

Appendix J Noise Data

**Mission Canyon Stream Habitat Restoration Project
Initial Study/Mitigated Negative Declaration**

MEMORANDUM

To: Jenny McGee, Phuong Trinh, Southern California Edison
From: Zhe Chen, Michael Baker International
Date: November 22, 2021
Subject: Guzzler Truck Reference Noise Level Measurement Summary

Introduction

The purpose of this technical memorandum is to summarize the noise measurement result of a guzzler truck operation in support of the Mission Creek Stream Habitat Restoration Project.

Noise Level Measurements

In order to measure the reference noise level of an operating guzzler truck, Michael Baker International conducted three short-term noise measurements at five feet from the front, rear driver side, and rear passenger side of the guzzler truck when the truck was in full power operation. The measurements were conducted during a trenching activity at 1226 West Burnett Street, Long Beach, on November 4, 2021. The construction activity involved digging a narrow trench in the ground using a shovel and the guzzler truck sucking up dirt and gravel. The two-minute measurements were taken between 10:00 a.m. and 10:20 a.m. The noise levels measured are identified in Table 1, Noise Measurements.

**Table 1
Noise Measurements**

Site No.	Location	Leq (dBA)	Lmax (dBA)	Lmin(dBA)	Peak (dBA)	Time
1	5 feet from the front of the truck	82.3	84.1	81.1	103.1	10:08 a.m.
2	5 feet from the rear driver side of the truck	90.3	95.0	78.0	107.3	10:13 a.m.
3	5 feet from the rear passenger side of the truck	88.0	101.5	80.3	110.0	10:17 a.m.
Average		86.9				
Source: Michael Baker International, November 4, 2021.						

Meteorological conditions when the measurements were taken were cloudy skies, cool temperatures, with light wind speeds (one mile per hour), and low humidity. Noise monitoring equipment used for the measurements consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for Type I (precision) sound level meters. Measured noise levels at five

feet from the front, rear driver side, and rear passenger side of the guzzler truck were 82.3 dBA L_{eq} , 90.3 dBA L_{eq} , and 88.0 dBA L_{eq} , respectively. The average noise level of the three measurements represents the reference noise level for the guzzler truck, which was 86.9 dBA L_{eq} at five feet. Refer to Appendix A, Noise Data, for the results of the field measurements.

Appendix A
Noise Data

Site Number: NM-1			
Recorded By: Danielle Regimbal, Tina Yuan			
Job Number: 178554			
Date: 11/5/2021			
Time: 10:08 AM			
Location: 5 feet from the front of the truck			
Source of Peak Noise: Trucks idling and trenching events			
Noise Data			
Leq (dB)	Lmax(dB)	Lmin (dB)	Peak (dB)
82.3	84.1	81.1	103.1

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	09/09/2021	
	Microphone	Brüel & Kjær	4189	3086765	09/09/2021	
	Preamp	Brüel & Kjær	ZC 0032	25380	09/09/2021	
	Calibrator	Brüel & Kjær	4231	2545667	09/09/2021	
Weather Data						
Est.	Duration: 10 minutes			Sky: Cloudy		
	Note: dBA Offset = -0.02			Sensor Height (ft): 5 ft		
	Wind Ave Speed (mph / m/s)		Temperature (degrees Fahrenheit)		Barometer Pressure (inches)	
	S 1 mph		59		29.99	

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		11/05/2021 10:08:43
End Time:		11/05/2021 10:10:43
Elapsed Time:		00:02:00
Bandwidth:		1/3-octave
Max Input Level:		142.13

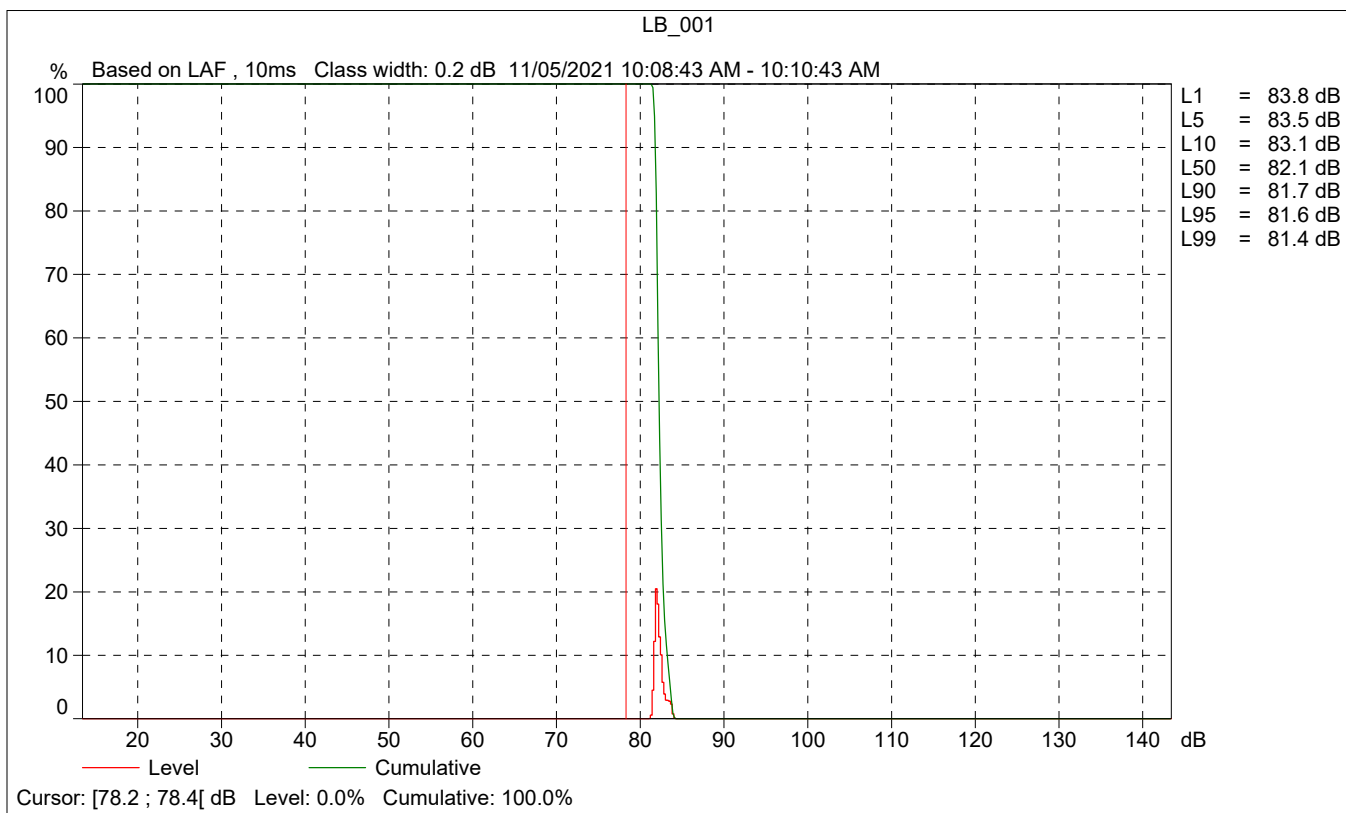
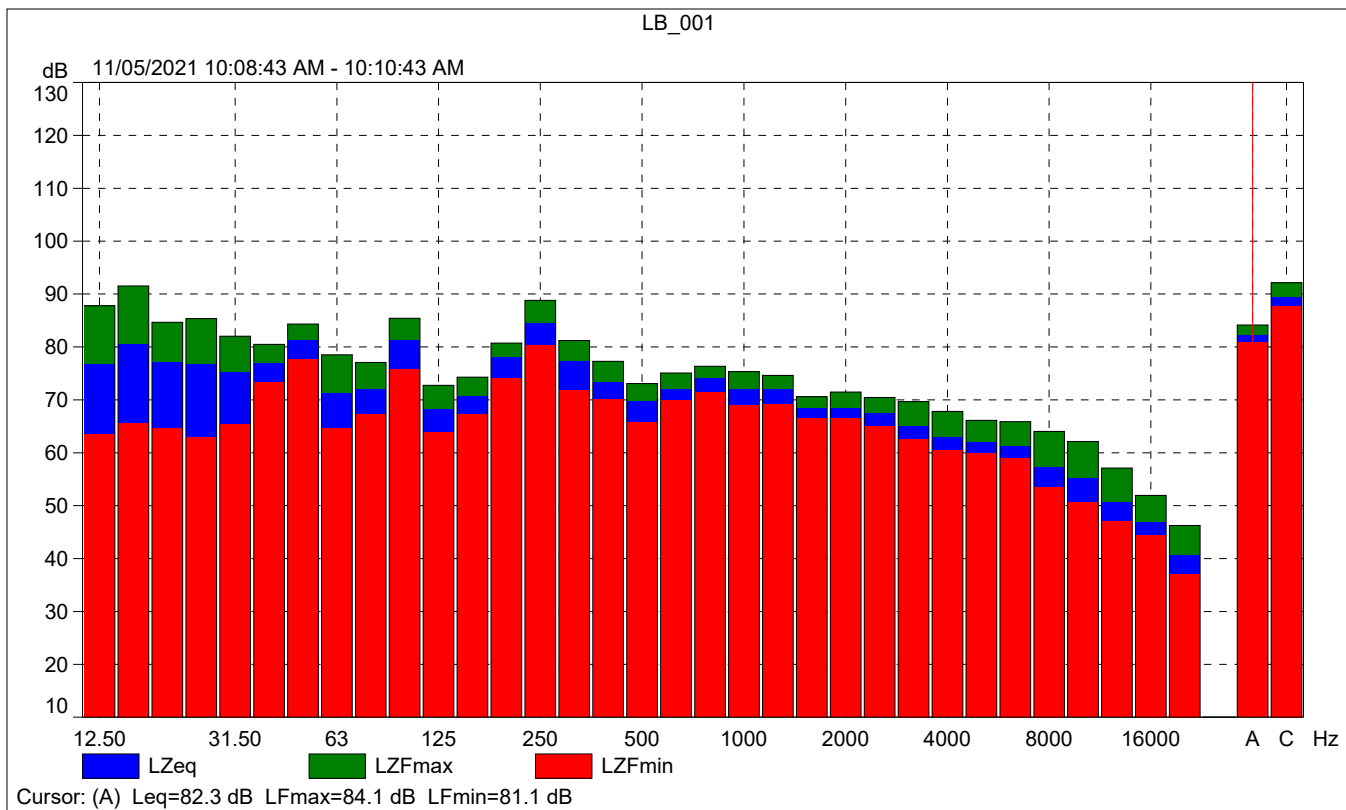
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Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

