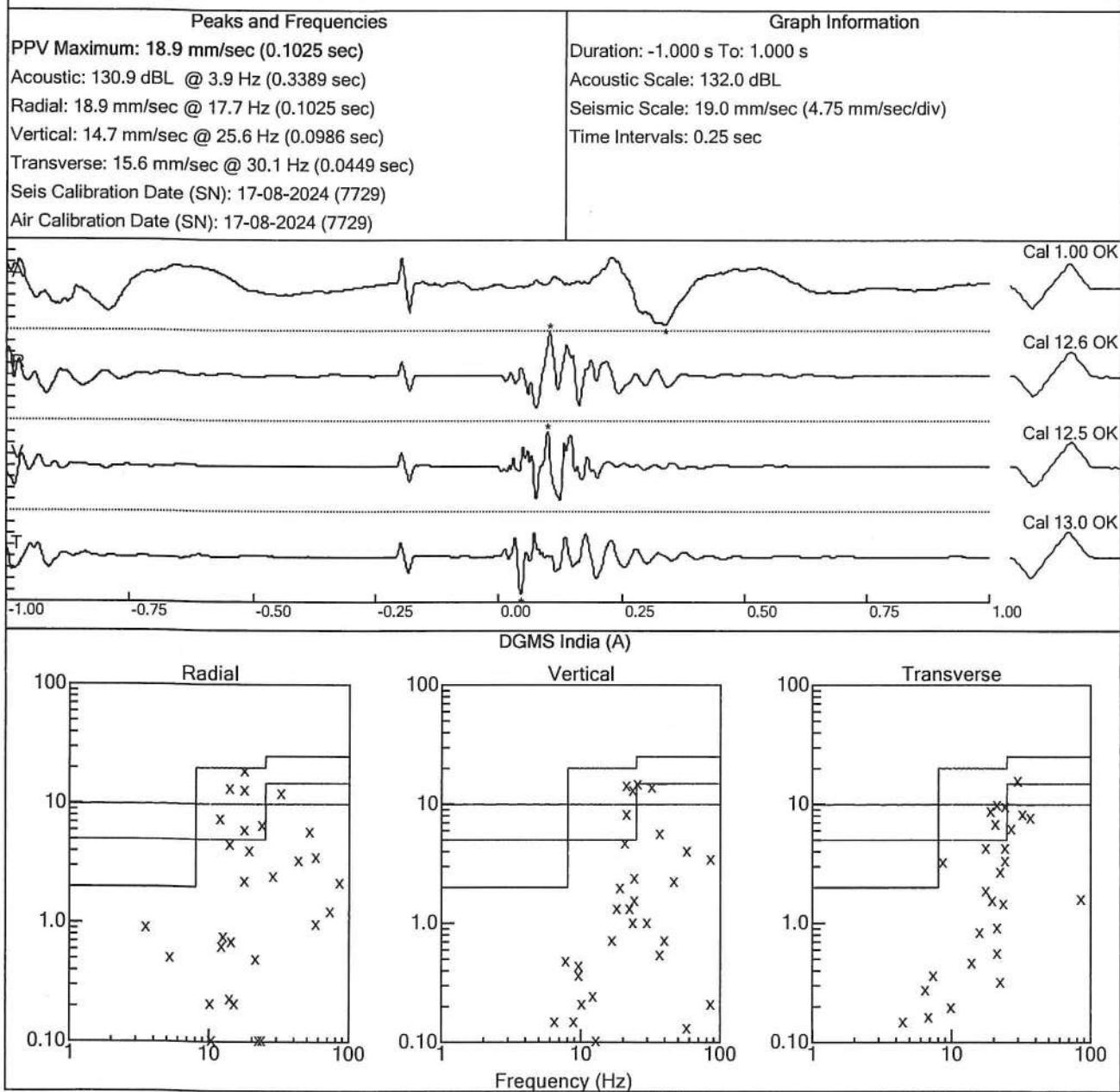
FFT Graph Information

Range: 1 to 100 Hz
Acoustic Scale: 8786.20
Seismic Scale: 2121.91



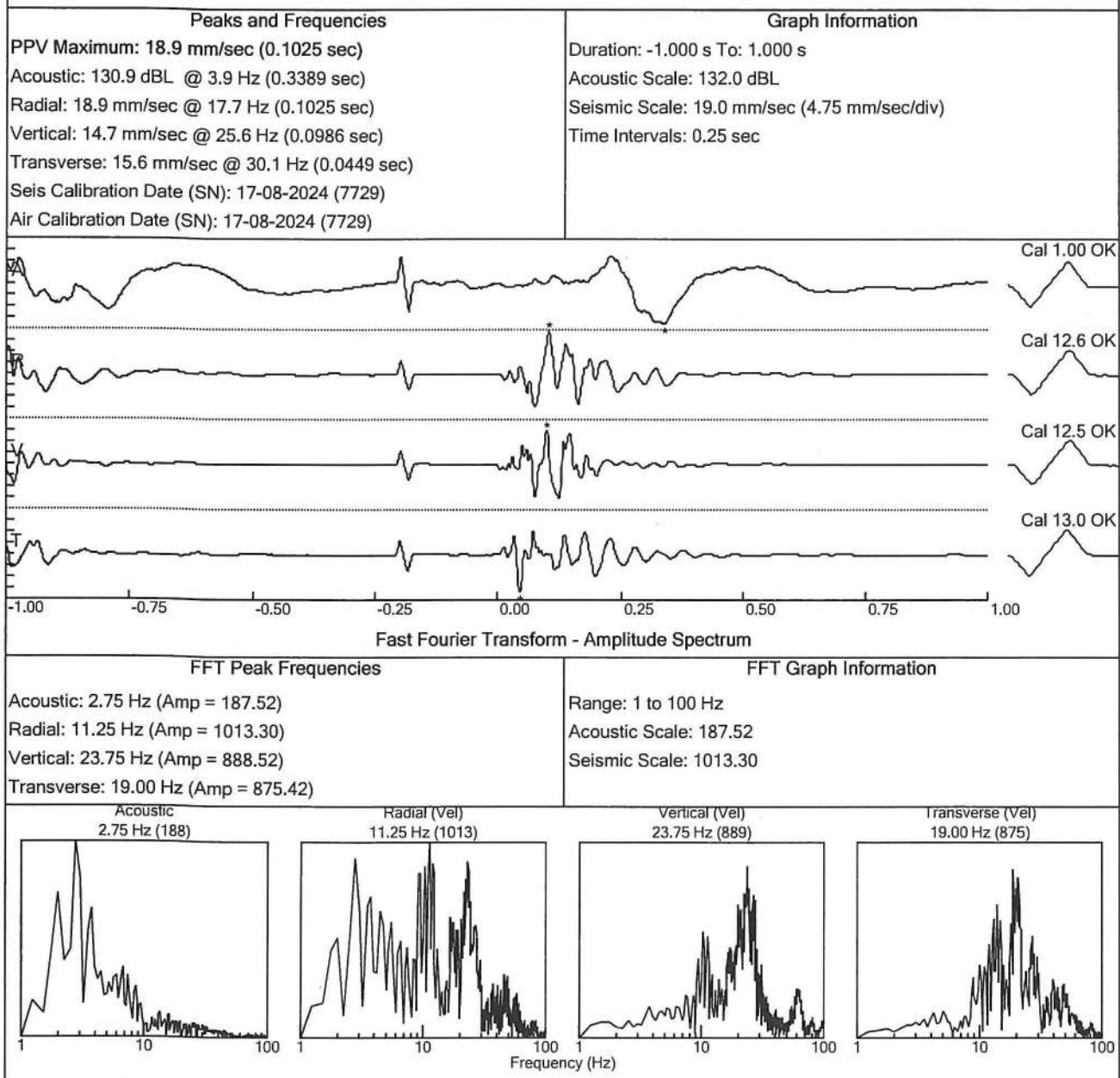
Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad

File: rw3a0u7y.evt
Number: 0286
Date and Time: 04-10-2024 15:29:59
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0u7y.evt
Number: 0286
Date and Time: 04-10-2024 15:29:59
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

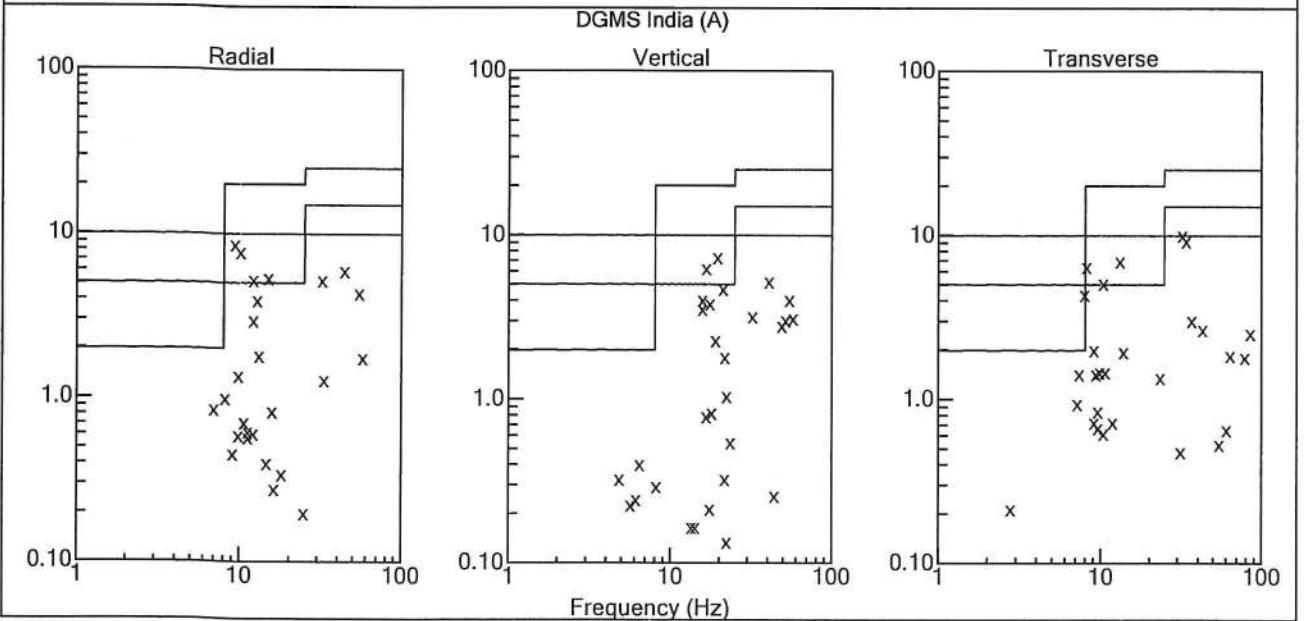
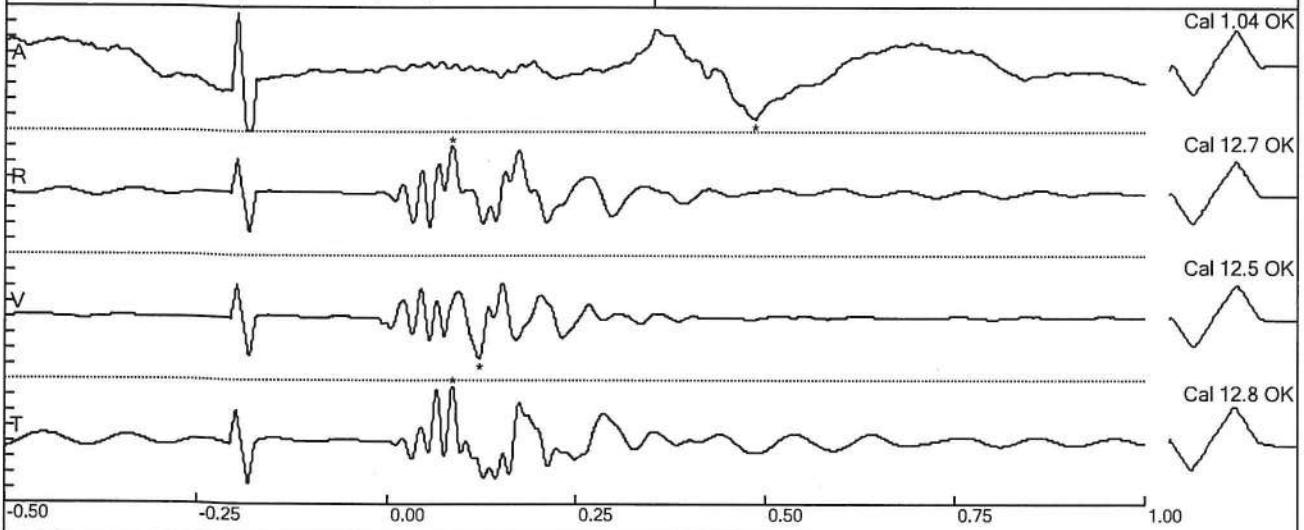


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0k95.evt
Number: 0329
Date and Time: 04-10-2024 15:29:49
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29

Peaks and Frequencies	
PPV Maximum:	10.0 mm/sec (0.08594 sec)
Acoustic:	124.1 dB @ 3.2 Hz (0.48438 sec)
Radial:	8.59 mm/sec @ 9.3 Hz (0.08496 sec)
Vertical:	7.20 mm/sec @ 19.3 Hz (0.12109 sec)
Transverse:	10.0 mm/sec @ 32.0 Hz (0.08594 sec)
Seis Calibration Date (SN):	17-08-2024 (7730)
Air Calibration Date (SN):	17-08-2024 (7730)

Graph Information	
Duration:	-0.500 s To: 1.000 s
Acoustic Scale:	126.0 dB
Seismic Scale:	11.0 mm/sec (2.75 mm/sec/div)
Time Intervals:	0.25 sec

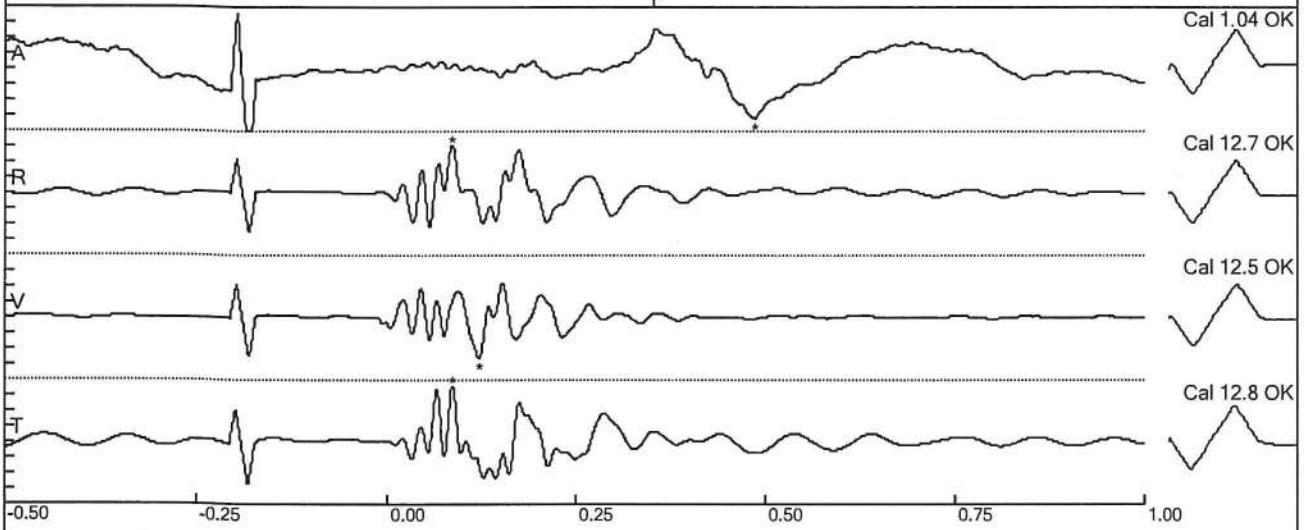


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0k95.evt
Number: 0329
Date and Time: 04-10-2024 15:29:49
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29

Peaks and Frequencies
PPV Maximum: 10.0 mm/sec (0.08594 sec)
Acoustic: 124.1 dB @ 3.2 Hz (0.48438 sec)
Radial: 8.59 mm/sec @ 9.3 Hz (0.08496 sec)
Vertical: 7.20 mm/sec @ 19.3 Hz (0.12109 sec)
Transverse: 10.0 mm/sec @ 32.0 Hz (0.08594 sec)
Seis Calibration Date (SN): 17-08-2024 (7730)
Air Calibration Date (SN): 17-08-2024 (7730)

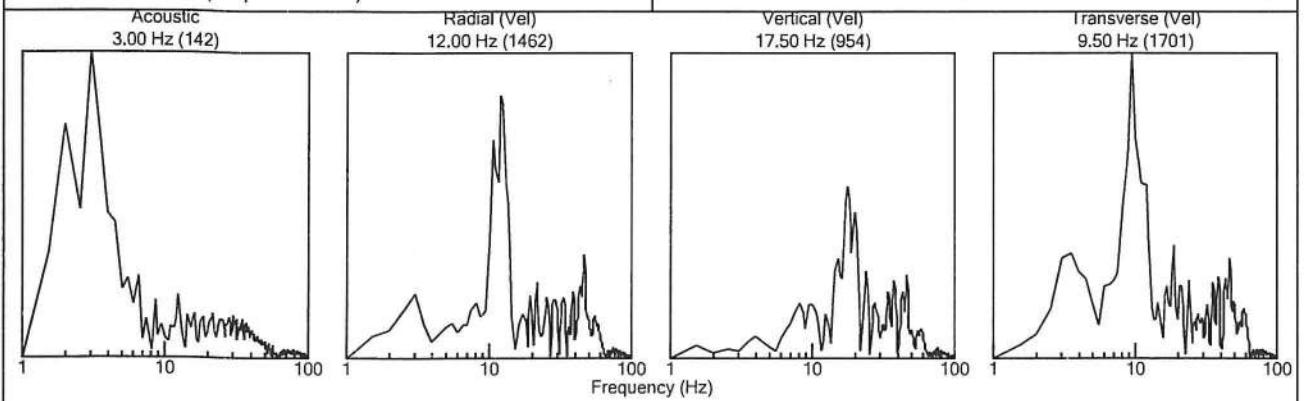
Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 126.0 dB
Seismic Scale: 11.0 mm/sec (2.75 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

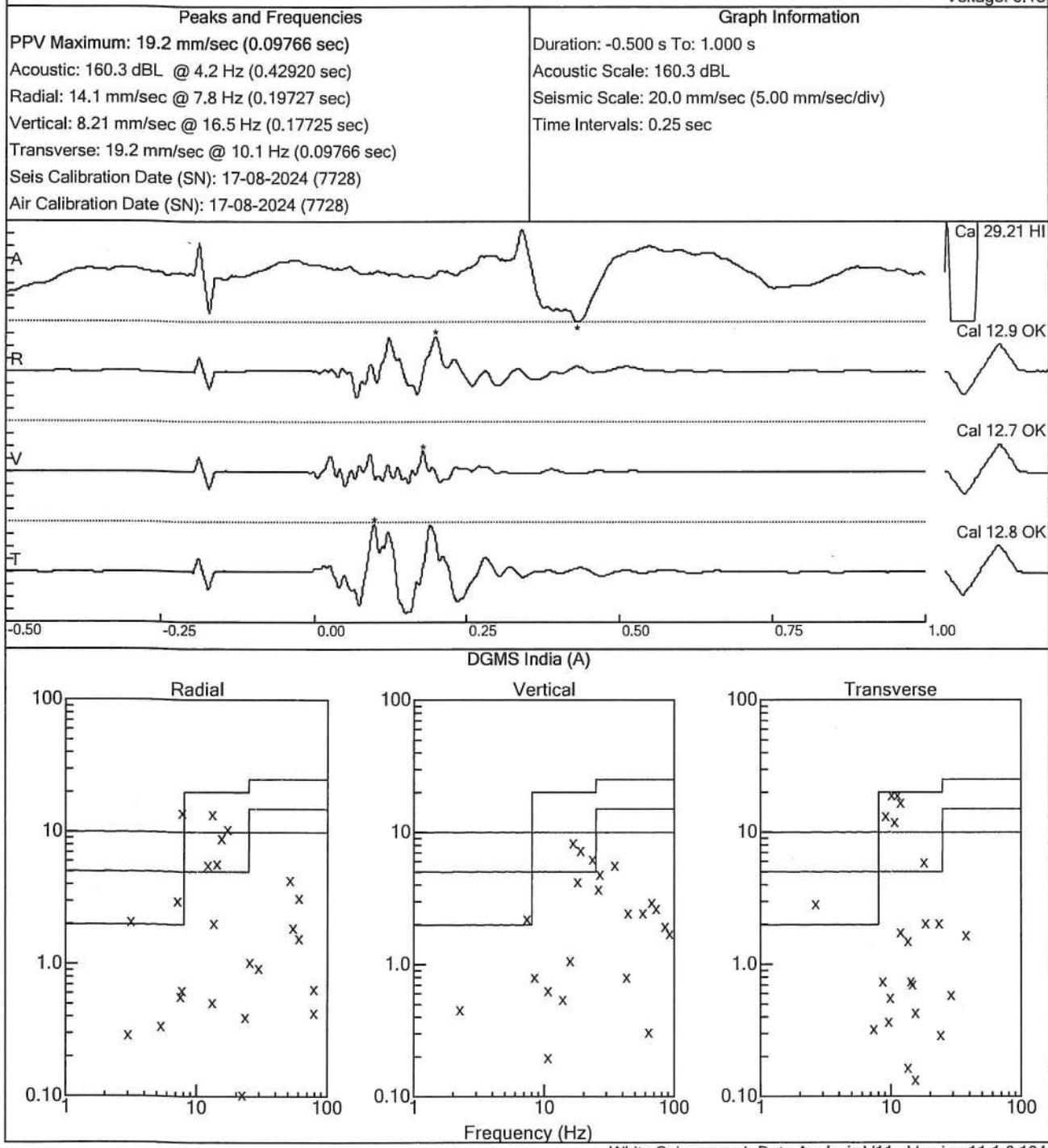
FFT Peak Frequencies
Acoustic: 3.00 Hz (Amp = 142.10)
Radial: 12.00 Hz (Amp = 1461.57)
Vertical: 17.50 Hz (Amp = 953.91)
Transverse: 9.50 Hz (Amp = 1700.54)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 142.10
Seismic Scale: 1700.54



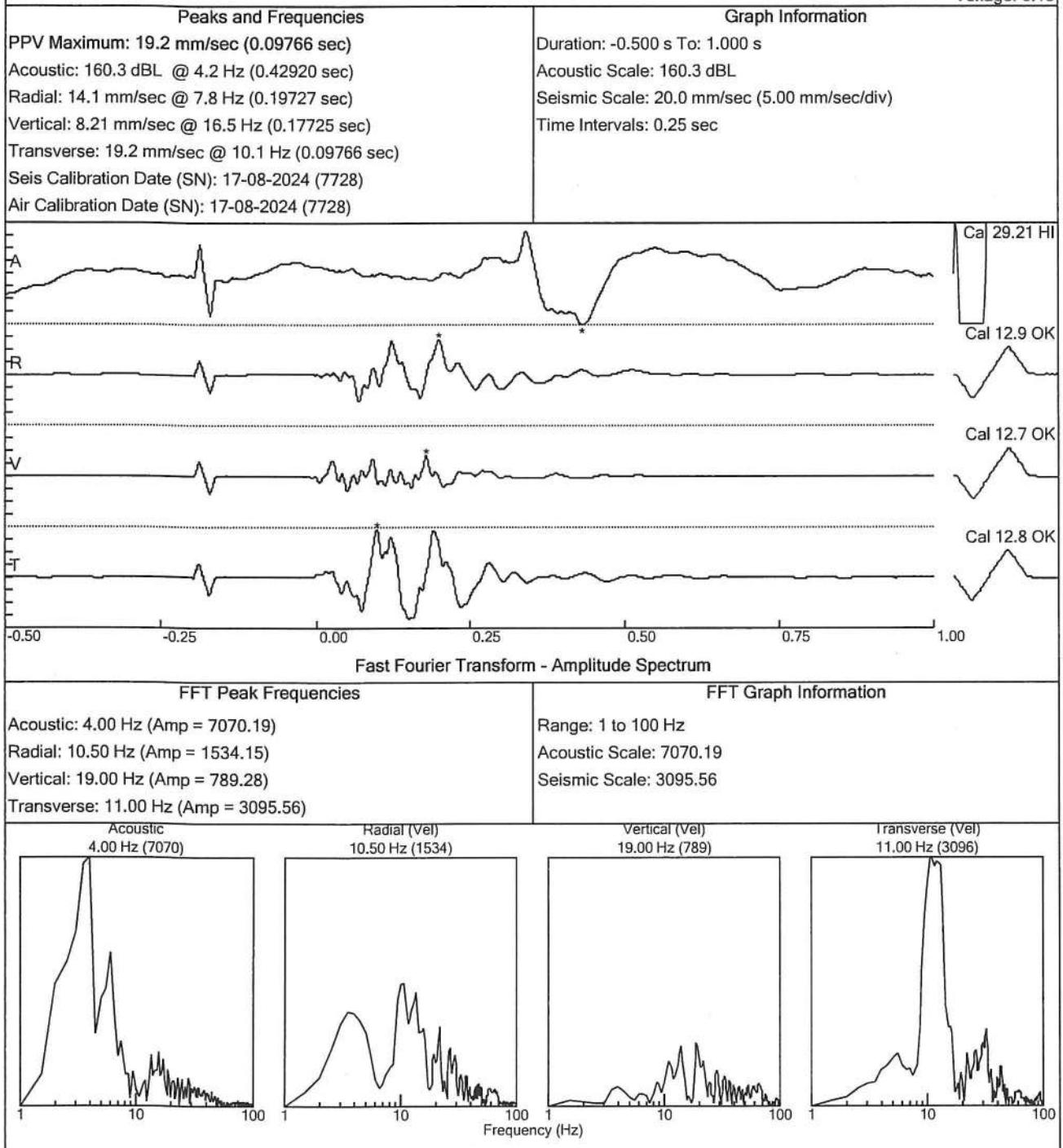
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39z841.evt
Number: 0145
Date and Time: 04-10-2024 15:29:01
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw39z841.evt
Number: 0145
Date and Time: 04-10-2024 15:29:01
SN: 7728
Seismic Trigger: 1.00 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.18

