

New Acland Coal Mine Stage 3 Project

Air, Noise and Vibration Report June 2023

New Acland Mine



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1. Introduction

1.1. Purpose

This document (**Report**) is issued by New Acland Coal Pty Ltd (**New Acland Coal/NAC**) in respect of the New Acland Coal Mine Stage 3 project (**New Acland Mine or Project**).

The purpose of this Report is to make publicly available environmental monitoring reports from air, noise and vibration monitoring that has been conducted at and around the New Acland Mine in accordance with environmental authority EPML00335713 (**Environmental Authority / EA**).

This Report exclusively covers the period commencing on 1 June 2023 and ending on 30 June 2023 (**Monitoring Period**).

This report is intended to satisfy the requirements of Condition 3 of the Co-ordinator General's Imposed Conditions applicable to the Project.¹

1.2. Overview of operations during the Monitoring Period

During the Monitoring Period, pre-mining related activities commenced in the Manning Vale East pits but did not progress into the Willeroo or Manning Vale West pits.

The pre-mining activities included topsoil extraction, drilling and blasting in Manning Vale East. No coal extraction occurred within the Monitoring Period.

1.3. Independent Review of Noise Compliance Monitoring

In accordance with EA Condition F13, for the first 12 months of the Stage 3 Mine, the monthly Compliance Noise Monitoring Report must be reviewed by an appropriately qualified independent acoustic consultant. This independent acoustic consultant must prepare their own (independent) report/memorandum, within two weeks of receiving the draft report, stating the process they have used to review the noise monitoring, analysis and findings and their acceptance (or otherwise) of the monthly noise monitoring report.

This review has been completed by AARC consulting, a third-party independent entity, and the report can be reviewed in Appendix 3 – Third-Party External Reports. The review of the determined the following:

- That noise levels during the June 2023 monitoring period were compliant with the NAC's EA. Upon review of the SLR report, AARC agree with this conclusion.

Recommendations identified by AARC were implemented in the monthly compliance monitoring report as needed. All monitoring data collected over the Monitoring Period has been assessed against the compliance limits of the relevant Environmental Authority conditions. These relevant Environmental Authority conditions are reproduced in Appendix 4 and the applicable Environmental Authority limits have been reproduced in Table 10 to Table 12 which are set out in Appendix 5.

¹ As last stated in the New Acland Coal Mine Stage 3 project Coordinator-General's change report No. 4 – amendment to stated conditions following Land Court (2021) proceedings released on 26 May 2022.

2. Environmental Monitoring

During the Monitoring Period, the following monitoring was undertaken:

- Air Quality Monitoring (refer to Section 2.1)
 - Total suspended particles (TSP) using TEOMs.
 - PM2.5 using TEOMs.
 - PM10 using TEOMs.
 - Insoluble solids.
- Noise Monitoring (Section 2.2)
 - Continuous performance monitoring.
 - Attended and unattended sensitive receptor monitoring.
- Vibration Monitoring
 - Blast and vibration results at sensitive receptors.

All environmental monitoring described in this Report was conducted by suitably qualified and experienced personnel as required under schedule B of the Environmental Authority and using equipment / instruments maintained in accordance with schedule F of the Environmental Authority.

2.1. Air Quality Monitoring Locations and Parameters

Air quality monitoring was performed at seven (7) locations during the Monitoring Period.

These monitoring locations are outlined in Table 1 and shown in Figure 1.

It is noted that certain location descriptions outlined below deviate from the ones outlined in the Environmental Authority conditions with the rationale for such deviations being set out in New Acland Coal’s Air Emissions Management Plan.

Table 1: Air quality monitoring sites and parameters

Parameter	Site ID					
	1 - Acland	2 - North	3a - West	5 - Southwest	6 - East	7 - East
PM _{2.5} TEOM	✓					✗
PM _{2.5} background	✗	✗	✓	✗	✓	✗
PM ₁₀ TEOM	✓	✓	✓	✓	✓	✓
TSP TEOM	✓	✓**	✓**	✓**	✓**	✓**
Dust gauge – insoluble solids	✓	✓	✓	✓	✓	✓

2.2. Noise Monitoring Parameters and Locations

Noise monitoring was performed at various locations during the Monitoring Period. These monitoring locations are outlined in Table 2 and shown in Figure 2 and Figure 3.

For further information on the noise monitoring strategy please refer to the Noise and Vibration Management Plan.

Table 2: Noise monitoring sites and parameters

Parameter	Locations									
Performance Monitoring – Directional Noise Compass*2	Northern Compass					Acland Compass				
Unattended Noise Monitoring	1	4	8	10	11	15	19	34	35	38
Attended Noise Monitoring	1	4	8	10	11	15	19	34	35	38

2 * Noise performance monitoring includes correlated noise compasses based on mining progression.

3. Data and Results

Data collected over the course of this Monitoring Period have been summarised and presented in the following sections in comparison to the limits prescribed by the Environmental Authority.

3.1. Air Quality Monitoring

New Acland Coal collected real-time dust monitoring and monthly depositional dust data during the Monitoring Period to inform any offsite impacts. This included monitoring for total suspended particles (TSP), fine particulate matter (PM2.5, PM10), and insoluble solids.

A summary of the data has been presented in the table below. For the entire results please refer to the appendices of this document. A month-to-month summary is also available online, [Real-Time Air Quality and Noise Performance Monitoring Data](#) dashboard. Interpretation of compliance is undertaken by comparing the EA nuisance limit to the 24-hour average.

The data has been compared to the relevant Environmental Authority limits to determine compliance and outlined in the Table 3: below.

3.1.1. Negative Values

Table 3: below includes negative minimum values occurring during the monitoring period. This is a result of the filter dynamics occurring during sample collection, when particles are collected by the monitoring device (Tapered element oscillating microbalance, TEOM). During particulate collection in the TEOM, the particles are influenced by other airborne gases, other particles, or the filter media.

This dynamic may result in fluctuating sample concentrations up to $-10 \mu\text{g}/\text{m}^3$; typically observed in rainfall events where the filter becomes heavy from moisture. These values are considered “clean” conditions and reported in accordance with the US Environmental Protection Agency (EPA) ‘Standard Operating Procedure for the Continuous Measurement of Particulate Matter’³. Variations outside of this range is considered to be inaccurate and excluded from the data as likely attributed to from equipment malfunction.

Table 3: Compliance air quality monitoring data collected during the Monitoring Period.

Location	Units	EA Limits (24 hour)	Data points (Count only)	1-hour Maximum	1-hour Minimum	24-hour Average
Total Suspended Particles (TSP)						
Location 1- Acland	$\mu\text{g}/\text{m}^3$	Annual Air Quality Limit –	30	7.71	-0.24	2.53
Location 2 – North	$\mu\text{g}/\text{m}^3$		30	30.11	4.51	12.68

³ Reference: US EPA, 2009, Standard Operating Procedure for the Continuous Measurement of Particulate Matter, Thermo Scientific TEOM® 1405-DF Dichotomous Ambient Particulate Monitor with FDMS®, Federal Equivalent Method EQPM-0609-181, [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2021-03/documents/8500c_fdms_sop_draft.pdf](https://www.epa.gov/sites/default/files/2021-03/documents/8500c_fdms_sop_draft.pdf).

Location	Units	EA Limits (24 hour)	Data points (Count only)	1-hour Maximum	1-hour Minimum	24-hour Average
Location 3a – West	µg/m3	90	30	23.59	5.89	11.24
Location 5 – Southwest	µg/m3	Nuisance Limit** – 80	30	22.99	4.56	10.89
Location 6 – East	µg/m3		30	19.44	3.76	9.46
PM 2.5						
Location 1 – Acland	µg/m3	24-hour Avg 25	30	21.84	4.35	11.40
PM 10						
Location 1- Acland	µg/m3	24-hour Avg 50	30	19.98	4.42	9.87
Location 2 – North	µg/m3		30	19.86	4.59	10.18
Location 3a – West	µg/m3		30	18.45	5.18	9.63
Location 5 – Southwest	µg/m3		30	19.75	5.02	9.63
Location 6 – East	µg/m3		30	19.19	4.61	9.44
Total Insoluble solids						
Location 1– Acland (AD16)	mg/m ² /day	120	1 ^	--	--	27
Location 2 – North (AD03)	mg/m ² /day		1 ^	--	--	10
Location 3a – West (AD24)	mg/m ² /day		1 ^	--	--	110
Location 5 – Northwest (AD44)	mg/m ² /day		1 ^	--	--	13
Location 6 – East (AD18)	mg/m ² /day		1 ^	--	--	17
Location 7- East (AD31)	mg/m ² /day		1 ^	--	--	17

**Environmental Nuisance under schedule 15 of the Environmental Protection Act 1994 is define as unreasonable interference or likely interference with an environmental value caused by air contaminants, visual conditions, or other ways as prescribed by regulation.

^ Monitoring period of 30 days has been included as per dust depositional standards, AS/NZS 2850.10.1.2016.

3.2. Noise Performance and Quality Monitoring

New Acland Coal has collated and presented the noise monitoring data that has been collected in accordance with the Environmental Authority, as described in section above. A summary of the data has been presented in the table below; for the entire results please refer to the appendices of this document. A month-to-month summary is also available online, on the [Real-Time Air Quality and Noise Performance Monitoring Data](#) dashboard. The data has

been compared to the relevant EA limits outlined in to determine compliance and outlined in Table 4: below. Noise limits for NAC mine change based on the hours of operation and are more conservative during night shift (10PM to 7AM), Sundays, and Public Holidays. Please refer to Appendix 5 for further information. If performance or compliance monitoring indicates the potential for exceedance of the relevant EA limits, NAC undertakes a review of the noise source and implement noise abatement measures as required.

L_{max} data has been included in this report for the period of 14 June to the 30 June inclusive, coinciding with the commencement of night-time operations.

3.2.1. Noise Exclusions

NAC's Noise and Vibration Management Plan outlines the process of data exclusions and inclusions based on extraneous noise collected by the compasses. The data presented below is all noise data collected by the compasses and includes instances of external noise generation that would have been excluded during usual operations.

Table 4: Compliance noise monitoring data collected during the Monitoring Period.

Location	Units	EA Limits	Data points (Count only)	Maximum	Minimum	Average
Attended Monitoring						
Refer to Appendix 3 – Third-Party External Reports for outcomes of the monitoring event.						
Unattended Monitoring						
Refer to Appendix 3 – Third-Party External Reports for outcomes of the monitoring event.						
Performance Monitoring – L_{eq} 15 minutes (7AM – 6PM) *						
Acland Noise Compass	dB	42	1320	41.97	21.76	34.53
North Noise Compass	dB		1320	40.79	20.89	31.42
Performance Monitoring – L_{eq} 15 minutes (6PM – 7AM) *						
Acland Noise Compass	dB	35	884	34.90	14.97	24.76
North Noise Compass	dB		884	34.08	11.60	23.84
Performance Monitoring – L_{max} (10 PM – 7AM) *						
Acland Noise Compass	dB	50	6638	49.99	19.94	32.62
North Noise Compass	dB		6643	50.00	22.84	32.57

*It is noted that performance noise monitoring is undertaken onsite at the New Acland Mine and is not used to determine compliance with relevant Environmental Authority conditions.

3.2.2. Blast and Vibration Quality Monitoring

During the Monitoring Period, four (4) blasts were undertaken at NAC. All blasting was undertaken from the Manning Vale East pit. The closest sensitive receptor from the blasting location was identified as the Acland township. The results of each blast have been presented in Table 5 below.

Table 5: Blast and vibration monitoring data collected during the Monitoring Period

Date	Time	Location	Acland - Airblast Over pressure (dB)	Acland - Ground Vibration Peak Particle Velocity (mm/sec)
Environmental Authority Limits			115	5
03/06/2023	10:20 AM	Acland Township	113.8	1.41
20/06/2023	10:38AM		104.1	1.18
26/06/2023	11:36AM		DNT*	DNT*

Date	Time	Location	Acland - Airblast Over pressure (dB)	Acland - Ground Vibration Peak Particle Velocity (mm/sec)
30/06/2023	10:36AM		106.1	1.01

* 'Did not trigger (DNT)' applies when the blasting event was not detected on the monitoring device.

4. Compliance Review and Conclusion

During the Monitoring Period there was no recorded noncompliance against the EA limits. Appendix 2 – Environmental Monitoring Data sets out full results for monitoring conducted during the Monitoring Period.

Appendix 1 – Monitoring Locations

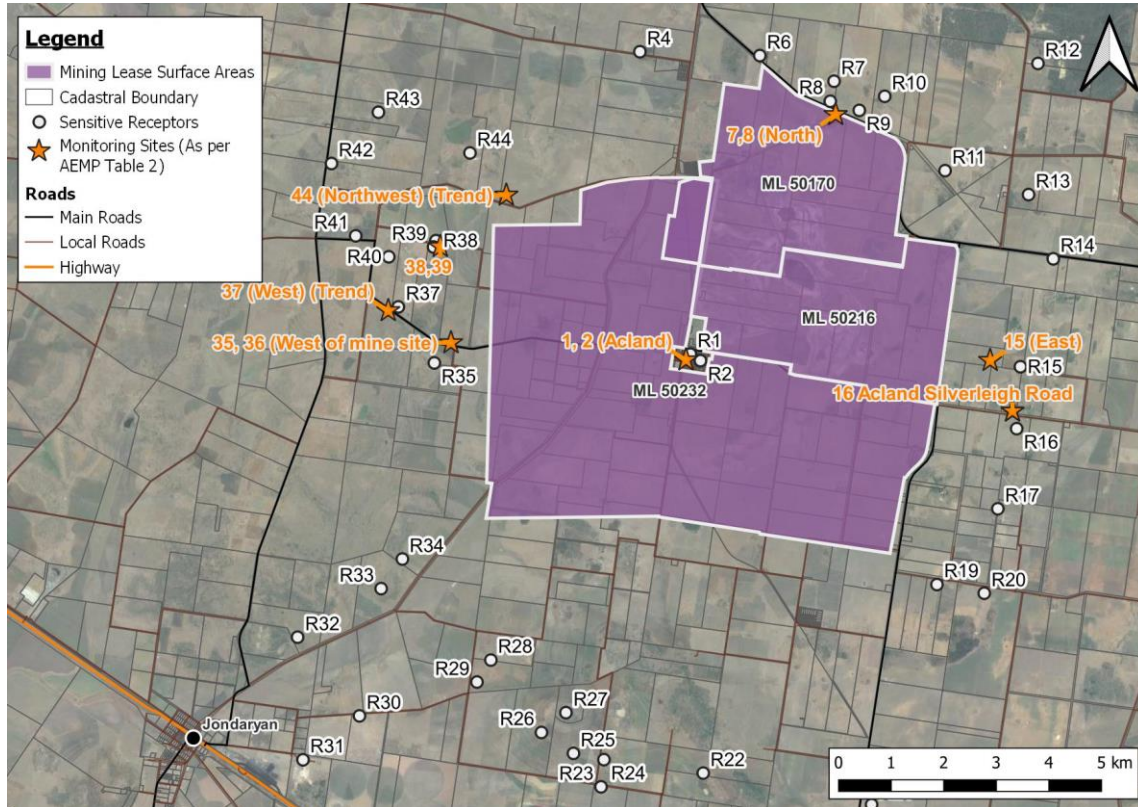


Figure 1: NAC Stage 3 air quality and meteorological monitoring sites

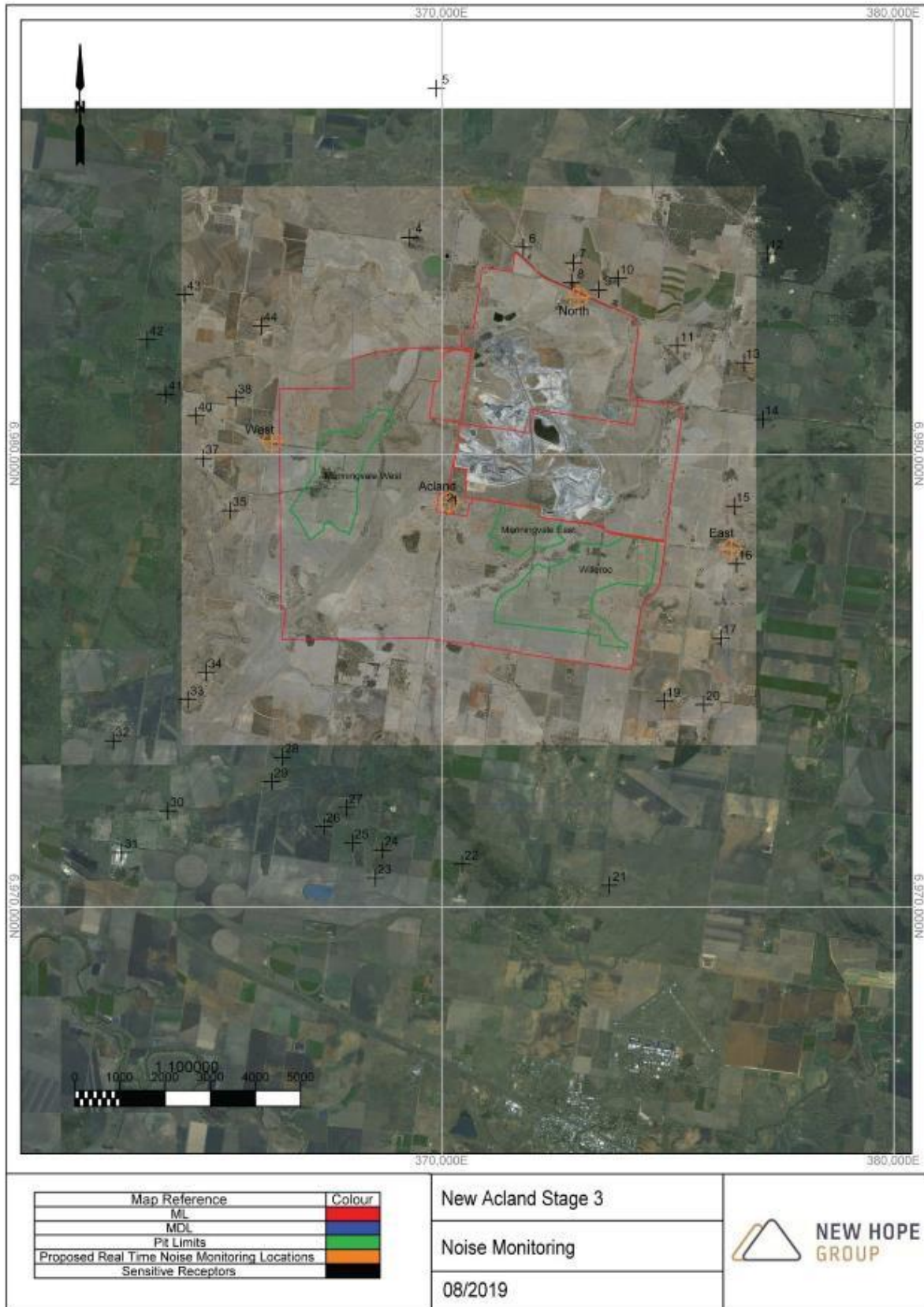


Figure 2: Stage 3 Real-Time Noise Performance Monitoring Locations.