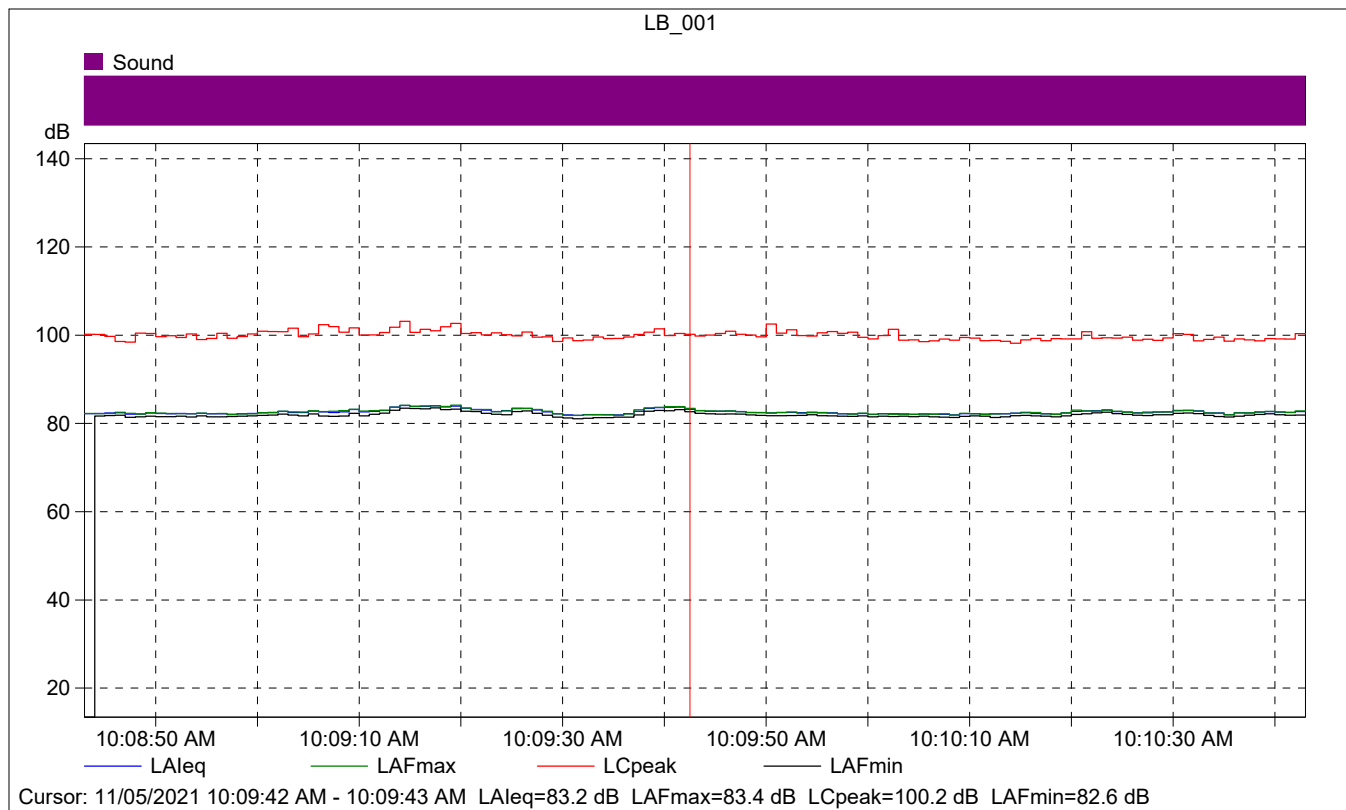
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

Calibration Time:		11/05/2021 09:53:00
Calibration Type:		External reference
Sensitivity:		43.5511879622936 mV/Pa

LB_001

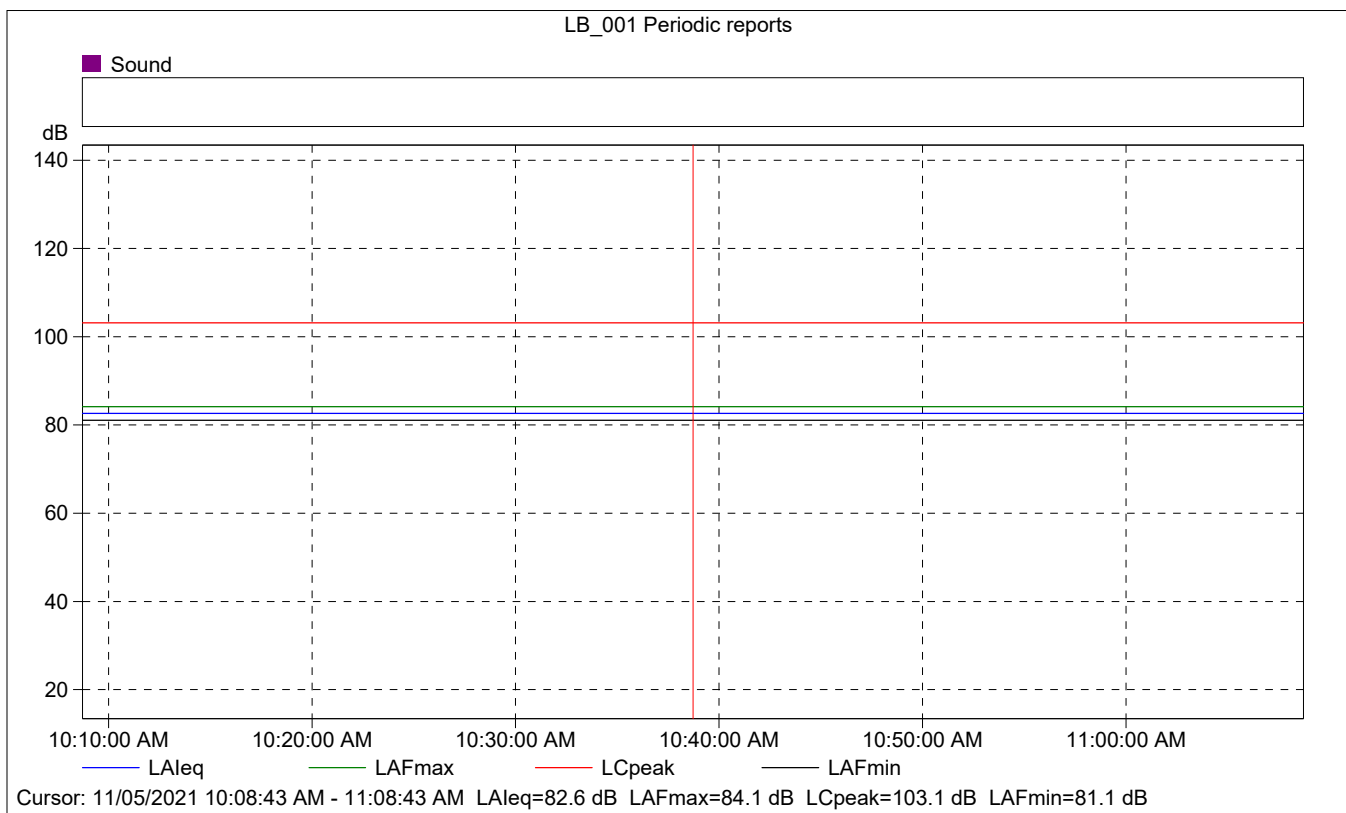
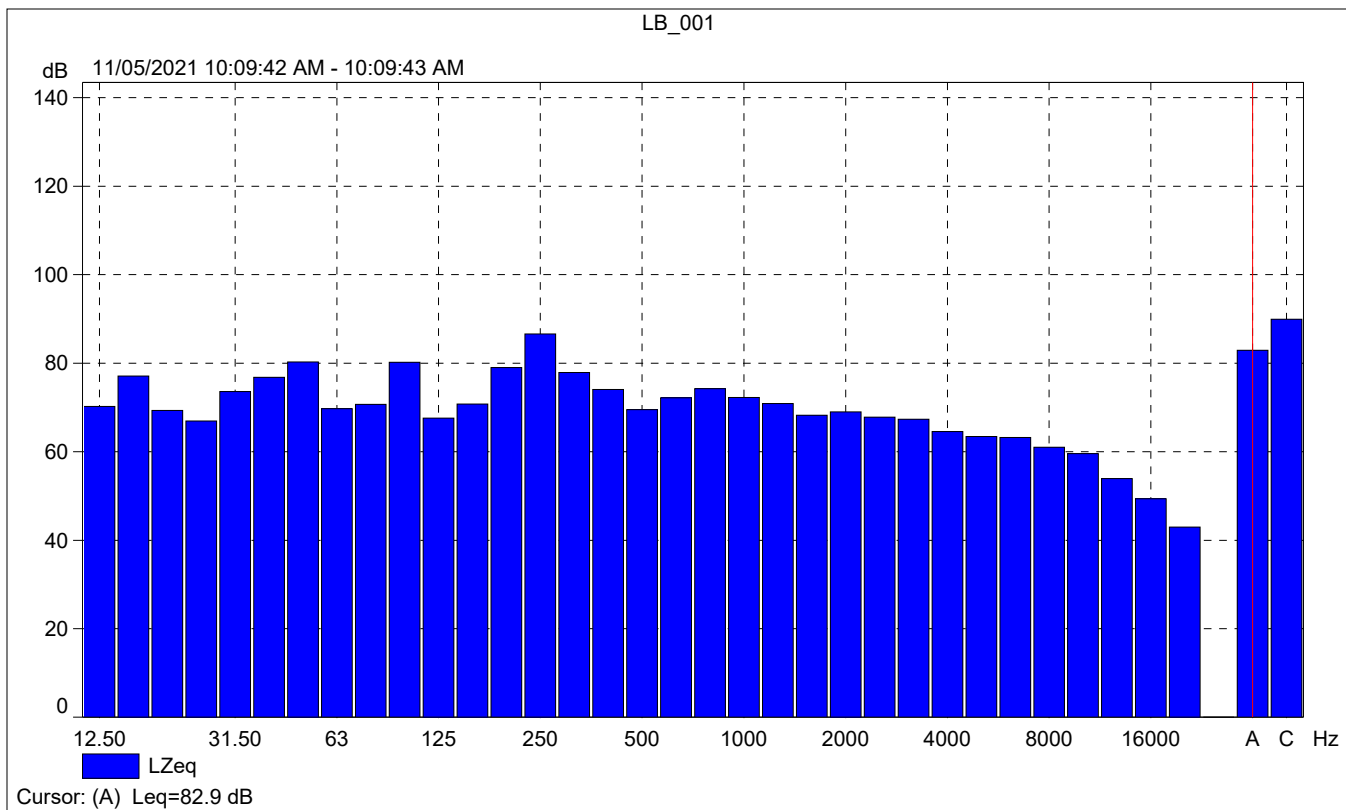
	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	82.3	84.1	81.1
Time	10:08:43 AM	10:10:43 AM	0:02:00				
Date	11/05/2021	11/05/2021					