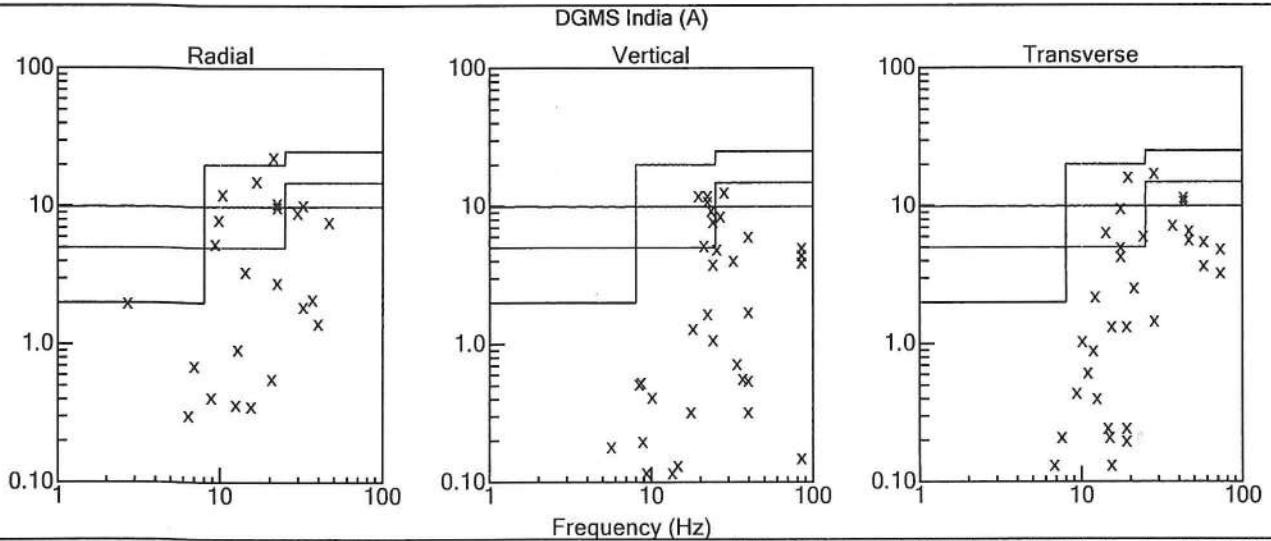
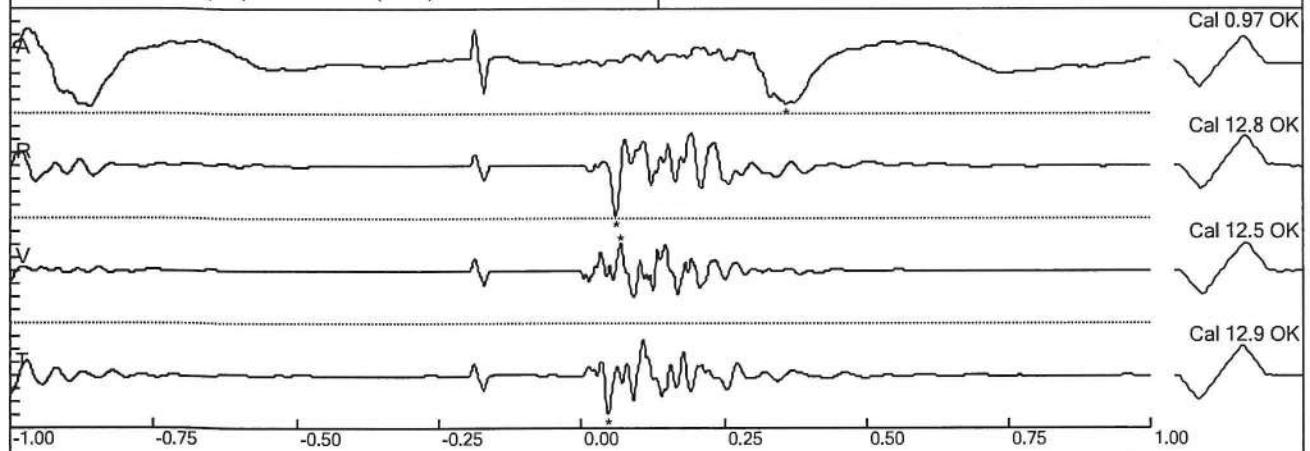


Blast induced ground vibration monitoring
At Kedla Open Cast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad

File: rw3a207z.evt
 Number: 0287
 Date and Time: 04-10-2024 15:30:00
 SN: 7729
 Seismic Trigger: 0.750 mm/sec
 Air Trigger: 148.2 dB
 Sample Rate: 1024
 Duration: 1 Seconds
 Pre-Trigger: 1.0 Second
 Seismic Gain: 256mm/sec
 Acoustic Gain: 148.2 dB
 Voltage: 6.30

Peaks and Frequencies
 PPV Maximum: 23.1 mm/sec (0.0596 sec)
 Acoustic: 130.3 dB @ 4.1 Hz (0.3584 sec)
 Radial: 23.1 mm/sec @ 21.3 Hz (0.0596 sec)
 Vertical: 12.5 mm/sec @ 28.4 Hz (0.0674 sec)
 Transverse: 17.5 mm/sec @ 28.4 Hz (0.0459 sec)
 Seis Calibration Date (SN): 17-08-2024 (7729)
 Air Calibration Date (SN): 17-08-2024 (7729)

Graph Information
 Duration: -1.000 s To: 1.000 s
 Acoustic Scale: 132.0 dB
 Seismic Scale: 24.0 mm/sec (6.00 mm/sec/div)
 Time Intervals: 0.25 sec

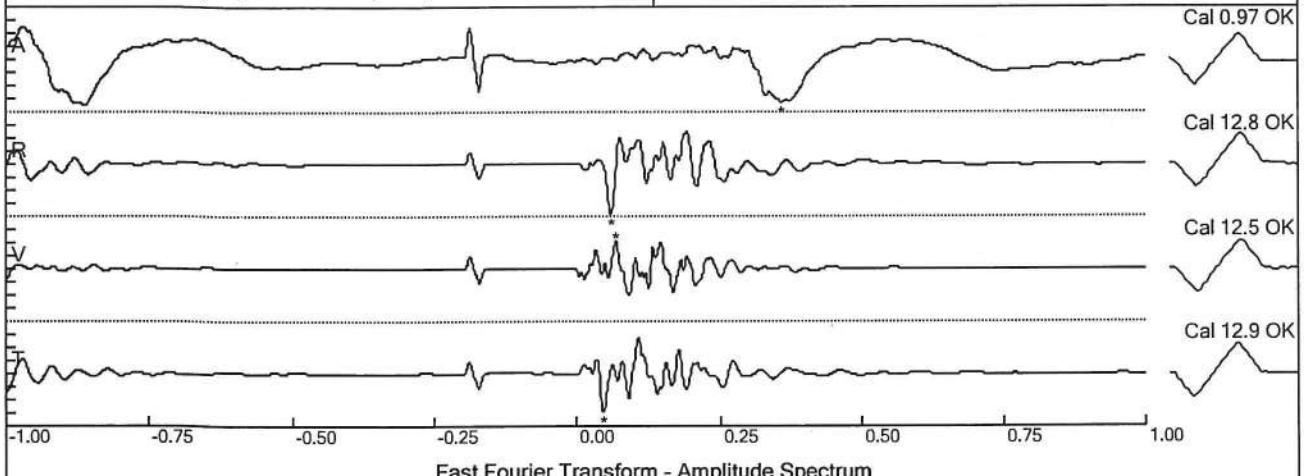


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a207z.evt
Number: 0287
Date and Time: 04-10-2024 15:30:00
SN: 7729
Seismic Trigger: 0.750 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.30

Peaks and Frequencies
PPV Maximum: 23.1 mm/sec (0.0596 sec)
Acoustic: 130.3 dB @ 4.1 Hz (0.3584 sec)
Radial: 23.1 mm/sec @ 21.3 Hz (0.0596 sec)
Vertical: 12.5 mm/sec @ 28.4 Hz (0.0674 sec)
Transverse: 17.5 mm/sec @ 28.4 Hz (0.0459 sec)
Seis Calibration Date (SN): 17-08-2024 (7729)
Air Calibration Date (SN): 17-08-2024 (7729)

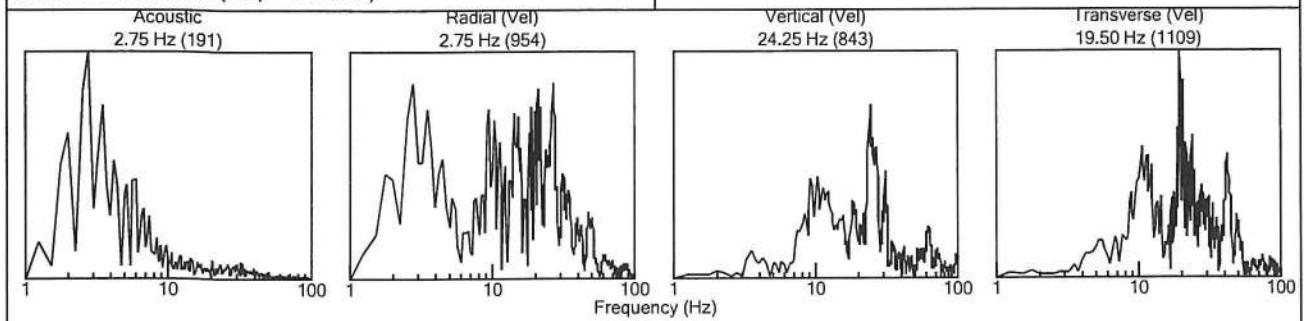
Graph Information
Duration: -1.000 s To: 1.000 s
Acoustic Scale: 132.0 dB
Seismic Scale: 24.0 mm/sec (6.00 mm/sec/div)
Time Intervals: 0.25 sec



Fast Fourier Transform - Amplitude Spectrum

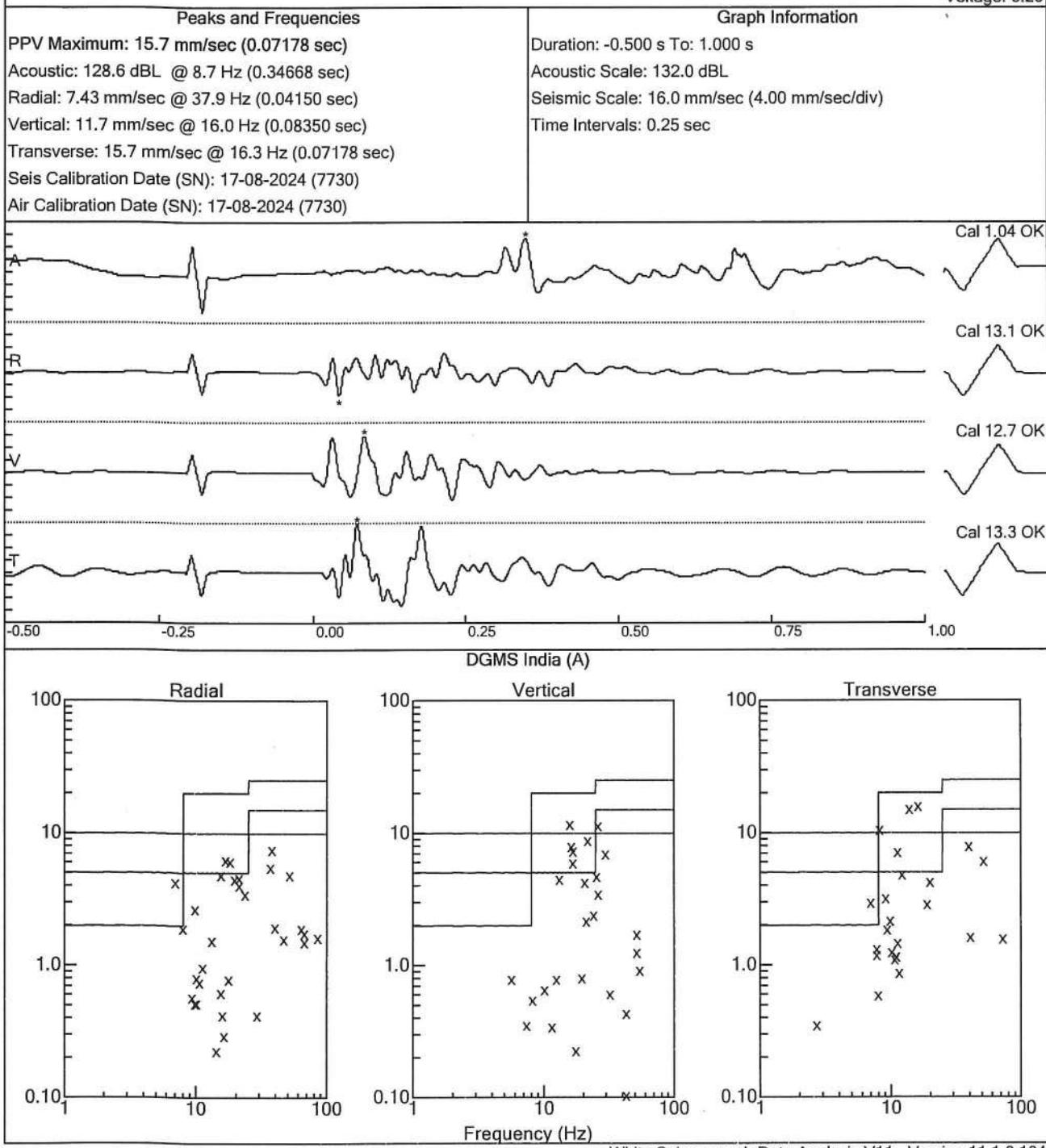
FFT Peak Frequencies
Acoustic: 2.75 Hz (Amp = 191.20)
Radial: 2.75 Hz (Amp = 953.88)
Vertical: 24.25 Hz (Amp = 843.20)
Transverse: 19.50 Hz (Amp = 1108.95)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 191.20
Seismic Scale: 1108.95



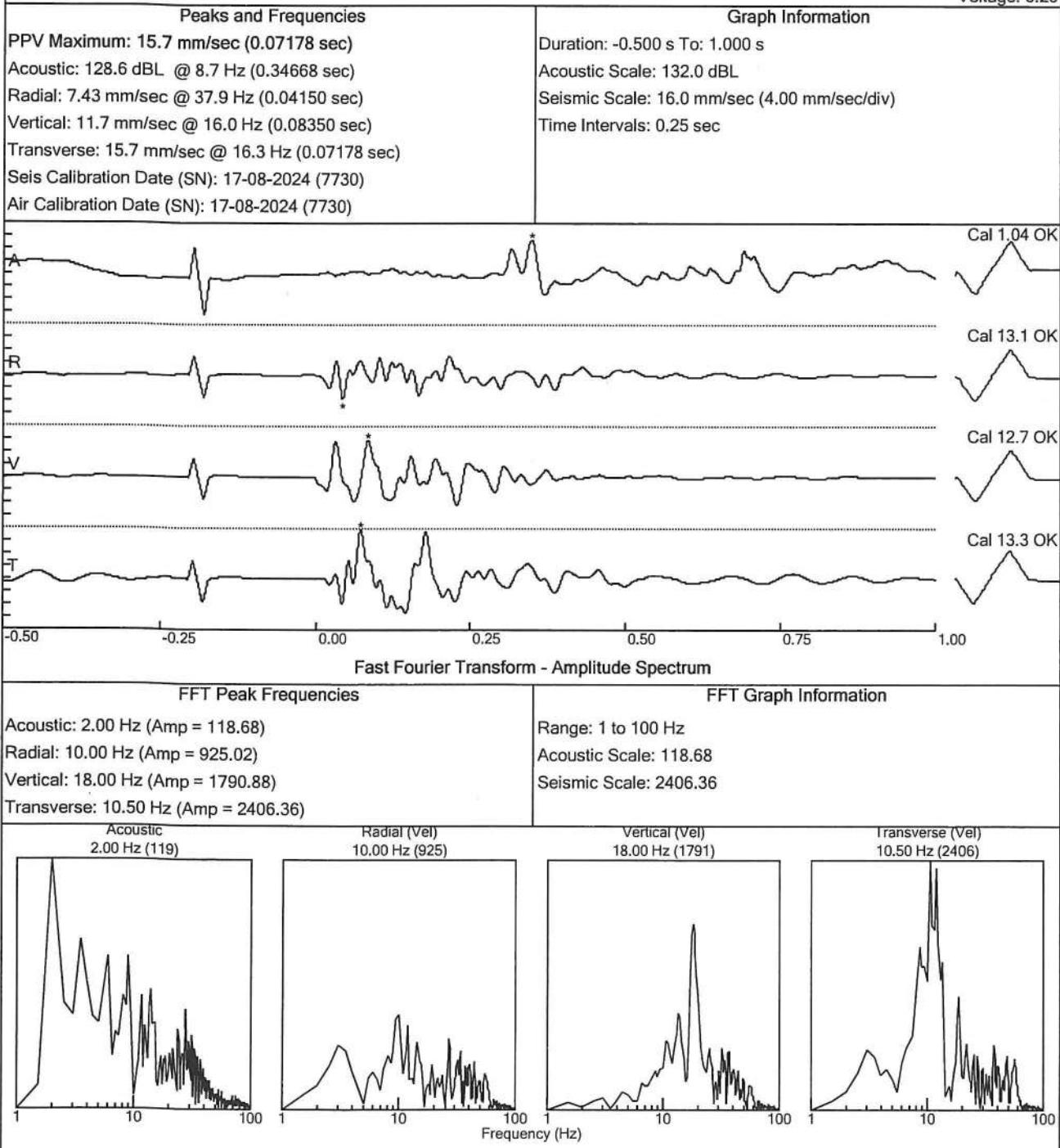
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0o97.evt
Number: 0331
Date and Time: 04-10-2024 15:29:52
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



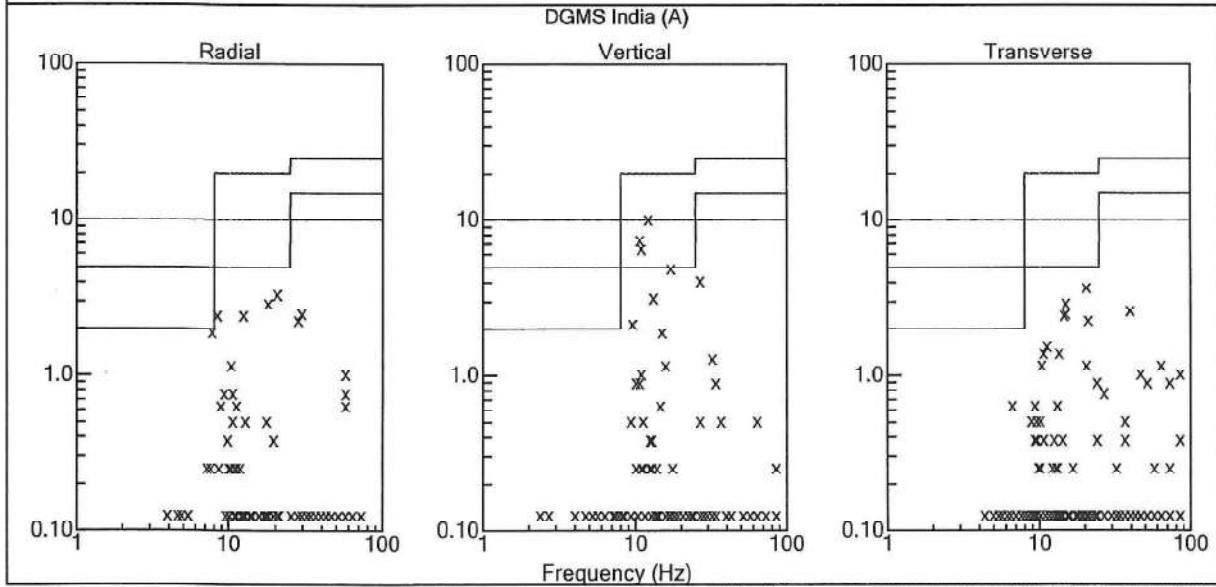
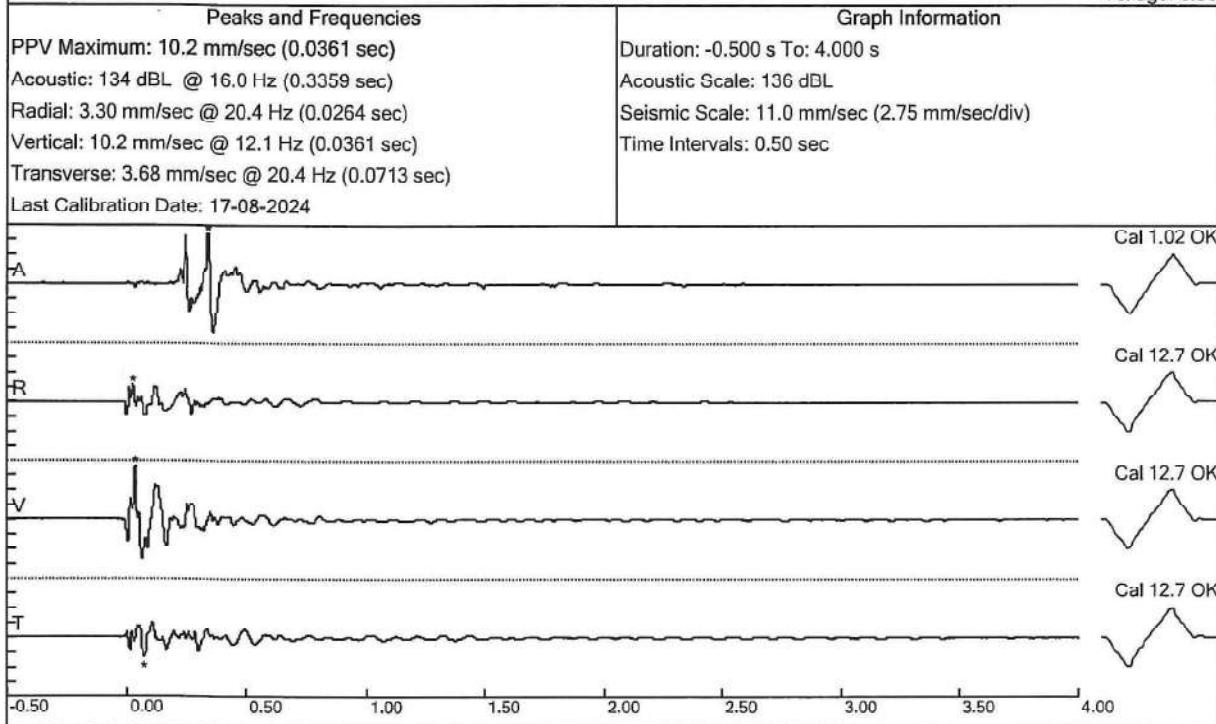
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: rw3a0o97.evt
Number: 0331
Date and Time: 04-10-2024 15:29:52
SN: 7730
Seismic Trigger: 1.00 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



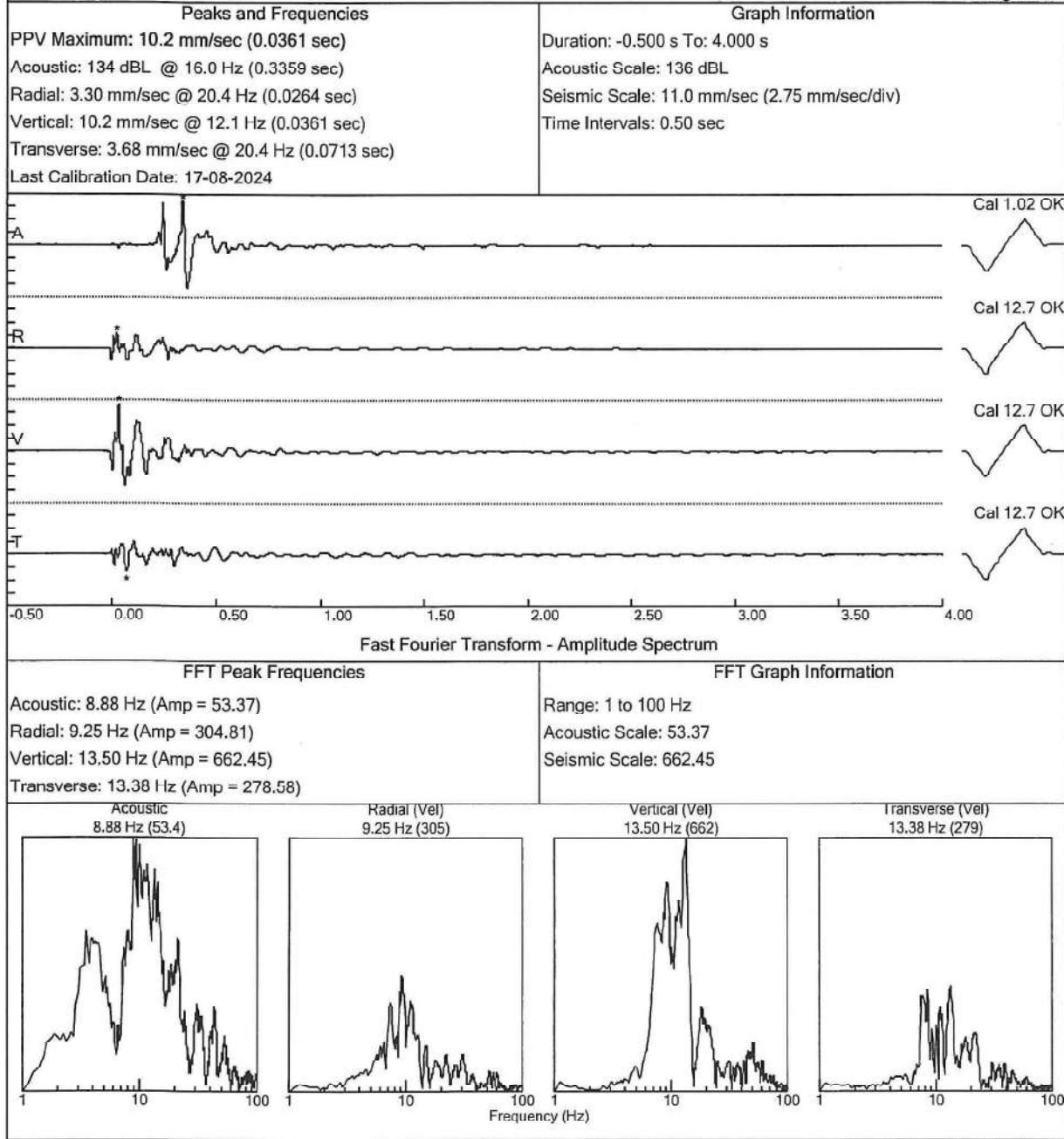
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221440203.dtb
Number: 203
Date and Time: 04-10-2024 14:40:00
SN: 6351
Seismic Trigger: 2.54 mm/sec
Air Trigger: 142 dB
Sample Rate: 1024
Duration: 4 Seconds
Pre-Trigger: 0.5 Second
Seismic Range: 63.5 in/s
Acoustic Range: 142 dB
Gain: 2.0x
Voltage: 6.30