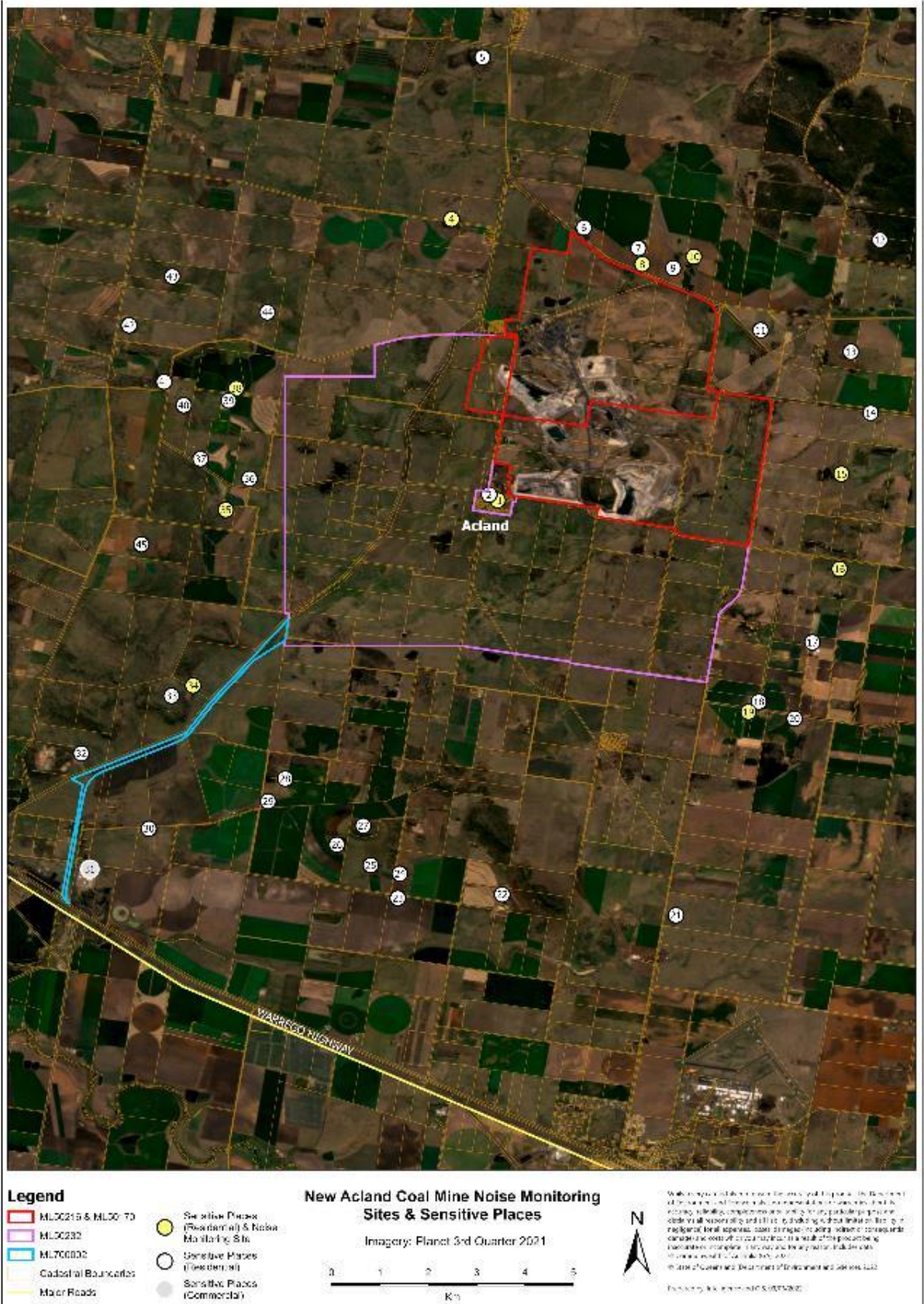


Figure 3: NAC Sensitive Places and Noise Monitoring Locations

Appendix 2 – Environmental Monitoring Data

Table 6: New Acland Coal's Air Quality Monitoring for Total Suspended Particles (TSP), PM10, and PM2.5.

Date	Time	Location 1 - Acland PM10	Location 1 - Acland PM2.5	Location 1 - Acland TSP	Location 2 - North PM10	Location 2 - North TSP	Location 3a - West PM10	Location 3a - West TSP	Location 5 - South West PM10	Location 5 - South West TSP	Location 6 - East PM10	Location 6 - East TSP
01/06/2023	0:00	12.95	15.24	2.34	11.96	14.73	12.74	15.67	12.65	15.69	11.28	12.02
02/06/2023	0:00	12.4	13.91	3.25	14.11	19.58	11.48	12.74	12.01	13.92	11.46	11.33
03/06/2023	0:00	11.01	12.12	3.4	10.08	11.3	9.55	9.93	10.15	11.87	10.6	10.19
04/06/2023	0:00	10.1	10.91	3.82	8.9	9.65	8.74	8.63	9.56	10.1	8.57	8.02
05/06/2023	0:00	11.57	12.91	2.03	10.21	11.33	9.57	9.06	10.58	10.79	9.43	8.87
06/06/2023	0:00	9.09	11.59	1.45	6.79	7.81	6.48	6.62	7.06	7.88	6.81	6.63
07/06/2023	0:00	8.47	10.9	-0.02	7.72	9.62	6.46	6.76	6.96	8.14	6.87	7.07
08/06/2023	0:00	5.69	6.71	-0.24	5.69	7.45	5.18	5.89	5.93	7.03	5.27	5.47
09/06/2023	0:00	5.85	5.74	1.29	7.23	9.48	5.89	6.27	5.62	6.07	5.86	6
10/06/2023	0:00	7.23	9.41	1.48	7.2	9.21	6.95	8.32	6.75	7.73	7.4	7.73
11/06/2023	0:00	10.18	12.55	3.04	8.43	9.92	7.55	8.18	8.3	9.35	8.78	8.89
12/06/2023	0:00	7.78	10.54	1.17	7.02	8.05	5.73	6.44	6.31	7.04	6.41	6.36
13/06/2023	0:00	9.06	10.4	2.26	10.44	13.15	9.4	11.43	9.07	10.9	10.87	12.08
14/06/2023	0:00	7.91	8.69	2.24	9.04	10.86	8.63	10.33	8.63	9.57	7.91	8.46
15/06/2023	0:00	9.95	11.07	1.86	11.71	14.76	10.52	12.93	9.98	11.24	9.63	10.04
16/06/2023	0:00	11.29	13.41	1.9	10.77	13.5	11.02	13.65	10.58	12.54	9.85	10.63
17/06/2023	0:00	12.08	14.11	3.47	12.46	15.12	12.89	15.04	12.33	14.38	10.35	10.6
18/06/2023	0:00	10.92	12.22	4.82	12.29	14.83	11.25	13.41	10.53	12.74	11.59	12.15
19/06/2023	0:00	11.36	13.33	2.81	11.71	14.15	11.92	14.79	11.1	12.62	10.37	10.85
20/06/2023	0:00	9.36	11.62	0.5	10.19	13.08	9.23	11.46	8.84	10.79	11.08	13.03
21/06/2023	0:00	14.02	19.38	2.16	14.75	18.65	11.53	14.34	12.17	14.84	12.05	12.41

Date	Time	Location 1 - Acland PM10	Location 1 - Acland PM2.5	Location 1 - Acland TSP	Location 2 - North PM10	Location 2 - North TSP	Location 3a - West PM10	Location 3a - West TSP	Location 5 - South West PM10	Location 5 - South West TSP	Location 6 - East PM10	Location 6 - East TSP
22/06/2023	0:00	19.98	21.84	7.71	18.9	23.17	18.45	21.45	19.75	22.99	19.19	19.44
23/06/2023	0:00	12.23	12.17	4.19	12.38	14.05	11.13	11.92	12.54	12.99	11.52	11.45
24/06/2023	0:00	6.12	6.52	1.94	6.36	7.4	6.81	7.74	6.44	7.31	5.96	6.09
25/06/2023	0:00	9.6	10.68	3.28	10.66	13.44	9.71	11.93	9.56	11.09	10.22	10.67
26/06/2023	0:00	7.35	8.58	1.54	10.02	12.84	7.78	9.59	7.44	8.68	6.94	7.05
27/06/2023	0:00	8.69	10.62	0.91	8.65	12.72	8.79	11.84	8.69	9.32	9.32	8.03
28/06/2023	0:00	14.52	15.47	5.11	19.86	30.11	18.43	23.59	19.03	19.38	17.57	14.09
29/06/2023	0:00	4.42	4.35	4.66	4.59	4.51	<Samp	<Samp	5.02	4.56	4.61	3.76
30/06/2023	0:00	4.86	5.14	1.56	5.17	5.92	5.6	6.07	5.28	5.08	5.36	4.4

Table 7: NAC Noise Compass Data L_{eq} (dB) for Acland and Northern Compasses

Date	Location 1 - Acland				Location 2 - North			
	Count	Max	Min	Average	Count	Max	Min	Average
01/06/2023	95	38.84	14.40	26.04	95.00	37.46	15.25	26.88
02/06/2023	96	41.90	17.91	31.16	96.00	37.63	15.16	30.41
03/06/2023	96	41.61	16.78	32.47	96.00	40.79	17.89	28.24
04/06/2023	96	41.86	15.07	31.49	96.00	39.25	20.56	31.15
05/06/2023	96	43.61	21.68	33.77	96.00	40.44	19.00	31.84
06/06/2023	96	41.97	18.43	31.88	96.00	39.72	16.53	31.21
07/06/2023	96	40.87	17.26	28.14	96.00	36.56	14.64	27.42
08/06/2023	96	40.30	15.75	29.18	96.00	36.28	14.03	27.21
09/06/2023	96	35.23	14.69	24.68	96.00	35.95	13.99	26.10
10/06/2023	96	39.78	14.31	25.06	96.00	35.77	14.36	25.34
11/06/2023	96	40.60	15.90	28.00	96.00	38.82	16.01	27.52
12/06/2023	96	41.14	16.26	28.73	96.00	43.44	16.07	29.81
13/06/2023	96	45.82	16.71	26.99	96.00	35.92	13.61	26.59
14/06/2023	96	37.36	17.95	26.33	96.00	36.81	15.63	26.68
15/06/2023	96	41.76	16.19	25.73	96.00	36.51	15.22	26.11
16/06/2023	96	36.77	14.97	27.50	96.00	33.35	14.61	26.53
17/06/2023	96	41.10	15.27	30.28	96.00	38.07	13.53	25.35
18/06/2023	96	41.09	15.13	27.68	96.00	35.23	11.60	26.33
19/06/2023	96	40.78	18.16	29.15	96.00	38.64	16.43	29.43
20/06/2023	96	37.80	16.09	27.09	96.00	38.03	18.95	29.12
21/06/2023	96	41.20	19.70	30.03	96.00	36.14	14.41	26.18
22/06/2023	96	40.67	20.72	29.01	96.00	37.88	16.00	28.06
23/06/2023	96	36.02	15.37	24.58	96.00	35.75	14.94	27.54
24/06/2023	96	40.76	15.04	28.37	96.00	35.07	16.64	26.29
25/06/2023	96	37.89	22.66	30.56	96.00	35.31	14.28	25.55
26/06/2023	96	41.44	18.32	28.48	96.00	36.56	21.01	29.06
27/06/2023	96	35.70	17.41	29.35	96.00	36.83	14.40	27.44
28/06/2023	96	37.82	16.40	27.59	96.00	38.64	14.13	27.27
29/06/2023	96	40.27	16.35	27.21	96.00	38.13	13.74	29.00
30/06/2023	96	37.04	15.02	24.83	96.00	38.02	16.50	26.76

Table 8: $L_{A_{Max}}$ Noise monitoring data collected during the Monitoring Period

Date	Location 1 -Acland				Location 2 - North			
	Count	Max	Min	Average	Count	Max	Min	Average
15/06/2023	453	49.99	20.10	31.93	414	49.95	23.04	29.27
16/06/2023	413	49.95	19.98	29.23	402	49.90	23.48	32.37
17/06/2023	421	49.97	19.96	29.72	423	48.97	22.85	30.71

Date	Location 1 -Acland				Location 2 - North			
	Count	Max	Min	Average	Count	Max	Min	Average
18/06/2023	441	49.80	20.36	28.66	442	49.99	23.49	32.63
19/06/2023	391	49.66	20.48	29.00	403	49.93	23.09	32.66
20/06/2023	490	49.85	19.94	32.31	407	49.87	23.56	34.08
21/06/2023	438	49.92	21.15	33.56	400	49.92	23.19	28.56
22/06/2023	458	49.94	21.29	34.48	390	50.00	28.19	37.38
23/06/2023	234	49.98	20.52	34.70	366	49.96	23.38	37.73
24/06/2023	427	49.91	20.61	33.71	430	49.79	23.39	30.92
25/06/2023	369	49.89	20.97	33.50	450	49.99	23.27	30.57
26/06/2023	447	49.92	20.47	32.00	411	49.66	23.25	32.10
27/06/2023	383	49.89	20.76	31.50	412	49.97	22.84	31.12
28/06/2023	438	49.89	20.64	36.55	414	49.82	23.49	32.50
29/06/2023	396	49.94	21.41	39.68	431	49.92	24.44	38.91
30/06/2023	439	49.99	20.21	32.40	448	49.97	23.38	30.54



CERTIFICATE OF ANALYSIS

Work Order : **EN2306706**
Client : **NEW HOPE CORPORATION LIMITED**
Contact : REBECCA MURPHY
Address : MULDU ROAD
ACLAND QLD, AUSTRALIA 4401
Telephone : ----
Project : Routine dust deposition analysis - May 2023
Order number : 4535895
C-O-C number : ----
Sampler : G OSBORNE
Site : ----
Quote number : BN/356/17 V3
No. of samples received : 32
No. of samples analysed : 31

Page : 1 of 9
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 04-Jul-2023 10:00
Date Analysis Commenced : 10-Jul-2023
Issue Date : 24-Jul-2023 13:56



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Thomas Regan	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in mg/m².day as sampling data was provided by the client.
- No copper sulfate correction was applied to samples #001-006, 009, 017, 019, 023-025, 027, 028, 030, 033 and 034.
- EA119: Visual Analysis of Dusts key to Descriptions;
 - EA119: Mineral Matter/Dirt - Subhedral to euhedral crystalline grains including fine sand, clay and other fine mineral particulates.
 - EA119: Coal - Black sharp angled grains with glossy conchoidal fractures or dull with cellular features.
 - EA119: Insects - Whole insects such as spiders, ants, moths or outer parts of insects including wings, legs and exoskeletons.
 - EA119: Vegetation - Plant debris and algae including trichomes, decomposed organic matter and charred particulates showing characteristic cellular plant structures.
 - EA119: Polysaccharide Slime - Slimy gelatinous material including decomposed soft body parts of insects and vegetation.
 - EA119: Copper Sludge - Blue to blue-green subhedral to euhedral crystalline salts characteristic of Copper salts, commonly precipitated from the copper sulphate algacide solution.
 - EA119: Sand - pale, yellowish brown loose granular substance resulting from the erosion of siliceous and other rocks.
- EA119: Other Impurities - Irregularly shaped pieces of transparent material resembling glass.
- EA119: Visual analysis of Dusts is not covered under the ALS scope of NATA accreditation. Percentages are based on the average estimated coverage of each identified component and are semi-quantitative only
- EA141: The analyst has noted coarse particulates resembling sand present in the insoluble matter for sample 017, 021, 022
- For dust analysis, the Limit of Reporting (LOR) referenced in the reports for deposited matter parameters represents the reporting increment rather than reporting limit.