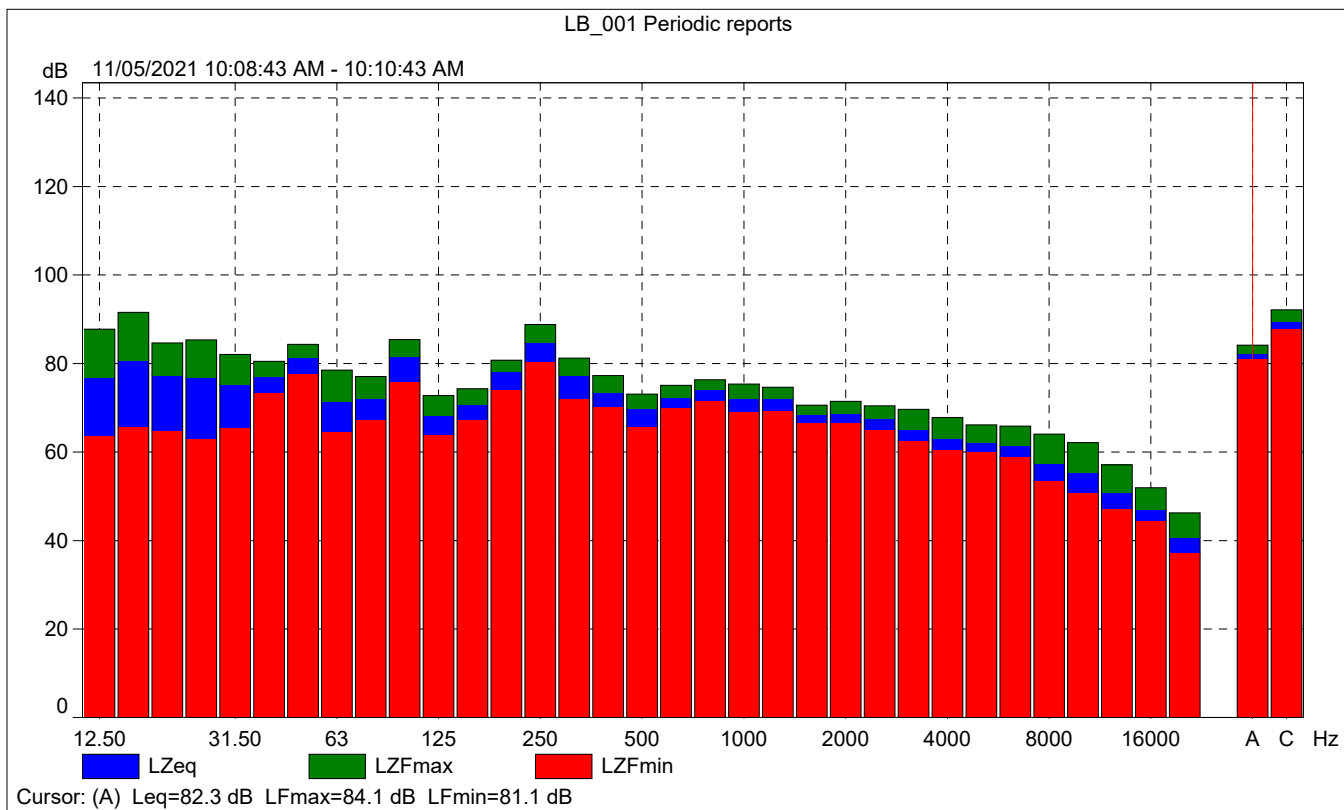
LB_001

	Start time	Elapsed time	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			83.2	83.4	82.6
Time	10:09:42 AM	0:00:01			
Date	11/05/2021				



LB_001 Periodic reports

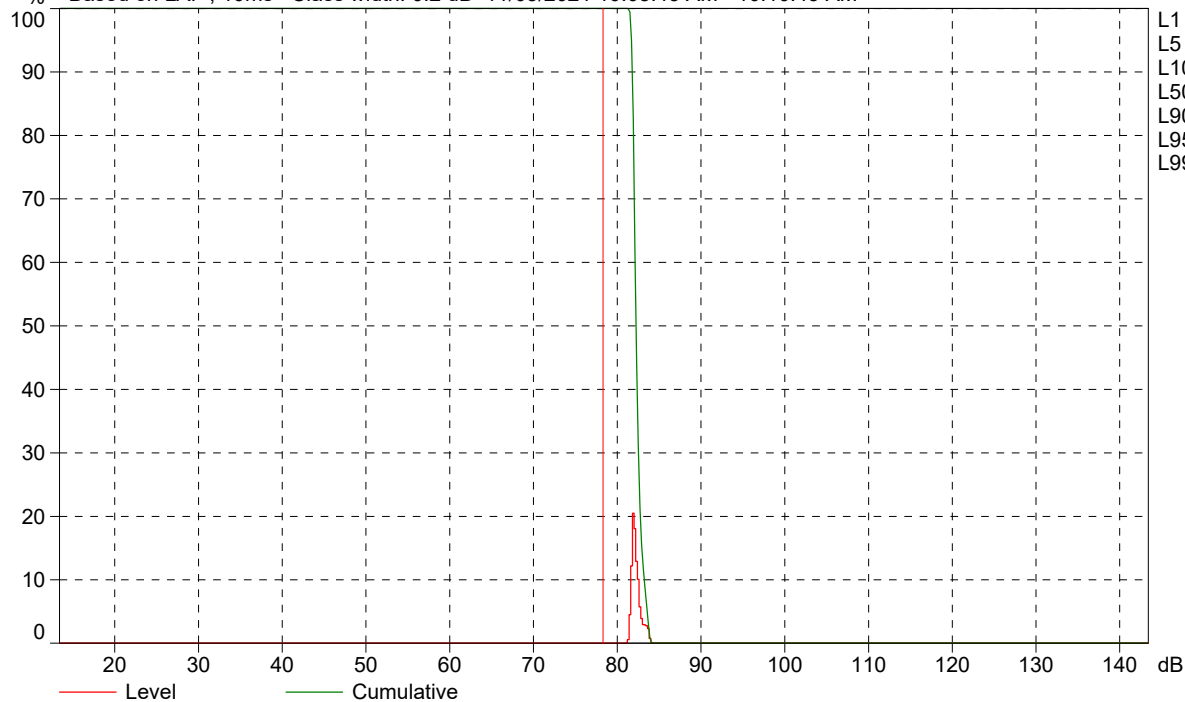
	Start time	Elapsed time	Overload [%]	LAFeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	82.6	84.1	81.1
Time	10:08:43 AM	0:02:00				
Date	11/05/2021					





LB_001 Periodic reports

% Based on LAF, 10ms Class width: 0.2 dB 11/05/2021 10:08:43 AM - 10:10:43 AM



- L1 = 83.8 dB
- L5 = 83.5 dB
- L10 = 83.1 dB
- L50 = 82.1 dB
- L90 = 81.7 dB
- L95 = 81.6 dB
- L99 = 81.4 dB

Cursor: [78.2 ; 78.4] dB Level: 0.0% Cumulative: 100.0%

Site Number: NM-2			
Recorded By: Danielle Regimbal, Tina Yuan			
Job Number: 178554			
Date: 11/5/2021			
Time: 10:13 AM			
Location: 5 feet from rear diver side of the truck			
Source of Peak Noise: Trucks idling and trenching events			
Noise Data			
Leq (dB)	Lmax(dB)	Lmin (dB)	Peak (dB)
90.3	95.0	78.0	107.3