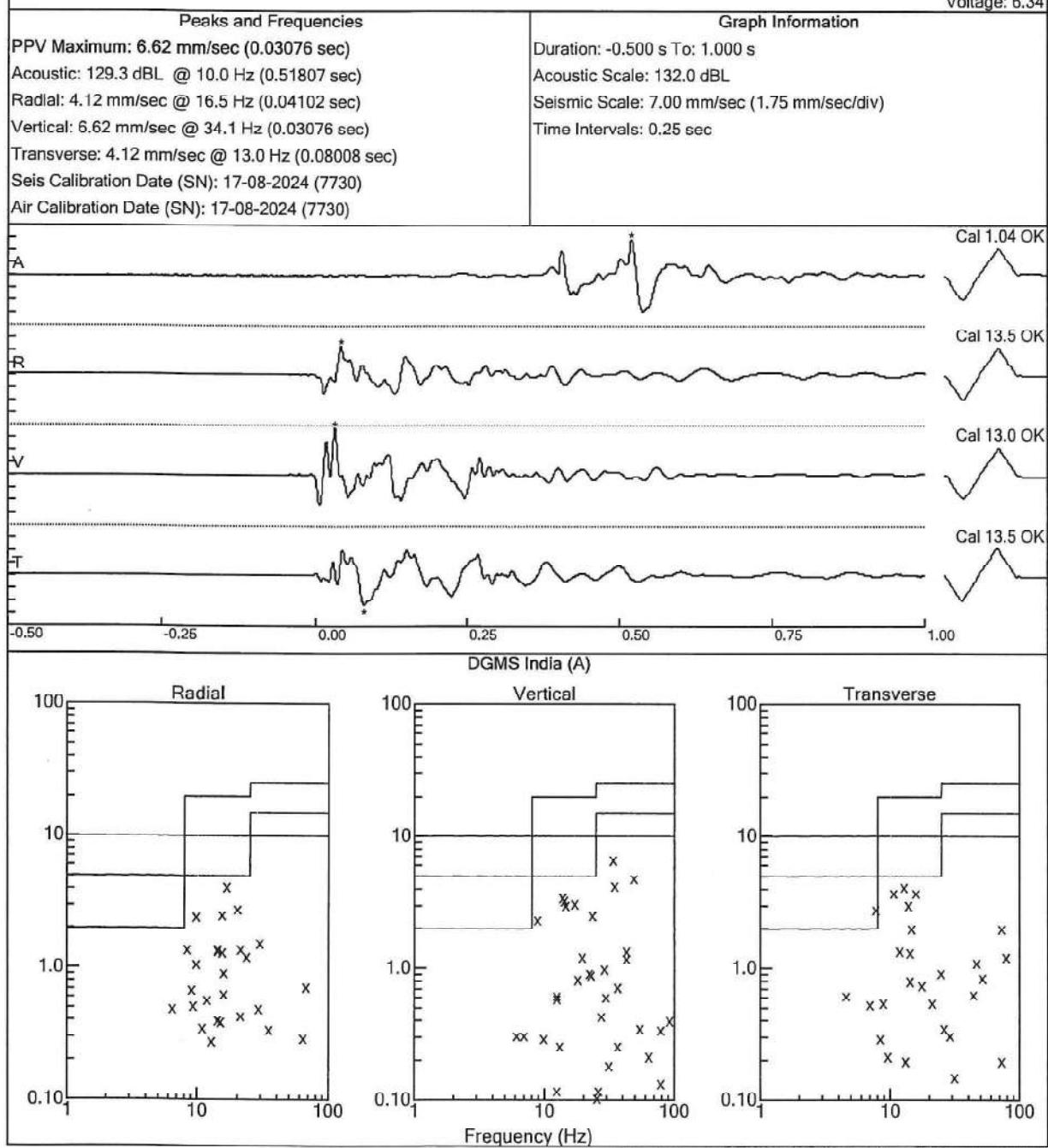
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 6351202406221440203.dtb
Number: 203
Date and Time: 04-10-2024 14:40:00
SN: 6351
Seismic Trigger: 2.54 mm/sec
Air Trigger: 142 dB
Sample Rate: 1024
Duration: 4 Seconds
Pre-Trigger: 0.5 Second
Seismic Range: 63.5 in/s
Acoustic Range: 142 dB
Gain: 2.0x
Voltage: 6.30



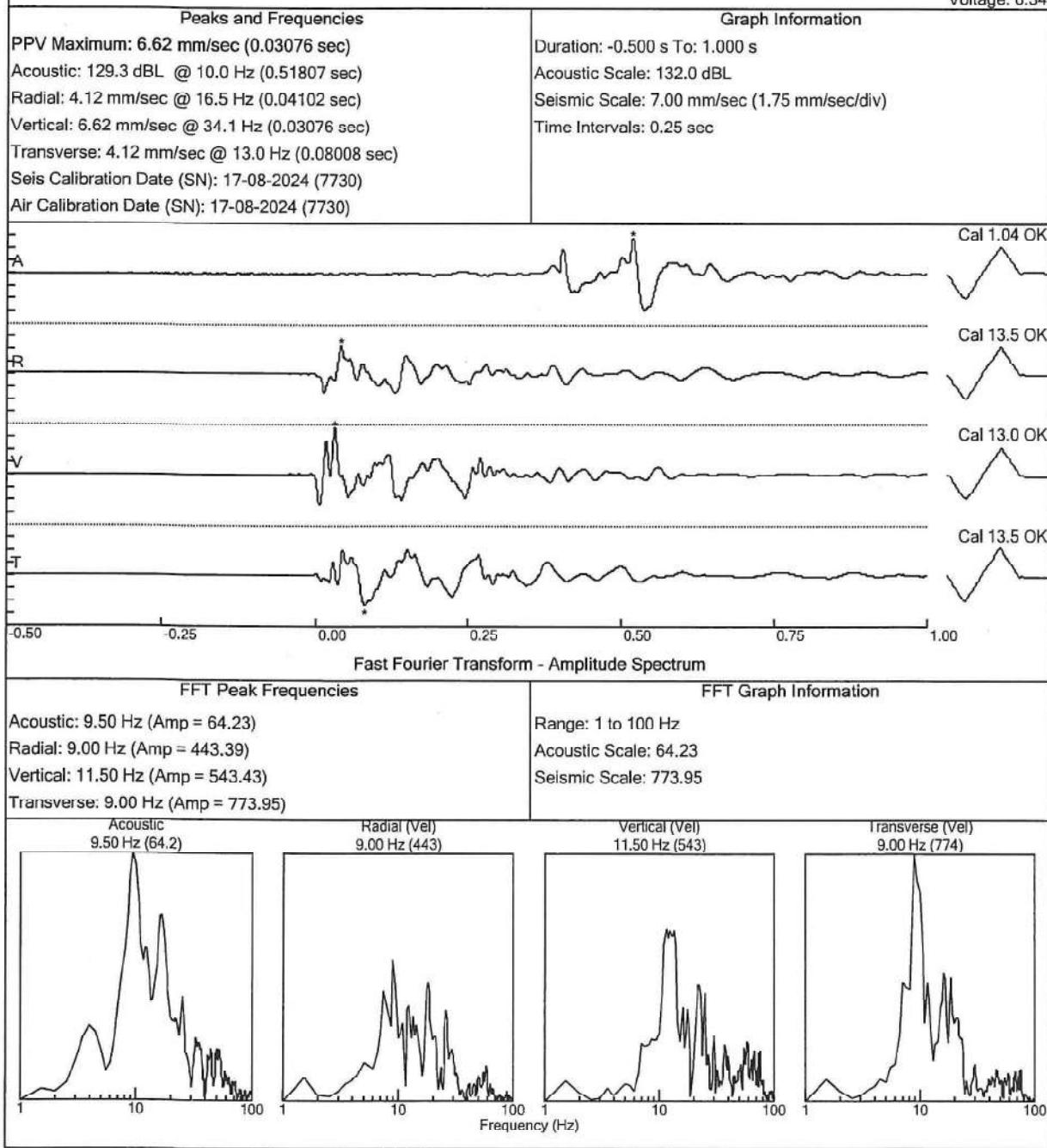
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha338078.evt
Number: 0260
Date and Time: 04-10-2024 14:41:44
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.34



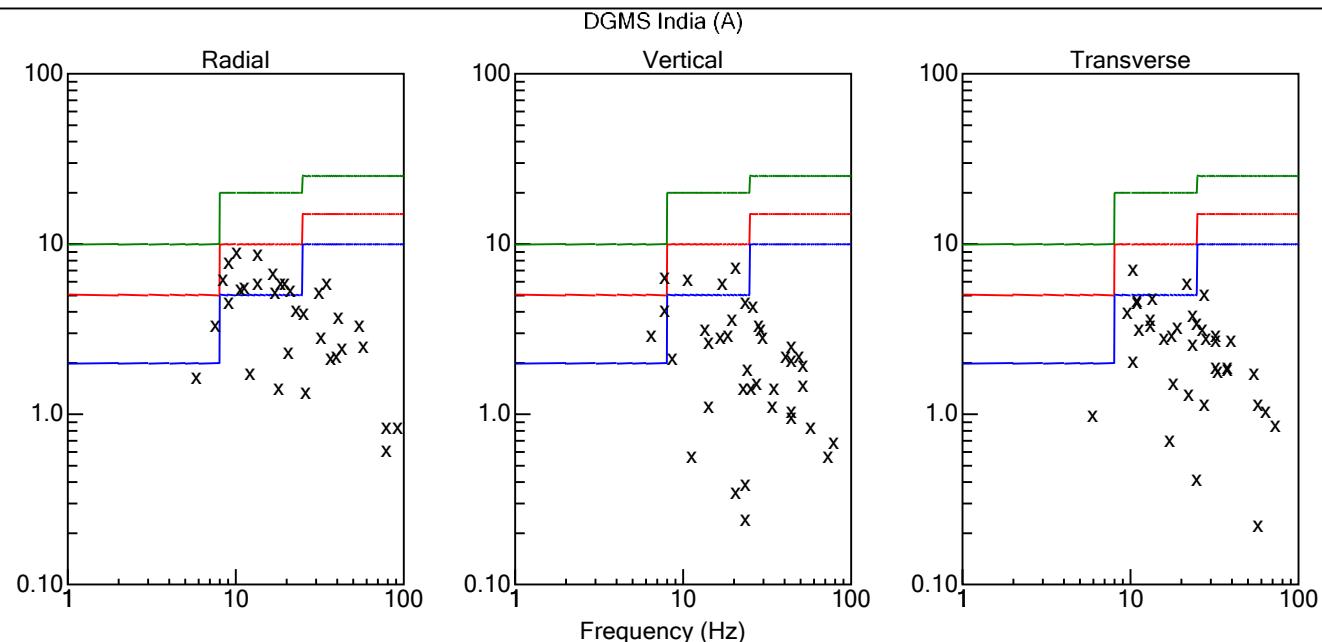
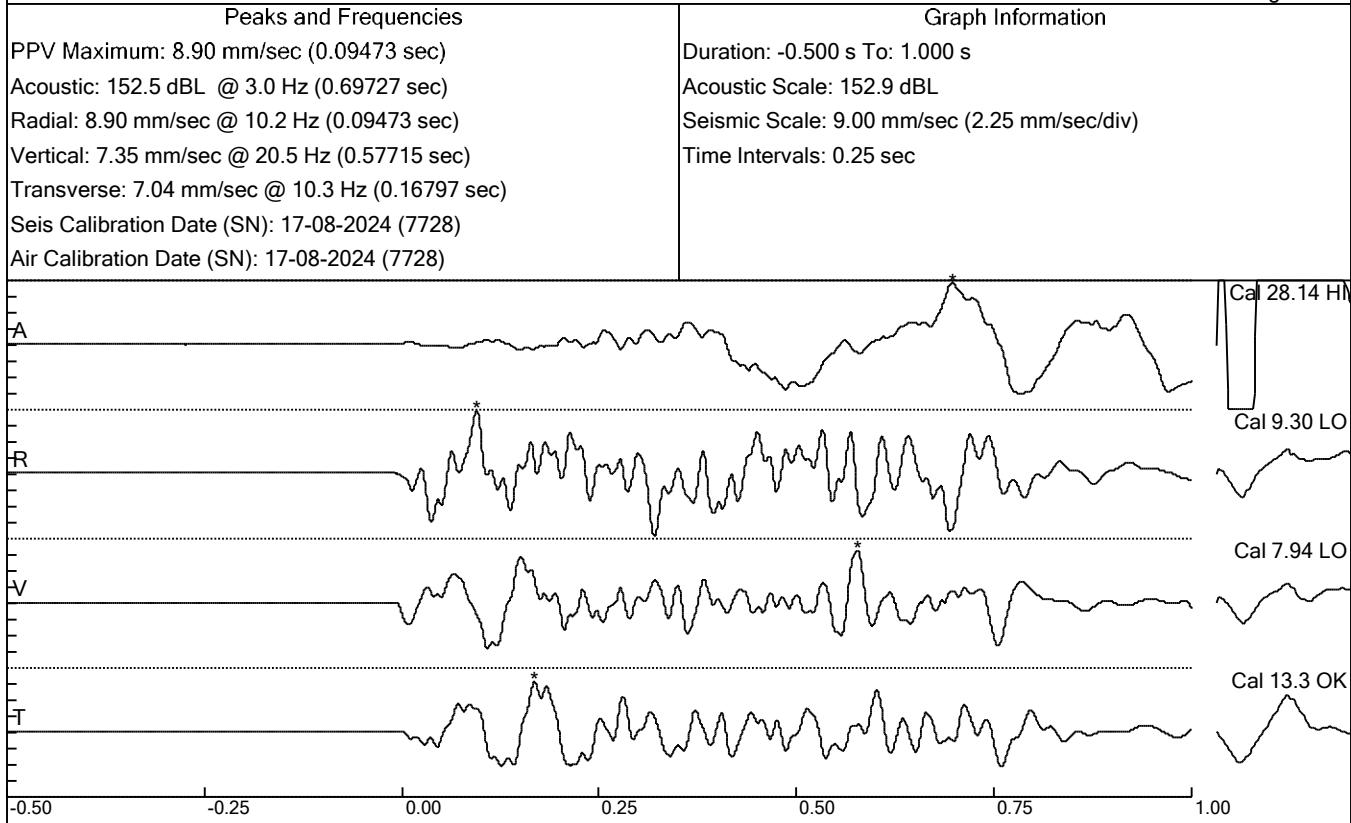
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: ha338078.evt
Number: 0260
Date and Time: 04-10-2024 14:41:44
SN: 7730
Seismic Trigger: 0.500 mm/sec
Air Trigger: 148.1 dBL
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dBL
Voltage: 6.34



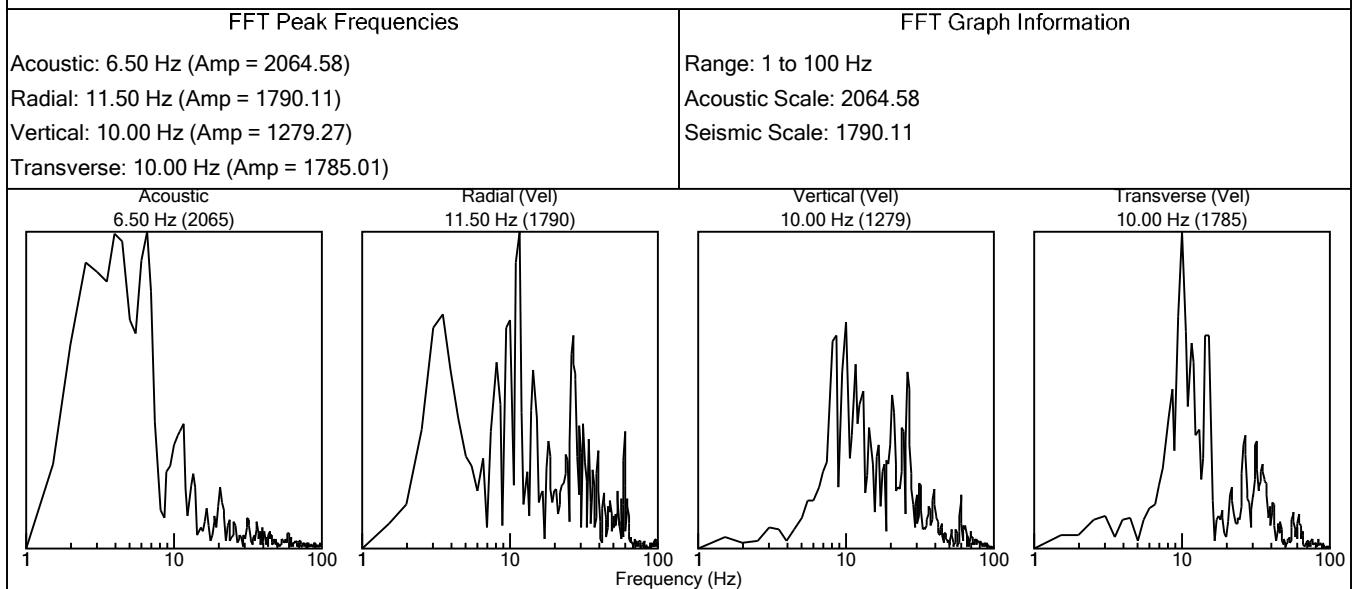
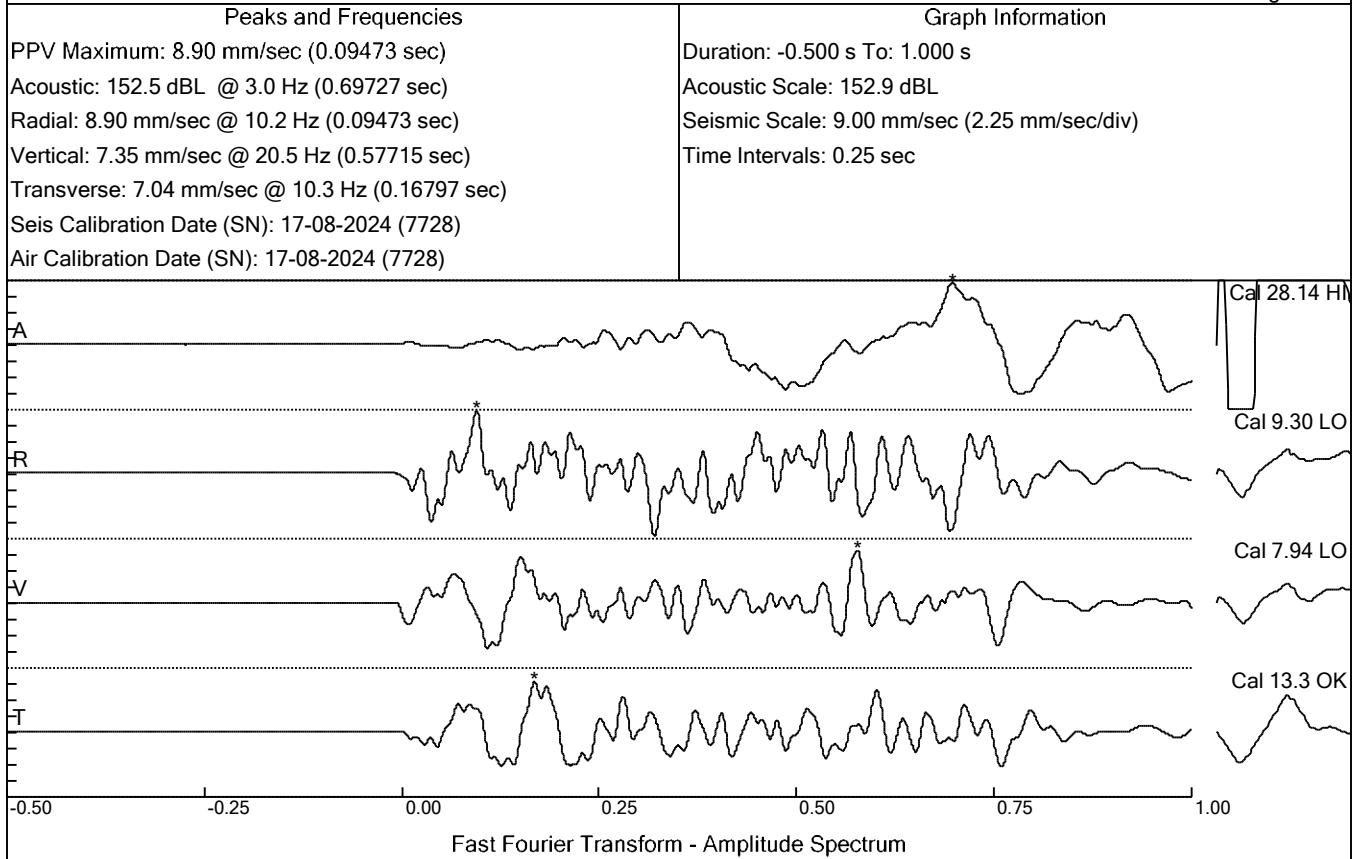
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1m7levt
Number: 0273
Date and Time: 13-01-2025 17:50:19
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.05



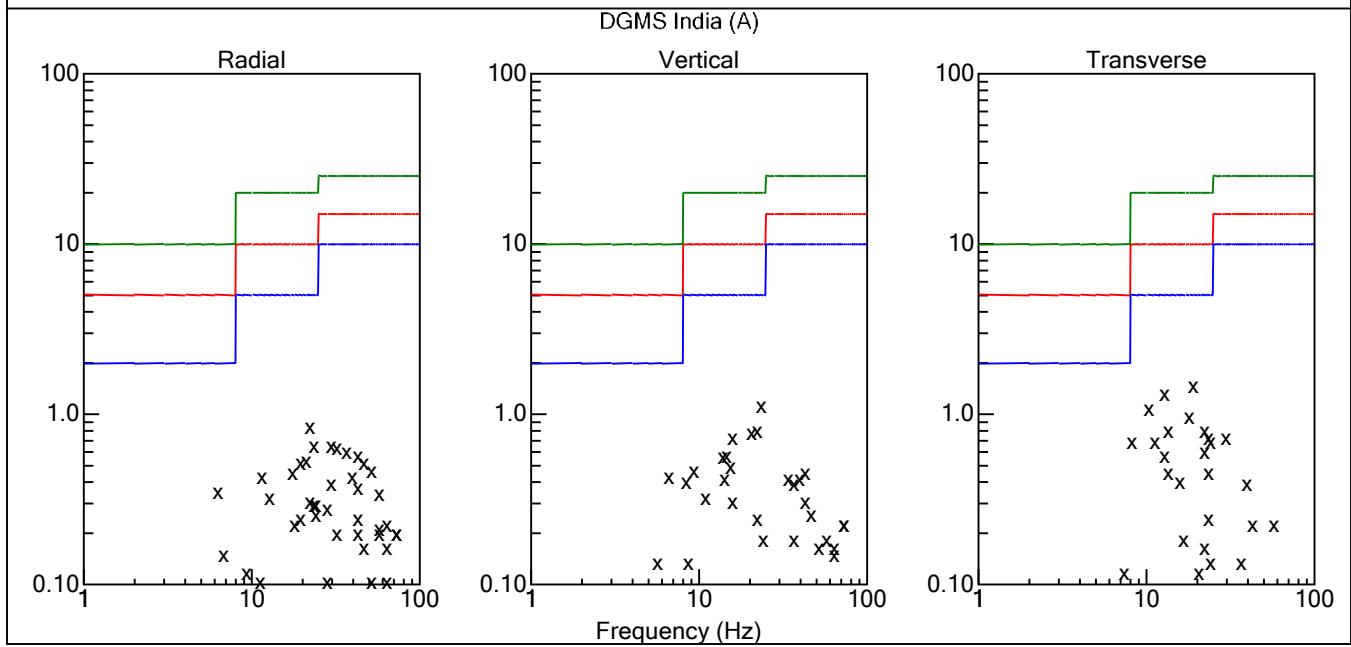
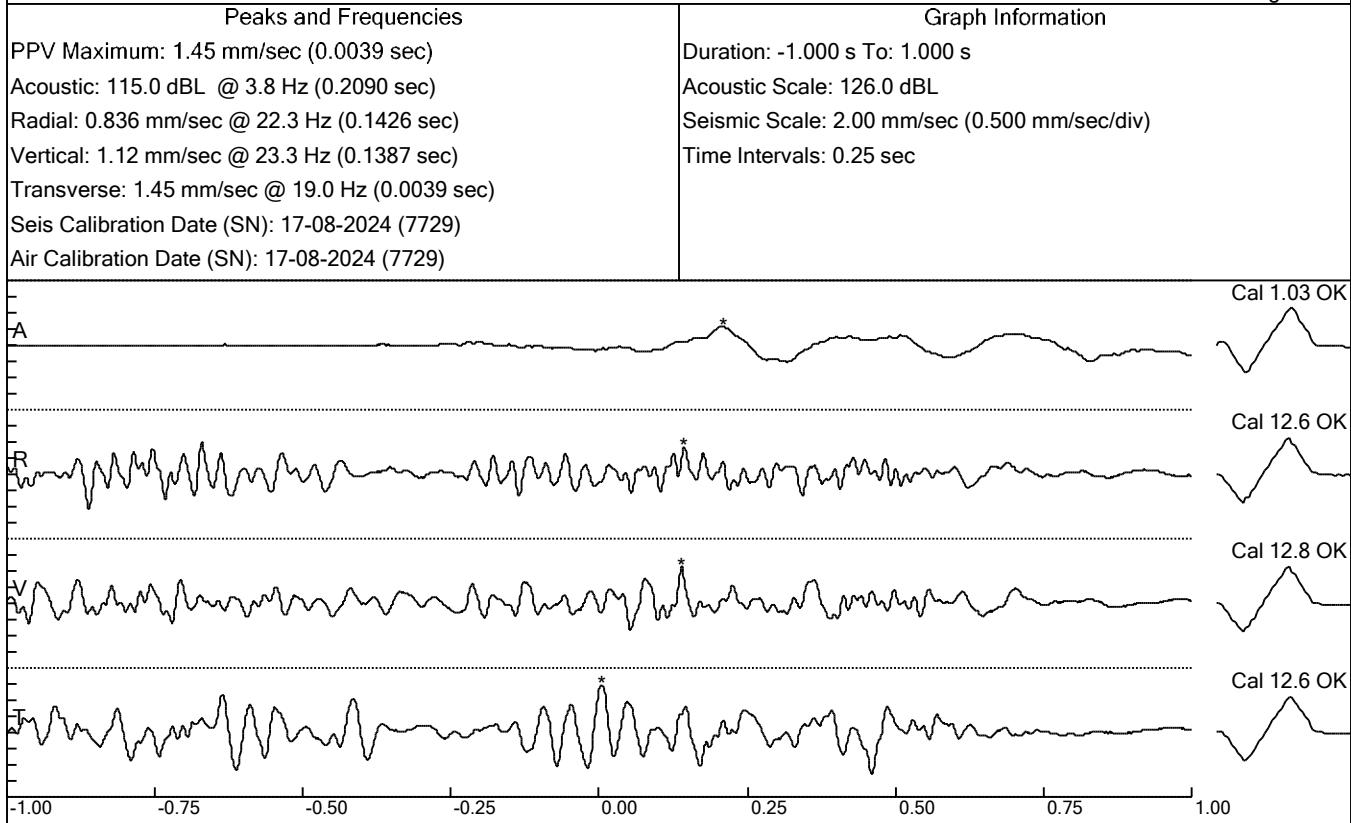
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1m7levt
Number: 0273
Date and Time: 13-01-2025 17:50:19
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.05