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD43 25/05/23 - 26/06/23	AD38 25/05/23 - 26/06/23	AD2 25/05/23 - 26/06/23	AD3 25/05/23 - 26/06/23	AD4 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-001	EN2306706-002	EN2306706-003	EN2306706-004	EN2306706-005
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Trace	Light/Medium	Very Light	Trace	Light
∅ Coal	----	5	%	40	20	20	15	5
∅ Insects	----	5	%	10	5	5	5	30
∅ Vegetation	----	5	%	10	10	5	10	30
∅ Polysaccharide Slime	----	5	%	----	40	20	----	10
∅ Copper Sludge	----	5	%	----	5	----	----	----
∅ Mineral Material	----	5	%	40	20	50	70	25
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	7	43	20	7	20
Ash Content (mg)	----	2	mg	3	24	11	3	11
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	<3	20	17	3	27
Combustible Matter (mg)	----	2	mg	<2	11	9	3	16
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	73	86	80	57	86
Total Soluble Matter (mg)	----	2	mg	42	49	45	31	49
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	7	63	37	10	47
Total Insoluble Matter (mg)	----	2	mg	4	35	20	6	27
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	80	150	116	67	133
Total Solids (mg)	----	2	mg	46	84	65	37	76



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD26 25/05/23 - 26/06/23	AD14 25/05/23 - 26/06/23	AD30 25/05/23 - 26/06/23	AD18 25/05/23 - 26/06/23	AD31 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-006	EN2306706-007	EN2306706-008	EN2306706-009	EN2306706-010
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Trace	Medium/Heavy	Medium/Heavy	Trace	Trace
∅ Coal	----	5	%	20	5	5	20	5
∅ Insects	----	5	%	10	5	5	10	15
∅ Vegetation	----	5	%	20	20	25	15	20
∅ Polysaccharide Slime	----	5	%	5	40	50	----	----
∅ Mineral Material	----	5	%	45	30	15	55	60
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	10	83	40	3	7
Ash Content (mg)	----	2	mg	5	47	23	<2	4
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	<3	53	76	13	10
Combustible Matter (mg)	----	2	mg	<2	31	43	8	5
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	63	40	47	60	<3
Total Soluble Matter (mg)	----	2	mg	36	22	26	33	<2
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	10	136	116	17	17
Total Insoluble Matter (mg)	----	2	mg	5	78	66	9	9
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	73	176	163	76	17
Total Solids (mg)	----	2	mg	41	100	92	42	9



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD21 25/05/23 - 26/06/23	AD22 25/05/23 - 26/06/23	AD11 25/05/23 - 26/06/23	AD33 25/05/23 - 26/06/23	AD27 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-011	EN2306706-012	EN2306706-015	EN2306706-016	EN2306706-017
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Light	Very Heavy	Light	Very Light	Light
∅ Coal	----	5	%	10	10	20	10	<5
∅ Insects	----	5	%	5	20	10	20	10
∅ Vegetation	----	5	%	15	30	20	20	30
∅ Polysaccharide Slime	----	5	%	40	----	----	15	10
∅ Mineral Material	----	5	%	30	40	50	35	50
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	37	316	33	13	3
Ash Content (mg)	----	2	mg	21	179	19	8	2
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	17	47	10	13	33
Combustible Matter (mg)	----	2	mg	9	27	6	8	19
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	7	<3	<3	766	86
Total Soluble Matter (mg)	----	2	mg	4	<2	<2	434	49
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	53	363	43	27	37
Total Insoluble Matter (mg)	----	2	mg	30	206	25	16	21
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	60	363	43	792	123
Total Solids (mg)	----	2	mg	34	206	25	450	70



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD36 25/05/23 - 26/06/23	AD41 25/05/23 - 26/06/23	AD35 25/05/23 - 26/06/23	AD37 25/05/23 - 26/06/23	AD23 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-018	EN2306706-019	EN2306706-020	EN2306706-021	EN2306706-022
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Trace	Trace	Trace	Light/Medium	Very Heavy
∅ Coal	----	5	%	5	10	10	5	10
∅ Insects	----	5	%	15	15	10	20	10
∅ Vegetation	----	5	%	20	20	20	15	15
∅ Polysaccharide Slime	----	5	%	5	----	----	40	5
∅ Copper Sludge	----	5	%	----	----	----	5	----
∅ Mineral Material	----	5	%	55	55	60	15	60
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	10	10	7	33	1150
Ash Content (mg)	----	2	mg	5	5	4	18	652
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	7	7	7	30	233
Combustible Matter (mg)	----	2	mg	5	4	3	18	132
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	<3	83	<3	<3	143
Total Soluble Matter (mg)	----	2	mg	<2	47	<2	<2	81
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	17	17	13	63	1380
Total Insoluble Matter (mg)	----	2	mg	10	9	7	36	784
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	17	100	13	63	1530
Total Solids (mg)	----	2	mg	10	56	7	36	865



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD16 25/05/23 - 26/06/23	AD40 25/05/23 - 26/06/23	AD10 25/05/23 - 26/06/23	AD24 25/05/23 - 26/06/23	AD44 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-023	EN2306706-024	EN2306706-025	EN2306706-026	EN2306706-027
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Very Light	Light	Trace	Medium/Heavy	Trace
∅ Coal	----	5	%	10	10	10	5	10
∅ Insects	----	5	%	10	5	10	40	20
∅ Vegetation	----	5	%	10	10	15	20	20
∅ Polysaccharide Slime	----	5	%	20	25	5	5	----
∅ Mineral Material	----	5	%	50	50	60	30	50
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	17	23	7	27	3
Ash Content (mg)	----	2	mg	9	14	3	15	2
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	10	20	7	83	10
Combustible Matter (mg)	----	2	mg	7	11	5	47	5
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	80	70	86	10	86
Total Soluble Matter (mg)	----	2	mg	45	40	50	5	48
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	27	43	13	110	13
Total Insoluble Matter (mg)	----	2	mg	16	25	8	62	7
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	106	113	100	120	100
Total Solids (mg)	----	2	mg	61	65	58	67	55



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD45 25/05/23 - 26/06/23	AD46 25/05/23 - 26/06/23	AD47 25/05/23 - 26/06/23	AD49 25/05/23 - 26/06/23	AD50 25/05/23 - 26/06/23
Sampling date / time				26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00	26-Jun-2023 00:00
Compound	CAS Number	LOR	Unit	EN2306706-028	EN2306706-029	EN2306706-030	EN2306706-032	EN2306706-033
				Result	Result	Result	Result	Result
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Very Light	Trace	Trace	Medium	Trace
∅ Coal	----	5	%	10	10	15	5	<5
∅ Insects	----	5	%	15	5	5	30	20
∅ Vegetation	----	5	%	10	10	5	30	5
∅ Other Impurities	----	5	%	----	----	----	5	----
∅ Polysaccharide Slime	----	5	%	5	----	----	----	----
∅ Copper Sludge	----	5	%	----	----	5	----	5
∅ Mineral Material	----	5	%	60	75	70	30	70
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	27	10	10	13	10
Ash Content (mg)	----	2	mg	15	5	5	8	5
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	7	7	3	76	3
Combustible Matter (mg)	----	2	mg	4	5	3	42	2
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	76	<3	83	30	86
Total Soluble Matter (mg)	----	2	mg	44	<2	48	18	49
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	33	17	13	90	13
Total Insoluble Matter (mg)	----	2	mg	19	10	8	50	7
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	110	17	96	120	100
Total Solids (mg)	----	2	mg	63	10	56	68	56



Analytical Results

Sub-Matrix: DEPOSITIONAL DUST
 (Matrix: AIR)

Sample ID

				AD51	----	----	----	----
				25/05/23 - 26/06/23	----	----	----	----
				26-Jun-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	EN2306706-034	-----	-----	-----	-----
				Result	----	----	----	----
EA119: Visual Analysis of Dusts								
∅ Deposition	----	5	-	Trace	----	----	----	----
∅ Coal	----	5	%	<5	----	----	----	----
∅ Insects	----	5	%	15	----	----	----	----
∅ Vegetation	----	5	%	10	----	----	----	----
∅ Copper Sludge	----	5	%	10	----	----	----	----
∅ Mineral Material	----	5	%	65	----	----	----	----
EA120: Ash Content								
Ash Content	----	3	mg/m2/day(30)	7	----	----	----	----
Ash Content (mg)	----	2	mg	3	----	----	----	----
EA125: Combustible Matter								
Combustible Matter	----	3	mg/m2/day(30)	<3	----	----	----	----
Combustible Matter (mg)	----	2	mg	<2	----	----	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	3	mg/m2/day(30)	80	----	----	----	----
Total Soluble Matter (mg)	----	2	mg	46	----	----	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	3	mg/m2/day(30)	7	----	----	----	----
Total Insoluble Matter (mg)	----	2	mg	4	----	----	----	----
EA142: Total Solids								
Total Solids	----	3	mg/m2/day(30)	86	----	----	----	----
Total Solids (mg)	----	2	mg	50	----	----	----	----

Appendix 3 – Third-Party External Reports



New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

Muldu Road
Acland QLD 4401

Prepared by:

SLR Consulting Australia Pty Ltd

Level 16, 175 Eagle Street, Brisbane, QLD, Australia,
4000

SLR Project No.: 620.10963.01001

10 August 2023

Revision: 1.0

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	10 August 2023	G Cowie / B Hansen	Shane Elkin	G Cowie

Basis of Report

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with New Acland Coal Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Executive Summary

SLR Consulting Australia Pty Ltd (SLR) was engaged by New Acland Coal Pty Ltd (NAC) to conduct monthly noise monitoring and assessment for the New Acland Coal Mine (NAC mine) during the 12-month period of May 2023 to April 2024 to satisfy Conditions F4, F6 and Table F2 of the NAC Environmental Authority (EA) EPML00335713 dated 14 November 2022, and Section 6 of the Department of Environment and Science (DES) approved NAC Noise and Vibration Management Plan. This report presents the noise monitoring results for June 2023 ('the June 2023 monitoring period').

In undertaking this noise survey during the month of June 2023, the following points are noted and provide context to the overall noise survey, analysis and assessment:

- For the monitoring period between 7 and 13 June 2023 (inclusive), official NAC start and stop times were 7:00 am to 6:30 pm daily. This predominately covers the day-time period which forms the basis for this analysis and assessment of the majority of the monitoring locations (excluding NML4 and NML35).
- NAC transitioned to 24-hour operations on 14 June 2023, which occurred during the reported unattended noise monitoring period for NML4 and NML35. NML4 and NML35 were repeat monitoring locations, conducted between 15 and 26 June 2023 (inclusive), due to incomplete monitoring data during the initial 7 and 13 June 2023 monitoring period. For these two (2) repeat locations, unattended analysis was undertaken for the day, evening and night-time periods corresponding with the change to 24-hour operations.
- The NAC rail spur is yet to be constructed, therefore an assessment against rail noise limits is not applicable.
- Attended noise measurements have only been conducted during the day-time period coinciding with the general mine operational time for the initial monitoring period between 7 and 13 June 2023 (inclusive). No repeated attended measurements were conducted at NML4 and NML35.

For this June 2023 monitoring period, noise monitoring was undertaken between 7 and 27 June 2023, at the eleven (11) locations detailed in the EA Table F2 Compliance noise monitoring locations and frequency and Figure F1 – Noise monitoring locations and sensitive places. In accordance with Table F2 of the EA, analysis was undertaken on seven (7) selected days which, where possible, included days where there were adverse weather conditions (ie morning/late afternoon temperature inversions, and/or light source to receiver wind directions) and/or normal to peak mine operations. The dates below represent the start of each assessed daily period:

- NML1, NML8, NML10, NML11, NML15, NML18, NML34, NML38 – 7 to 13 June 2023 (inclusive), assessment period being 6:45 am to 6:30 pm for each of these days.
- NML4 – 15 to 18, 20, 21 and 23 June, assessment period being 24-hours starting 6:00 pm for each of these days.
- NML35 – 20 to 27 June 2023 (inclusive), assessment period being 24-hours starting 6:00 pm for each of these days.

A visual 'traffic light' summary of the attended and unattended noise monitoring completed in the June 2023 monitoring period are presented in Table E1, where:

- ○ an unshaded symbol indicates NAC was not operating during this period. Therefore an assessment against the EA noise conditions was not required,
- ● grey indicates NAC mine noise was undetectable while the mine was operational,
- ● green indicates detected NAC mine noise measurements achieved the relevant time period noise limit/s,
- ● orange indicates marginal exceedances of the relevant time period noise limit/s (marginal being an acoustically negligible exceedance of 1 or 2 dBA), and



- ● red indicates an exceedance greater than 2 dBA of the relevant time period noise limit/s,

Where NAC mine attributable noise could not be detected in the unattended noise monitoring data, it has been concluded that at times, ambient noise sources likely masked contributions from NAC mine preventing further detection.

A detailed summary of results and findings for the unattended and attended noise monitoring during the June 2023 monitoring period is presented further within this report.

As required by Condition F6 of the EA, noise monitoring was completed at a representative Background Location during this assessment. A review of the unattended noise monitoring data indicated Rating Background Levels (RBLs) typical of a rural environment with ambient noise sources such as bird song, wind noise, aircraft noise (from Oakey Air Base and small light aircraft) and distant road traffic noise being the predominant sources. No periods were considered to have NAC mine attributable noise audible and/or measurable.



Table E1 Summary of June 2023 Noise Monitoring Results

Noise Monitoring Location	Unattended Results			Attended Results		
	Day	Evening	Night	Day	Evening	Night
EA EPMLOO335713 noise limit	42 dBA LAeq,15min, adj.	35 dBA LAeq,15min, adj.	35 dBA LAeq,15min, adj. 50 dBA LAmax	42 dBA LAeq,15min, adj.	35 dBA LAeq,15min, adj.	35 dBA LAeq,15min, adj. 50 dBA LAmax
NML1	● NAC mine noise measured up to 38 dBA LAeq,15min, adj.	● NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	○ NAC mine non-operational during night-time period	● NAC mine noise measured at 38 dBA LAeq,15min, adj.	○ N/A	○ N/A
NML4	● NAC mine noise not detected	● NAC mine noise not detected	● NAC mine noise not detected	● NAC mine noise not detected	○ N/A	○ N/A
NML8	● NAC mine noise rarely detected	● NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	○ NAC mine non-operational during night-time period	● NAC mine noise not detected	○ N/A	○ N/A
NML10	● NAC mine noise rarely detected	● NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	○ NAC mine non-operational during night-time period	● NAC mine noise not detected	○ N/A	○ N/A
NML11	● NAC mine noise not detected	● NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	○ NAC mine non-operational during night-time period	● NAC mine noise not detected	○ N/A	○ N/A
NML15	● NAC mine noise rarely detected	● NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	○ NAC mine non-operational during night-time period	● NAC mine noise derived to be ≤25 dBA LAeq,15min, adj.	○ N/A	○ N/A



Noise Monitoring Location	Unattended Results			Attended Results		
	Day	Evening	Night	Day	Evening	Night
NML16	<input checked="" type="radio"/> NAC mine noise rarely detected	<input type="radio"/> NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	<input type="radio"/> NAC mine non-operational during night-time period	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> N/A	<input type="radio"/> N/A
NML18	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	<input type="radio"/> NAC mine non-operational during night-time period	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> N/A	<input type="radio"/> N/A
NML34	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	<input type="radio"/> NAC mine non-operational during night-time period	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> N/A	<input type="radio"/> N/A
NML35	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> N/A	<input type="radio"/> N/A
NML38	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> NAC mine non-operational after 6:30 pm, NAC mine non-operational after 6:30 pm, no mine noise detected between 6pm and 6:30pm	<input type="radio"/> NAC mine non-operational during night-time period	<input type="radio"/> NAC mine noise not detected	<input type="radio"/> N/A	<input type="radio"/> N/A

Day: 7:00 am to 6:00 pm

Evening: 6:00 pm to 10:00 pm

Night: 10:00 pm to 7:00 am

N/A denotes no measurement conducted.



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Appendix D	Attended Noise Monitoring Summary
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Acronyms and Abbreviations

dBA	Decibels, A-weighted
CHPP	Coal handling and preparation plant
Daytime	The time period of 7:00 am to 6:00 pm
DES	Department of Environment and Science
EA	Environmental Authority
Evening	The time period of 6:00 pm to 10:00 pm
ML	Mine lease
NAC	New Acland Coal
Night-time	The time period of 10:00 pm to 7:00 am
NML	Noise monitoring location
NMM	DES Noise Measurement Manual (2020)
NVMP	Noise and Vibration Management Plan
RBL	Rating Background Level
RoM	Run-of-Mine
RTN	Road traffic noise



1.0 Introduction

The New Acland Coal (NAC) mine is located to the northeast of Acland in Queensland and is operated by NAC. The current mining activities consist of overburden and topsoil removal in Manning Vale East pit and rehabilitation of Stage 2 areas (Centre, South, and West pits), and drilling for blast preparations in Manning Vale East. Current forecasts have NAC extracting Stage 3 coal in October 2023, at which point export coal is transported by road haul trucks along Jondaryan-Muldu Road to a coal stock yard southeast of Jondaryan adjacent to the Warrego Highway and processing plants being restarted. Export coal is loaded onto trains, at the Jondaryan Rail Loadout Facility (JRLF), to transport to Port of Brisbane. Since NAC has been in care and maintenance since 2020, there has been no activity at the JRLF. Therefore, no noise associated with rail corridors have been assessed in this report.