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	09/09/2021	
	Microphone	Brüel & Kjær	4189	3086765	09/09/2021	
	Preamplifier	Brüel & Kjær	ZC 0032	25380	09/09/2021	
	Calibrator	Brüel & Kjær	4231	2545667	09/09/2021	
Weather Data						
Est.	Duration: 10 minutes			Sky: Cloudy		
	Note: dBA Offset = -0.02			Sensor Height (ft): 5 ft		
	Wind Ave Speed (mph / m/s)		Temperature (degrees Fahrenheit)		Barometer Pressure (inches)	
	S 1 mph		59		29.99	

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		11/05/2021 10:13:09
End Time:		11/05/2021 10:15:09
Elapsed Time:		00:02:00
Bandwidth:		1/3-octave
Max Input Level:		142.13

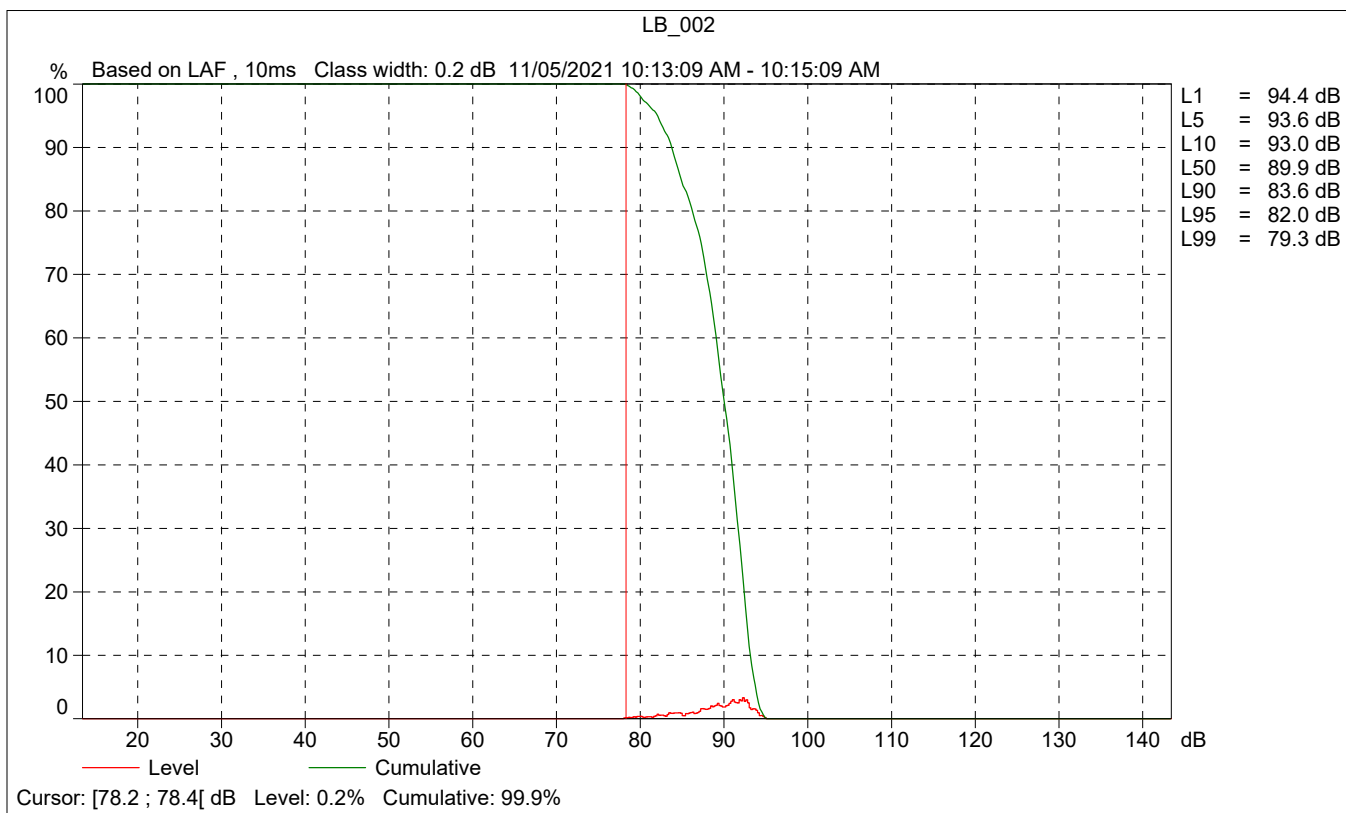
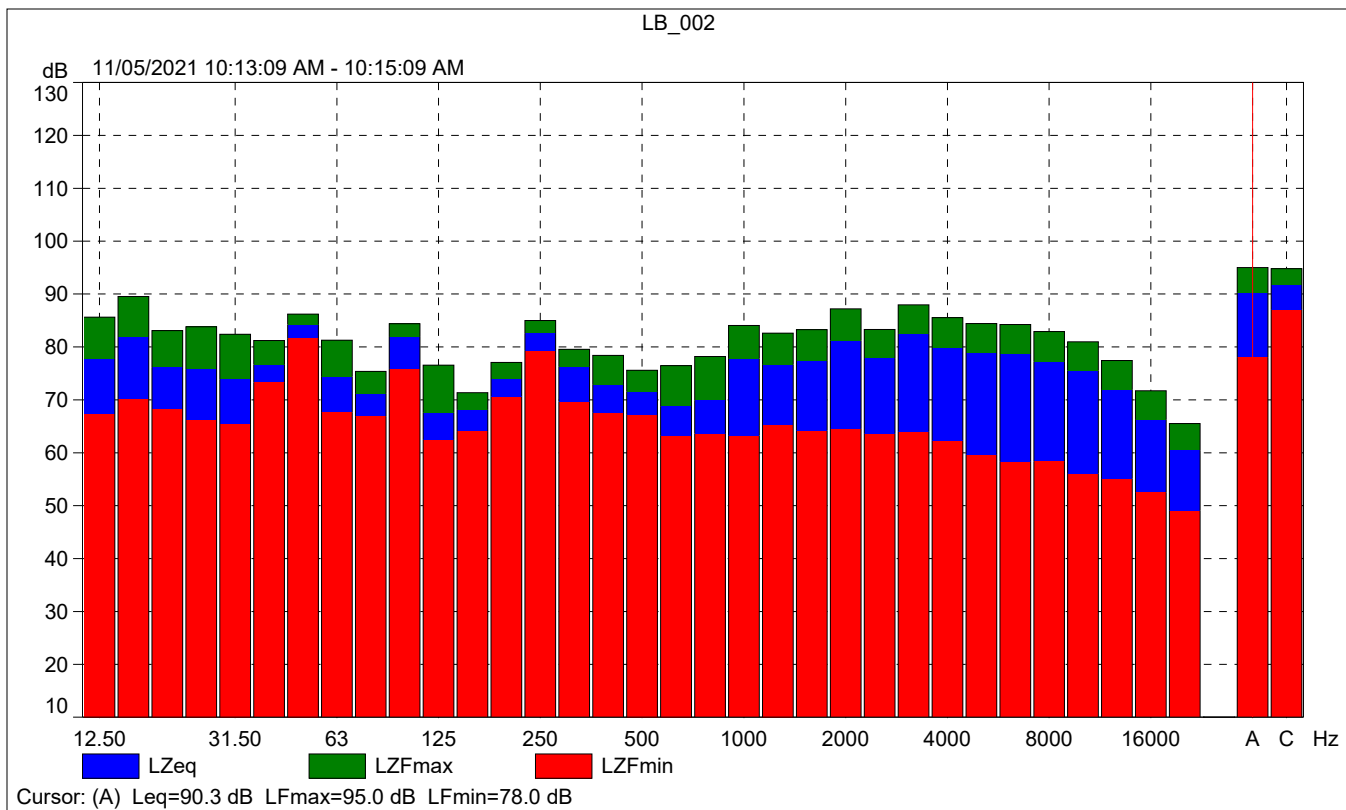
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

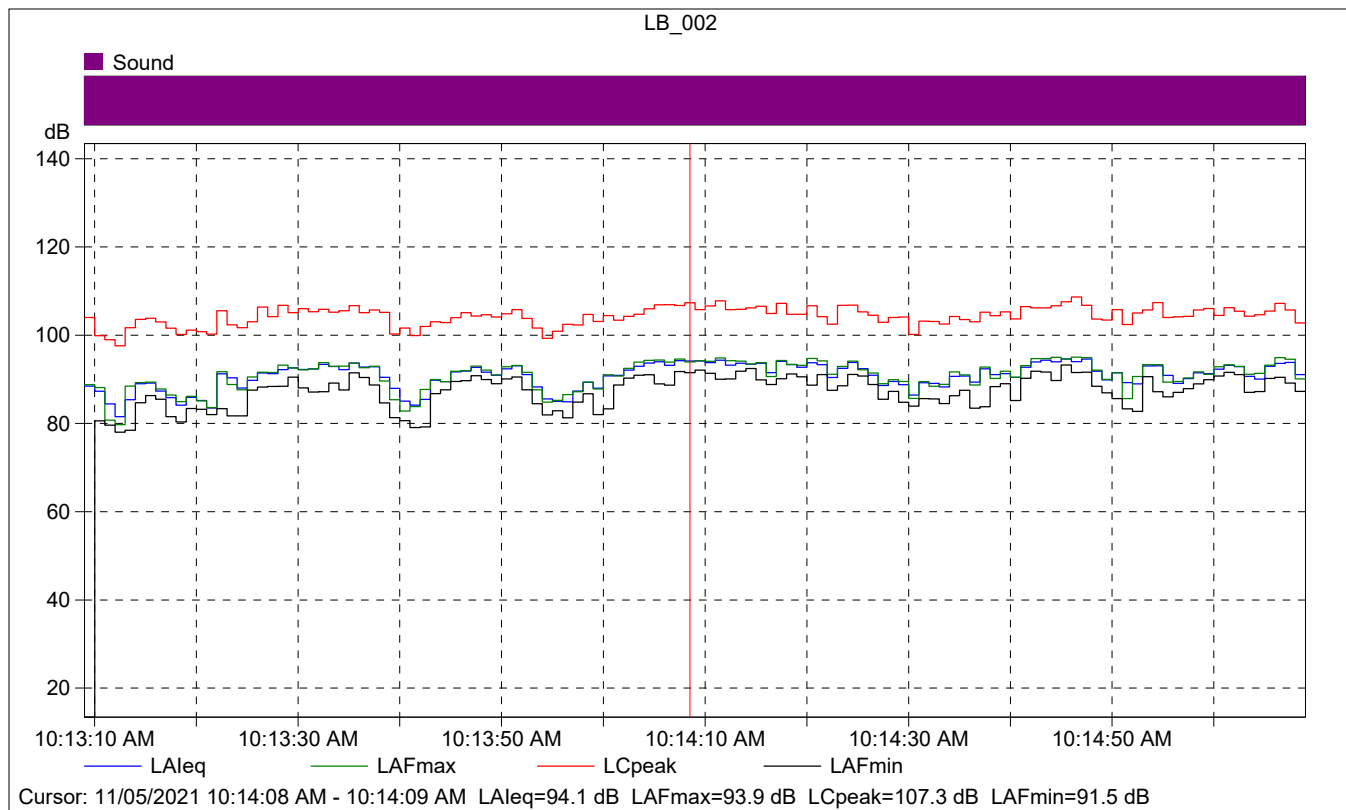
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