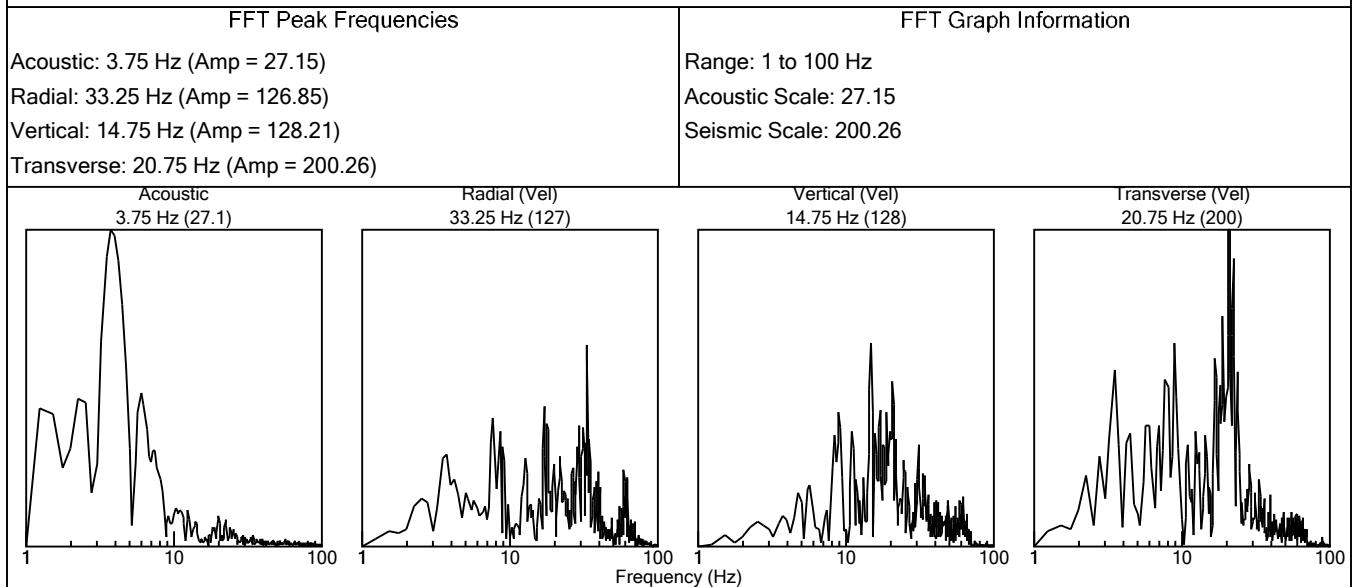
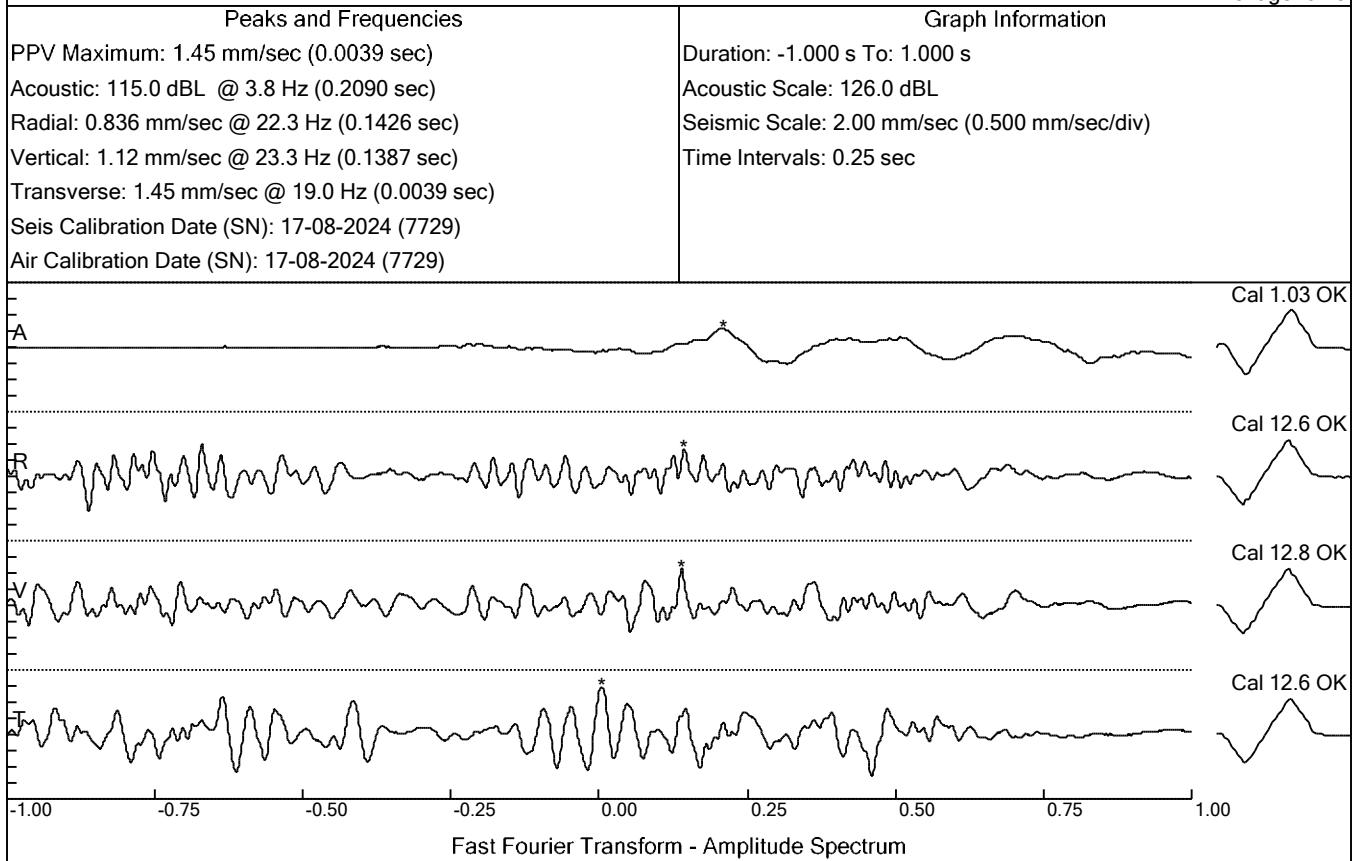
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r4kd1.evt
Number: 0469
Date and Time: 13-01-2025 17:51:24
SN: 7729
Seismic Trigger: 1.25 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



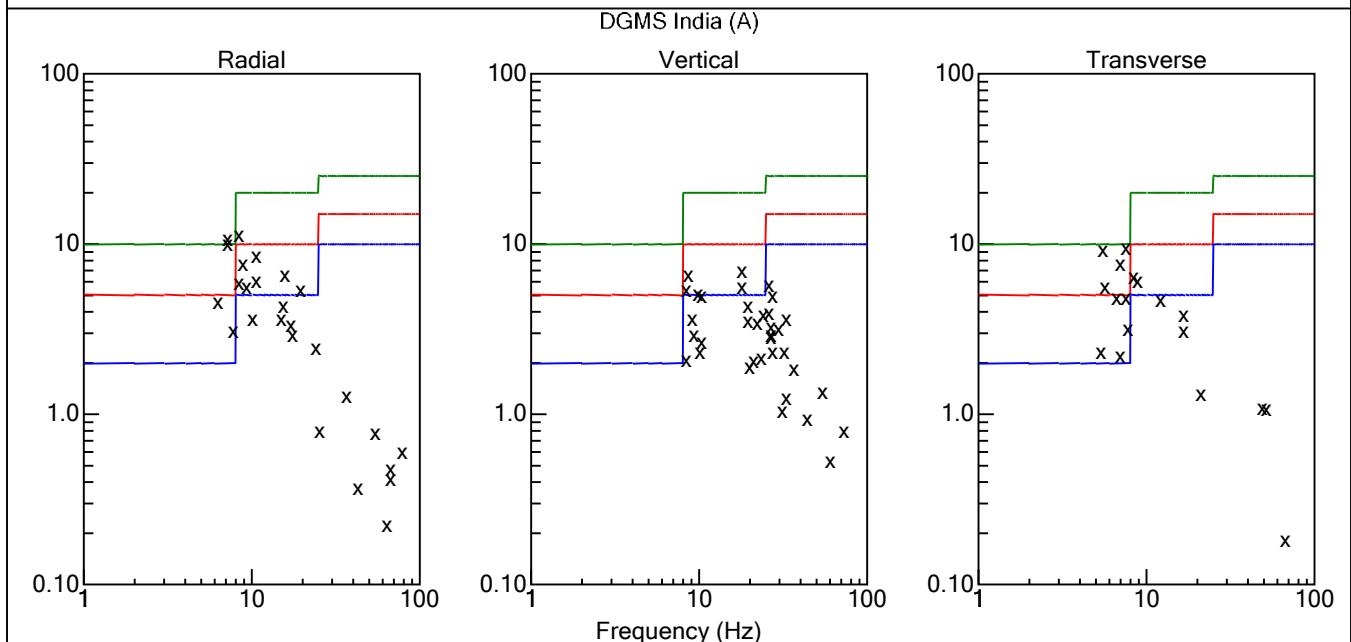
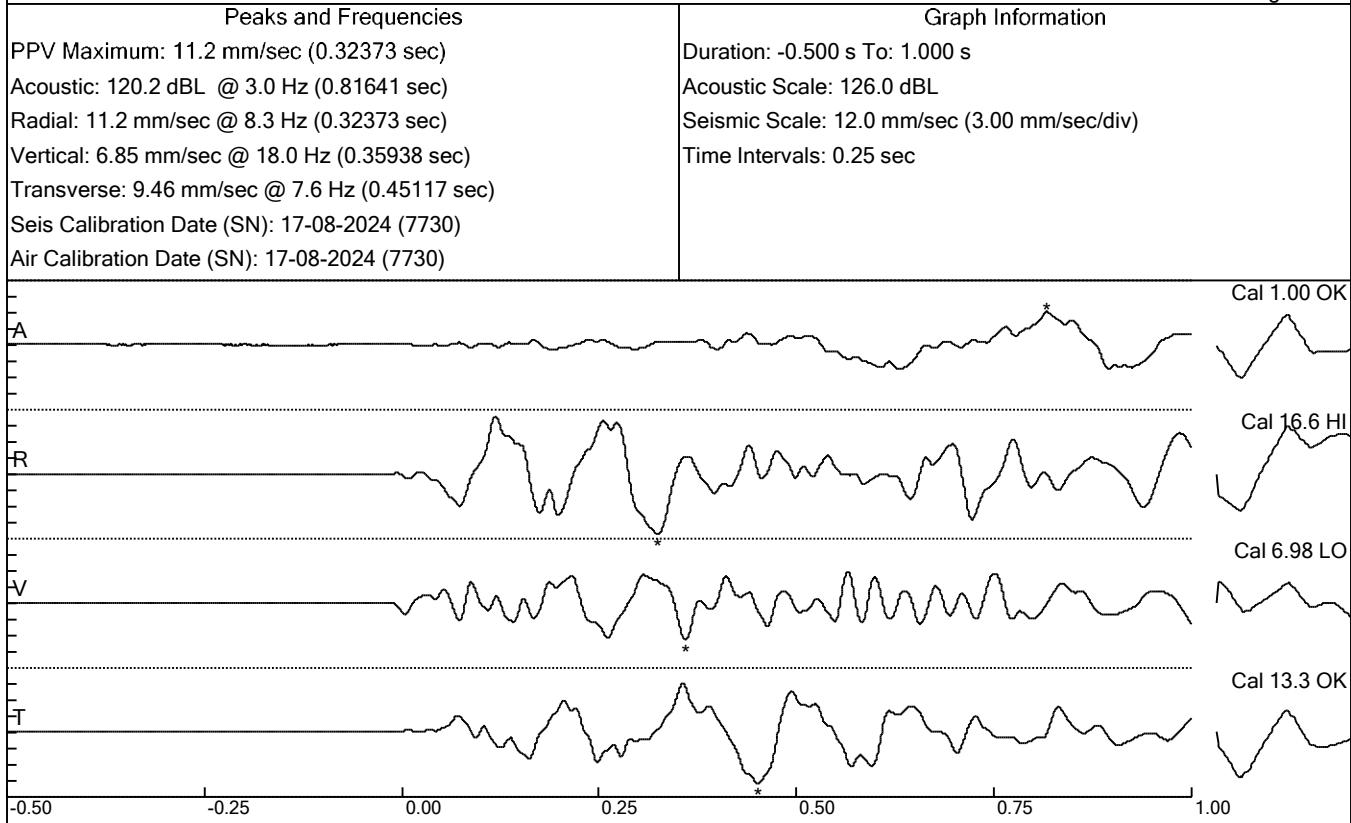
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r4kd1.evt
Number: 0469
Date and Time: 13-01-2025 17:51:24
SN: 7729
Seismic Trigger: 1.25 mm/sec
Air Trigger: 148.2 dB
Sample Rate: 1024
Duration: 1 Seconds
Pre-Trigger: 1.0 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.29



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r44c2.evt
Number: 0434
Date and Time: 13-01-2025 17:51:08
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26

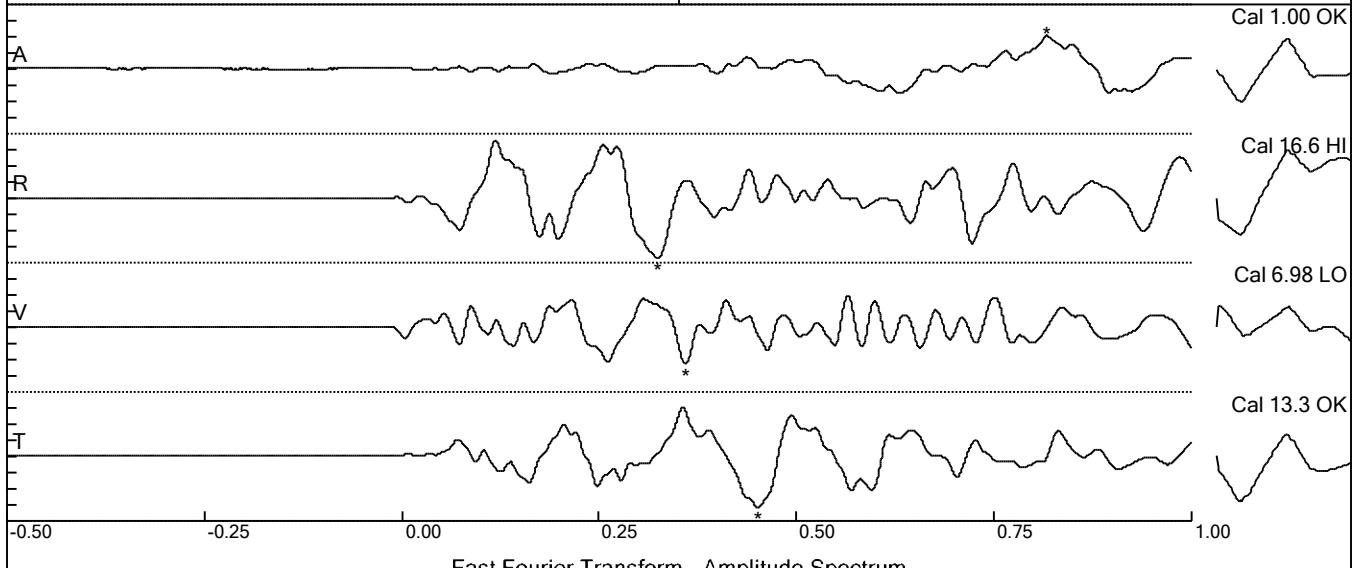


**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r44c2.evt
Number: 0434
Date and Time: 13-01-2025 17:51:08
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26

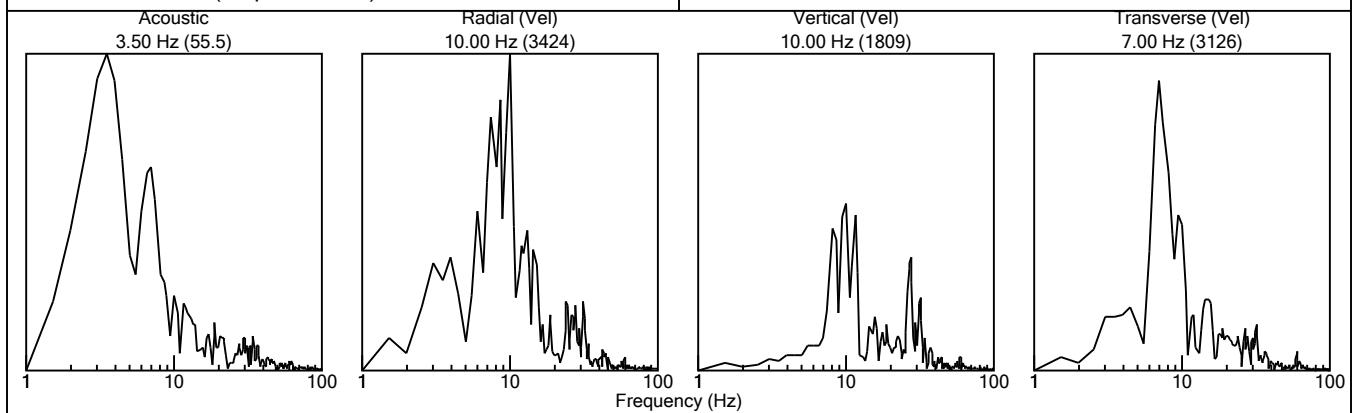
Peaks and Frequencies
PPV Maximum: 11.2 mm/sec (0.32373 sec)
Acoustic: 120.2 dB @ 3.0 Hz (0.81641 sec)
Radial: 11.2 mm/sec @ 8.3 Hz (0.32373 sec)
Vertical: 6.85 mm/sec @ 18.0 Hz (0.35938 sec)
Transverse: 9.46 mm/sec @ 7.6 Hz (0.45117 sec)
Seis Calibration Date (SN): 17-08-2024 (7730)
Air Calibration Date (SN): 17-08-2024 (7730)

Graph Information
Duration: -0.500 s To: 1.000 s
Acoustic Scale: 126.0 dB
Seismic Scale: 12.0 mm/sec (3.00 mm/sec/div)
Time Intervals: 0.25 sec



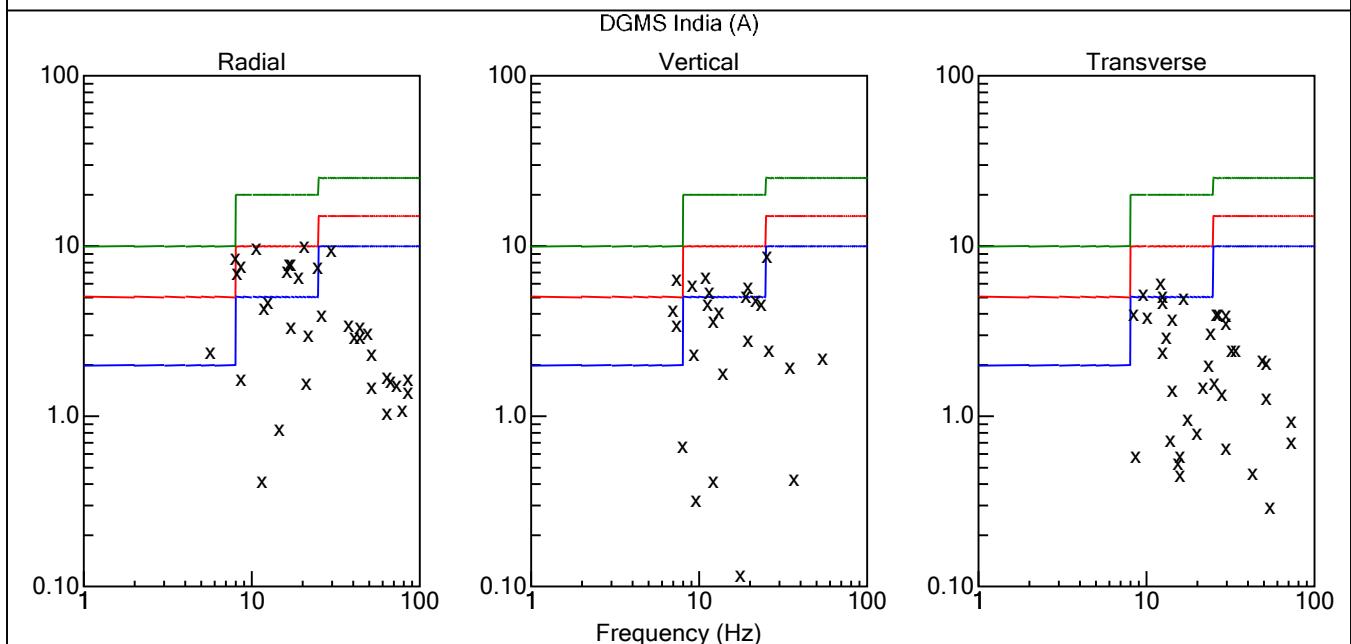
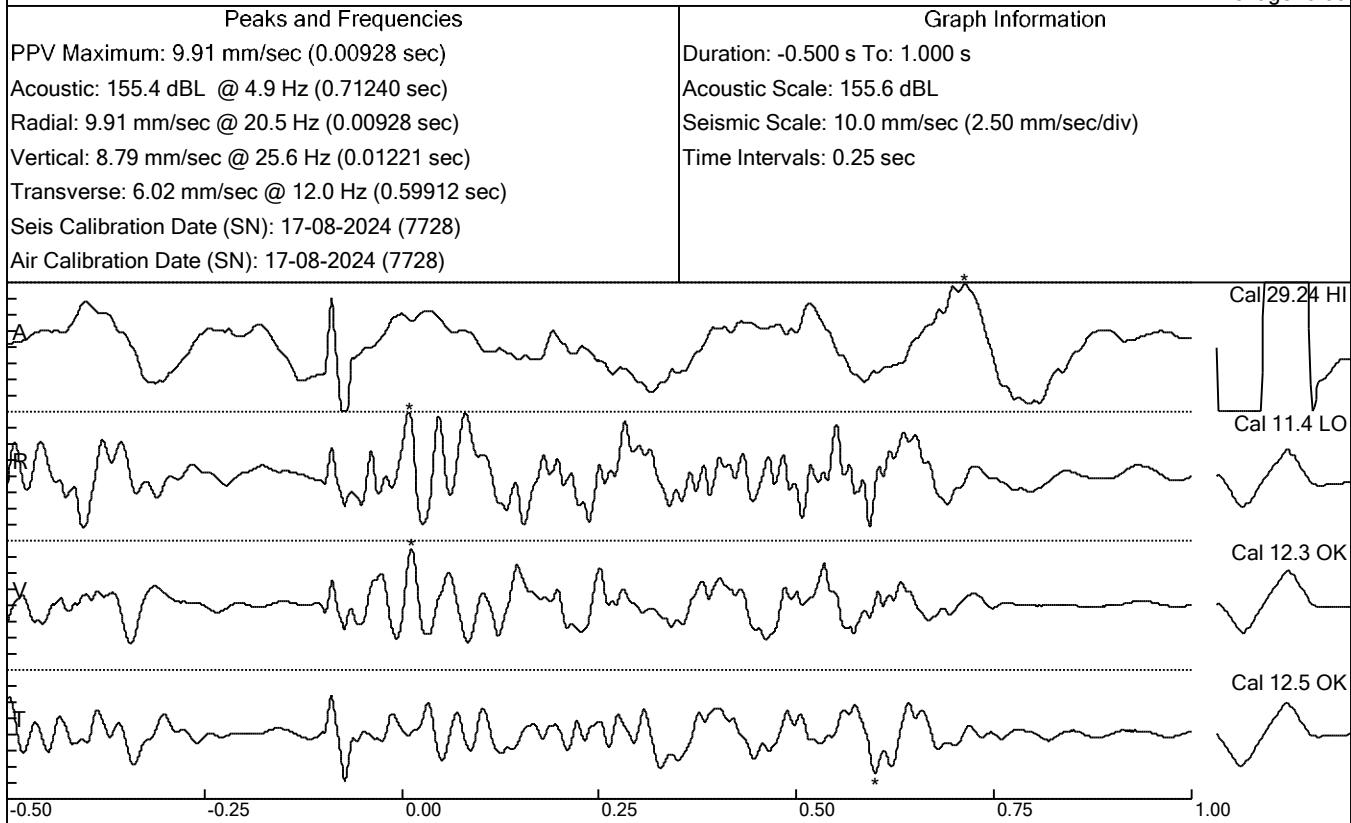
FFT Peak Frequencies
Acoustic: 3.50 Hz (Amp = 55.53)
Radial: 10.00 Hz (Amp = 3423.50)
Vertical: 10.00 Hz (Amp = 1808.91)
Transverse: 7.00 Hz (Amp = 3126.29)

FFT Graph Information
Range: 1 to 100 Hz
Acoustic Scale: 55.53
Seismic Scale: 3423.50