The NAC mine is operated under Environmental Authority (EA) EPML00335713 dated 14 November 2022. The noise levels in Schedule F – Table F1 of the EA apply at noise sensitive receptors and vary depending on the daytime, evening and night-time periods.

This report details environmental noise levels measured during the month of June 2023 to satisfy Conditions F4, F6 and Table F2 of the EA EPML00335713, and Section 6 of the DES approved NAC Noise and Vibration Management Plan (reference '20221125_NAC03 – Noise and Vibration Management Plan-Ver-01', dated 27 April 2023, referred to herein as the NVMP). Where measured noise levels have been determined to be attributable to NAC mining activities, those noise levels have been assessed against the noise levels prescribed in the EA.

In undertaking this noise survey during the month of June 2023, the following points are noted and provide context to the overall noise survey, analysis and assessment:

- For the monitoring period between 7 and 13 June 2023 (inclusive), official NAC start and stop times were 7:00 am to 6:30 pm daily. This predominately covers the day-time period which forms the basis for this analysis and assessment of the majority of the monitoring locations (excluding NML4 and NML35).
- NAC transitioned to 24-hour operations on 14 June 2023, which occurred during the reported unattended noise monitoring period for NML4 and NML35. NML4 and NML35 were repeat monitoring locations, conducted between 15 and 26 June 2023 (inclusive), due to incomplete monitoring data during the initial 7 and 13 June 2023 monitoring period. For these two (2) repeat locations, unattended analysis was undertaken for the day, evening and night-time periods corresponding with the change to 24-hour operations.
- The NAC rail spur is yet to be constructed, therefore an assessment against rail noise limits is not applicable.
- Attended noise measurements have only been conducted during the day-time period coinciding with the general mine operational time for the initial monitoring period between 7 and 13 June 2023 (inclusive). No repeated attended measurements were conducted at NML4 and NML35.

The term 'noise' is commonly understood as unwanted sound but commonly used when discussing all sound within our environment. In this report, the term 'noise' refers to all sound pressure levels irrespective of whether it would be defined as 'unwanted'. The report uses specialist acoustic terminology and an explanation of common terms is provided in Appendix A.



2.0 EA EPML00335713 and NVMP Requirements

2.1 EA Noise Limits

Schedule F of NAC EA EPML00335713 contains noise¹ conditions relevant to mining operations occurring within the mining leases referenced under the EA. The EA noise conditions relevant to this monitoring and assessment are reproduced below (either in full, or in-part as noted).

F1: The environmental authority holder must ensure that noise generated by the mining activities does not cause the criteria in Table F1 – Noise Limits (includes construction activities) [Table 1] to be exceeded at a noise sensitive place.

The measurement of noise for a noise sensitive place is either:

- a) At that place (if measured there); or
- b) At the monitoring location to which the noise sensitive place is correlated (where there is not measure at the noise sensitive place).

Table 1 Table F1: Noise Limits (includes construction activities)

Noise level dBA measured as	All days		
	7:00 am – 6:00 pm	6:00 pm - 10:00 pm	10:00 pm – 7:00 am
Noise measured at a 'Noise sensitive place'			
LAeq, adj, 15min ¹	42	35	35
LAm _{ax}	-	-	50
LAm _{ax} rail spur ²	-	-	56
LAeq(24hour) rail spur ²	-	-	50
NOTE:			
1 All noise other than that which is distinguishable as train noise			
2 Only for noise distinguishable as train noise			

F4: A Noise Monitoring Program must be developed by a suitably qualified and experienced person in relation to noise and implemented for all stages of mining to monitor compliance with Table F1 – Noise limits (includes construction noise) [Table 1] at the frequency and locations in Table F2 – Compliance noise monitoring locations and frequency and shown in Figure F1 – Noise monitoring locations and sensitive places [Figure 1].

The Noise Monitoring Program must include a figure which identifies noise monitoring locations and sensitive places. [Figure 1]

[The remaining part of Condition F4 is not directly applicable to this monitoring and assessment]

F6: Compliance noise monitoring and recording required by conditions F4, F5, F6, F7 and F8 must be conducted in accordance with the administering authority's Noise Measurement Manual and include the following:

- a) LA01, adj, 15 min - day, evening & night; LA10, adj, 15 min - day, evening & night; LAeq, adj, 15min - day, evening & night and LA90, adj, 15 min - day, evening & night;
- b) background noise LA90;

¹ Schedule F also contains conditions related to blasting, however these are not applicable to this monitoring and assessment.



- c) the level and frequency of occurrence of impulsive or tonal noise and any adjustment and penalties to statistical levels;
- d) atmospheric conditions including temperature, relative humidity and wind speed and directions;
- e) effects due to any extraneous factors such as traffic noise and natural sources (e.g. insects, birds and wind);
- f) location, date and time of monitoring;
- g) if a complaint concerns low frequency noise and where permitted by the owner or occupier of the noise sensitive place: LLINeq 10 min (internal), LAeq 10 min (internal) and one third octave band measurements in LLINeq 10 min (internal) for centre frequencies in the 10 – 200 Hz range;
- h) maximum (LAmax) noise levels – night (for a minimum of 30 min); and
- i) 1/3 octave band spectrums

Table 2 Table F2 – Compliance noise monitoring locations and frequency

Monitoring Locations	Frequency
1 (Acland)	Monthly
34 (rail spur), 35 and 38 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to condition F4, F5, F6, F7 and F8)	Monthly
4, 8 and 10 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to condition F4, F5, F6, F7 and F8)	Monthly
11, 15, 16 (if occupied) and 19 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to condition F4, F5, F6, F7 and F8)	Monthly
Seven (7) days unattended monitoring at the above noise sensitive places or alternate locations identified in the Noise Monitoring Program developed pursuant to condition F4.	Monthly for the first 12 months

Note: Monitoring locations are presented on Figure 1.

2.2 NVMP Requirements

Section 3.2 ‘Detailed Description of the Noise Management System’ from the NVMP states the following relevant details to this assessment and reporting:

Monthly Compliance Noise Monitoring – In accordance with EA Conditions F4, F6 and F12, NAC will undertake monthly compliance noise measurements at the nominated residential locations contained in Table F2 of the EA.

This monthly compliance monitoring is additional to the continuous performance monitoring and is to be undertaken as a series of short-term, operator attended noise measurements by an appropriately qualified acoustic consultant.

Section 6 provides a detailed description of the monthly noise compliance monitoring methodology for the Stage 3 Mine.

Section 7 contains the protocol that NAC will employ throughout the life of the Stage 3 Mine’s operations to determine exceedances of the EA noise limits.

Section 6 ‘Monthly Compliance Noise Monitoring, Assessment and Reporting’ of the NVMP states the following relevant details to this assessment and reporting:

6.1. Compliance Monitoring Locations and Frequency

In accordance with EA Condition F12 and Table F2 – Compliance Noise Monitoring Locations and Frequency, the monthly compliance noise monitoring will be undertaken at the locations stated in Table 6-1 [Table 3].



Table 3 Table 6-1: Compliance Monitoring Locations for the Stage 3 Mine.

Monitoring Locations	Frequency
1 (Acland)	Monthly
34 (rail spur), 35 and 38 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to EA Condition F4)	Monthly
4, 8 and 10 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to EA Condition F4)	Monthly
11, 15 and 19 (or alternative noise sensitive places identified in the Noise Monitoring Program developed pursuant to EA Condition F4)	Monthly
Seven (7) days unattended monitoring at the above noise sensitive places or alternate locations identified in the Noise Monitoring Program developed pursuant to condition F4.	Monthly for the first 12 months

The relevance of the noise monitoring locations outlined in Table 6-1 [Table 3] will be reviewed on an annual basis. If any changes to the noise monitoring locations are required, a brief report/memorandum will be produced and submitted to DES for their review and approval prior to any changes to the Noise Monitoring Program being implemented.

6.2. Compliance Monitoring Equipment and Methodology

The compliance noise monitoring methodology and reporting will be undertaken as follows (subject to the review comments/feedback from the independent acoustic consultant appointed to review the compliance noise monitoring for the first 12 months of the Stage 3 Mine).

- Noise measurements will be undertaken by an appropriately qualified acoustic consultant.
- On a monthly basis, a minimum of three (3) 15-minute operator-attended noise measurements will be undertaken in a random order across all ten (10) locations stated in Table 6-1 [Table 3].
- All attended measurements will ideally be undertaken within 50m of the residence (but not closer than 3.5m). However, if (a) access is not obtainable to enter the property or (b) domestic noise sources (e.g. air-conditioning, barking dogs, etc.) prevent measurements being undertaken close to each residence, then measurements must be undertaken as close as practically possible to the residence to allow a judgement/calculation to be made as to what the corresponding noise levels would have been at the residence.
- Ideally one (1) measurement will be taken during each of the day (7am to 6pm), evening (6pm to 10pm) and night (10pm to 7am) periods. However, if mining operations are unmeasurable during the day period (due to non-adverse weather and/or the presence of other ambient extraneous noise sources), then the three (3) measurements must be undertaken during the evening and/or night periods.
- All measurements will be undertaken using a NATA-calibrated Type-1 sound level meter (compliant with AS IEC 61672.1-2019 “Electroacoustics - Sound Level Meters”).
- All measurements and subsequent analysis will be undertaken in strict accordance with EA EPML00335713 (most notably condition F6) and DES’s Noise Measurement Manual (DEHP 2013).
- Within 14 days of completion of the compliance noise monitoring, a Compliance Noise Monitoring Report will be prepared.
- In addition to the above, for the first 12 months, seven days of unattended noise monitoring will also be undertaken at the noise monitoring locations outlined in Table 6-1 [Table 3]. At the completion of the unattended noise monitoring, the data will be downloaded, analysed and reported in the Compliance Noise Monitoring Report (in conjunction with the roving short-term attended measurements).



Section 7 'Protocol for Determining Exceedances of the EA Noise Conditions' of the NVMP states the following relevant details to this assessment and reporting:

Exceedances of the EA noise conditions can only be determined from the monthly compliance noise monitoring or any additional compliance noise monitoring requested by DES. However, the note in Condition F7 states "The performance monitoring required under this condition is to be used for performance management and can be used by the administering authority to assess compliance with Table F1 – Noise limits (includes construction activities)".

All exceedances of the EA noise conditions determined from either form of compliance noise monitoring (monthly or DES requested) will be documented in either the monthly Compliance Noise Monitoring Report, which will then be published publicly, or in a stand-alone report provided to DES in response to a specific request to undertake compliance noise monitoring.

All noise monitoring equipment and methodology used to determine whether any exceedances have occurred during compliance noise monitoring will be undertaken in accordance with EA Condition F6, Section 6.2 and DES's Noise Measurement Manual (DEHP 2013) and Australian Standard (AS) 1055.

In accordance with EA Condition F2, if noise monitoring indicates the potential for an exceedance of the EA noise conditions, NAC will immediately implement noise abatement measures upon receiving those results to avoid exceeding the EA noise conditions.

3.0 Mine Operations During the June 2023 Monitoring Period

NAC has provided the following explanation of mine operations during this noise monitoring assessment period. This explanation is supported with additional information contained in Appendix B of this report.

The primary noise generating departments at NAC mine are:

- Removal of overburden,
- Drill and blast works,
- Progressive rehabilitation, and
- Heavy vehicle workshop.

NAC operate mobile mining equipment as listed in Table 4 at any one time. The mobile plant are the most significant noise generators at NAC for this reporting period.

Production workers generally operate a combination of the mobile plant to achieve its schedule across a combination of active pits. Burden material from these active pits is transferred to relatively local dumping points.

Production workers are scheduled to operate a combination of the mobile plant listed in Table 4 across the following roster:

- 1 to 13 June; Monday to Sunday – official NAC start and stop times are 7:00 am to 6:30 pm daily, however may start before, or run later than these times where noise permits (ie actively monitoring their performance noise monitoring system), and deemed safe. The heavy vehicle workshop operates from 6:30 am to 6:30 pm (with tool box talks and general preparation occurring between 6:30 am and 7:00 am).
- 14 to 30 June; Monday to Sunday – NAC moved to 24-hour operations. SLR understands works outside of the 7:00 am to 6:30 pm period are at reduced capacity.

Through a review of available operational logs (see Appendix B), recorded actions relating to start and stop times during the 7 to 13 June monitoring period were within these official start and stop times. Notwithstanding this finding, for completeness and consistency to the May 2023 noise



survey report², detailed analysis of the unattended noise monitoring data has been completed for the period of 6:45 am to 6:30 pm for the seven (7) days outlined in Section 4.2.

Locations NML4 and NML35, which were redeployed after the commencement of NAC’s 24-hour operations, have had detailed analysis undertaken for the full 24-hour period, consistent with the possible operational period.

Table 4 NAC Mobile Mining Equipment List

Unit Number	Machine Type	Unit Number	Machine Type
	Excavators		Dozer
EX107	Hitachi EX1800	DZ609	Caterpillar D10T
EX109 ¹	Hitachi EX470	DZ610M	Caterpillar D11R
EX110 ¹	Hitachi EX3600	DZ611	Caterpillar D11R
	Wheel Loaders	DZ612	Caterpillar D11T
WL208	Caterpillar 992G	DZ613	Caterpillar D11T
WL211	Caterpillar 992G	DZ618	Caterpillar D10T
WL214 ¹	Le Tourneau L1150	DZ622	Caterpillar D11R
WL216 ¹	Le Tourneau L1350	DZ625 ¹	Caterpillar D11T
	Haul Trucks	DZ626 ¹	Caterpillar D11T
RD310	Caterpillar 785 Volumax		Wheel Dozer
RD311	Caterpillar 785 Rock Body	WD802	Caterpillar 854G
RD312	Caterpillar 785 Volumax	WD803 ¹	Caterpillar 854G
RD314 ²	Caterpillar 785 Coal Tray		Grader
RD316 ²	Caterpillar 785 Coal Tray	GR703	Caterpillar 16G
RD317 ²	Caterpillar 785 Volumax	GR704	Caterpillar 24H
RD318 ¹	Caterpillar 785 Coal Tray	GR706	Caterpillar 24H
RD319 ¹	Caterpillar 785 Volumax Coal		Water Truck
RD320 ¹	Caterpillar 785 Volumax Coal	WT004	Caterpillar 773B
RD406 ¹	Caterpillar 789C	WT006 ¹	Caterpillar 785C Watertruck
RD407 ¹	Caterpillar 789C	WT008 ¹	Caterpillar 789C Watertruck
RD408 ¹	Caterpillar 789C		Drill
RD409 ¹	Caterpillar 789C	DR991	Atlas Copco DML
RD410 ¹	Caterpillar 789C		Service Trucks
RD411 ¹	Caterpillar 789D	ST004	Ford Louisville Service Truck
RD412 ¹	Caterpillar 789D	ST006	Mack Service Truck
RD413 ¹	Caterpillar 789D	ST007	Mack Service Truck Granite
RD414 ¹	Caterpillar 789D	ST012	Caterpillar 773F ST
RD415 ¹	Caterpillar 789D		
RD501 ¹	Caterpillar 793F		
RD502 ¹	Caterpillar 793F		

² SLR report ‘620.10963.00350-R01-v1.0-20230704’ dated 4 July 2023.



Unit Number	Machine Type	Unit Number	Machine Type
RD503 ¹	Caterpillar 793F		
RD504 ¹	Caterpillar 793F		
RD505 ¹	Caterpillar 793F		

Note: This is mobile mining equipment only and does not include ancillary equipment such as lighting plants, pumps etc.

Note 1: Fully noise attenuated mobile mining equipment.

Note 2: Partially noise attenuated mobile mining equipment

The heavy vehicle workshop is scheduled to operate between 6:30 am and 6:30 pm, and includes one (1) service truck operator, and five (5) fitters spread between the field and workshop as needed. Additional and other tradespersons are contracted as required. Servicing consists of a variety of noise generating activities, some more significant than others.

NAC are scheduled to start mining coal in quarter 3 of 2023. Accordingly, during the monitoring period, there were no mobile equipment assigned to excavating Run-of-Mine (ROM) coal, nor were either of the coal handling and preparation plants (CHPPs) operating.

The NAC rail spur is yet to be constructed, therefore an assessment against rail noise is not applicable to this monitoring period.

The exception to the above is NAC's operational constraints; agreed shift times, human resources (absenteeism/overtime), weather, unscheduled maintenance, unscheduled delays for performance management relating to noise at sensitive receptor locations, and emergencies. Attached as Appendix B are details of unscheduled activities and other 'noise events' during this noise monitoring assessment period that are considered typical of normal mining operations.

4.0 Noise Monitoring Methodology




This assessment has been conducted through a combination of long-term unattended noise measurements and the short-term operator attended noise measurement. The monitoring and analysis methodology detailed in the following subsections have been conducted in a manner to be in general accordance with DES's Noise Measurement Manual (NMM) and address the requirements of EA Condition F6.

4.1 Monitoring Locations




The noise monitoring locations are detailed in Table 5 and shown in Figure 1. Each location was selected to minimise influences from extraneous noise sources (eg optimum placement of the monitors away from air-conditioners, dogs, rustling trees etc.), but remaining near enough to be representative of the sensitive receptor in general accordance with the requirements of the NVMP.






Table 5 Noise Monitoring Location Details

Location	Coordinates (GDA 94, Zone 56)	Description	Representative Photo
NML1	370,385 m E 6,979,192 m S	Located at historical noise monitoring location representing this sensitive receptor, which is approx. 25 m northeast of the residence at Allen Street, Acland. Location approx. 360 m southwest of NAC's Stage 2 West Pit.	
NML4	369,336 m E 6,984,857 m S	Located on opposite side of Balgowan Road to the NML4 residence to the southwest. Location approx. 2.7 km northwest of NAC admin building.	
NML8	373,015 m E 6,983,968 m S	Located in front yard, 20 m south of the residence façade. Location approx. 2.0 km northwest of NAC admin building.	