Calibration Time:		11/05/2021 09:53:00
Calibration Type:		External reference
Sensitivity:		43.5511879622936 mV/Pa

LB_002

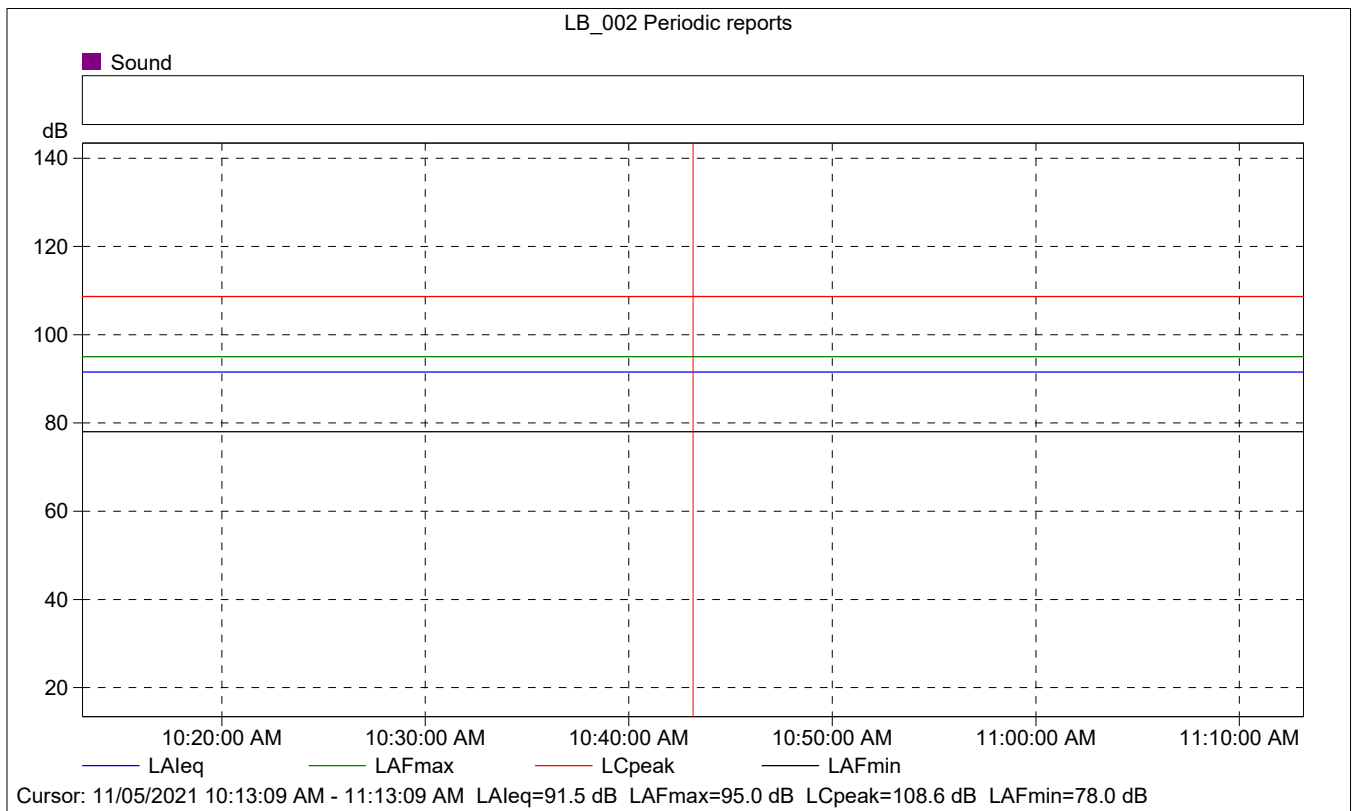
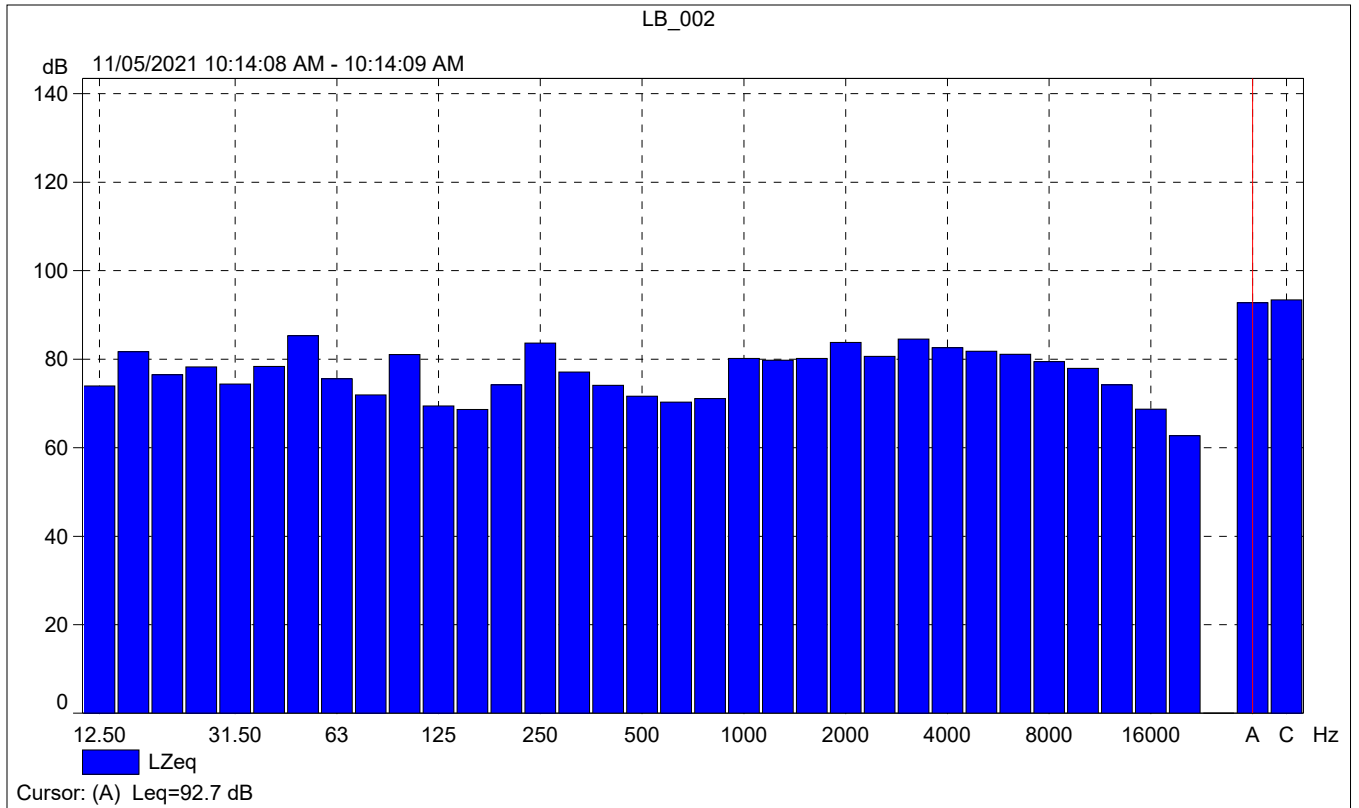
	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	90.3	95.0	78.0
Time	10:13:09 AM	10:15:09 AM	0:02:00				
Date	11/05/2021	11/05/2021					