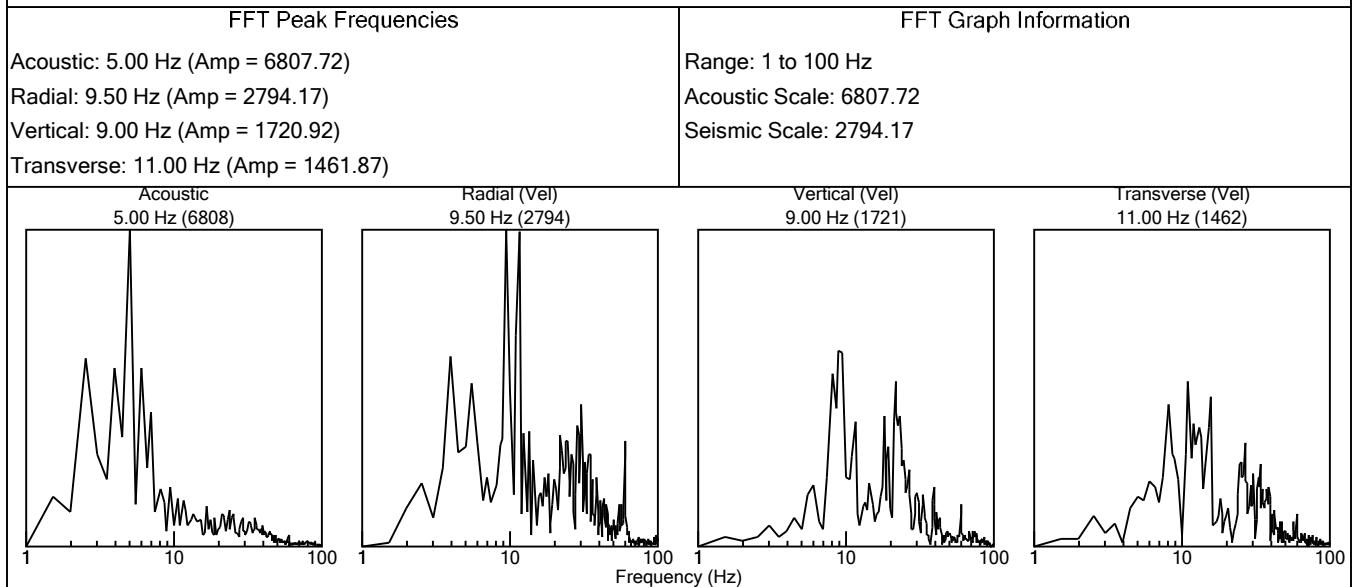
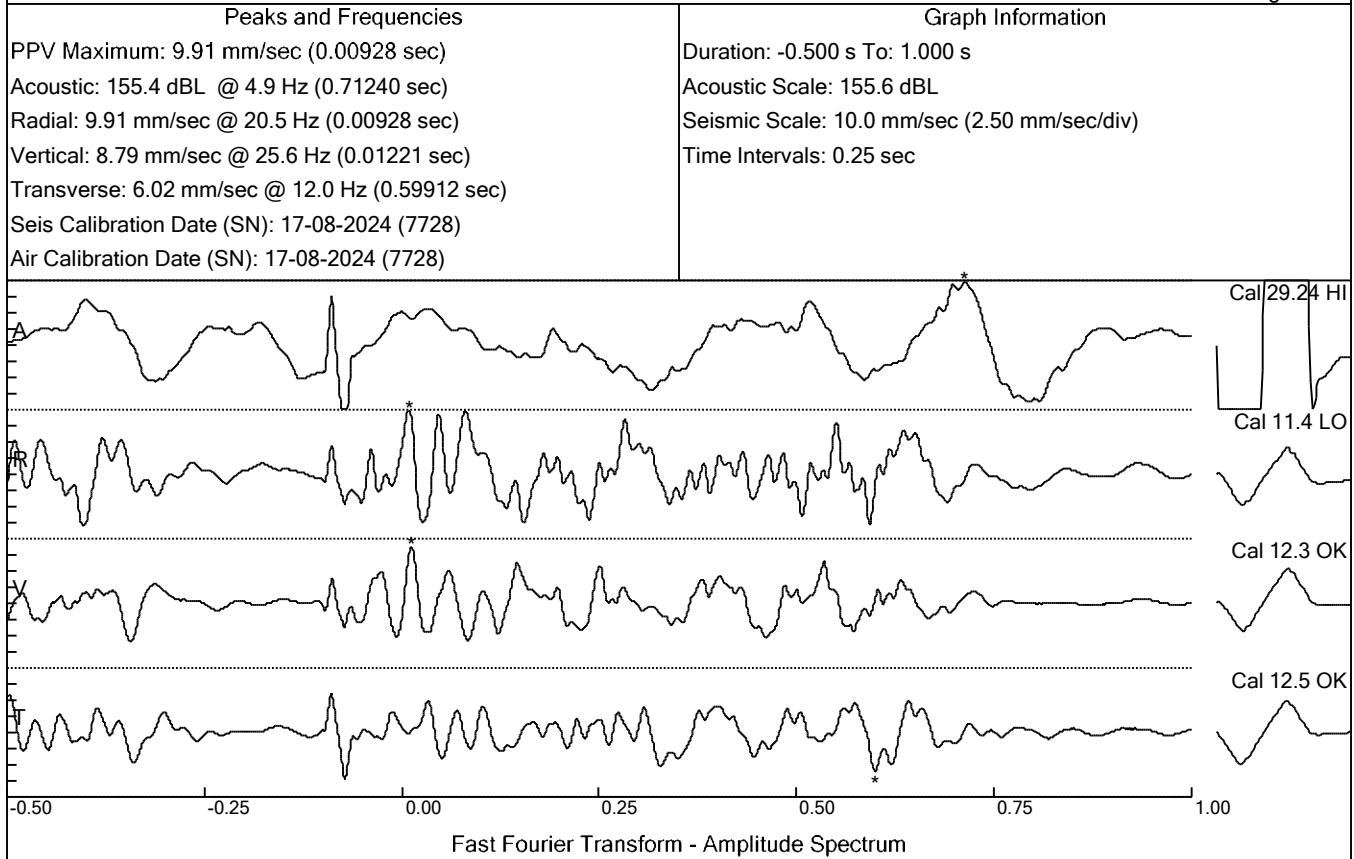
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1o7m.evt
Number: 0274
Date and Time: 13-01-2025 17:50:21
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.05



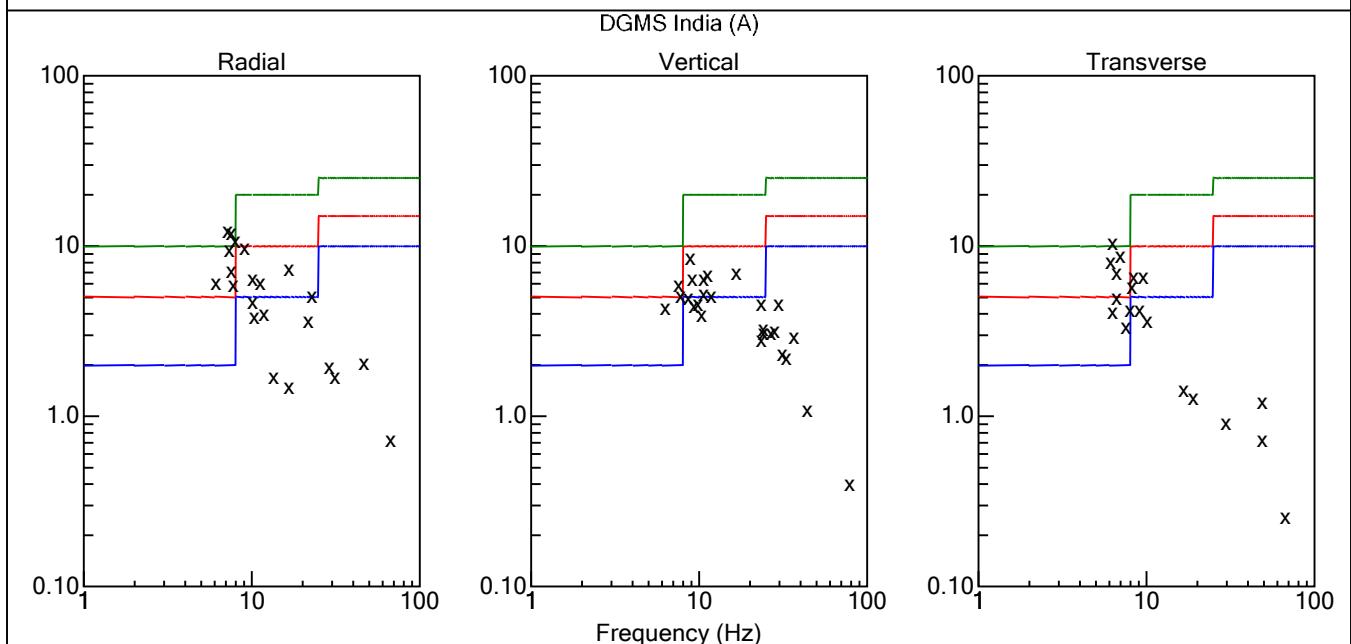
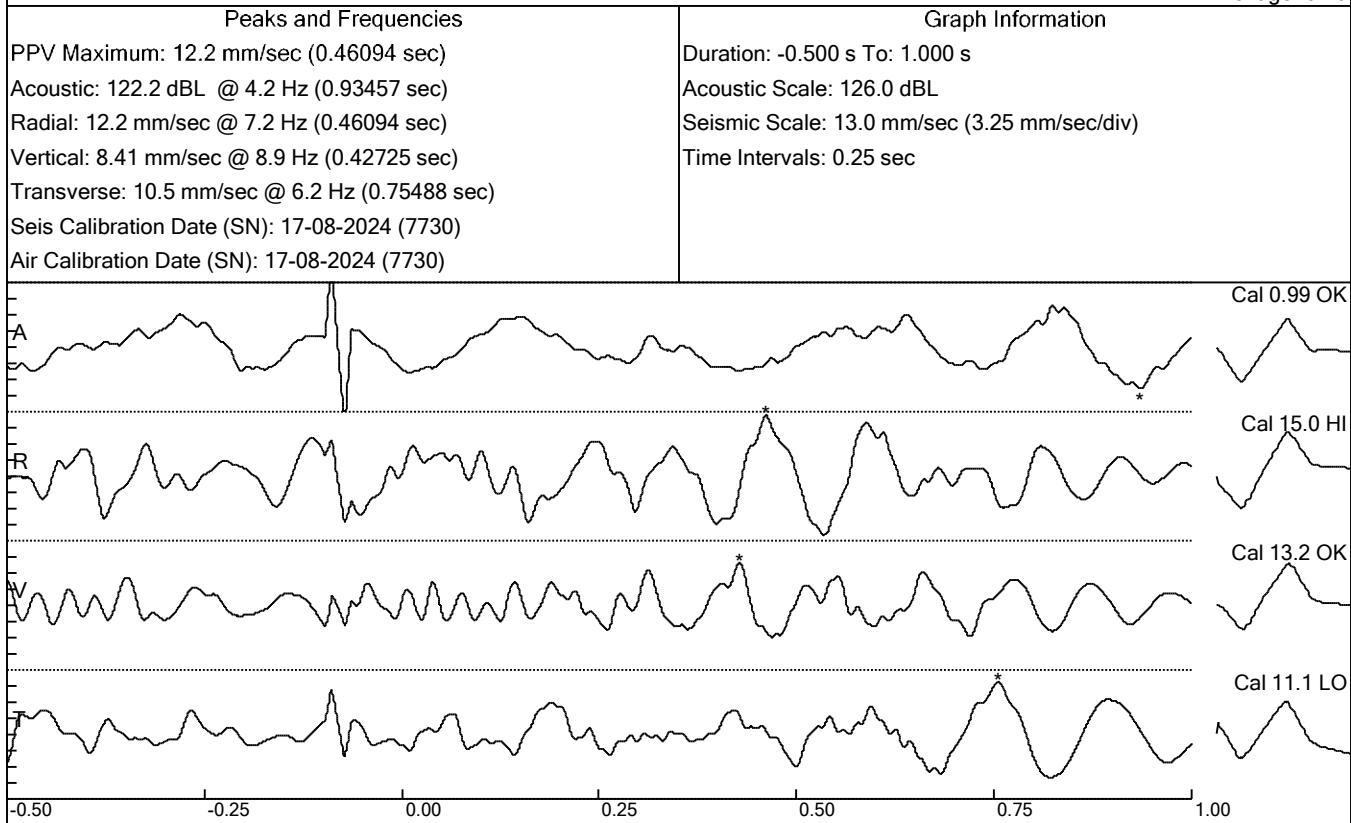
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1o7m.evt
Number: 0274
Date and Time: 13-01-2025 17:50:21
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.05



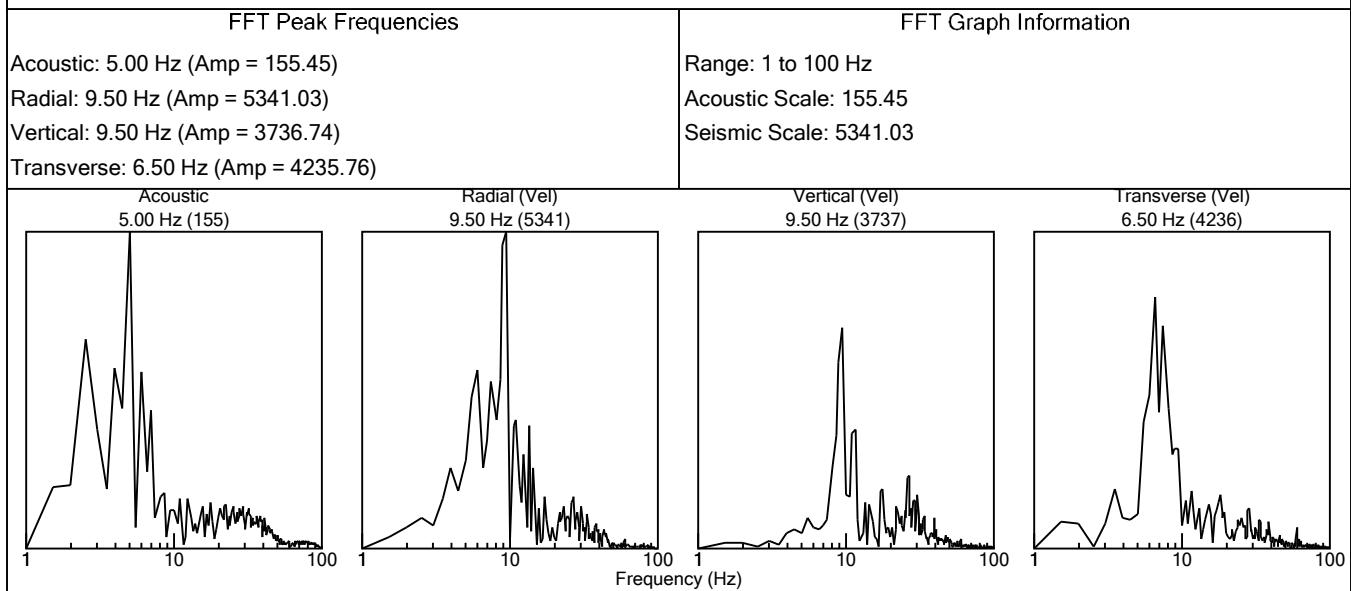
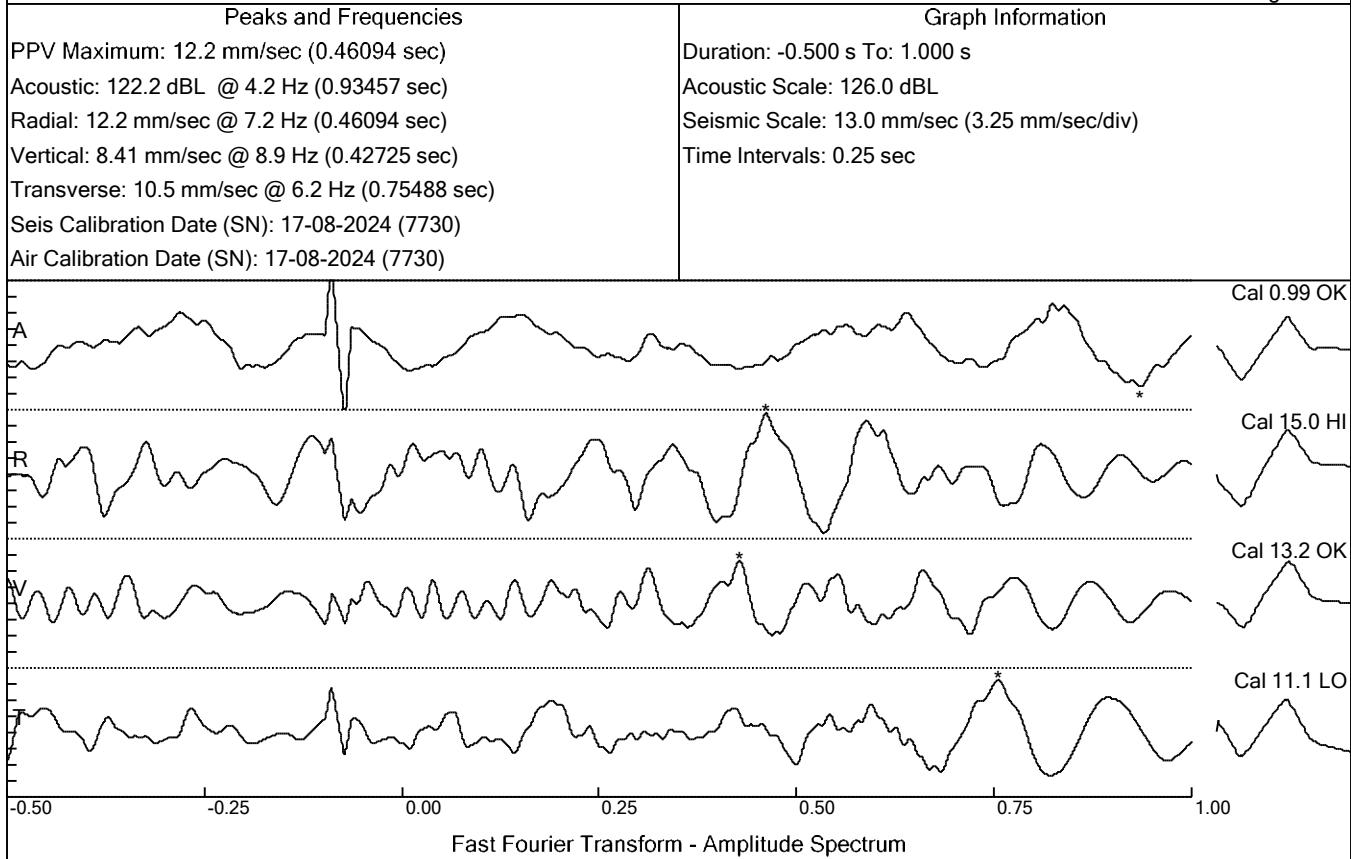
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r46c3.evt
Number: 0435
Date and Time: 13-01-2025 17:51:10
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26



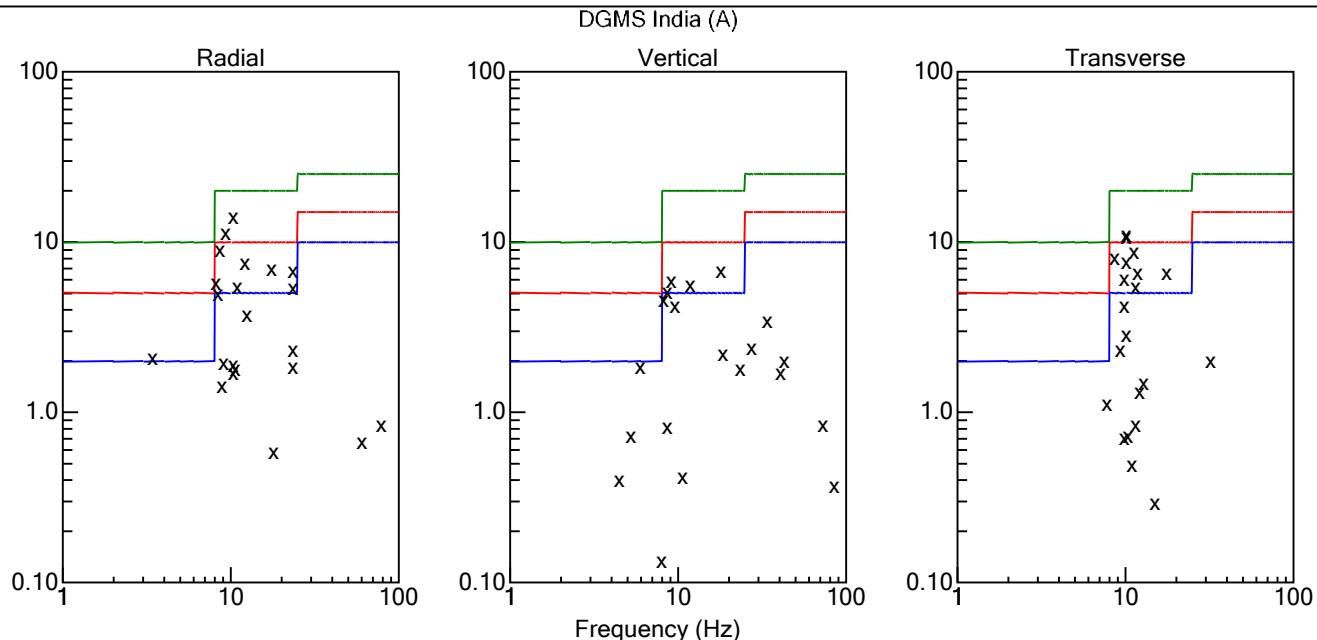
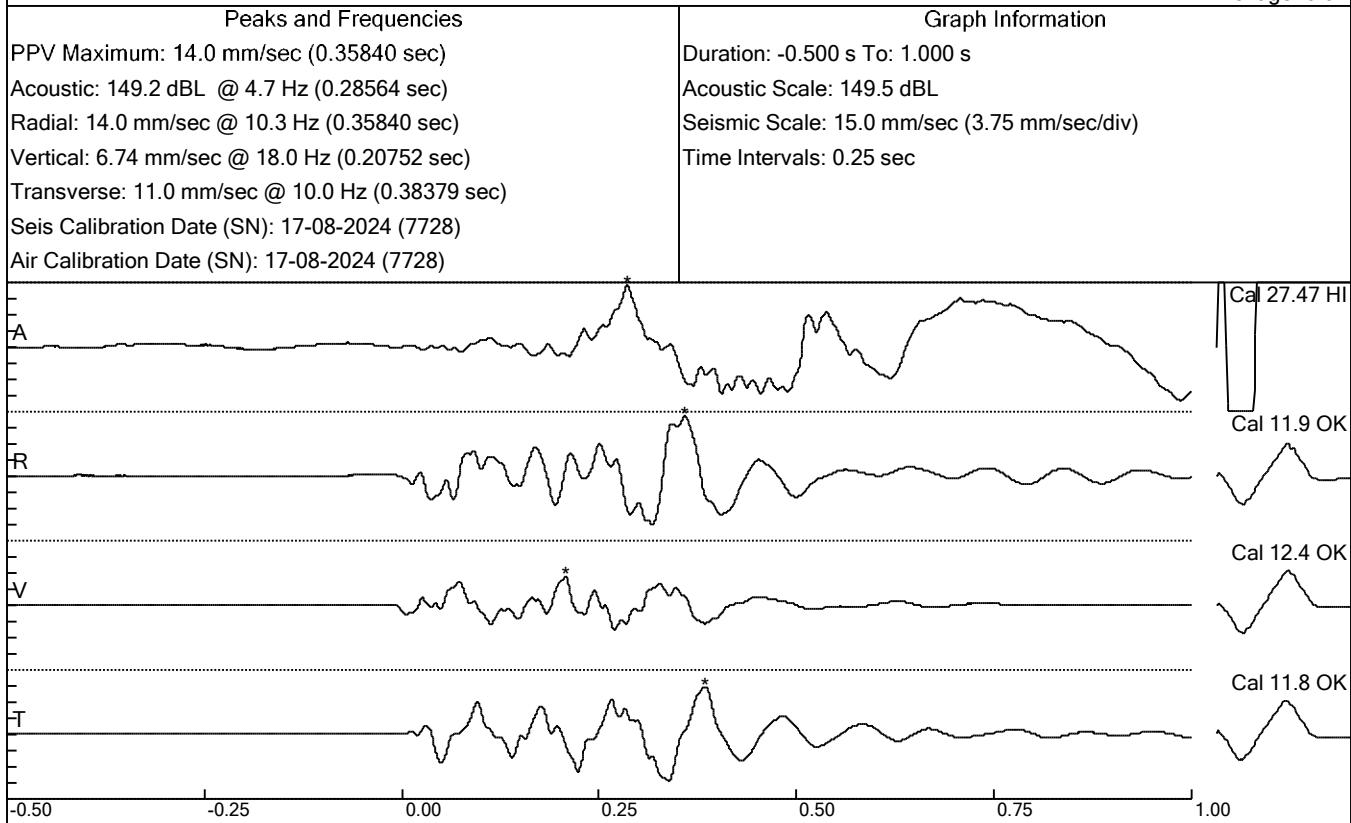
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r46c3.evt
Number: 0435
Date and Time: 13-01-2025 17:51:10
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.26