Location	Coordinates (GDA 94, Zone 56)	Description	Representative Photo
NML10	374,031m E 6,984,060 m S	Noise monitor located at representative location 35 m southwest of sensitive receptor. Approximately 3.0 km northeast from NAC admin building	
NML11	375,169 m E 6,982,676 m S	Noise monitor located approximately 40 m southwest of sensitive receptor at representative location. Location approx. 3.9 km east of NAC admin building.	
NML15	376,603 m E 6,978,865 m S	Noise monitor located at representative location 70 m southwest of sensitive receptor. Approximately 2.7 km east from NAC	



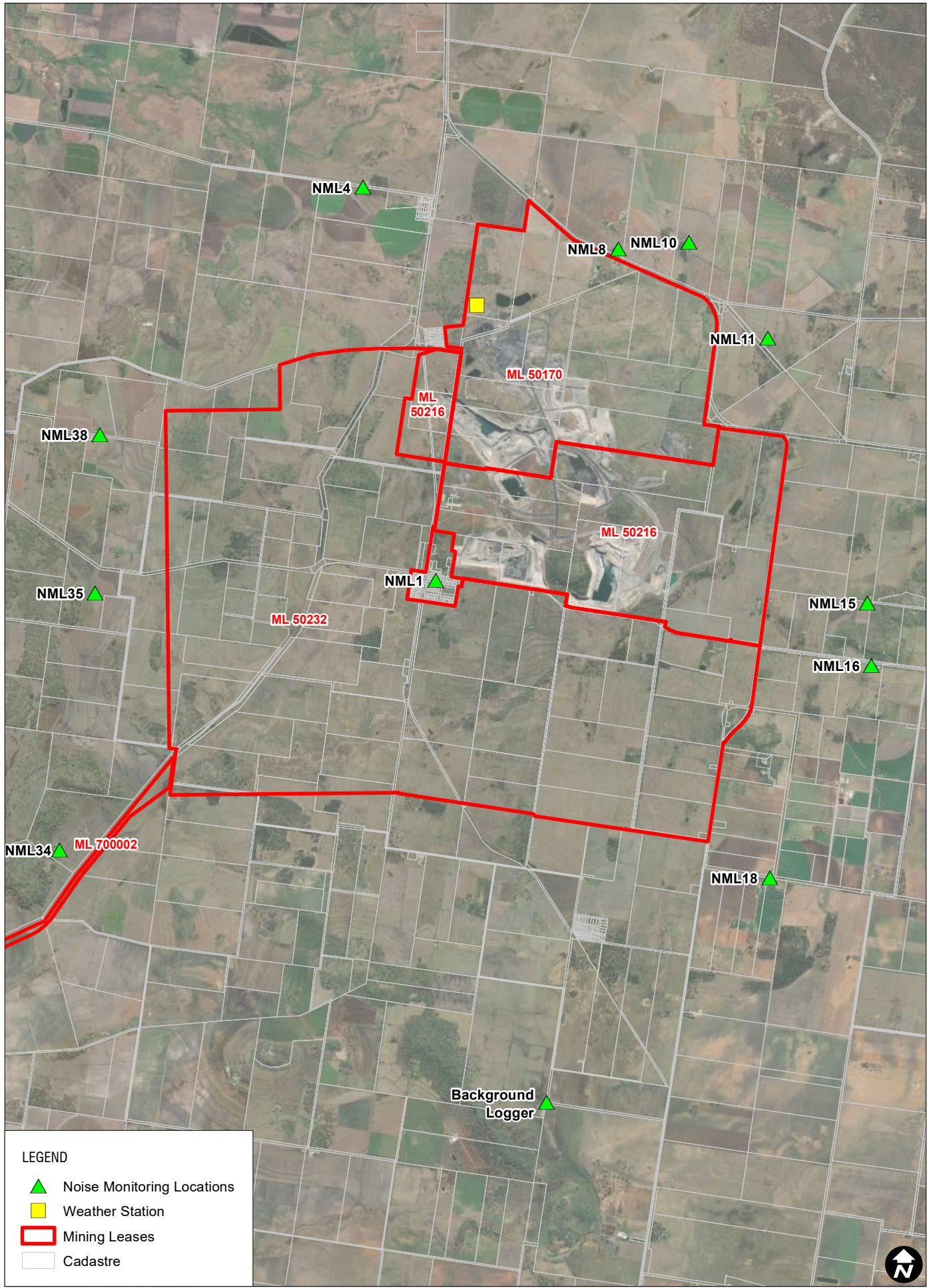
Location	Coordinates (GDA 94, Zone 56)	Description	Representative Photo
NML16	376,661 m E 6,977,960 m S	Noise monitor located at representative location 70 m northwest of sensitive receptor. Approximately 3 km southeast from NAC	
NML18	375,194 m E 6,974,907 m S	Noise monitor located at representative location 70 m southwest of sensitive receptor. Approximately 4.4 km southeast from NAC	
NML34	364,969 m E 6,975,304 m S	Noise monitor located at representative location 35 m northeast of sensitive receptor. Approximately 7.1 km southwest from NAC	



Location	Coordinates (GDA 94, Zone 56)	Description	Representative Photo
NML35	365,482 m E 6,979,010 m S	Noise monitor located at representative location 12 m east of sensitive receptor. Approximately 5 km southwest from NAC	
NML38	365,549 m E 6,981,292 m S	Noise monitor located at representative location approximately 50 m to the southeast of the sensitive receptor. Location approx. 5.0 km west of NAC.	
Background	371,979 m E 6,971,669 m S	Located in field, approximately 7 km southeast of NAC and 1.7 km west of Oakey Cooyar Road.	



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4.2 Monitoring Dates

For this June 2023 monitoring period, noise monitoring was undertaken between 7 and 27 June 2023. In accordance with the EA and NVMP requirements (see Section 2.0), analysis was undertaken on seven (7) selected days which, where possible, included days where there were adverse weather conditions (ie morning/late afternoon temperature inversions, and/or light source to receiver wind directions) and/or normal to peak mine operations.

Initially all monitoring locations were conducted during the period of 7 to 13 June 2023 inclusive, however due to incomplete monitoring data at NML4 and NML35 during this initial monitoring period, the unattended noise monitoring equipment was redeployed at these two (2) locations with revised monitoring dates noted below.

As noted in Section 3.0, NAC transitioned to 24-hour operations from 14 June 2023 onwards, with works outside of the 7:00 am to 6:30 pm period at reduced capacity. In consultation with NAC, the decision was made to undertake the June 2023 noise monitoring during the first half of June in order to allow enough time to conduct the 7 days of required monitoring (including repeated monitoring where an insufficient number of days were captured), and ensuring the report could be completed in a timely manner. This resulted in unattended and targeted attended measurements occurring during the first half of June where NAC mine operated during the official 7:00 am to 6:30 pm period.

The dates below represent the start of each assessed daily period:

- NML1, NML8, NML10, NML11, NML15, NML18, NML34, NML38 – 7 to 13 June 2023 (inclusive), assessment period being 6:45 am to 6:30 pm for each of these days.
- NML4 – 15 to 18, 20, 21 and 22 June (inclusive), assessment period being 24-hours starting 6:00 pm for each of these days.
- NML35 – 20 to 26 June 2023 (inclusive), assessment period being 24-hours starting 6:00 pm for each of these days.

In accordance with the NVMP requirements, a total of three (3) 15-minute attended noise measurements were conducted at each monitoring location, and occurred during the NAC operating period. Targeted day-time attended noise measurements were undertaken at each monitoring location on 6, 7 and/or 8 June 2023, and coincided with the initial deployment for all monitoring location. For NML4 and NML35, attended measurements were not repeated as the three (3) completed at each location during the initial equipment deployment were considered representative of the noise environment at each of these two (2) locations. Noise Monitoring Equipment

Table 6 details the noise monitoring equipment used for unattended and attended noise monitoring. To also ensure suitable analysis could be completed on the unattended noise monitoring data, audio data, one-third octave frequency data, and fast and impulsive L_{Amax} data were captured by the noise logger at each location.

All unattended noise loggers were set to log data in 15-minute intervals (in accordance with Condition F6 of EA EPML00335713). The Background Location was also set to log 15-minute intervals (representing a standard background monitoring location/program). The primary logging profile for each unattended noise logger was set to log A-weighted and fast response continuous noise levels.

All acoustic instrumentation employed throughout the noise monitoring survey was designed to comply with the requirements of AS IEC 61672.1-2019 "Electroacoustics - Sound Level Meters" and carried current manufacturer calibration certificates. Instrument calibration was checked in the field before and after each measurement survey, with the variation in calibrated levels not exceeding the acceptable variation of ± 1.0 dBA.



Table 6 Unattended and Attended Noise Monitoring Equipment – June 2023

Location	Noise Monitoring Equipment
NML1	SVAN 977 SN: 99019
NML4	SVAN 977 SN: 98419
NML8	SVAN 977 SN: 69507
NML10	SVAN 977 SN: 99021
NML11	SVAN 977 SN: 99018
NML15	SVAN 977 SN: 69757
NML16	SVAN 977 SN: 99035
NML18	SVAN 977 SN: 69720
NML34	NGARA SN: 8781BA
NML35	NGARA SN: 8781DD
NML38	SVAN 977 SN: 69756
Background	NGARA SN: 8781DB
All	Brüel & Kjær 2250 Sound Level Meter SN: 3004710 Brüel & Kjær 2250 Sound Level Meter SN: 3004638
All	G.R.A.S 42AG SN:279052 SV30A SN:24573

4.3 Meteorological Conditions

Weather data during the June 2023 monitoring period was obtained from a permanent weather station located approximately 300 m northwest of NAC’s main administration building (see Figure 1) and was considered representative of the study area (ie all monitoring locations are within 11 km of this permanent weather station without any major intervening terrain with the potential to impact the local weather). The meteorological data from the weather station was filtered for any periods of rainfall and periods where wind speeds were in excess of 5.0 m/s (18 km/h) and noise levels were excluded where these periods occurred. Comments have also been included where elevated wind noise and/or rainfall was observed during unattended logging or operator attended noise measurements but where the recorded weather conditions were compliant with DES’s NMM.

4.4 Analysis Methodology

The attended and unattended analysis methodology utilised for this June 2023 monitoring period is outlined in the following sub-sections. It is noted that this methodology may be reviewed and revised for future monitoring rounds (including when mine operations move to more intensive 24-hour operations and rail activities commence), however it is not proposed to reanalyse historical data if and when such conditions change.

4.4.1 Attended Noise Data

For those attended measurements where NAC mine attributable noise was audible and/or measurable, analysis of the attended noise measurements was completed through re-reviewing the LAeq,15 min data file to remove periods of noted extraneous noise (ie traffic passbys, wind/tree noise, bird song etc). This was completed via the following steps (which are similar to those completed for the unattended analysis outlined in Section 4.4.2):

- Extract the 1-second LAeq overall noise levels and one-third octave band data.



- Identify periods of extraneous noise and remove the corresponding 1-second data periods (this identification process was undertaken through reviewing the measurement notes and listening back to the captured audio data to confirm start/stop times of sources).
- Recalculate the L_{Aeq} based on the remaining 1-second data and confirm NAC attributable noise level.
- Unlike the unattended analysis outlined in Section 4.4.2, the attended analysis has not used frequency filters and corresponding correction factors. As such, all one-third octave bands have been considered in the recalculate L_{Aeq} .
- Where bird song was observed throughout the 15-minute measurement period, and could not be excluded through the 1-second data (ie because bird song was continuous through the 15-minute period), this source was excluded via manually adjusting the recalculated L_{Aeq} one-third octave band spectra in the bands dominated by bird song to levels more representative of the observed mining contribution).
- For periods where mine noise was only observed for a brief period within the overall 15-minute measurement period, only this period was further analysed and an NAC attributable noise level derived from that data period.

With the removal of those extraneous sources, the $L_{Aeq,15\text{ min}}$ was calculated to a level attributable to NAC mine noise. During this review, where practicable, the resulting $L_{AFmax,15\text{ min}}$ and corresponding $L_{AImax,15\text{ min}}$ attributable to NAC mine noise were compared to determine whether any impulsive corrections were warranted in accordance with the NMM. Similarly, if tonal characteristics were measured/audible, the $L_{Aeq,15\text{ min}}$ noise level calculated to a level attributable to NAC noise was reviewed and adjusted via the following method outlined in the NMM:

- 1 Confirm the $L_{eq,15\text{ min}}$ A-weighted one-third octave band noise level exceeds the neighbouring bands by 5 dB
- 2 Add 5 dB to the tonal one-third octave band noise level
- 3 Logarithmically sum all A-weighted one-third octave bands, including the adjusted band
- 4 The arithmetic difference between the logarithmically summed noise level determined in point 3 and the original overall A-weighted noise level becomes the tonal correction.

If NAC attributable noise was determined to be inaudible and/or unmeasurable during the attended measurement, the above re-review was not performed and an NAC mine attributable noise level was not presented. Similarly, in instances where short durations (less than 30 seconds) of NAC mine attributable noise was discernible yet significantly below ambient noise levels, such that accurate quantification was not possible, an estimated upper limit for the noise contribution has been presented and a full re-review was not performed.

As no attended measurements were conducted during the night-time period for the June 2023 monitoring period, due to predominately day-time mine operations during the dates of the attended measurements, the attended noise data has not been analysed and assessed against the L_{Amax} 50 dBA night-time noise limit.

4.4.2 Unattended Noise Data

The analysis of the unattended noise monitoring data captured from each monitoring location (excluding the Background location) has been completed via the following methodology. The methodology outlined below has been undertaken in order to identify the NAC mine attributable noise level, where it is in fact audible and/or measurable (ie acoustically detectable³). In a lot of

³ The phrases 'acoustically detectable/detected' and 'audible and measurable' are used in this report to refer to measurements where the key noise source (i.e. NAC mine operations) was able to be measured by an appropriate sound level meter (measurable in one or more one-third octave band), and/or was audible to a suitably qualified acoustic consultant. In some instances, the key source was measurable but not audible due to, for example, either being acoustically 'masked' by other sources (such as constant wind noise) or at the edge of or below the range of typical human hearing. Conversely, in some instances the key sources were audible but difficult to measure due to, for example, either being acoustically 'masked'



instances, due to the prominence of ambient noise sources, prevailing weather condition, and/or extent of mining activities, NAC mine noise could either not be detected or only 'just' detectable via the methodology outlined below and an exact NAC attributable noise level has not been possible to determine. In these cases, the results presented in Appendix E represent 'ambient' noise levels where NAC mine attributable noise, if just detected, is less than the reported value. If NAC noise was not detected, the results solely represent 'ambient' noise levels.

- 1 For this June 2023 assessment up until the period of and including 13 June 2023, SLR has been advised that the official NAC start and stop times are 7:00 am to 6:30 pm daily, however they may start before, or run later than these times where noise permits (ie actively monitoring their performance noise monitoring system), and deemed safe⁴. As noted in Section 3.0, through a review of available operational logs (see Appendix B), recorded actions relating to start and stop times during the 7 to 13 June monitoring period were within these official start and stop times. Notwithstanding this finding, for completeness and consistency to the May 2023 noise survey report, detailed analysis of the unattended noise monitoring data has been completed for the period of 6:45 am to 6:30 pm for the seven (7) days outlined in Section 4.2. Locations NML4 and NML35, which were redeployed after the commencement of NAC's 24-hour operations, have had detailed analysis undertaken for the full 24-hour period, consistent with the possible operational period.
- 2 Through detailed analysis of selected 'mine dominant' attended noise measurements associated with the performance monitoring station correlation survey in April and May 2023⁵, (see analysis in Appendix C), it was determined that the difference in mine noise contribution for the frequency range of 20 Hz to 630 Hz and separately the 20 Hz to 1 kHz one-third octave bands (inclusive) when compared to the total mine noise (20 Hz to 20 kHz) were as follows:
 - Acland performance monitoring station:
 - ≤ 630 Hz filter: missed mine noise energy = +2.3 dBA.
 - ≤ 1 kHz filter: missed mine noise energy = +0.7 dBA.
 - Northern performance monitoring station:
 - ≤ 630 Hz filter: missed mine noise energy = +1.6 dBA.
 - ≤ 1 kHz filter: missed mine noise energy = +0.7 dBA.

Due to the prominence of extraneous noise sources above 630 Hz or 1 kHz (ie bird song, traffic passbys, depending on the time of day), these frequency band filters have been applied to all logged unattended noise data. This was applied via logarithmically summing the LAeq 20 Hz to 630 Hz and 20 Hz to 1 kHz one-third octave bands for each 15-minute logged interval.

The ≤ 630 Hz one-third octave band forms the primary filter for all compliance monitoring locations due to mine noise generally been detectable within this frequency range (or theoretically detectable) noting the distance many locations are setback from NAC. The exception is NML1 where both filters have been considered due to the proximity of this location to NAC operations and that mine noise can be clearly measured at contributing noise levels in the frequency range of 800 Hz and 1 kHz and not solely ≤ 630 Hz.

by other sources (such as constant wind noise or traffic noise), or a complex noise environment was observed where multiple other noise sources were detected which contributed to the overall measured noise level elevated above the key source's contribution.