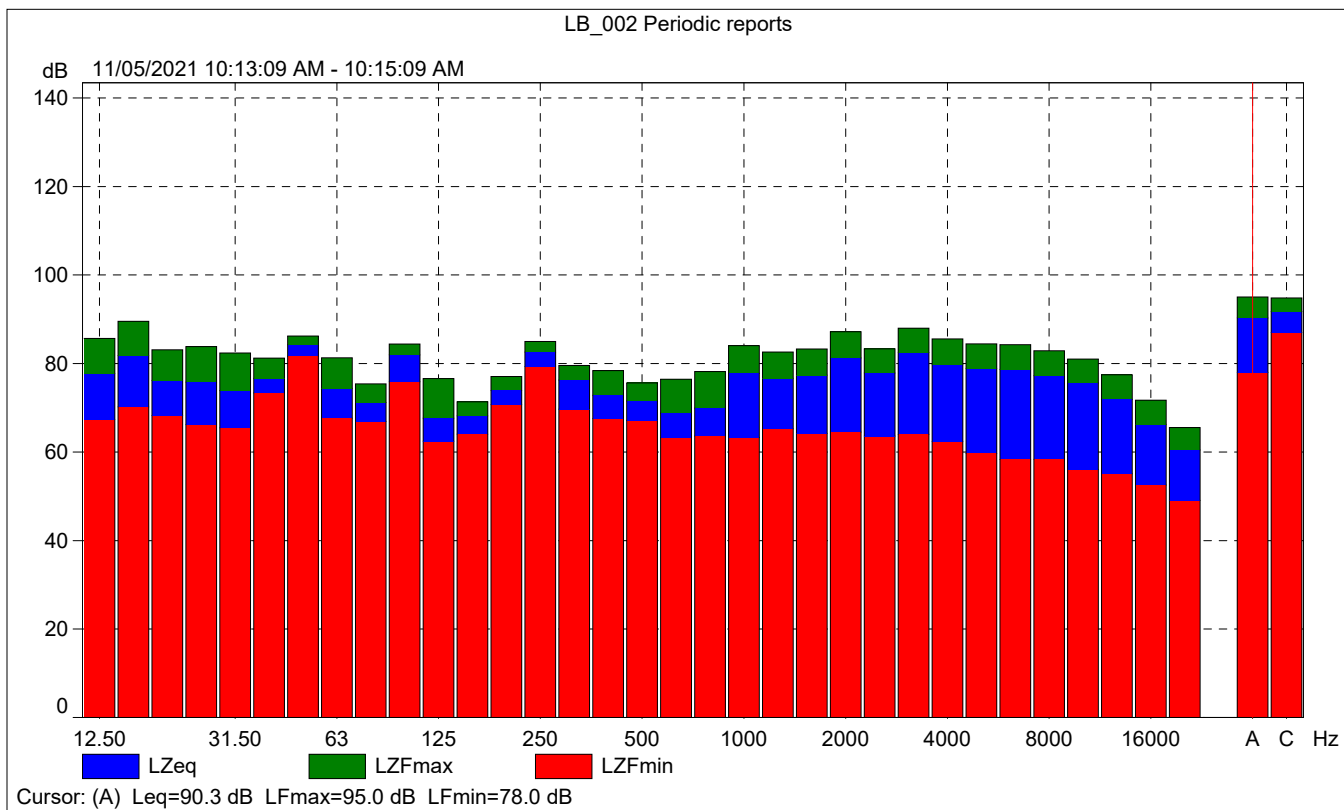
LB_002

	Start time	Elapsed time	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			94.1	93.9	91.5
Time	10:14:08 AM	0:00:01			
Date	11/05/2021				



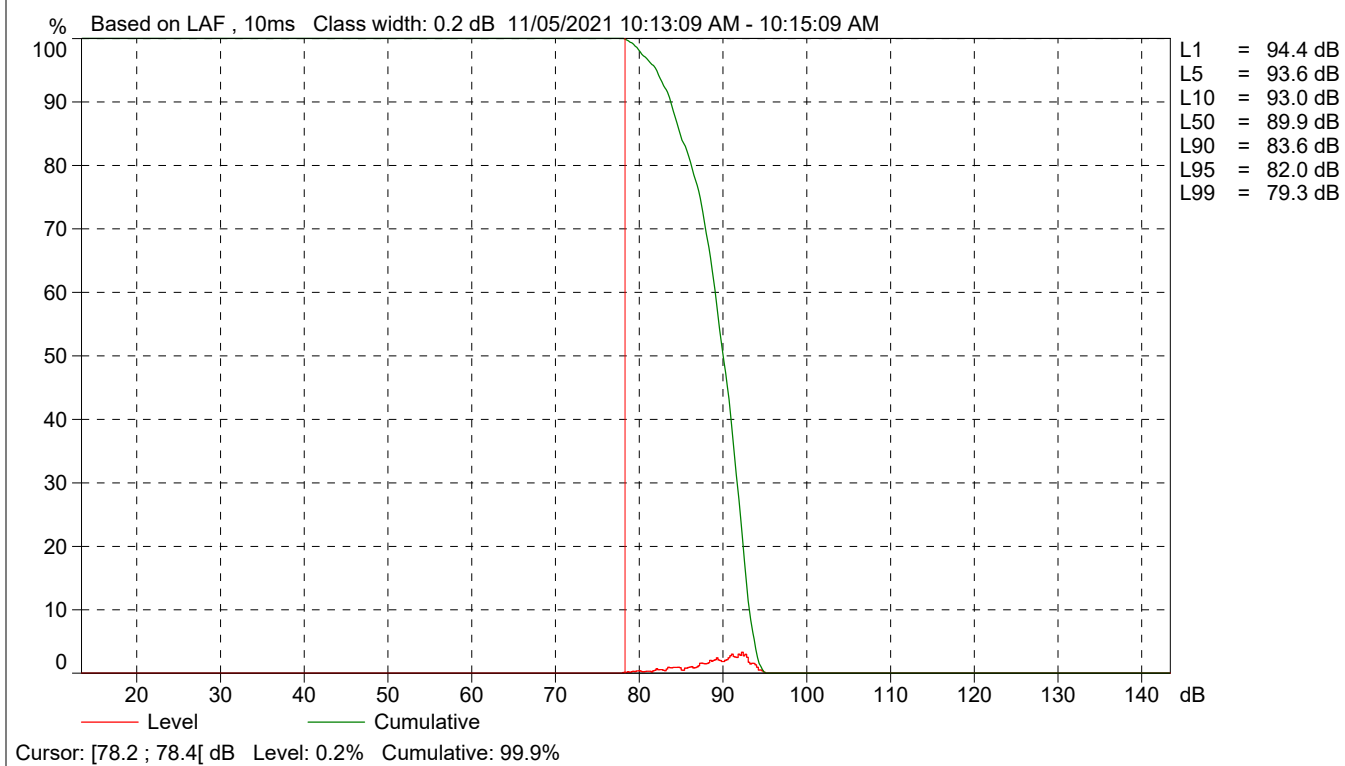
LB_002 Periodic reports

	Start time	Elapsed time	Overload [%]	LAFeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	91.5	95.0	78.0
Time	10:13:09 AM	0:02:00				
Date	11/05/2021					





LB_002 Periodic reports



Site Number: NM-3			
Recorded By: Danielle Regimbal, Tina Yuan			
Job Number: 178554			
Date: 11/5/2021			
Time: 10:17 AM			
Location: 5 feet from the rear passenger side			
Source of Peak Noise: Trucks idling and trenching events			
Noise Data			
Leq (dB)	Lmax(dB)	Lmin (dB)	Peak (dB)
88.0	101.5	80.3	110.0

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	09/09/2021	
	Microphone	Brüel & Kjær	4189	3086765	09/09/2021	
	Preamplifier	Brüel & Kjær	ZC 0032	25380	09/09/2021	
	Calibrator	Brüel & Kjær	4231	2545667	09/09/2021	
Weather Data						
Est.	Duration: 10 minutes			Sky: Cloudy		
	Note: dBA Offset = -0.02			Sensor Height (ft): 5 ft		
	Wind Ave Speed (mph / m/s)		Temperature (degrees Fahrenheit)		Barometer Pressure (inches)	
	S 1 mph		59		29.99	

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		11/05/2021 10:17:06
End Time:		11/05/2021 10:19:06
Elapsed Time:		00:02:00
Bandwidth:		1/3-octave
Max Input Level:		142.13