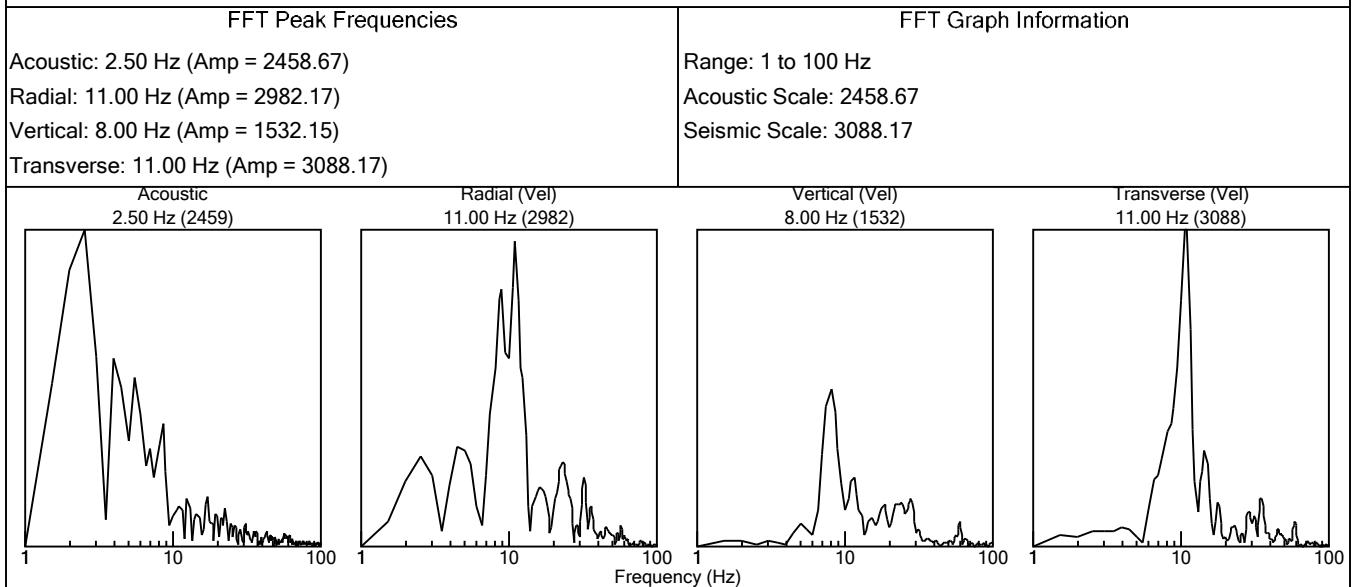
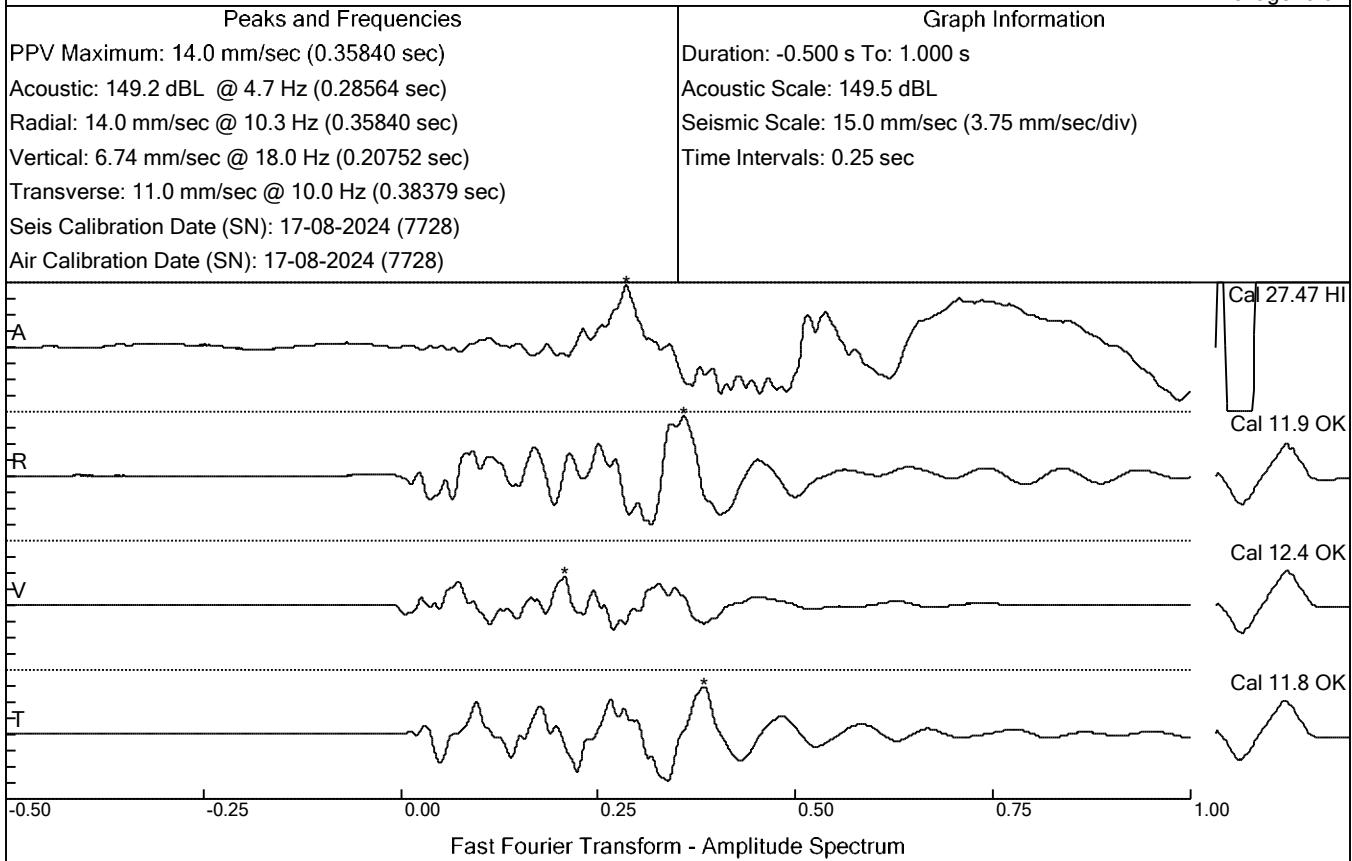
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1q7n.evt
Number: 0275
Date and Time: 13-01-2025 17:50:23
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



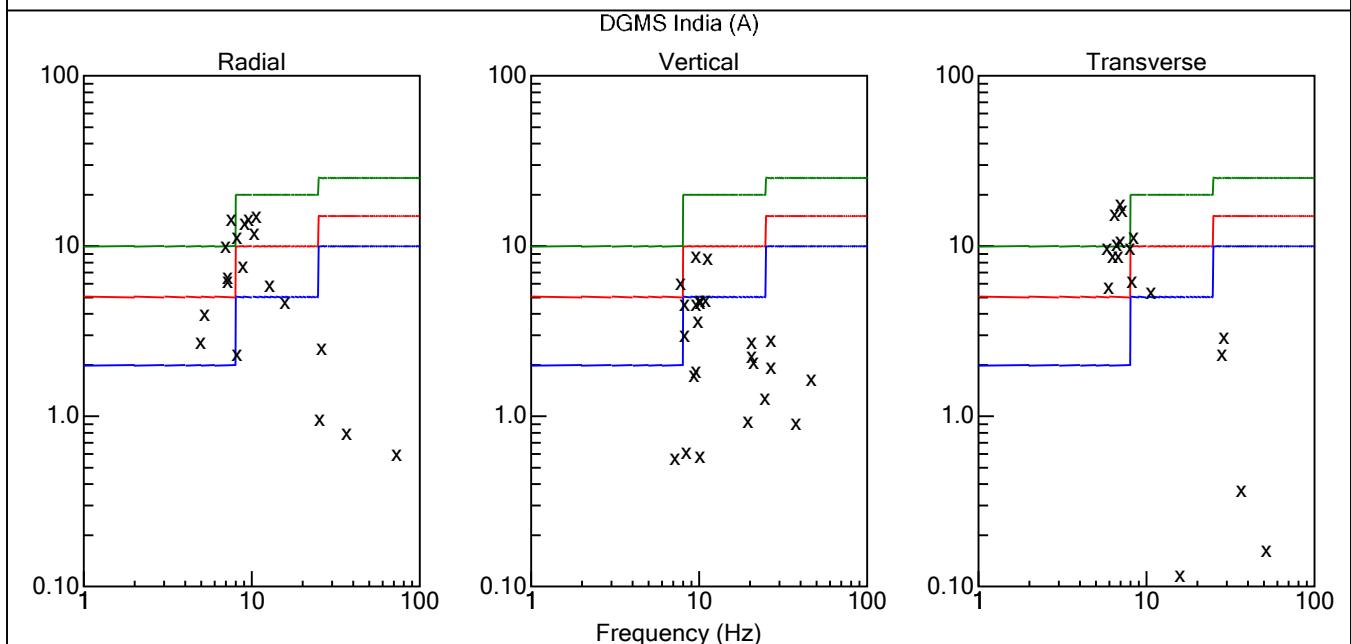
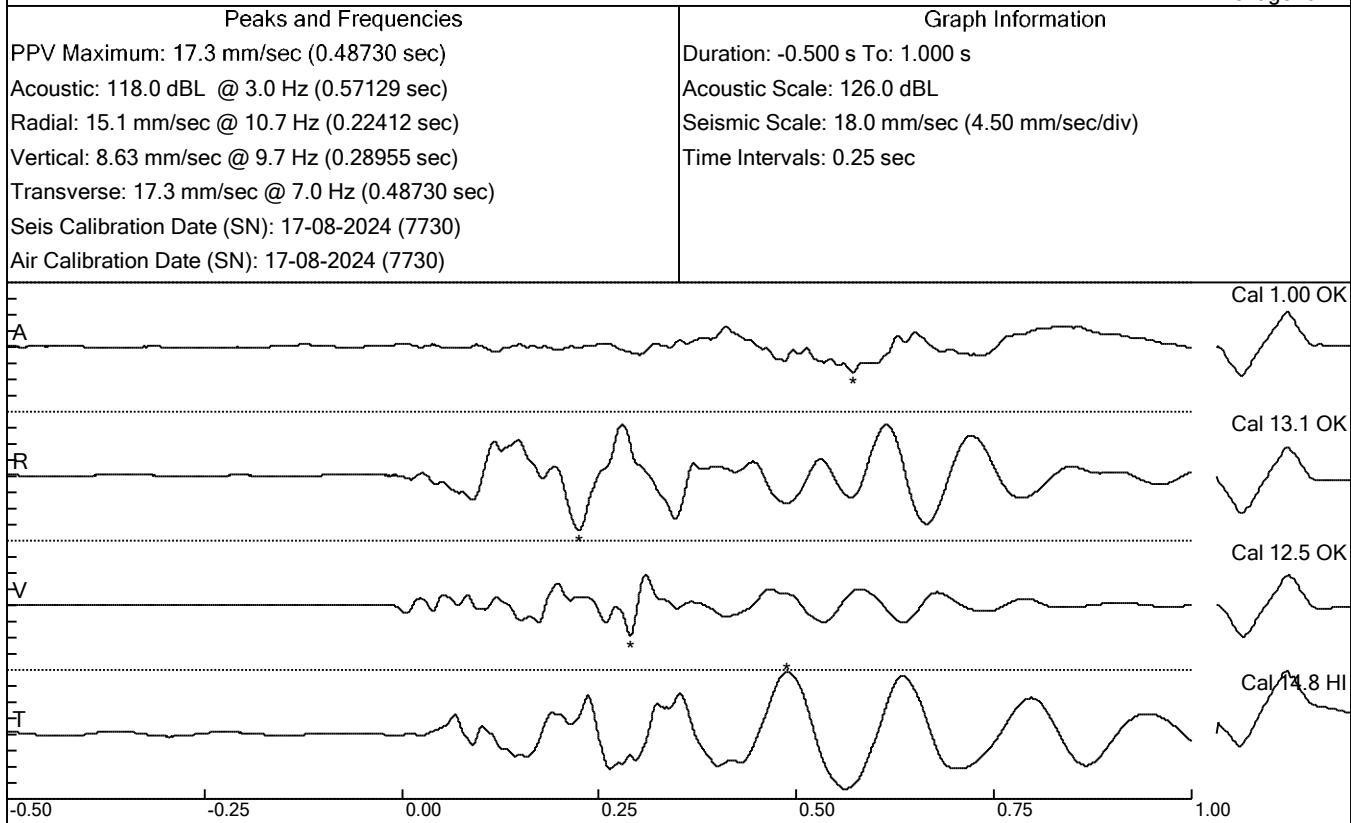
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1q7n.evt
Number: 0275
Date and Time: 13-01-2025 17:50:23
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



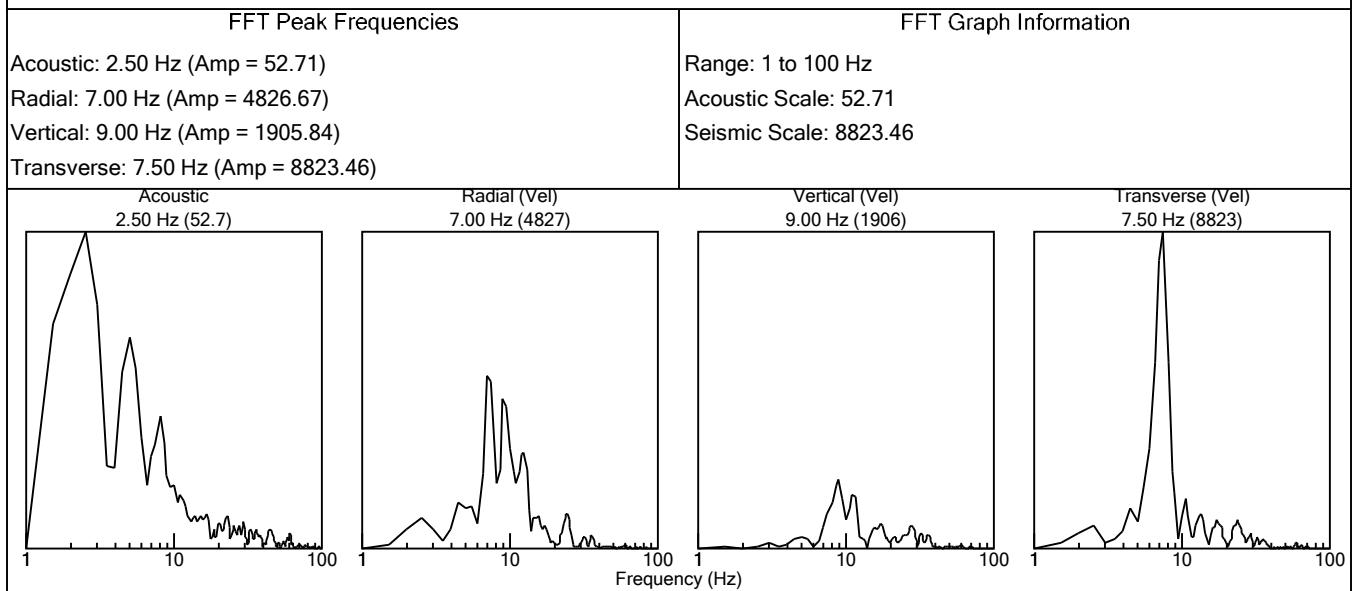
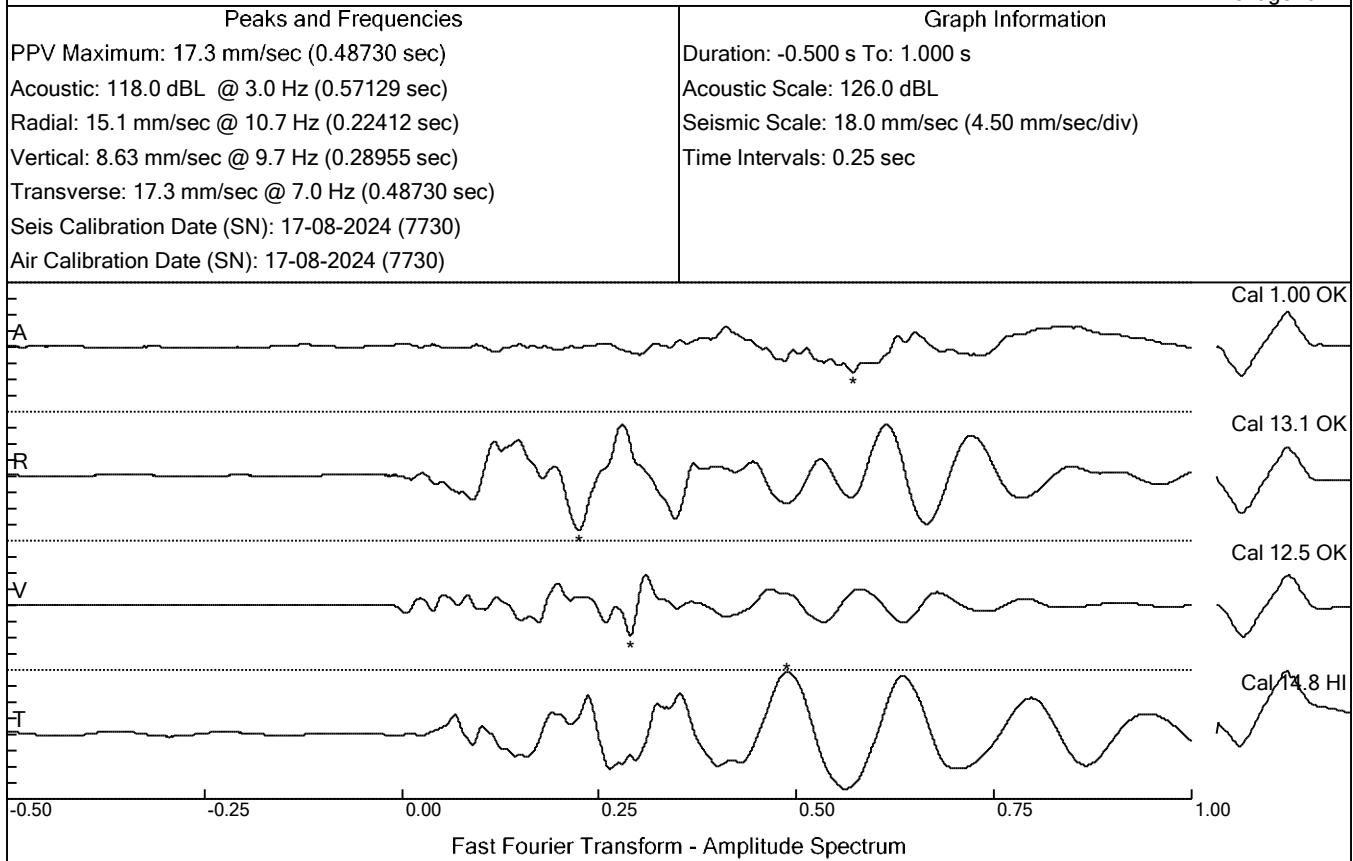
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r48c5.evt
Number: 0437
Date and Time: 13-01-2025 17:51:12
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24



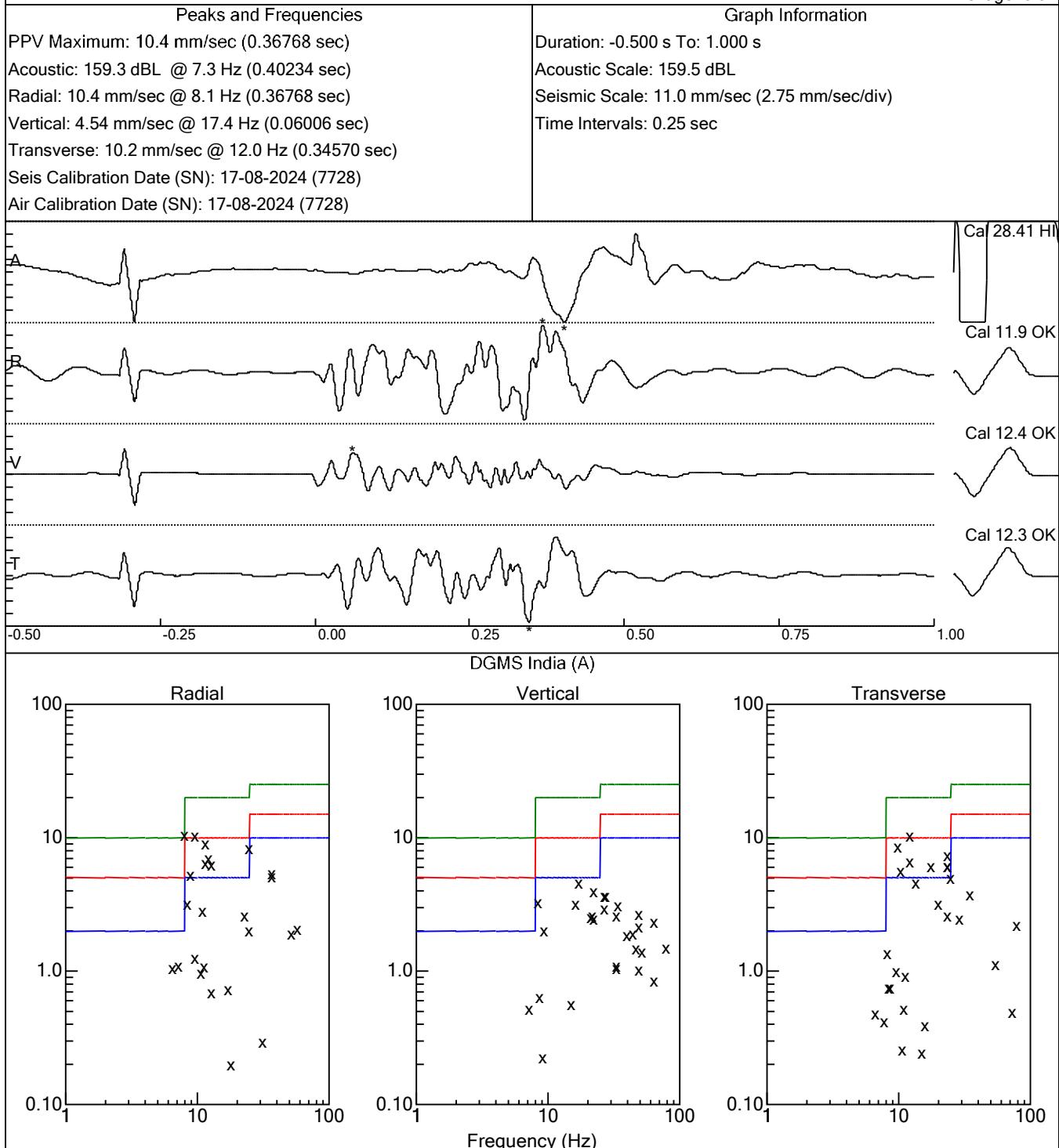
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r48c5.evt
Number: 0437
Date and Time: 13-01-2025 17:51:12
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24



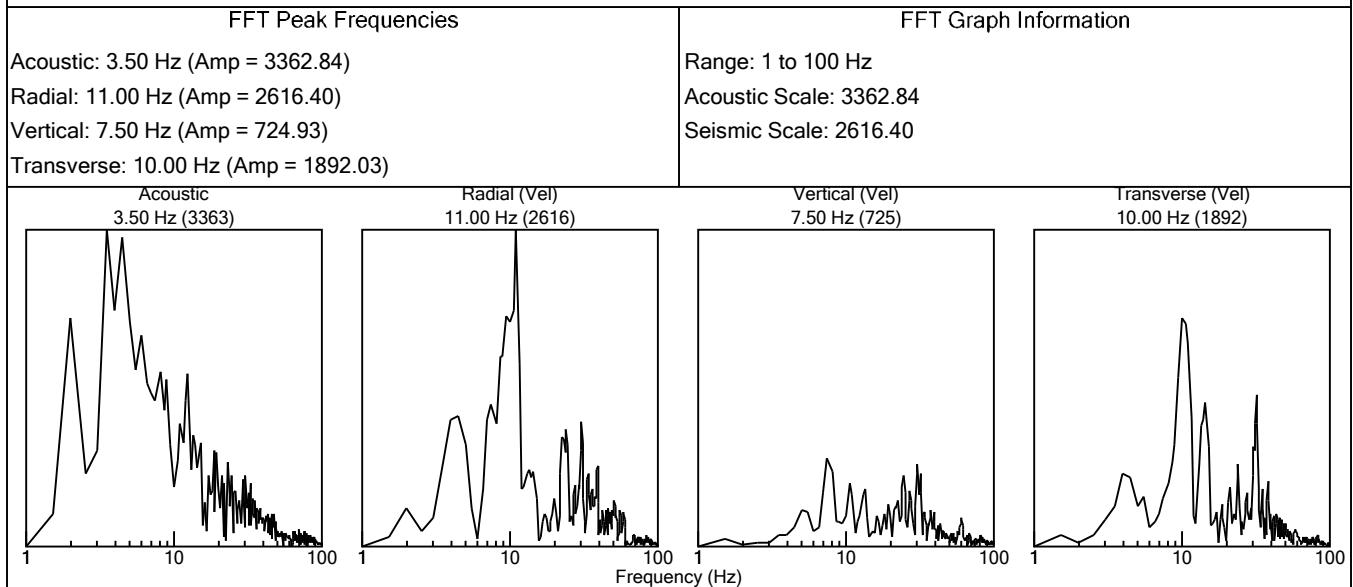
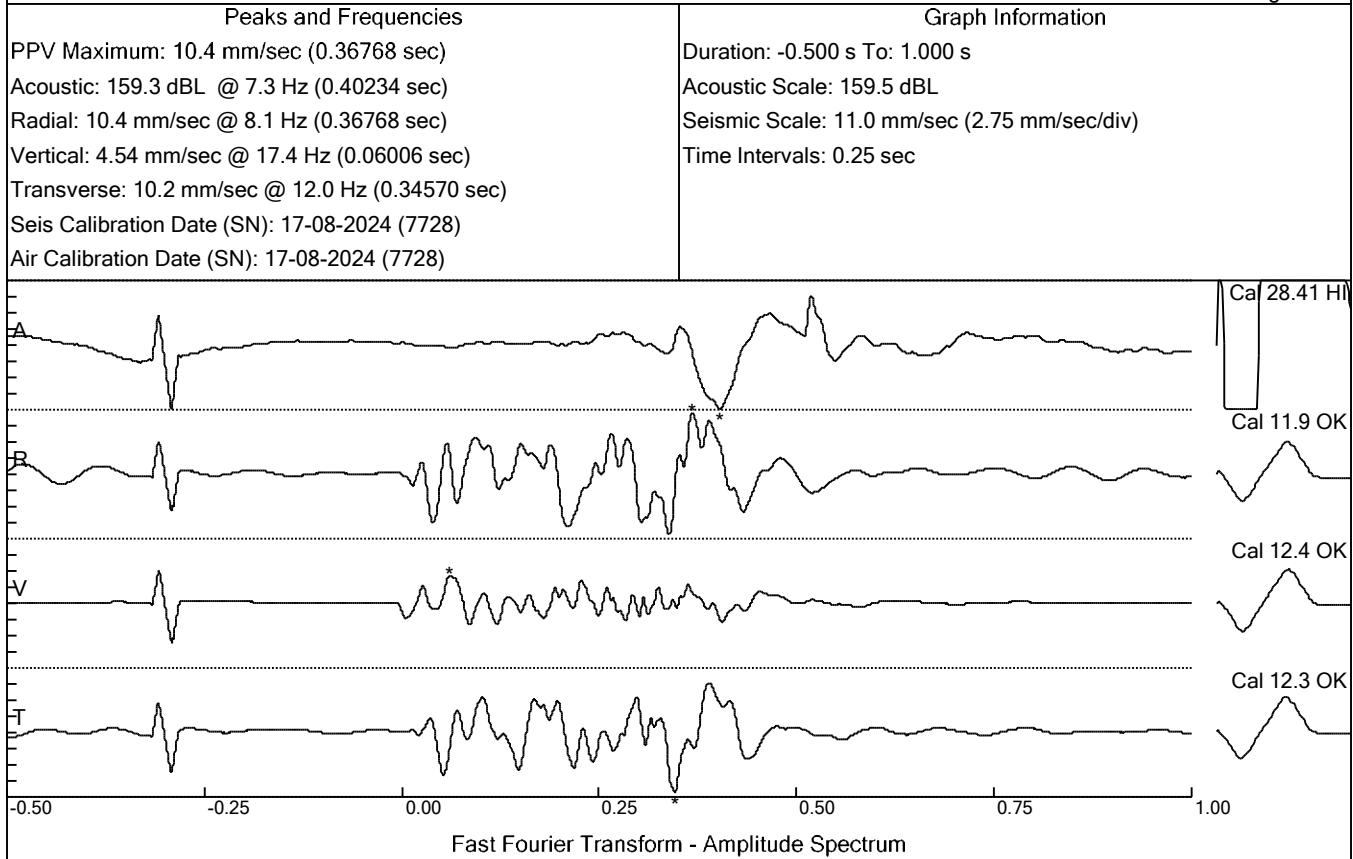
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1s7o.evt
Number: 0276
Date and Time: 13-01-2025 17:50:25
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