⁴ These operational times and corresponding assessment times are applicable to this June 7 to 13 2023 monitoring period. NAC commenced their transition to 24-hour operations during the second half of June 2023, whereby the noise monitoring and analysis also covered the corresponding 24 hour period.

⁵ Correlation monitoring completed by SLR for NAC, and occurred at the Acland and Northern performance monitoring stations.



The corrections have been applied to the following grouping:

- Acland performance monitoring station frequency filter corrections – applied to NML1, NML15, NML16, NML18, NML34, NML35, NML38:
 - Northern performance monitoring station frequency filter corrections – applied to NML4, NML8, NML10, NML11.
- 3 Periods where the $L_{Aeq,15 \text{ min}}$ value was greater than the corresponding time period noise level conditioned within Schedule F – Table F1 (day – 42 dBA, evening – 35 dBA, night-time – 35 dBA, as applicable), with the addition of the frequency filter corrections noted in Point 2, were conditionally formatted to automatically highlight. The conditional formatting is:
- Day (>42 dBA) – pink cells in Appendix E
 - Evening (>35 dBA) – peach cells in Appendix E
 - Night-time (>35 dBA) – peach cells in Appendix E.
- 4 $L_{Aeq,15 \text{ min}}$ periods that were highlighted were reviewed to determine the contributing noise levels from NAC mine operations or whether extraneous noise sources interfered with that 15-minute period, including contributing the $\leq 630 \text{ Hz}$ and/or $\leq 1 \text{ kHz}$ one-third octave bands. This review was completed via the following logged data and other supporting information:
- Listen back to the logged audio data to determine audible noise sources.
 - One-third octave noise spectrum – either the total 15-minute spectrum or at a finer resolution of 1-minute interval data.
 - Review of measured weather data and to eliminate noise monitoring periods that exceeded the prescribed wind speed and rainfall criteria stated in the NMM.
 - Review available mine operation logs to confirm mining activities occurred in highlighted periods.
- 5 In addition to the review of those periods that were highlighted through Point 4, 15-minute periods that were within 5 dBA of the relevant time period noise level limits prescribed in Schedule F - Table F1 were also reviewed to determine the contributing noise levels from NAC operations or whether extraneous noise sources interfered with that 15-minute period, including into the $\leq 630 \text{ Hz}$ and/or $\leq 1 \text{ kHz}$ one-third octave bands contributions. This accounted for periods where potential tonal or impulsive characteristics may be present and warranted corrections being applied (thus increasing the reported NAC attributable noise level). 15-minute periods where the L_{Aeq} noise level was less than 5 dBA of the relevant time period noise level limit prescribed in Schedule F - Table F1 were generally not reviewed unless there was clear evidence of NAC attributable noise in the raw one-third octave band data or 15-minute periods before/after were within 5 dBA of the relevant time period noise level contained in Schedule F - Table F1.
- 6 This review identified the following common extraneous noise sources that were removed from the filtered results contained in this report:
- Traffic passbys,
 - Bird song,
 - Insects,
 - Wind,
 - Helicopters, and
 - Domestic noise.

The process for removing these extraneous sources were as follows:

- Traffic passbys, helicopters, domestic noise and wind noise that contained typically broadband energy well into the frequency filters – these type of extraneous sources were recorded during the assessed time periods, with certain times observing multiple



- events in a 15-minute period. They typically dominated the noise environment for 30-60 seconds per event, or longer if repetitive events occurred, sometimes dominating the full 15-minute period. Where these events were detected and determined to dominate a corresponding 1-minute period, that data was removed from the analysis. Where 1-minute periods were removed, the remaining 1-minute L_{Aeq} 's within that 15-minute period were logarithmically averaged to recalculate a corrected $L_{Aeq, 15min}$. Where more than 5-minutes of data was excluded, the full 15-minute period was excluded.
- Bird song – bird song was clearly audible and dominant for much of the monitoring period. Bird song is typically observed from just prior to sunrise to just after sunset, with bird song attributable noise levels most elevated during the morning and late afternoon periods. Typically, bird song dominated those frequencies above 1 kHz so were inherently excluded from this analysis through the ≤ 630 Hz / ≤ 1 kHz one-third octave band filters. At times however, bird song (typically from crows, roosters and pigeons) contaminated the 1 kHz one-third octave band, and observed within the 630 Hz and 800 Hz one-third octave bands, which required the removal of that contamination. Where the analysis clearly identified bird song contributing or dominating the ≤ 1 kHz filter, the ≤ 630 Hz filter was considered more appropriate over the ≤ 1 kHz filter for determining mine contributions (this is in part the key reason why the ≤ 630 Hz filter forms the primary filter for the majority of monitoring locations). If bird song was also identified as contributing to or dominating the ≤ 630 Hz filter, a similar process for correcting passbys, helicopters etc was adopted by removing the dominant 1-minute period/s. Where 1-minute period/s were removed, the remaining 1-minute L_{Aeq} 's within that 15-minute period were logarithmically averaged to recalculate a corrected $L_{Aeq, 15min}$. Again, where more than 5-minutes of data was excluded, the full 15-minute period was excluded.
 - Insects – insect noise, where observed, was always in a frequency range above 1 kHz (typically in the range of 2 kHz to 6.3 kHz), and therefore exceeded via both the 630 Hz and ≤ 1 kHz filters. Minute by minute data did not have to be removed to exclude insect noise.
- 7 Where extraneous noise sources have been removed from a $L_{Aeq, 15 min}$ and the noise level recalculated, that number has been presented in blue – see Appendix E. Where a 15-minute noise level was above the relevant time period noise level limit prescribed in Schedule F - Table F1, however considered to have been dominated by extraneous noise for the more than 5-minutes of the 15-minute period, a blue cell shading has been applied to the comment cell, and the 15-minute noise level is to be excluded.
- 8 As part of this review, suitable analysis was completed on the reviewed periods to determine whether any tonal and/or impulsive characteristics were detected (in accordance with the NMM and Condition F6 of EA EPML00335713). Dozer track slaps and overburden/coal dumping were observed with a number of events satisfying SLR's interpretation of the NMM criterion for determining where impulsive corrections need be applied. Tonal characteristics from mining activities were also observed at times and again satisfying SLR's interpretation of the NMM criterion for determining where tonal corrections need be applied. Where tonal and/or impulsive characteristic correction has been applied to an $L_{Aeq, 15 min}$ noise level, that number has been presented in magenta – see Appendix E.
- 9 As noted in Point 1, the NAC mine activity log for the 7 to 13 June 2023 monitoring period indicated all daily operations commenced at or after 7:00 am, and ceased before 6:30 pm. Therefore as no NAC operations occurred within the 10:00 pm to 7:00 am night-time period for these monitoring dates, an assessment against the 50 dBA L_{Amax} noise limit is not applicable. For NML4 and NML35, where the monitoring period for these two (2) locations corresponded to 24-hour NAC mining operation, the following steps have been undertaken:
- An initial filter has been applied to the as measured L_{Amax} 15-minute noise levels to identify those above 50 dBA. When the L_{Amax} noise level is equal to or less than 50 dBA,



no further analysis has been completed, regardless of whether mine noise has been detected or not.

- Where the measured L_{Amax} 15-minute noise level is above 50 dBA, the L_{Amax} event has been identified and via the spectral and/or audio data, the source identified and noted accordingly in Appendix E.
- If multiple events are above 50 dBA within the 15-minute, but no mine noise is detected, no further identification of these additional events is conducted.
- If multiple events are above 50 dBA within the 15-minute, and mine noise is detected, further identification of these additional events is conducted to confirm whether any are attributable to mine noise. If the mine attributable L_{Amax} can be identified and is above 50 dBA, this is reported. If all events above 50 dBA are attributable to non-mine sources, this is noted accordingly.
- For this analysis, the L_{Amax} is defined as the maximum noise event, rather than an 'average maximum'. This aligns to the definition of L_{Amax} in the EA.
- For the period just prior to sunrise and through to 7:00 am, where bird song tends to dominant the noise environment, determination of mine attributable L_{Amax} noise levels can often be difficult. Where a conclusive determination of the mine attributable L_{Amax} noise cannot be made, due to the frequent nature of bird song or other extraneous noise sources, this is noted accordingly.

Finally, as noted in Section 4.3, comments have also been included where elevated wind noise and/or rainfall was observed during unattended logging noise measurements but where the recorded weather conditions were compliant with the NMM. Where wind noise and/or rainfall has either effected or dominated the measurement, this has been noted accordingly including whether the 15-minute data is considered suitable for use or excluded due to wind/rain effects/dominance (see Appendix E).

5.0 Noise Monitoring Results

The following section documents the attended and unattended noise monitoring results completed as part of this assessment.

5.1 Attended Noise Results

As noted in Section 4.2, three (3) 15-minute attended noise measurements were conducted at each monitoring location on 6, 7 and/or 8 June 2023, and occurred during the NAC mine operating period.

The results of that attended noise measurements, including the derived noise level attributable to NAC mine operations where NAC mine was detectable (audible and/or measurable), are detailed in Appendix D. A summary of the findings are presented below:

- NML1: All three (3) attended measurements measured $L_{Aeq,adj,15min}$ noise levels attributable to NAC mine below the respective noise limit. The highest measured NAC mine attributable noise level was 38 dBA $L_{Aeq,15min adj}$, occurring at 10:00 am and 4:45 pm on 7 June 2023, which is below the day-time 42 dBA $L_{Aeq,15min adj}$ noise limit.
- NML4: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML8: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML10: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML11: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.



- NML15: One (1) of the three (3) attended measurements measured LA_{eq,adj,15min} noise levels attributable to NAC mine below the respective noise limit, NAC mine was inaudible and unmeasurable during the remaining measurements. The highest measured NAC mine attributable noise level was ≤ 25 dBA LA_{eq,15min adj}, occurring at 8:30 am on 8 June 2023, which is below the day-time 42 dBA LA_{eq,15min adj} noise limit.
- NML16: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML18: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML34: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML35: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.
- NML38: NAC mine was inaudible and unmeasurable during all three (3) attended measurements.

NAC mine attributable noise was audible/measurable during four (4) of the 33 (15-minute period) attended measurement, and inaudible/unmeasurable (ie undetectable) during the remaining attended measurements. For those 15-minute attended noise measurements completed for this monitoring period where NAC was audible and measurable, all NAC mine attributable noise levels were below the day-time 42 dBA LA_{eq,15min adj} noise limit prescribed in Schedule F - Table F1 of NAC's EA.

5.2 Unattended Noise Results

A summary of each monitoring location's analysed noise logger data (statistical and audio) is contained within the following sections.

The detailed analysis results for each monitoring location during the June 2023 monitoring period is contained within Appendix E.

5.2.1 NML1

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML1, totalling 329 individual 15-minute intervals. Analysis showed that for all 15-minute intervals where NAC mine was detected (audible/measurable) following the unattended analysis methodology presented in Section 4.4.2, the resulting NAC mine attributable noise levels were below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA.

Through the detailed analysis, tonal characteristics were identified during five (5) 15-minute periods during the day-time period between 7 and 11 June 2023, for which relevant corrections were applied. Regarding impulsive characteristics, whilst some transient mine noise events were audible during the analysis, SLR did not deem any of the reviewed periods as containing mine noise which warranted correction for impulsive characteristics. With the inclusion of appropriate tonal corrections, no LA_{eq, adj, 15 min} noise level attributable to NAC mine was above the noise levels contained in Schedule F – Table F1.

The most noteworthy day for noise monitoring at NML1 was 7 June 2023 where drilling works (for blast preparation) and a waste shovel circuit (including dozer) were operating approximately 1.1 km east of NML1, from approximately 7:11 am until 5:31 pm. Attributable noise levels were determined at 38 dBA LA_{eq,15min adj} for six (6) 15-minute periods occurring during this daytime period, with the remaining daytime period NAC attributable noise levels on this day being 37 dBA LA_{eq,15min adj} or less, therefore below the day-time 42 dBA LA_{eq,15min adj} noise limit.

The daytime noise environment at NML1 was frequently dominated by aircraft noise (from Oakey Air Base and small light aircraft), bird song, infrequency vehicle passbys, and wind generated noise.



5.2.2 NML4

There was a total of seven (7) 24-hour periods (day, evening and night time) analysed on 15 to 18, 20, 21 and 22 June 2023, totalling 672 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was not detected (audible or measurable) at this location. The daytime noise environment at NML4 was frequently dominated by aircraft noise (from Oakey Air Base and small light aircraft), bird song, dog barks and other wildlife noises, wind generated noise and farming machinery. It is possible that at times, these ambient noise source masked contributions from NAC mine hindering detection in the unattended noise data.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during aforementioned monitoring dates were below the relevant time period noise limit (ie 42 dBA LAeq,15min for the day-time period, or 35 dBA LAeq,15min for the evening and night-time period). Those 15-minute intervals above the relevant time period noise limit were determined to be a result of aircraft, wind generated noise or other extraneous sources as noted, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML4, an assessment for tonal or impulsive adjustments is not applicable.

Similarly, as NAC mine attributable noise was not detected, including during the night-time period, the 50 LAmax noise limit is considered to be achieved at NML4 during aforementioned monitoring dates.

Accordingly, for NML4, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.3 NML8

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML8, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was rarely detected (audible or measurable) at this location. The daytime noise environment at NML8 was frequently dominated by road traffic noise (being louder at this location than most other locations), aircraft noise (from Oakey Air Base and small light aircraft), bird song, wind generated noise and local machinery, and domestic noise. It is probable that these ambient noise source masked contributions from NAC mine hindering detection in the unattended noise data.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant road traffic, aircraft and wind generated noise, and NAC mine attributable noise could not be detected.

No tonal or impulsive NAC mine noise characteristics were detected during this period, therefore no adjustments were warranted.

Accordingly, for NML8, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.4 NML10

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML10, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was rarely detected (audible or measurable) at this location. The daytime noise environment at NML10 was frequently dominated by road traffic noise, aircraft noise (from Oakey Air Base and small light aircraft), bird song, wind generated noise, and local machinery noise. It is possible that at times, these ambient



noise sources masked contributions from NAC mine hindering detection in the unattended noise data.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant road traffic, aircraft, bird song, wind generated noise or other noted extraneous sources, and NAC mine attributable noise could not be detected.

No tonal or impulsive NAC noise characteristics were detected during this period, therefore no adjustments were warranted.

Accordingly, for NML10, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.5 NML11

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML11, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was not detected (audible or measurable) at this location. The daytime noise environment at NML11 was frequently dominated by road traffic noise, aircraft noise (from Oakey Air Base and small light aircraft), bird song, wind generated noise, local machinery noise (including idling trucks), cow bellows and dog barks. It is possible that at times, these ambient noise source masked contributions from NAC mine hindering detection in the unattended noise data.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant road traffic, aircraft, bird song, wind generated noise or other noted extraneous sources, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML11, an assessment for tonal or impulsive adjustments is not applicable.

Accordingly, for NML11, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.6 NML15

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML15, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was infrequently detected (audible or measurable) at this location. The daytime noise environment at NML15 was frequently dominated by road traffic noise (in the same direction as the mine), aircraft noise (from Oakey Air Base and small light aircraft), bird song, farm machinery, and wind generated noise. Noting that NAC mine attributable noise was detected during one (1) attended noise measurement at NML15 (albeit at ≤ 25 dBA LAeq for approximately 30 seconds), and detected infrequently in the unattended data at low levels and other sources dominating the ambient environment at the same time, it is possible that at times these ambient noise source masked contributions from NAC mine.

Notwithstanding this point, following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant road traffic, aircraft, farm machinery, wind generated noise or other noted extraneous sources, and NAC mine attributable noise could not be detected.



No tonal or impulsive NAC mine noise characteristics were detected during this period, therefore no adjustments were warranted.

Accordingly, for NML15, NAC mine attributable noise levels are considered to be below the relevant time period noise levels contained in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.7 NML16

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML16, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise was rarely detected (audible or measurable) at this location. The daytime noise environment at NML16 was frequently dominated by road traffic noise, aircraft noise (from Oakey Air Base and small light aircraft), bird song, localised farm machinery/mechanical noise, dog barks and wind generated noise. It is possible that at times, these ambient noise sources masked contributions from NAC mine preventing further detection.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during the 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant traffic, wind generated noise or localised farm machinery/mechanical noise, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML18, an assessment for tonal or impulsive adjustments is not applicable.

Accordingly, for NML16, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.8 NML18

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML18, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise could not be detected (audible or measurable) at this location. The daytime noise environment at NML18 was frequently dominated by road traffic noise, aircraft noise (namely from Oakey Air Base), bird song and wind generated noise.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant traffic, aircraft, bird or wind generated noise, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML18, an assessment for tonal or impulsive adjustments is not applicable.

Accordingly, for NML18, NAC mine attributable noise levels are considered to be below the relevant time period noise levels contained in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.9 NML34

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML34, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise could not be detected (audible or measurable) at this location. The daytime noise environment at NML34 was frequently dominated by road traffic noise, aircraft noise (from Oakey Air Base and small light aircraft), bird



song (including pigeons dominating the 630 Hz band), localised mechanical noise (farming equipment), wind generated noise, dog barks and domestic noise.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant road traffic, aircraft, bird song, wind generated noise or other noted extraneous sources, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML34, an assessment for tonal or impulsive adjustments is not applicable.