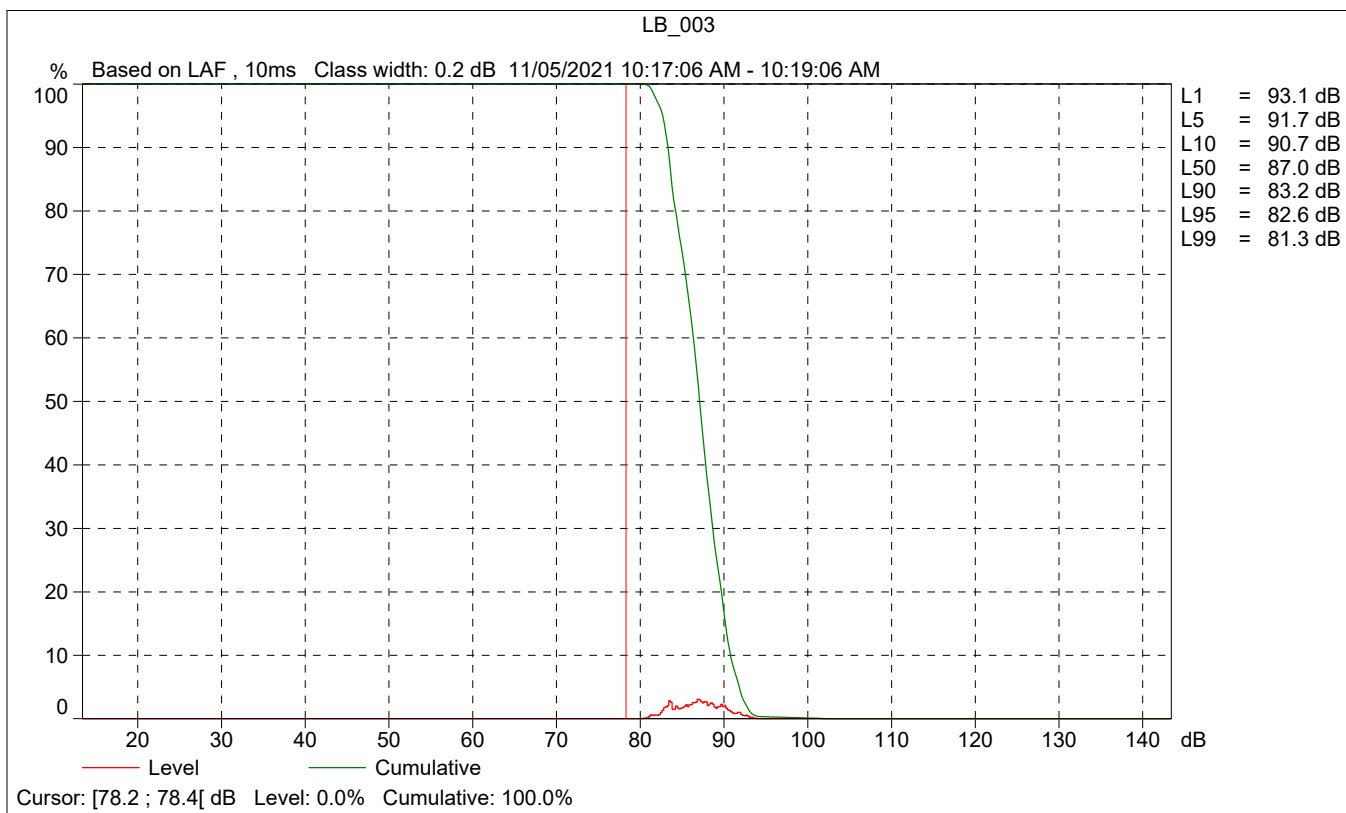
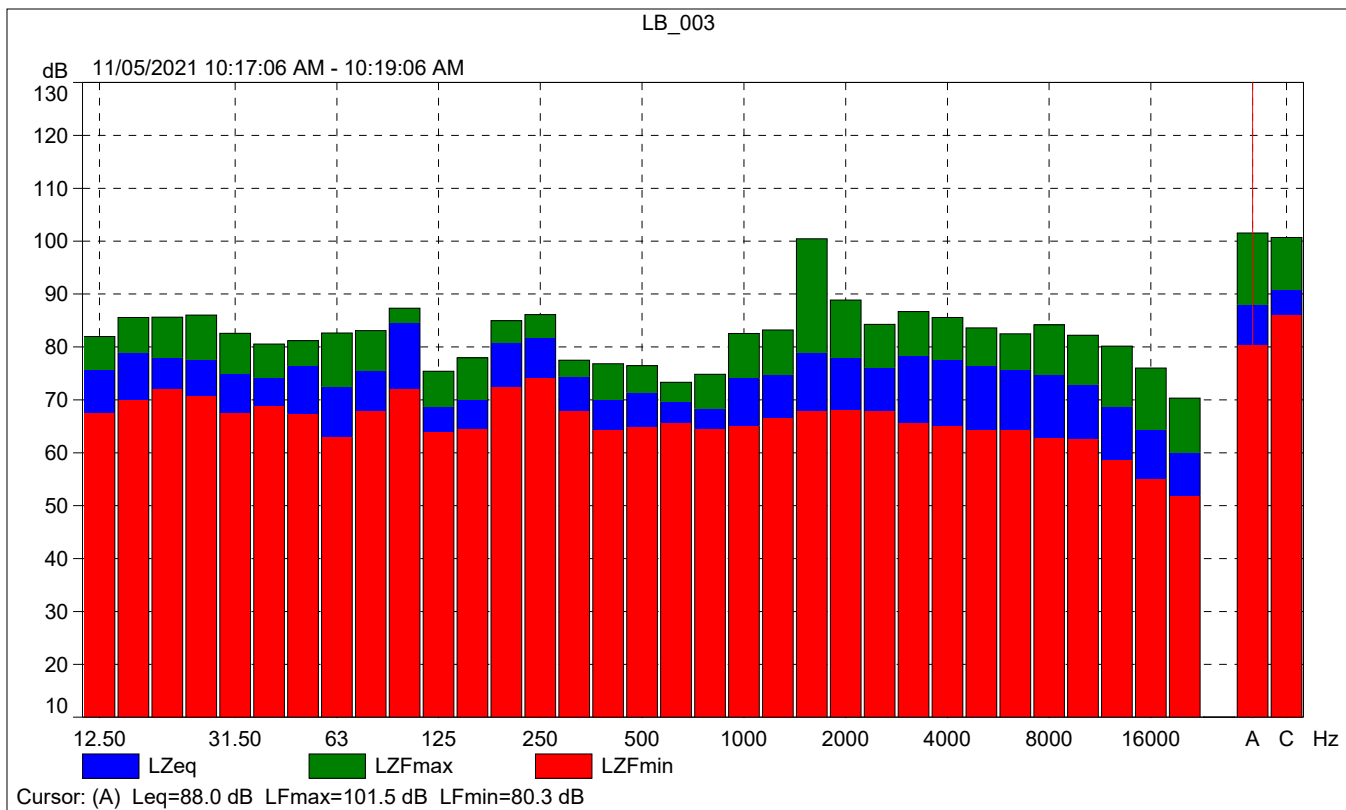
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

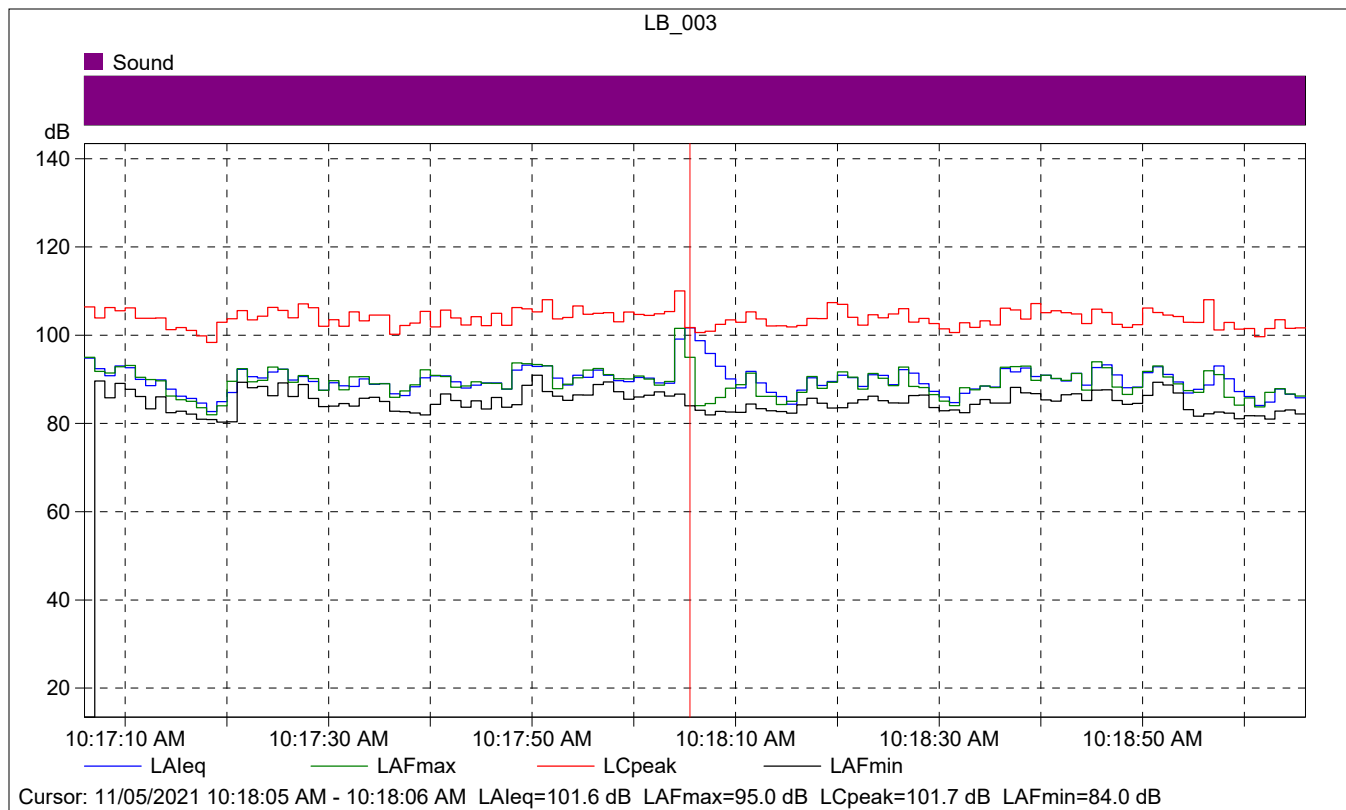
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

Calibration Time:		11/05/2021 09:53:00
Calibration Type:		External reference
Sensitivity:		43.5511879622936 mV/Pa