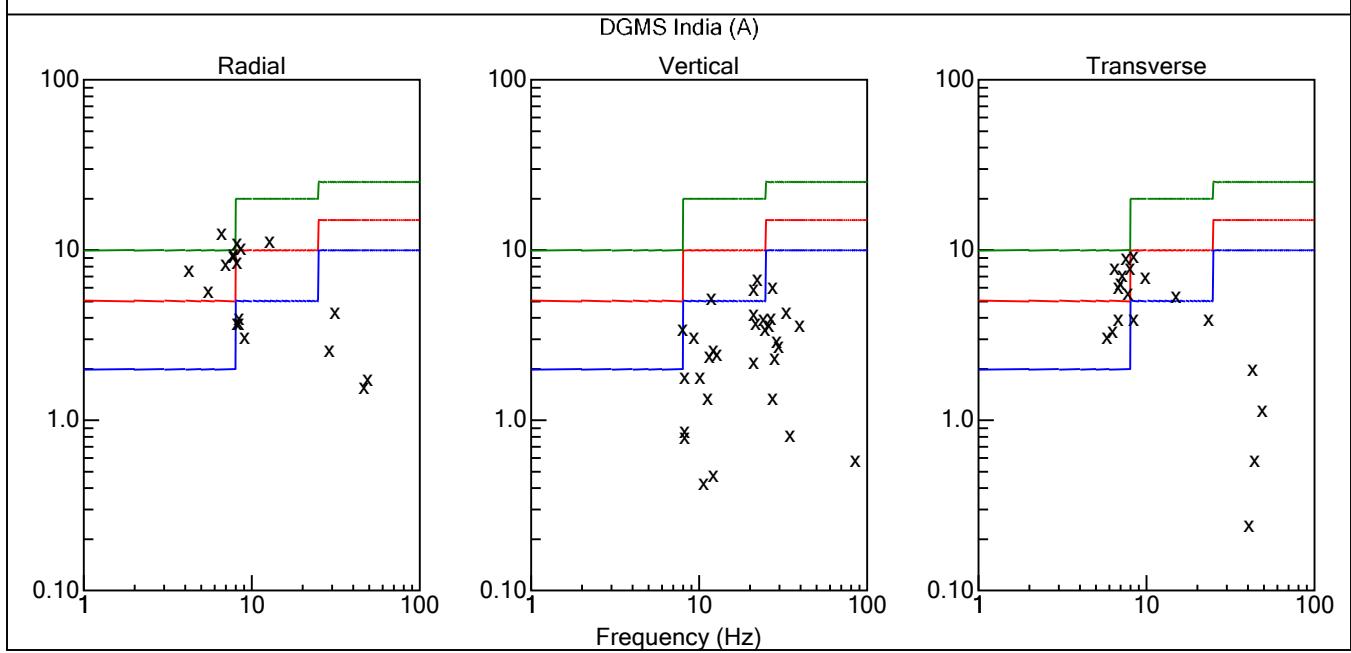
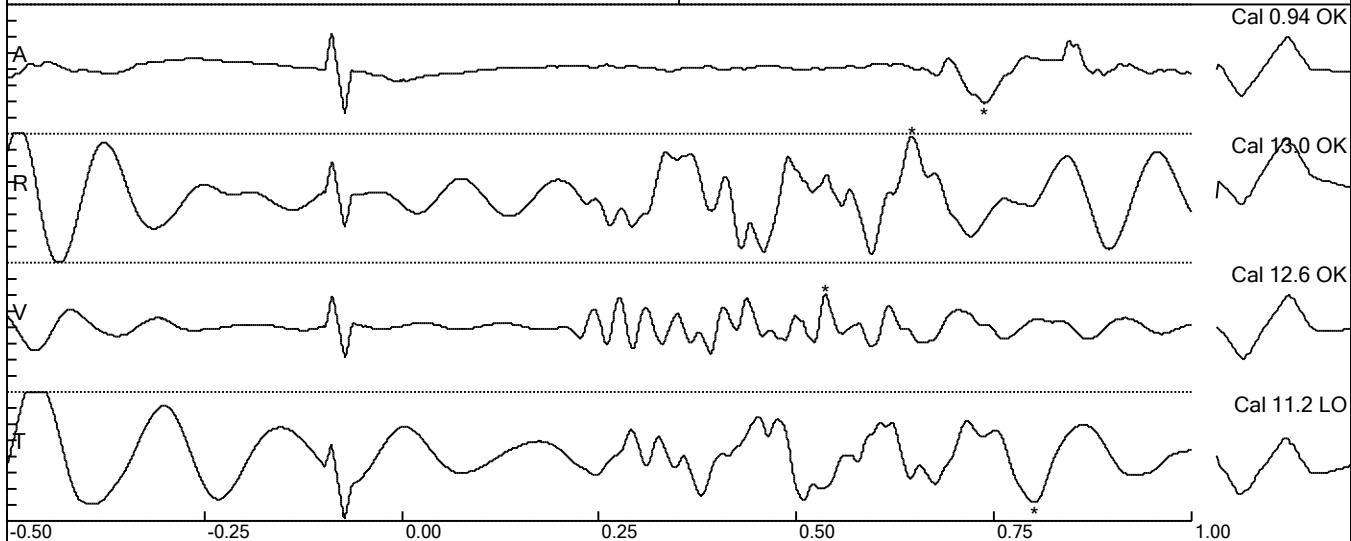
File: 353r1s7o.evt
Number: 0276
Date and Time: 13-01-2025 17:50:25
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r4ac6.evt
Number: 0438
Date and Time: 13-01-2025 17:51:14
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24

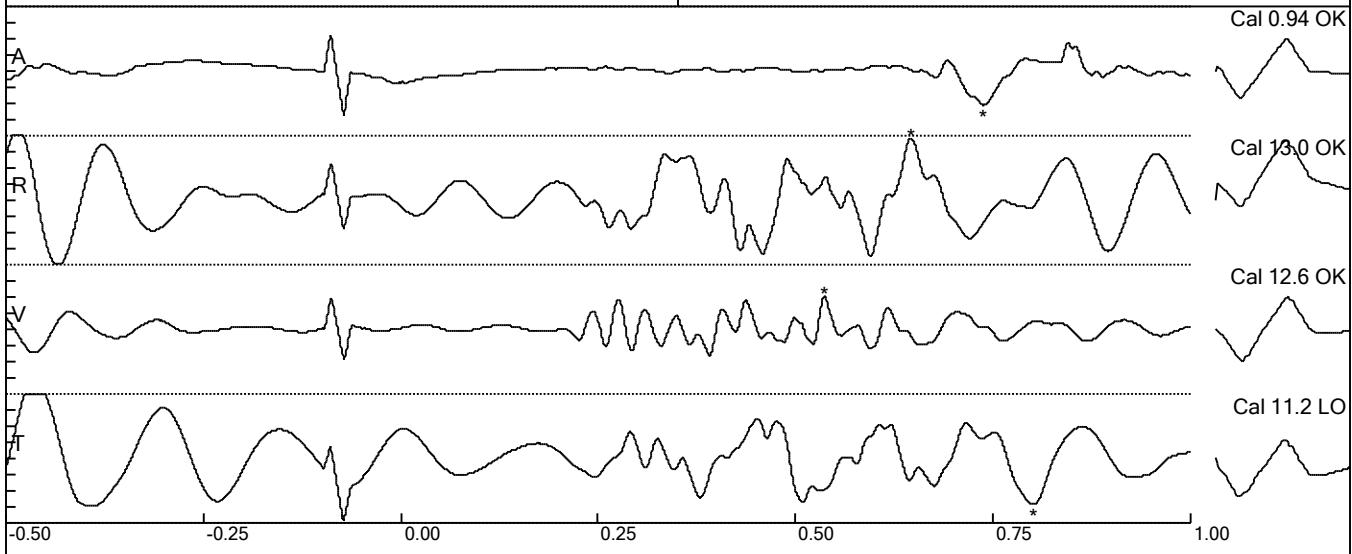
Peaks and Frequencies	Graph Information
PPV Maximum: 12.5 mm/sec (0.64600 sec)	Duration: -0.500 s To: 1.000 s
Acoustic: 126.6 dB @ 7.0 Hz (0.73730 sec)	Acoustic Scale: 132.0 dB
Radial: 12.5 mm/sec @ 6.6 Hz (0.64600 sec)	Seismic Scale: 13.0 mm/sec (3.25 mm/sec/div)
Vertical: 6.68 mm/sec @ 22.3 Hz (0.53613 sec)	Time Intervals: 0.25 sec
Transverse: 9.20 mm/sec @ 8.5 Hz (0.80078 sec)	
Seis Calibration Date (SN): 17-08-2024 (7730)	
Air Calibration Date (SN): 17-08-2024 (7730)	



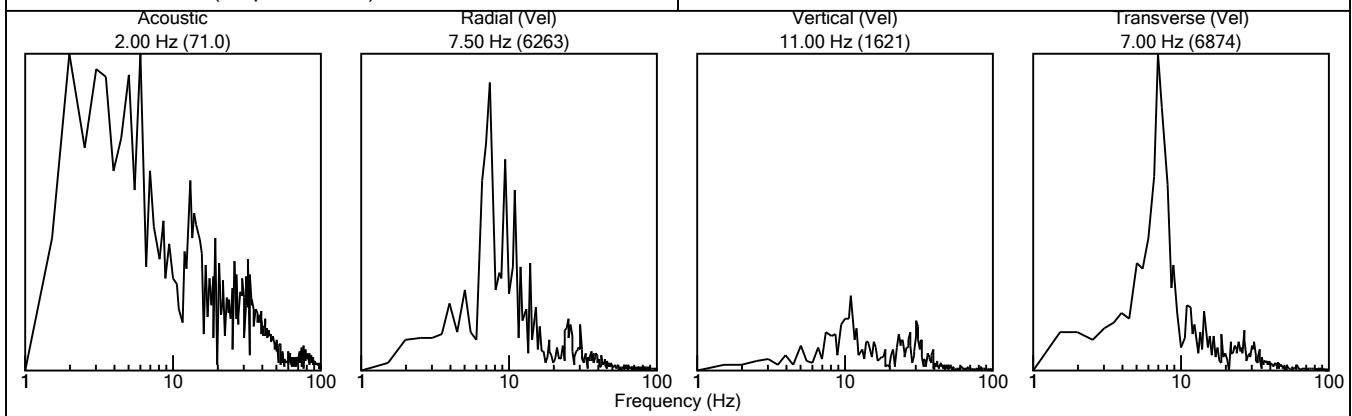
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r4ac6.evt
Number: 0438
Date and Time: 13-01-2025 17:51:14
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24

Peaks and Frequencies	Graph Information
PPV Maximum: 12.5 mm/sec (0.64600 sec)	Duration: -0.500 s To: 1.000 s
Acoustic: 126.6 dB @ 7.0 Hz (0.73730 sec)	Acoustic Scale: 132.0 dB
Radial: 12.5 mm/sec @ 6.6 Hz (0.64600 sec)	Seismic Scale: 13.0 mm/sec (3.25 mm/sec/div)
Vertical: 6.68 mm/sec @ 22.3 Hz (0.53613 sec)	Time Intervals: 0.25 sec
Transverse: 9.20 mm/sec @ 8.5 Hz (0.80078 sec)	
Seis Calibration Date (SN): 17-08-2024 (7730)	
Air Calibration Date (SN): 17-08-2024 (7730)	

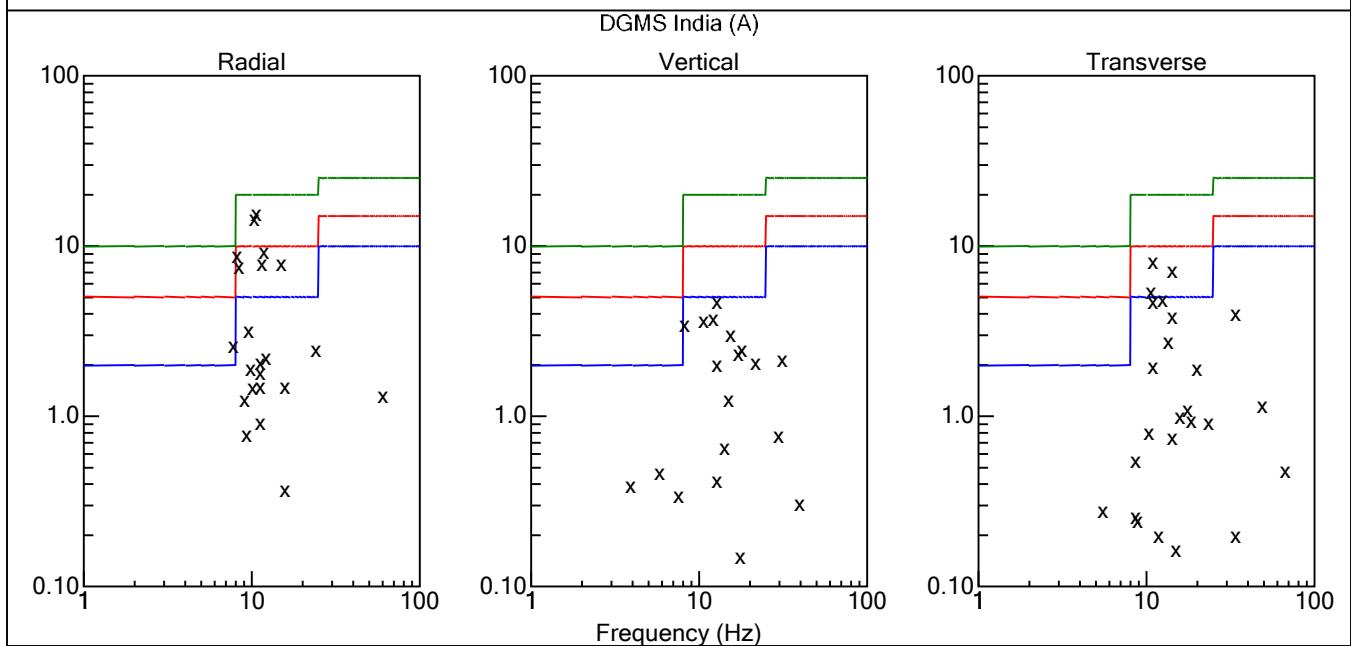
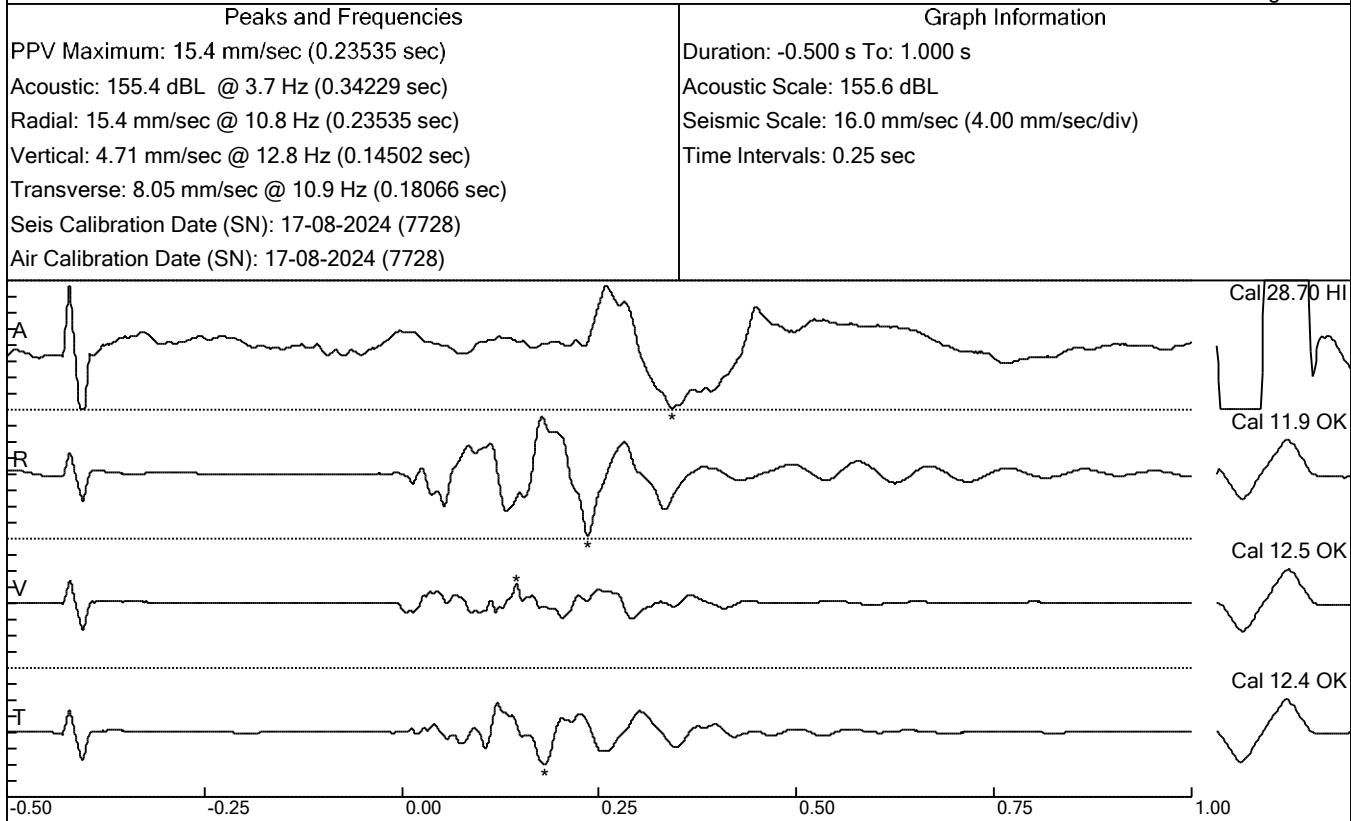


FFT Peak Frequencies	FFT Graph Information
Acoustic: 2.00 Hz (Amp = 70.98)	Range: 1 to 100 Hz
Radial: 7.50 Hz (Amp = 6263.33)	Acoustic Scale: 70.98
Vertical: 11.00 Hz (Amp = 1621.41)	Seismic Scale: 6873.81
Transverse: 7.00 Hz (Amp = 6873.81)	



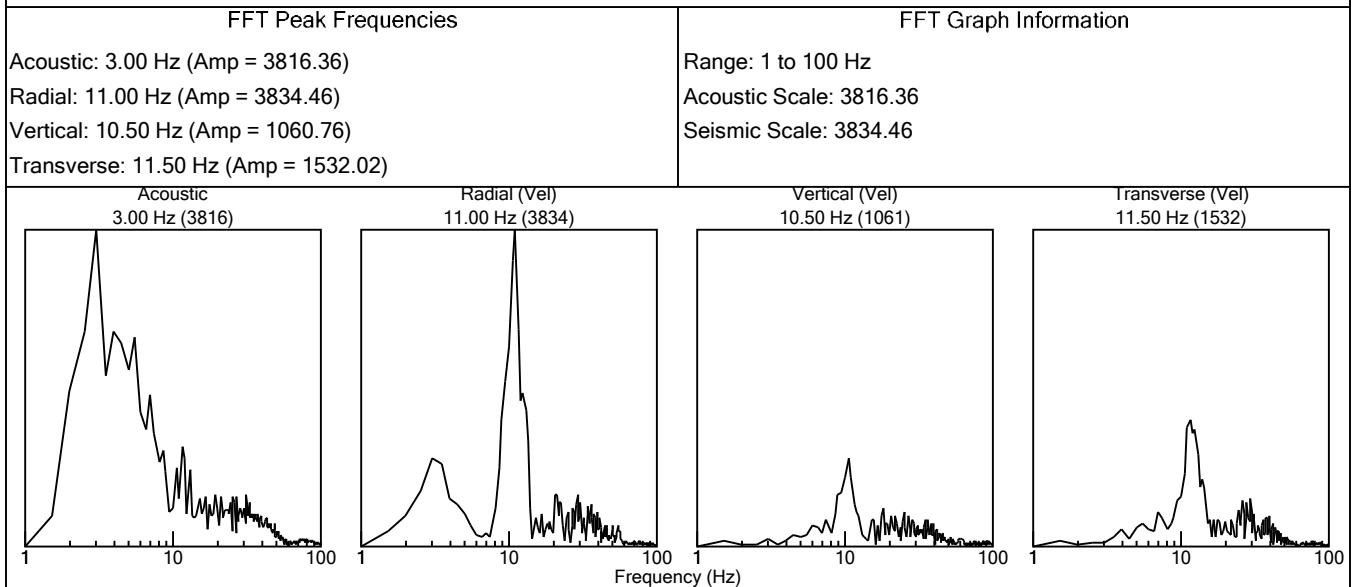
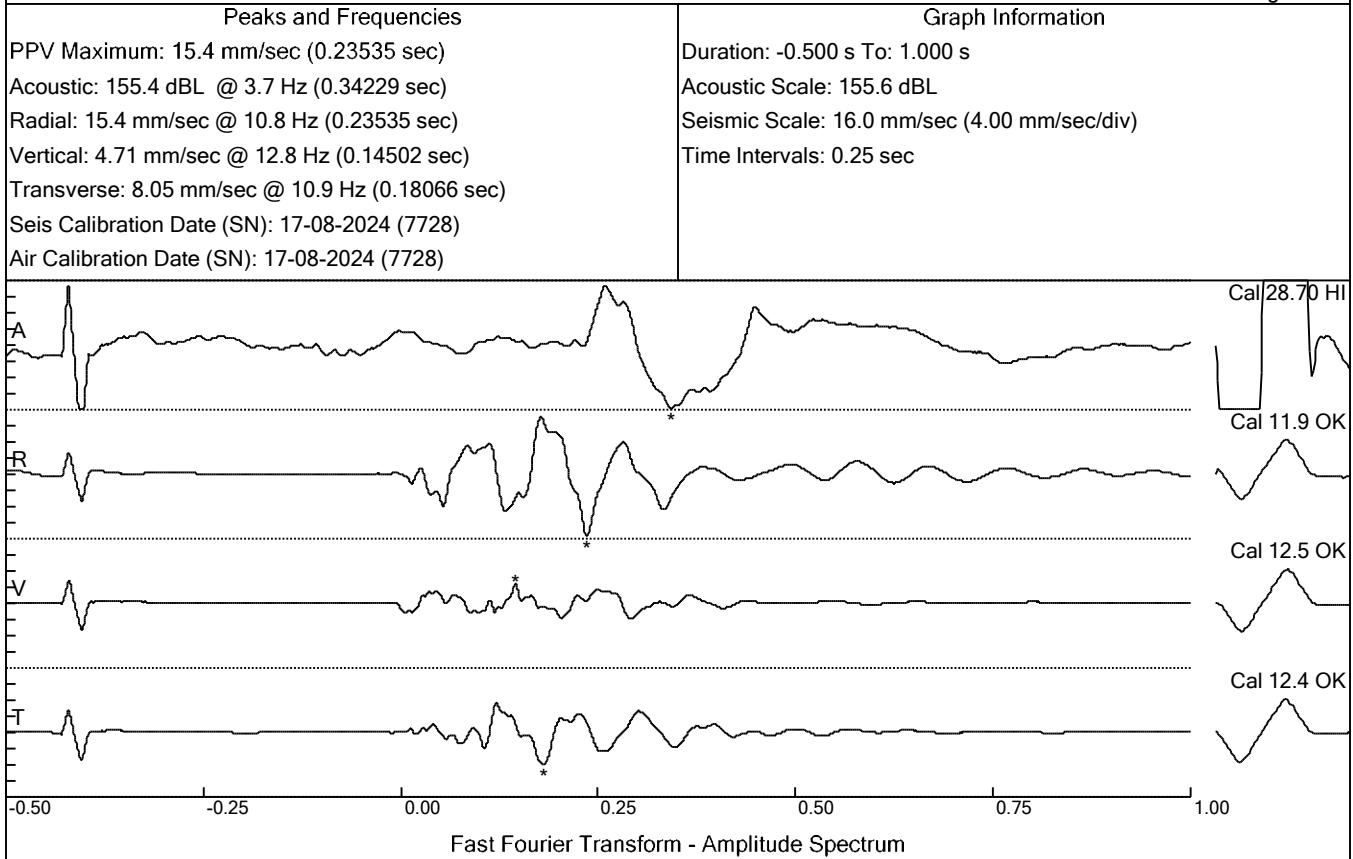
**Blast induced ground vibration monitoring
At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r1u7p.evt
Number: 0277
Date and Time: 13-01-2025 17:50:26
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