Accordingly, for NML34, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.10 NML35

There was a total of seven (7) 24-hour periods (day, evening and night time) analysed between 20 and 26 June 2023, totalling 672 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise could not be detected (audible or measurable) at this location. The noise environment at NML35 was frequently dominated by aircraft noise (from Oakey Air Base and small light aircraft), bird song, wind generated noise and isolated vehicle passbys.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 20 and 27 June 2023 period were below the relevant time period noise limit (ie 42 dBA LAeq,15min for the day-time period, or 35 dBA LAeq,15min for the evening and night-time period). Those 15-minute intervals above the relevant time period noise limit were determined to be a result of dominant wind generated or aircraft noise, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML35, an assessment for tonal or impulsive adjustments is not applicable.

Similarly, as NAC mine attributable noise was not detected, including during the night-time period, the 50 LAmax noise limit is considered to be achieved at NML4 during aforementioned monitoring dates.

Accordingly, for NML35, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.2.11 NML38

There was a total of seven (7) daily periods (6:45 am to 6:30 pm) analysed between 7 and 13 June 2023 at NML38, totalling 329 individual 15-minute intervals. Following the unattended analysis methodology presented in Section 4.4.2, NAC mine attributable noise could not be detected (audible or measurable) at this location. The daytime noise environment at NML38 was frequently dominated by aircraft noise (from Oakey Air Base and small light aircraft), background road traffic noise, bird song, , and wind generated noise.

Following the unattended analysis methodology presented in Section 4.4.2, the resulting 630 Hz filtered noise levels for the majority of the 15-minute intervals during 7 and 13 June 2023 period were below 42 dBA LAeq,15min. Those 15-minute intervals above this level (or above 35 dBA LAeq,15min for the evening and night periods) were determined to be a result of dominant wind generated noise, and NAC mine attributable noise could not be detected.

As NAC mine attributable noise could not be detected at NML38, an assessment for tonal or impulsive adjustments is not applicable.



Accordingly, for NML38, NAC mine attributable noise levels are considered to be below the relevant time period noise level limits prescribed in Schedule F - Table F1 of NAC's EA for the June monitoring period.

5.3 Unattended Noise Results – Background Location

To assist with this assessment, the unattended noise monitoring data from the Background Location has been analysed for the following:

- Determination of 'Rating Background Levels' (RBLs), and
- Conduct a high-level statistical and audio data review to confirm whether NAC mine noise was detected at this location and if so, to what noise level (if measurable).

The unattended ambient noise monitoring data was used to determine the RBL for day-time (7:00 am to 6:00pm), evening (6:00 pm to 10:00 pm) and night-time (10:00 pm to 7:00 am) periods, as presented in Table 7. With reference to the operational time periods for June 2023 (as stated in Section 3.0), limited NAC mine operations occurred during the evening and night-time periods, however the RBLs are still presented in Table 7 for completeness and transparency. The RBL is the median of the 10th percentile of the daily background (LA₉₀) noise levels in each assessment period (day, evening and night) over the duration of the monitoring.

Table 7 Background Location RBL

Monitoring Month	RBL (dBA)		
	Daytime (7:00 am – 6:00 pm)	Evening (6:00 pm - 10:00 pm)	Night-time (10:00 pm – 7:00 am)
June 2023	25	21	19

A review of the data presented in Table 7 indicates that the RBLs are typical of a rural environment with ambient noise sources such as bird song, wind noise, aircraft noise (from Oakey Air Base and small light aircraft) and distant road traffic noise being the predominant sources.

A high-level review of the captured audio and statistical data (namely one-third octave band LA_{eq} spectra) from the Background location was conducted to confirm whether NAC attributable noise was audible and/or measurable at this location. This review concluded that no periods were considered to have NAC mine attributable noise audible and/or measurable during the June 2023 monitoring period.

6.0 Conclusion

This June 2023 monitoring period has confirmed through attended and unattended noise monitoring at the eleven (11) monitoring locations that no 15-minute period during the assessed seven (7) days contained NAC mine attributable noise levels that exceeded the relevant noise level limits prescribed in Schedule F - Table F1: Noise Limits (includes construction activities) of NAC's EA.

This June 2023 assessment is now complete and subject to no further noise monitoring.





Appendix A Acoustic Terminology

New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

SLR Project No.: 620.10963.01001

10 August 2023

Sound Level (or Noise Level)

The terms sound and noise are almost interchangeable, except that in common usage noise is often used to refer to unwanted sound.

Sound (or noise) consists of minute fluctuations in atmospheric pressure capable of evoking the sense of hearing. The human ear (and those of other species) responds to changes in sound pressure over a very wide range. The loudest sound pressure to which the human ear responds is ten million times greater than the softest. The decibel (dB or dBL) scale reduces this ratio to a more manageable size by the use of logarithms.

The symbols SPL, L or LP are commonly used to represent Sound Pressure Level. The symbol LA represents A-weighted Sound Pressure Level. The standard reference unit for Sound Pressure Levels expressed in decibels is 2×10^{-5} Pa.

A-weighted Sound Pressure Level

The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an 'A-weighting' filter. This is an electronic filter having a frequency response corresponding approximately to human hearing.

People's hearing is most sensitive to sounds at mid frequencies (500 Hz to 4,000 Hz), and less sensitive at lower and higher frequencies. Thus, the level of a sound in dBA is a good measure of the loudness of that sound. Different sources having the same dBA level generally sound about equally loud.

Sound Power Level

The sound power of a source is the rate at which it emits acoustic energy. As with sound pressure, sound power levels (SWL) are expressed in dB units, but are identified by the symbols SWL.

The relationship between sound power and sound pressure may be likened to an electric radiator, which is characterised by a power rating but has an effect on the surrounding environment that can be measured in terms of a different parameter, temperature.

Change in Sound Pressure Levels

For human perception, a change of 1 dBA or 2 dBA in the level of a sound is considered to be indiscernible, while a 3 dBA to 5 dBA change corresponds to a small but noticeable change in loudness. A 10 dBA change corresponds to an approximate doubling or halving in loudness.

Typical Sound Pressure Levels

The table below lists examples of typical sound pressure levels.

Table A1 Examples of Typical Sound Pressure Levels

Sound Pressure Level (dBA)	Typical Example	Subjective (Human) Evaluation
130	Threshold of pain	Intolerable
120	Metal hammering	Extremely noisy
110	Grinding on steel	
100	Loud car horn at 3 metres (m)	Very noisy
90	Dog bark at 1 m	
80	Cicadas at 1 m	Loud
70	Noise level directly adjacent to a busy main road	
60	Ambient noise level in urban area close to main roads	Moderate to quiet
50	Typical rural environment with high insect noise or close to a main road	



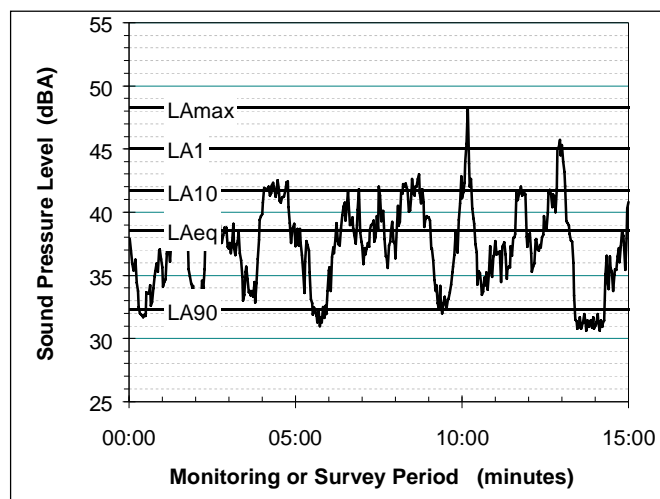
Sound Pressure Level (dBA)	Typical Example	Subjective (Human) Evaluation
40	Ambient noise level in a rural environment with light breezes and some noise from insects, birds and distant traffic	Quiet to very quiet
30	Ambient noise level in a typical rural noise environment in the absence of insect noise and wind	
20	Ambient noise level in remote and quiet rural environment away from main roads with no wind and no insect noise	Almost silent

Statistical Noise Levels

Sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels (LAN), where LAN is the A-weighted sound pressure level exceeded for N% of a given measurement period. For example, the LA1 is the noise level exceeded for 1% of the time and LA10 the noise exceeded for 10% of the time.

Figure A1 presents a hypothetical 15 minute noise measurement, illustrating various common statistical indices of interest.

Figure A1 Hypothetical 15 Minute Noise Measurement



Of particular relevance to this study, are:

- **LAmax** The A-weighted maximum sound pressure level of any given measurement period.
- **LA1** The A-weighted noise level exceeded for 1% during any given measurement period.
- **LA10** The A-weighted noise level exceeded for 10% during any given measurement period. This is commonly referred to as the average maximum noise level.
- **LA90** The A-weighted noise level exceeded for 90% during any given measurement period, often referred to as the 'background' noise level.
- **LAeq** The A-weighted equivalent noise level (basically the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.
- **LAeq, adj, 15min** The specific noise level measured as the A-weighted equivalent continuous noise level (LAeq) plus any adjustment for the character of the noise (tonal and/or impulsive) determined over a reference time period of 15-minutes.

Noise Propagation

Provided the receptor is in the far-field of the noise source, noise levels will reduce as a receptor moves further away from the source. This is due to spreading of the noise source energy over



distance. For a simple point source (for example, a motor) the theoretical reduction in noise levels is 6 dBA per doubling of distance. For a line source (for example, a busy road) the theoretical reduction is 3 dBA per doubling of distance. In reality however other factors affect noise propagation. These include ground absorption, air absorption, acoustic screening and meteorological effects.

Meteorological Effects

At distances over 500 m, meteorological affects (for example, local weather and atmospheric conditions) can substantially enhance or impair noise propagation. The most influential meteorological conditions on noise propagation are wind speed and direction and the occurrence of temperature inversions. Ambient air temperature and humidity and atmospheric pressure also affect noise propagation although to a lesser extent than wind and temperature inversions.

Wind Conditions

Wind conditions enhance noise propagation when the wind is blowing from a noise source towards a receptor and therefore noise levels at the receptor will be higher under these conditions. The wind can be thought to carry the noise in the direction it is heading. Where winds blow from the receptor towards the source, the propagation of noise is impaired and therefore lower noise levels will be experienced at the receptor.

It is important to consider the effect of prevailing wind conditions when assessing noise propagation over larger distances. Wind roses, which graph long term variations in wind speed and direction, are a useful tool for analysing prevailing wind conditions where available.

Temperature Inversions

Temperature inversions are a meteorological phenomenon where a layer of cold air is trapped at the ground surface under a layer of warmer air. Temperature inversions enhance noise propagation because sound travelling away from the ground is reflected back down from where the colder air meets the warmer air due to the change in pressure between the two layers.

Conditions that favour the development of a strong surface inversion are nights with calm winds and clear skies. Calm winds prevent warmer air above the surface from mixing down to the ground, and clear skies increase the rate of cooling at the Earth's surface. It is therefore important to consider the effect of temperature inversions when assessing noise propagation over larger distances and during night-time periods.

Tonality

Tonal noise contains one or more prominent tones (i.e. distinct frequency components), and is normally regarded as more offensive than 'broad band' noise.

Impulsive

An impulse noise is typified by a sudden rise time and a rapid sound decay. Impulse noise can be defined as having a high peak of short duration or a sequence of such peaks (bangs, clicks, clatters, or thumps).





Appendix B NAC Mine Operations Supporting Documents – June 2023

New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

SLR Project No.: 620.10963.01001

10 August 2023

Time	Event Type	Message
2023-06-06 07:04:08+1000	action	110 & 3x rdt start up
2023-06-06 07:05:05+1000	action	803 ready up
2023-06-06 07:15:33+1000	action	swampy ready up iptc
2023-06-06 07:21:36+1000	action	610 ready up dump 13
2023-06-06 07:28:03+1000	action	110 idle down
2023-06-06 07:31:39+1000	action	110 idle up
2023-06-06 07:33:17+1000	action	008 ready up
2023-06-06 07:33:57+1000	action	625 ready up
2023-06-06 07:47:47+1000	action	704 706 ready up
2023-06-06 08:04:47+1000	action	110 idle back
2023-06-06 08:24:48+1000	action	5.0m/s winds only some auto excluding
2023-06-06 08:44:45+1000	action	Dr23 started up
2023-06-06 09:13:05+1000	action	dr23 down on maintenance
2023-06-06 09:56:16+1000	action	006 start up
2023-06-06 09:59:29+1000	action	110 idle down
2023-06-06 10:08:14+1000	action	110 ready up
2023-06-06 10:54:39+1000	action	110 idle back
2023-06-06 11:05:19+1000	action	110 ready up
2023-06-06 11:21:19+1000	action	dril going agin
2023-06-06 13:58:21+1000	action	110 down for maintenance
2023-06-06 14:21:35+1000	action	Truck parked at Acland toilets for cleaning
2023-06-06 15:40:52+1000	action	110 ready up
2023-06-06 15:55:44+1000	action	110 ide back
2023-06-06 16:21:55+1000	action	110 ready up
2023-06-06 16:29:05+1000	action	drill parked for the shift
2023-06-06 16:31:16+1000	action	110 stopped for crib
2023-06-06 17:13:37+1000	action	110 idle back
2023-06-06 17:29:46+1000	action	parking up watercarts, and dozers
2023-06-06 17:30:07+1000	action	Graders will park up by 6
2023-06-06 17:33:32+1000	action	110 idle up
2023-06-06 17:38:38+1000	action	803 to parkup
2023-06-07 07:16:43+1000	action	7:11 start 216 circuit and 625 in 1st.
2023-06-07 07:20:05+1000	action	Start 110 @ idle
2023-06-07 07:29:45+1000	action	Idle back 110 and start 211 circuit. start 625 in 1st
2023-06-07 08:17:43+1000	action	408 sent to 216
2023-06-07 08:23:01+1000	action	706 started and sent to south pit.
2023-06-07 08:35:01+1000	action	Start 110 with 1 truck.
2023-06-07 08:44:04+1000	action	stop 110
2023-06-07 08:46:05+1000	action	Start 110 circuit
2023-06-07 08:49:11+1000	action	413 start on 110 circuit
2023-06-07 09:11:56+1000	action	110 circuit stopped on noise.
2023-06-07 09:15:46+1000	action	Start 110 circuit
2023-06-07 09:20:16+1000	action	drill walk at low idle.
2023-06-07 09:26:22+1000	action	110 stopped, drill stopped.
2023-06-07 09:29:28+1000	action	Start 110 circuit.
2023-06-07 09:39:00+1000	action	stop 110 circuit
2023-06-07 09:40:09+1000	action	stop all units
2023-06-07 09:45:45+1000	action	Start all units again.
2023-06-07 09:58:22+1000	action	stop 110 circuit
2023-06-07 10:00:54+1000	action	Start 110 circuit.
2023-06-07 10:03:16+1000	action	Start 803.
2023-06-07 10:12:23+1000	action	all units stopped on noise.
2023-06-07 10:15:41+1000	action	Start all units again.
2023-06-07 10:25:04+1000	action	Stop 803 and 110 circuit.
2023-06-07 10:30:31+1000	action	Start 110 circuit and 803.
2023-06-07 10:41:16+1000	action	stop 110 and 803
2023-06-07 10:46:51+1000	action	Start 110,803 and drill
2023-06-07 10:52:04+1000	action	Stop 110, 803, drill
2023-06-07 10:58:25+1000	action	stop all units.
2023-06-07 11:01:44+1000	action	Start units that were stopped on noise except drill. 006 getting a load of water.
2023-06-07 11:13:49+1000	action	stop all units
2023-06-07 11:16:10+1000	action	Start units again
2023-06-07 11:30:14+1000	action	start drill 23
2023-06-07 11:57:13+1000	action	11:40 stopped drill, 11:46 start drill
2023-06-07 12:16:39+1000	action	Walk 110 onto bench
2023-06-07 12:21:41+1000	action	110 stopped
2023-06-07 12:26:54+1000	action	803 and drill stop
2023-06-07 12:30:39+1000	action	drill and 803 start up
2023-06-07 12:40:35+1000	action	start 110 digger and trucks[2]
2023-06-07 12:48:27+1000	action	stop 110 circuit
2023-06-07 12:58:26+1000	action	stop 008 water truck
2023-06-07 13:01:05+1000	action	008 start up and 110 with only 1 truck
2023-06-07 13:03:17+1000	action	start 704 grader
2023-06-07 13:11:59+1000	action	413 truck joining 110 digger run
2023-06-07 13:23:22+1000	action	409 truck to 110 digger
2023-06-07 13:27:22+1000	action	stop 110 circuit
2023-06-07 13:30:35+1000	action	Start 110 circuit.
2023-06-07 13:51:53+1000	action	110 back to 1 truck at 1.30pm,803 parked up
2023-06-07 13:54:03+1000	action	1.53pm start 803
2023-06-07 14:02:39+1000	action	1 more truck joining 110 circuit.
2023-06-07 14:11:07+1000	action	stop 110 circuit and 803.
2023-06-07 14:15:28+1000	action	Start 110 and 803
2023-06-07 14:58:12+1000	action	110 circuit and 803 stop
2023-06-07 15:01:03+1000	action	110 circuit and 803 start
2023-06-07 15:11:05+1000	action	110 circuit and 803 stopped.
2023-06-07 15:26:04+1000	action	3:17 start 110 circuit and 803. 3:22 stop 110 circuit and 803 and start swampy.
2023-06-07 15:33:15+1000	action	Start 110 with 1 truck
2023-06-07 15:53:01+1000	action	3:45 ish units on crib
2023-06-07 16:44:46+1000	action	Start 110 and 1 truck and 802.