LB_003

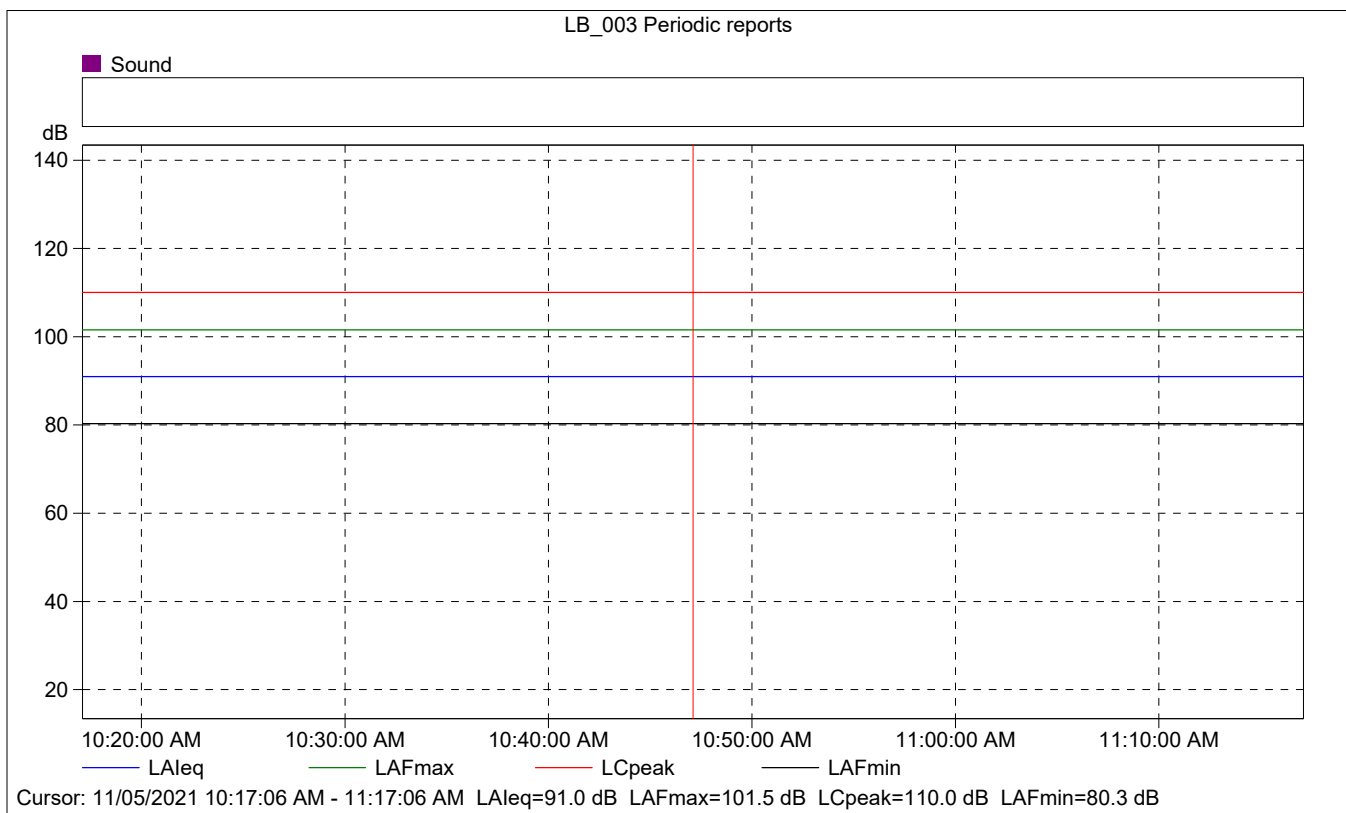
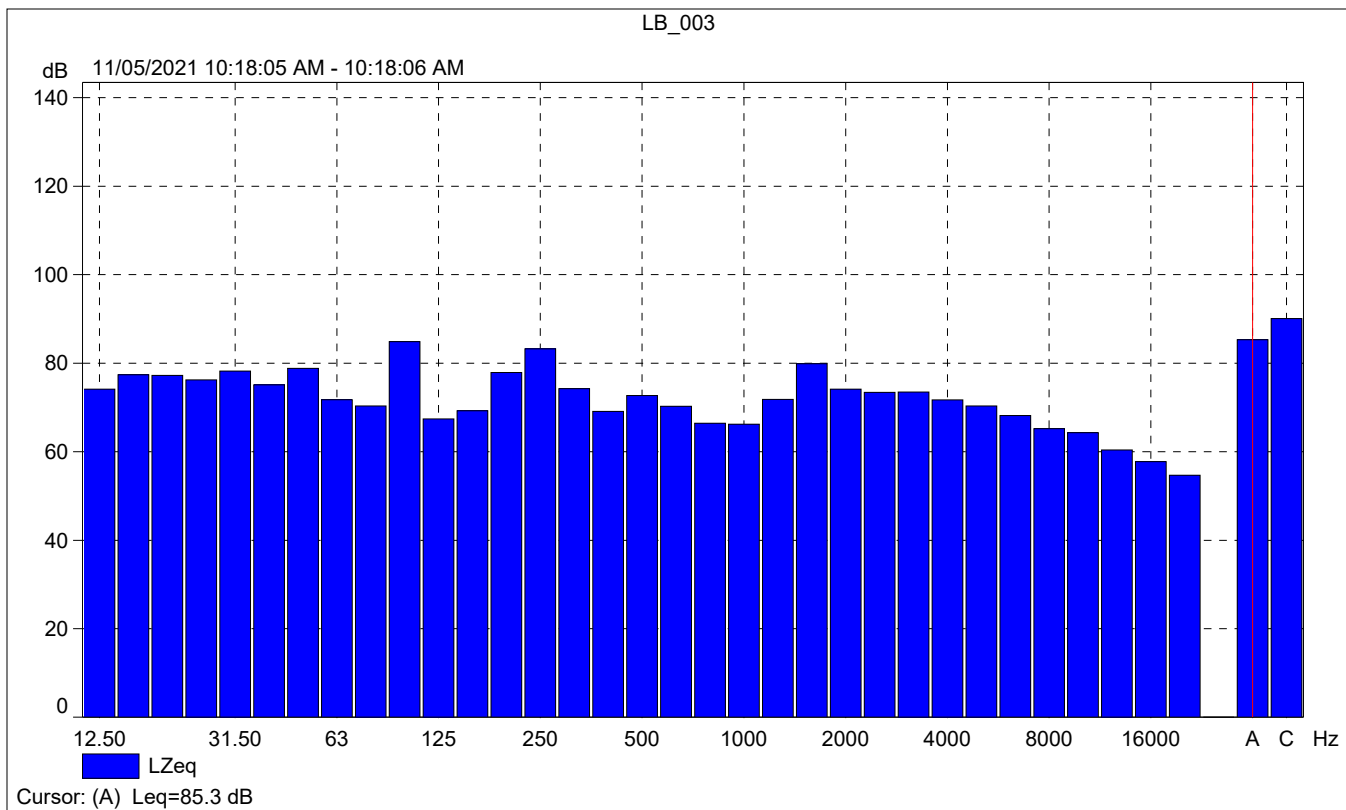
	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	88.0	101.5	80.3
Time	10:17:06 AM	10:19:06 AM	0:02:00				
Date	11/05/2021	11/05/2021					





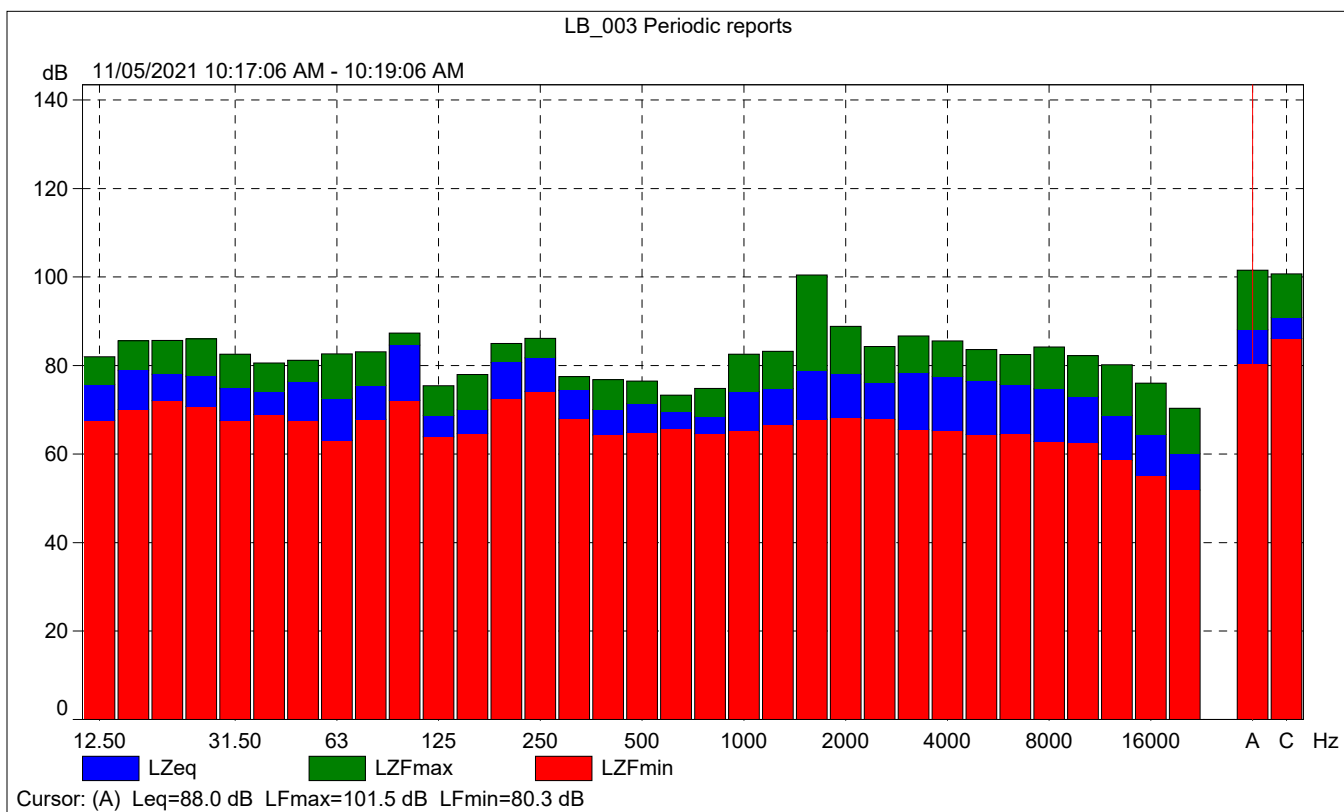
LB_003

	Start time	Elapsed time	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			101.6	95.0	84.0
Time	10:18:05 AM	0:00:01			
Date	11/05/2021				



LB_003 Periodic reports

	Start time	Elapsed time	Overload [%]	LALeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	91.0	101.5	80.3
Time	10:17:06 AM	0:02:00				
Date	11/05/2021					





LB_003 Periodic reports