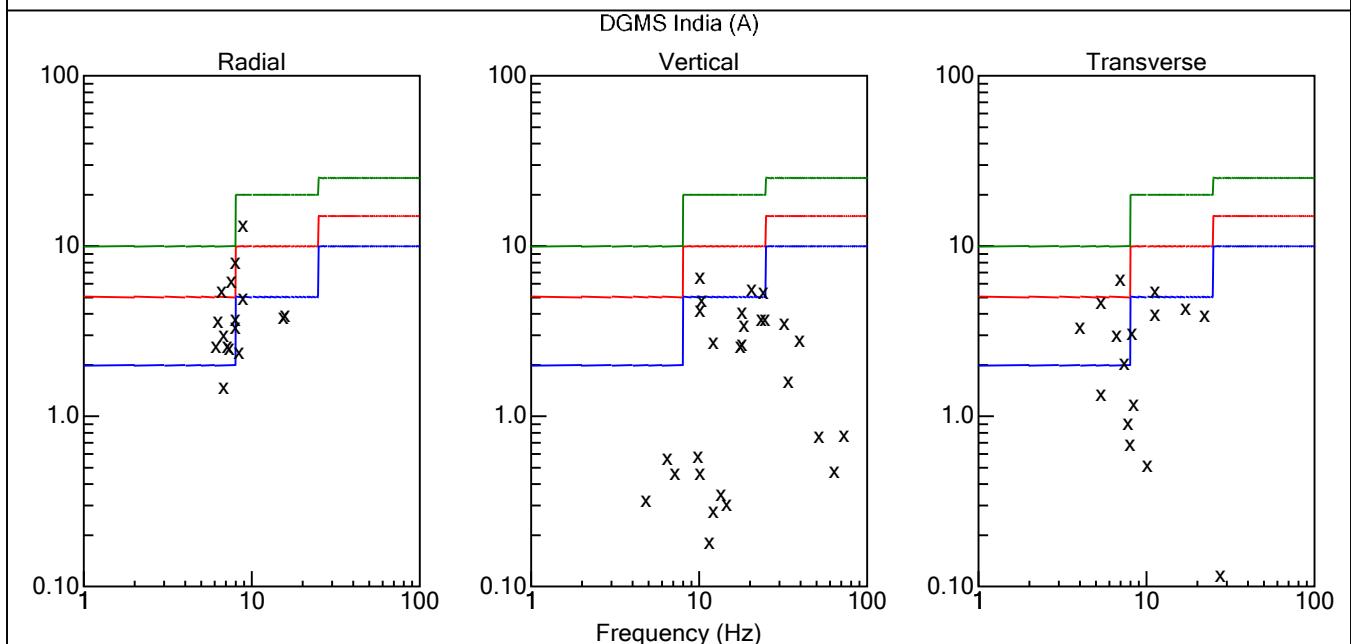
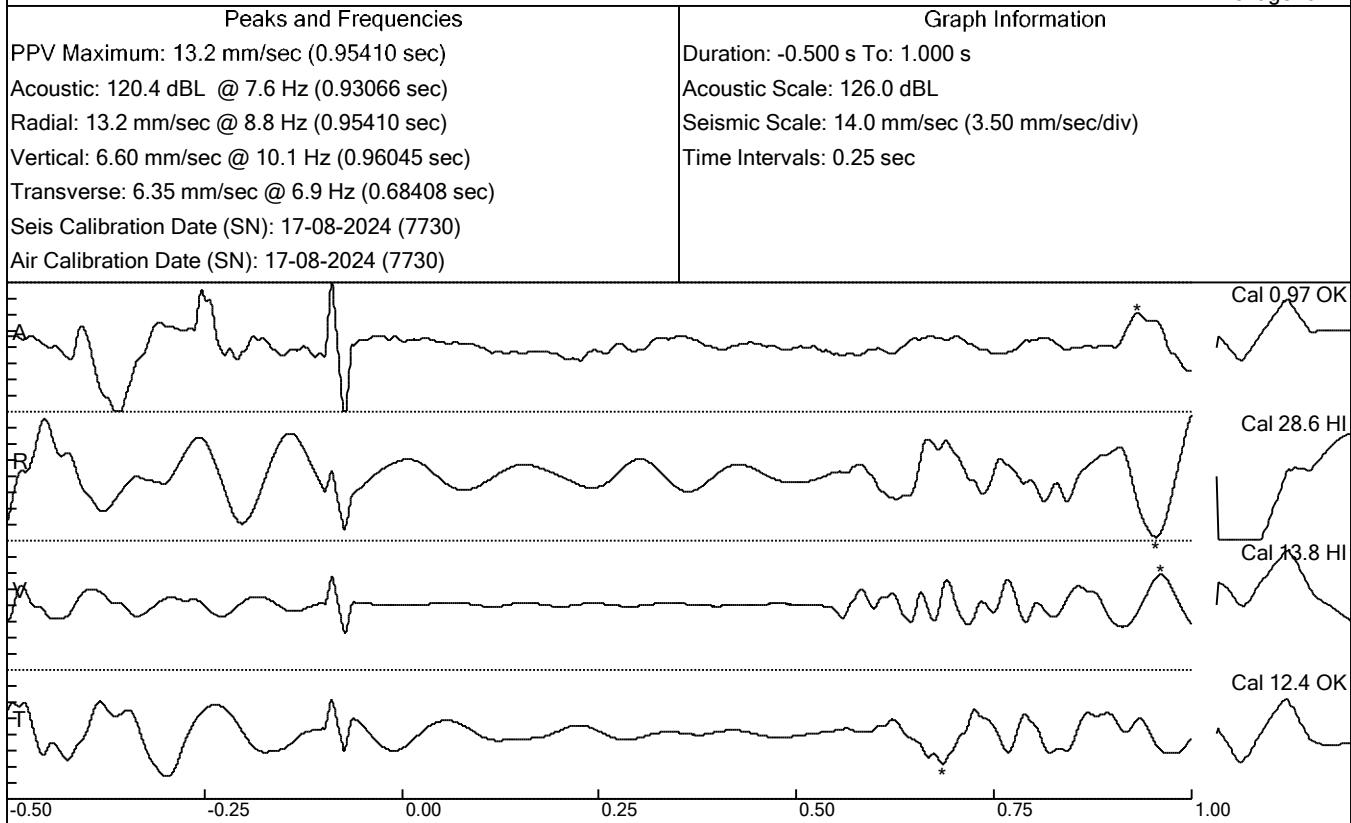
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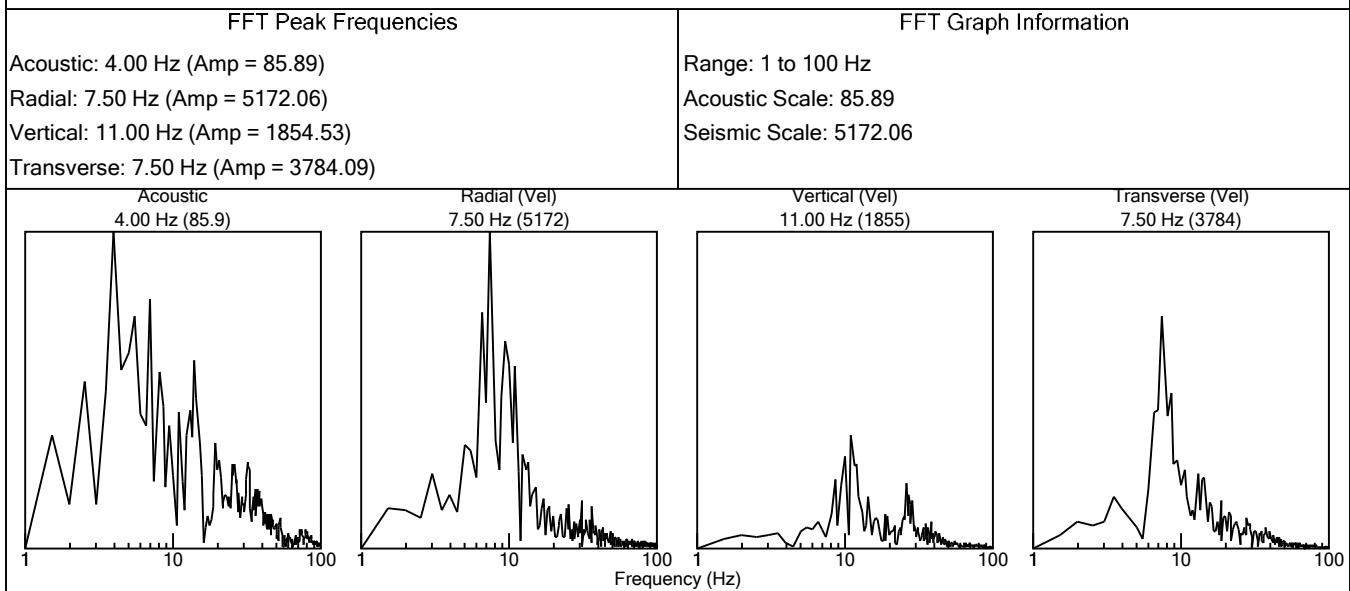
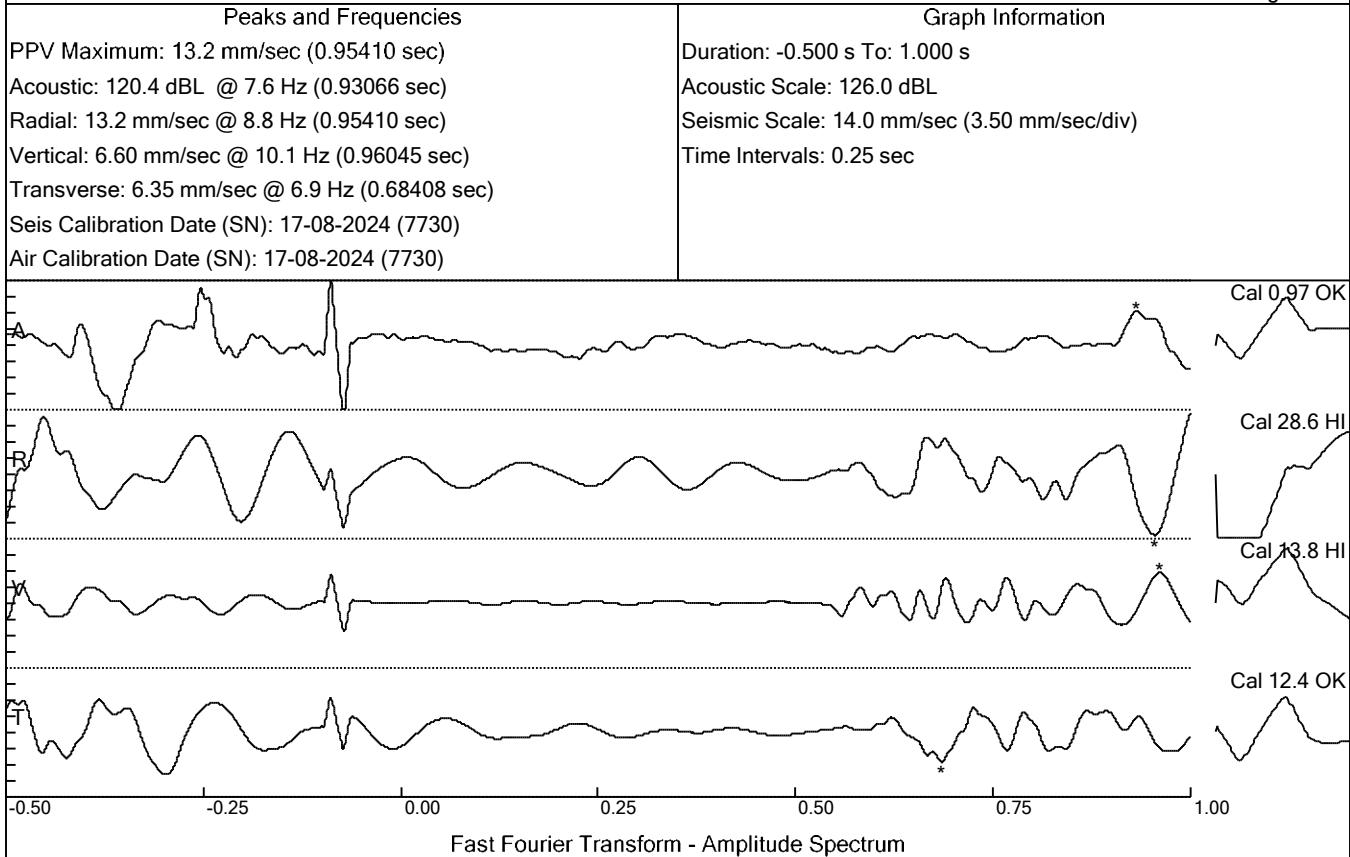
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At Kedla Opencast Project (KOCP),
Hazaribagh Area M/S CCL
By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

File: 353r4ac7.evt
Number: 0439
Date and Time: 13-01-2025 17:51:15
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24



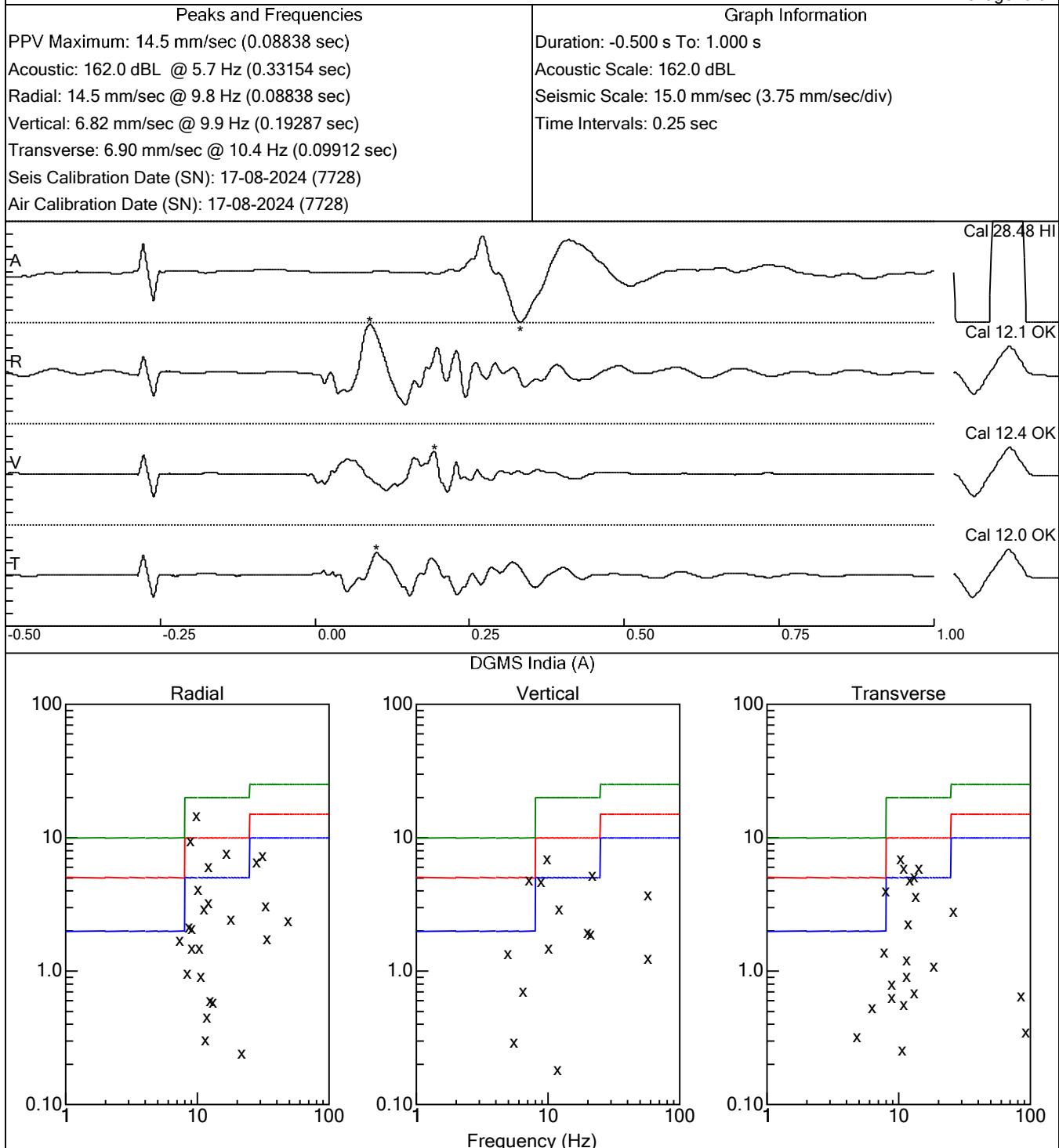
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Voltage: 6.24



**Blast induced ground vibration monitoring
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By Dr. B.S. Choudhary, IIT(ISM) Dhanbad**

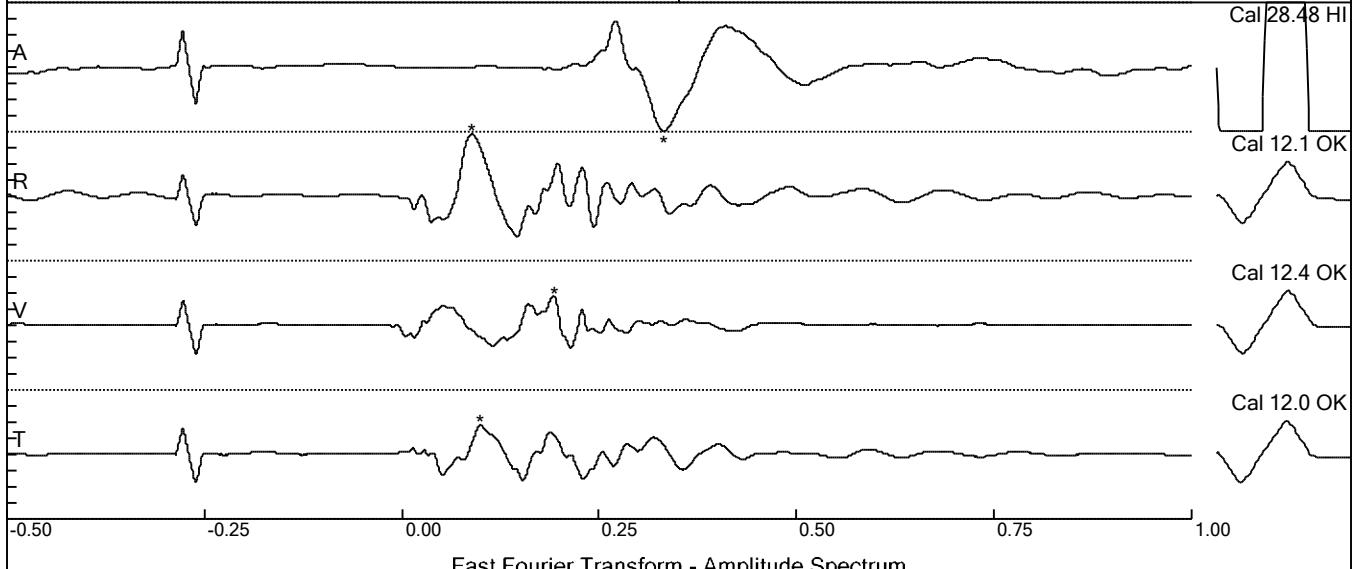
File: 353r1w7q.evt
Number: 0278
Date and Time: 13-01-2025 17:50:28
SN: 7728
Seismic Trigger: 1.25 mm/sec
Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02



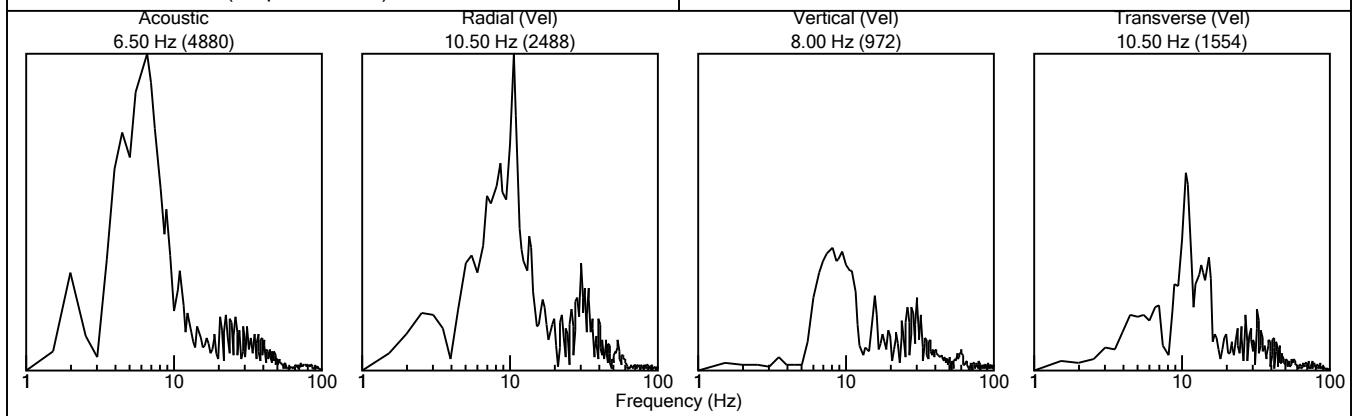
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Air Trigger: 170.8 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 177.4 dB
Voltage: 6.02

Peaks and Frequencies	Graph Information
PPV Maximum: 14.5 mm/sec (0.08838 sec)	Duration: -0.500 s To: 1.000 s
Acoustic: 162.0 dB @ 5.7 Hz (0.33154 sec)	Acoustic Scale: 162.0 dB
Radial: 14.5 mm/sec @ 9.8 Hz (0.08838 sec)	Seismic Scale: 15.0 mm/sec (3.75 mm/sec/div)
Vertical: 6.82 mm/sec @ 9.9 Hz (0.19287 sec)	Time Intervals: 0.25 sec
Transverse: 6.90 mm/sec @ 10.4 Hz (0.09912 sec)	
Seis Calibration Date (SN): 17-08-2024 (7728)	
Air Calibration Date (SN): 17-08-2024 (7728)	

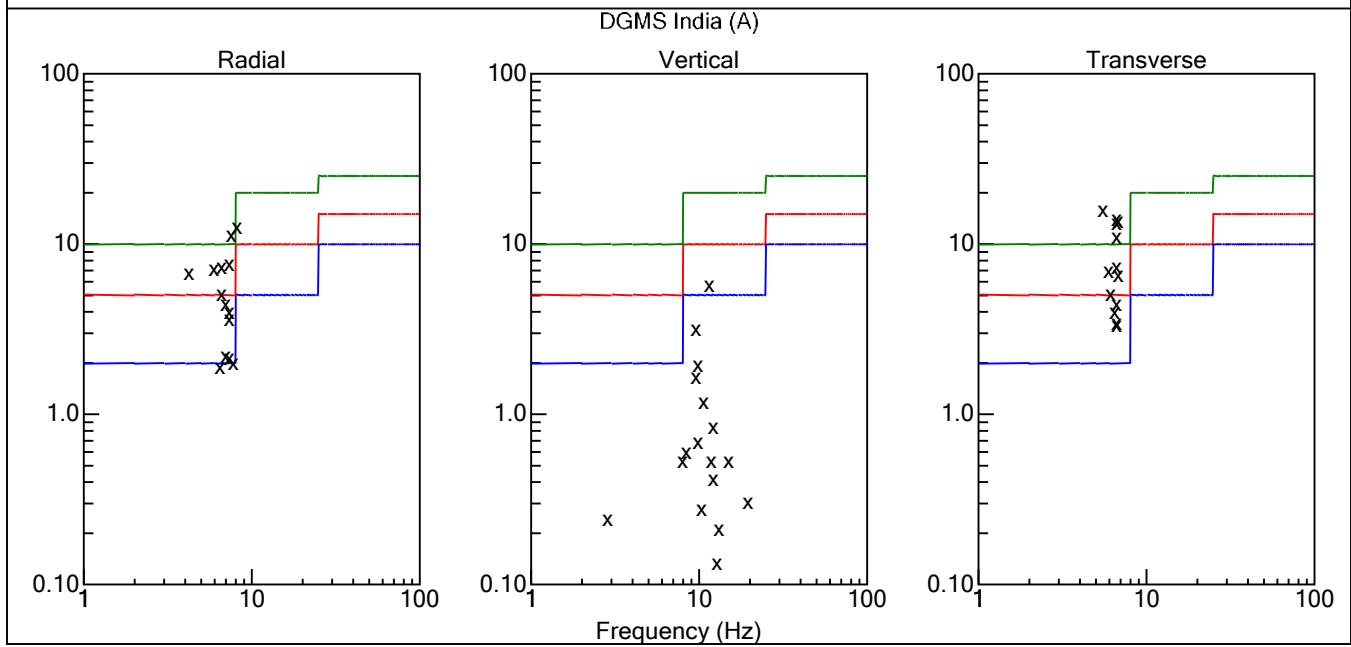
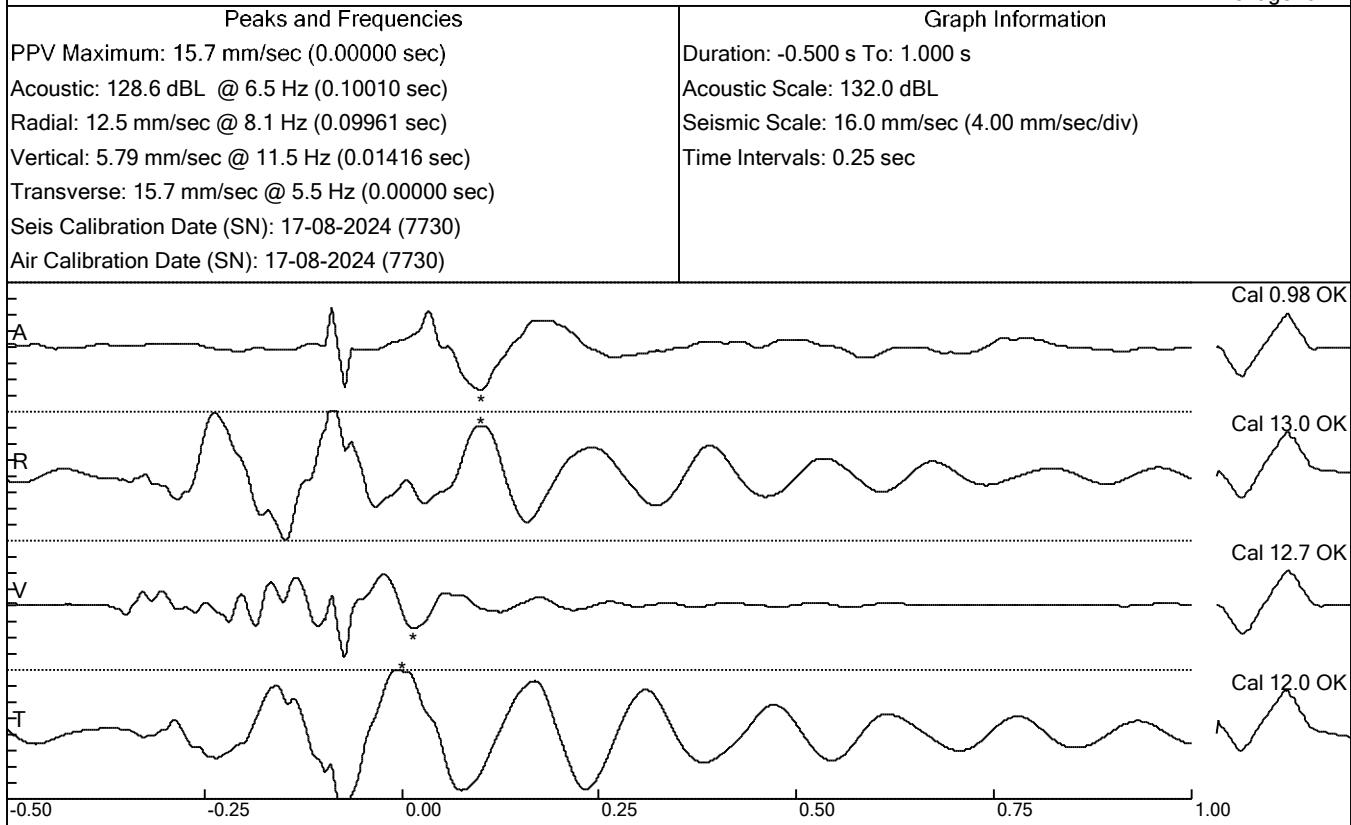


FFT Peak Frequencies	FFT Graph Information
Acoustic: 6.50 Hz (Amp = 4879.78)	Range: 1 to 100 Hz
Radial: 10.50 Hz (Amp = 2488.33)	Acoustic Scale: 4879.78
Vertical: 8.00 Hz (Amp = 971.68)	Seismic Scale: 2488.33
Transverse: 10.50 Hz (Amp = 1554.04)	



**Blast induced ground vibration monitoring
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File: 353r4cc9.evt
Number: 0441
Date and Time: 13-01-2025 17:51:17
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dB
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dB
Voltage: 6.24



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File: 353r4cc9.evt
Number: 0441
Date and Time: 13-01-2025 17:51:17
SN: 7730
Seismic Trigger: 1.50 mm/sec
Air Trigger: 148.1 dBL
Sample Rate: 2048
Duration: 1 Seconds
Pre-Trigger: 0.500 Second
Seismic Gain: 256mm/sec
Acoustic Gain: 148.2 dBL
Voltage: 6.24