Time	Event Type	Message
2023-06-07 17:00:49+1000	action	4:47 stop drill, 110 circuit and 802
2023-06-07 17:01:04+1000	action	start drill
2023-06-07 17:12:23+1000	action	Stop all units except drill
2023-06-07 17:15:51+1000	action	park 110 and trucks.
2023-06-07 17:17:31+1000	action	Start all units again.
2023-06-07 17:31:15+1000	action	Drill stopped for noise, too loud
2023-06-08 07:01:11+1000	action	start swampy and 008
2023-06-08 07:03:27+1000	action	Start drill
2023-06-08 07:11:20+1000	action	Drill 23 start drilling
2023-06-08 07:17:15+1000	action	Start 216 circuit
2023-06-08 07:19:19+1000	action	Start 610 in 1st gear
2023-06-08 07:29:29+1000	action	start 625 1st gear
2023-06-08 07:36:45+1000	action	626 started for testing
2023-06-08 07:37:53+1000	action	704, 706 graders started
2023-06-08 07:50:05+1000	action	Walk 110 into position
2023-06-08 07:56:44+1000	action	stop 110 and stop drill
2023-06-08 08:00:42+1000	action	Start drill again.
2023-06-08 08:03:30+1000	action	Start 004
2023-06-08 09:02:21+1000	action	Start 110 at full revs to test noise.
2023-06-08 09:06:28+1000	action	start 110 circuit with 1 truck.
2023-06-08 09:25:49+1000	action	stop 110 circuit
2023-06-08 09:28:25+1000	action	stop drill
2023-06-08 09:31:26+1000	action	start drill and 110 circuit
2023-06-08 09:42:48+1000	action	stop 110 circuit
2023-06-08 09:45:42+1000	action	Start 110 circuit.
2023-06-08 09:55:51+1000	action	stop 110 circuit
2023-06-08 10:00:22+1000	action	Start 110 circuit.
2023-06-08 10:14:56+1000	action	412 sent to join 110 circuit.
2023-06-08 10:38:41+1000	action	stop 110 circuit
2023-06-08 10:45:36+1000	action	110 circuit started.
2023-06-08 11:30:43+1000	action	110 circuit stopped for smoko.
2023-06-08 11:47:21+1000	action	802 started
2023-06-08 12:00:40+1000	action	706 to workshop
2023-06-08 12:00:47+1000	action	11:00 ish 216 and other units on crib.
2023-06-08 12:01:32+1000	action	11:50ish 216 and units back from crib
2023-06-08 12:13:46+1000	action	Start 110 circuit with 2 trucks.
2023-06-08 12:21:24+1000	action	413 sent to 110 digger, 609 and swampy given 2nd gear.
2023-06-08 12:21:59+1000	action	609 started work at 11:28
2023-06-08 12:31:03+1000	action	drill starting back up after fuel and oil delay. approx 30min delay.
2023-06-08 12:40:54+1000	action	610,625,626 dozers 2nd gear
2023-06-08 12:56:56+1000	action	109 digger tramming into position on drill floor
2023-06-08 13:28:41+1000	action	609 dozer tramming from Manning vale east to west pit
2023-06-08 13:31:34+1000	action	214 tramming to dump 2
2023-06-08 13:34:33+1000	action	stop 214 and 802 for noise and 110 down to 1 truck
2023-06-08 13:34:56+1000	action	stop drill and stop 110
2023-06-08 13:35:25+1000	action	609 stopped
2023-06-08 13:40:42+1000	action	start up drill.
2023-06-08 13:43:54+1000	action	214 and 609 tramming
2023-06-08 13:51:27+1000	action	214 loading with 1 truck
2023-06-08 14:02:38+1000	action	704 to west pit
2023-06-08 14:14:27+1000	action	110 and 214 stopped and 609 dozer, and drill in idle
2023-06-08 14:17:01+1000	action	start 214 and 110 circuits 609 dozer and 109 digger
2023-06-08 14:18:59+1000	action	610,625,626 back to first gear
2023-06-08 14:21:40+1000	action	110 circuit stopped, and drill started back up
2023-06-08 14:22:59+1000	action	609 stopped
2023-06-08 14:29:57+1000	action	110 start back up
2023-06-08 14:37:30+1000	action	Start 609 dozer.
2023-06-08 15:13:41+1000	action	803 started
2023-06-08 15:18:02+1000	action	110 on crib
2023-06-08 16:10:55+1000	action	110 and trucks start up
2023-06-08 16:25:45+1000	action	3:50 216 and units on crib
2023-06-08 17:38:28+1000	action	All units except 609, 110 circuit and drill are pulling up by 6 pm.
2023-06-08 18:06:01+1000	action	All unit in pit parked by 6:10 pm
2023-06-08 18:14:23+1000	action	Pit closed @ 6:15pm
2023-06-09 07:01:12+1000	action	Start Drill drilling, Start 216 circuit.
2023-06-09 07:05:43+1000	action	Start all dozers in 1st gear.
2023-06-09 07:08:22+1000	action	Start 710, 704 graders.
2023-06-09 07:10:49+1000	action	Start 802 tiger
2023-06-09 07:23:45+1000	action	Walk 110 into position.
2023-06-09 07:29:30+1000	action	Start 110 circuit operating.
2023-06-09 07:30:23+1000	action	Start 109
2023-06-09 07:31:09+1000	action	Start 214
2023-06-09 07:51:33+1000	action	All units running except 008. 008 could be but couldn't contact him at 7:15am when he was right to go.
2023-06-09 08:21:04+1000	action	digger down grease line broken
2023-06-09 08:39:17+1000	action	609 2nd gear
2023-06-09 08:58:16+1000	action	110 trucks to 214 loader
2023-06-09 09:48:00+1000	action	710 grader parked up
2023-06-09 10:00:10+1000	action	9:36am 211 loader
2023-06-09 10:09:11+1000	action	110 digger and trucks starting up
2023-06-09 13:02:27+1000	action	12.45 pm trucks dumping 0207
2023-06-09 14:58:22+1000	action	12.28pm 706 started
2023-06-09 15:02:23+1000	action	211 park up
2023-06-09 15:27:31+1000	action	3:11 110 digger stopped for crib and bucket repairs.
2023-06-09 15:28:14+1000	action	3:15 214 circuit started.
2023-06-09 16:14:01+1000	action	110 start loading. 214 stop loading.
2023-06-09 16:21:59+1000	action	4 pm 216 on crib
2023-06-09 17:28:42+1000	action	610,625,626,802,211, 216 circuit all parking by 6pm.
2023-06-09 18:15:50+1000	action	All units in pit parked by 6:10 and Pit closed 6:15pm
2023-06-10 07:01:03+1000	action	Start 216 circuit.

Time	Event Type	Message
2023-06-10 07:03:55+1000	action	Start swampy, 211, 626
2023-06-10 07:14:14+1000	action	Start 610
2023-06-10 07:16:04+1000	action	7:09am 609 started work.
2023-06-10 07:19:27+1000	action	706 started.
2023-06-10 07:26:43+1000	action	Stop 610.
2023-06-10 07:31:06+1000	action	Start drill @ idle
2023-06-10 07:32:49+1000	action	stop 609.
2023-06-10 07:37:52+1000	action	Stop 626
2023-06-10 07:44:51+1000	action	All gear in pit pulled up
2023-06-10 07:46:49+1000	action	Stopped 610 engine
2023-06-10 07:49:54+1000	action	706, 216 circuit, swampy, 211.
2023-06-10 07:51:55+1000	action	stop 706
2023-06-10 07:58:55+1000	action	stop 216 circuit.
2023-06-10 08:02:57+1000	action	Start 216 circuit
2023-06-10 08:11:01+1000	action	Start drill at low idle.
2023-06-10 08:16:24+1000	action	started 626 dozer and 706 grader
2023-06-10 08:36:59+1000	action	110 walk up on to bench, and drill shut down
2023-06-10 08:45:41+1000	action	110 circuit started with 1 truck.
2023-06-10 08:48:51+1000	action	109 start up
2023-06-10 08:51:21+1000	action	all trucks sent to 110 circuit
2023-06-10 09:00:12+1000	action	Start 609, 008
2023-06-10 09:06:06+1000	action	610 start work
2023-06-10 09:09:49+1000	action	Start 704 grader
2023-06-10 09:10:23+1000	action	All allocated units in pit running.
2023-06-10 09:24:52+1000	action	Swampy dozer given 2nd gear
2023-06-10 09:26:51+1000	action	All dozers given 2nd gear.
2023-06-10 10:27:27+1000	action	Start Drill drilling.
2023-06-10 11:28:01+1000	action	drill stopped brake down
2023-06-10 11:36:19+1000	action	11 .30 am hot seat 110 digger and trucks
2023-06-10 11:38:07+1000	action	216 crib
2023-06-10 12:24:33+1000	action	216 units starting
2023-06-10 12:29:57+1000	action	216 loading first truck
2023-06-10 14:31:20+1000	action	Drill starting on idle
2023-06-10 15:02:53+1000	action	2:45 611, 625 started
2023-06-10 15:07:37+1000	action	2:56 drill started drilling.
2023-06-10 16:38:20+1000	action	110 hot seated both crib breaks.
2023-06-10 16:47:14+1000	action	stop whole pit.
2023-06-10 16:52:04+1000	action	Shut all engines down on all gear.
2023-06-10 16:54:23+1000	action	4:43 significant wind change. Noise levels went up lots.
2023-06-10 17:01:30+1000	action	216 circuit and 802 start.
2023-06-10 17:09:08+1000	action	send 110 trucks to park up.
2023-06-10 17:20:42+1000	action	Stop 216, move 008, 802 and 110 to park up.
2023-06-10 17:23:06+1000	action	Move truck into place near drill and try move drill.
2023-06-10 17:32:32+1000	action	start 216 circuit.
2023-06-10 17:38:39+1000	action	Start 609
2023-06-10 17:40:02+1000	action	Start 611
2023-06-10 17:49:45+1000	action	Drill shut down and in position with truck for the morning.
2023-06-10 17:50:50+1000	action	All units in pit parking up by 6pm.
2023-06-10 18:13:10+1000	action	pit closed by 6.15pm
2023-06-11 07:00:40+1000	action	Start drill @ idle
2023-06-11 07:03:42+1000	action	Stop drill.
2023-06-11 07:04:38+1000	action	Start 216 @ idle to test noise.
2023-06-11 07:08:41+1000	action	410 move off from south pit to workshop.
2023-06-11 07:09:32+1000	action	216 upto high idle for test.
2023-06-11 07:13:12+1000	action	Start 216 with 1 truck and idle other trucks.
2023-06-11 07:14:18+1000	action	Start 609 1st gear.
2023-06-11 07:15:14+1000	action	start all trucks on.
2023-06-11 07:29:42+1000	action	Start 109.
2023-06-11 07:30:27+1000	action	Start 625.
2023-06-11 07:44:45+1000	action	Start 110 at idle for workshop.
2023-06-11 08:01:08+1000	action	start 626 dozer
2023-06-11 08:02:07+1000	action	start 611
2023-06-11 08:02:44+1000	action	611 stop
2023-06-11 08:09:24+1000	action	Start 704
2023-06-11 08:31:15+1000	action	drill started and rest of pits shut down.
2023-06-11 08:40:03+1000	action	609 start
2023-06-11 08:43:21+1000	action	625, 626 and 216 start
2023-06-11 08:48:18+1000	action	609, 625, 626 stopped drill started
2023-06-11 08:49:54+1000	action	Start drill and start drilling
2023-06-11 08:53:08+1000	action	625, 626 and 216 Cricut starting
2023-06-11 08:57:04+1000	action	611 started
2023-06-11 08:58:04+1000	action	610 dozer started
2023-06-11 08:59:41+1000	action	802 started
2023-06-11 09:17:16+1000	action	610 and 110 stared again
2023-06-11 09:23:18+1000	action	008 start up.
2023-06-11 09:24:22+1000	action	110 walk on to brench
2023-06-11 09:37:26+1000	action	Start 110 with 1 truck
2023-06-11 09:58:04+1000	action	stop 110 and 802
2023-06-11 10:03:43+1000	action	stop 110 circuit and 802 start up
2023-06-11 10:28:02+1000	action	Stop 110 circuit and 802.
2023-06-11 10:31:29+1000	action	110 circuit and 802 started.
2023-06-11 11:26:46+1000	action	Stop 110 circuit.
2023-06-11 11:33:10+1000	action	110 circuit start.
2023-06-11 11:42:50+1000	action	Stop 110 circuit.
2023-06-11 11:45:07+1000	action	Start 110 circuit.
2023-06-11 12:07:02+1000	action	802 start.
2023-06-11 12:16:27+1000	action	Start 413 with 110. All allocated units running.
2023-06-11 12:30:31+1000	action	216 trammng to work shop from south pit.
2023-06-11 13:50:55+1000	action	stop 802 and 110 circuit.

Time	Event Type	Message
2023-06-11 14:10:12+1000	action	Start 110 circuit @ 2:08.
2023-06-11 14:35:00+1000	action	802 started.
2023-06-11 14:42:10+1000	action	Mowing in Acland started in park.
2023-06-11 16:02:03+1000	action	Mowing in Acland stopped.
2023-06-11 16:22:45+1000	action	Mowing in Acland started again. mowing in park close to monitor.
2023-06-11 16:43:37+1000	action	Mowing in Acland stopped.
2023-06-11 16:54:15+1000	action	Stop 110 circuit and 802.
2023-06-11 16:56:54+1000	action	625,626 611 stopped
2023-06-11 16:57:57+1000	action	stop drill
2023-06-11 17:00:17+1000	action	start drill
2023-06-11 17:06:41+1000	action	110 finished for day due to noise and 802
2023-06-11 17:16:01+1000	action	Walk 110 off bench.
2023-06-11 17:39:43+1000	action	216 started for testing.
2023-06-11 17:41:13+1000	action	All units in pit will be parked by 6pm due to noise levels.
2023-06-11 17:53:23+1000	action	Stopped all units in pit.
2023-06-11 18:11:06+1000	action	Pit closed by 6:15pm
2023-06-12 07:00:55+1000	action	Start drill @ idle for noise sample.
2023-06-12 07:02:54+1000	action	volvo loader and 109 started in south pit.
2023-06-12 07:04:11+1000	action	Drill to full revs for noise test.
2023-06-12 07:08:22+1000	action	Start drill drilling.
2023-06-12 07:16:41+1000	action	start swampy in 1st gear and 626 @ idle to replace ripper shank.
2023-06-12 07:21:20+1000	action	stop drill and shield truck for drill
2023-06-12 07:23:22+1000	action	Start 008
2023-06-12 07:30:19+1000	action	Start drill.
2023-06-12 07:37:13+1000	action	stop Drill
2023-06-12 07:38:10+1000	action	stop all units in pit.
2023-06-12 07:47:49+1000	action	216 leaving workshop
2023-06-12 07:53:52+1000	action	214 circuit started with 625 and 610 dozers
2023-06-12 08:07:18+1000	action	626 started
2023-06-12 08:14:52+1000	action	start 611
2023-06-12 08:24:16+1000	action	shut swappy dozer down,start up 609 dozer
2023-06-12 08:37:14+1000	action	Start 110 walking into position.
2023-06-12 08:40:52+1000	action	626 down
2023-06-12 08:51:45+1000	action	211 started
2023-06-12 08:53:51+1000	action	110 start up with 1 truck 413
2023-06-12 08:58:36+1000	action	802 start
2023-06-12 09:02:26+1000	action	start up 408 and 414
2023-06-12 09:13:27+1000	action	Stop 110 and 802
2023-06-12 09:15:38+1000	action	Start 110 and 802.
2023-06-12 09:30:41+1000	action	Start 006 on ipt2/2 for a test.
2023-06-12 09:51:33+1000	action	Start drill, stop 110 circuit and swap 408 and 415 circuits.
2023-06-12 10:40:10+1000	action	drill walking to south pit,110 circuit crib.704 grading 110 floor
2023-06-12 11:23:29+1000	action	110 circuit start up
2023-06-12 11:28:18+1000	action	802 start
2023-06-12 12:06:56+1000	action	004 water truck started,
2023-06-12 13:31:18+1000	action	stop 110 circuit shut down noise 1.29 pm
2023-06-12 13:31:37+1000	action	Start 110 circuit. 1.31pm
2023-06-12 14:11:06+1000	action	Stop 110 circuit.
2023-06-12 14:14:55+1000	action	start 110 circuit
2023-06-12 14:54:11+1000	action	stop 110 circuit
2023-06-12 15:01:22+1000	action	Start 110 circuit.
2023-06-12 15:14:22+1000	action	stop 110 circuit
2023-06-12 15:16:15+1000	action	Start 110 circuit.
2023-06-12 15:41:29+1000	action	stop 110 circuit
2023-06-12 15:46:43+1000	action	Start 110 circuit.
2023-06-12 16:42:04+1000	action	Stop 110 circuit.
2023-06-12 16:46:39+1000	action	Start 110 circuit.
2023-06-12 16:47:13+1000	action	Start 110 circuit.
2023-06-12 17:05:17+1000	action	Stop 110 circuit and 802.
2023-06-12 17:08:19+1000	action	all pits shutdown due to noise
2023-06-12 17:16:29+1000	action	Start all units again except 110 circuit and 110 digger.
2023-06-12 17:24:05+1000	action	Start 802 and send him to park up for the day due to noise.
2023-06-12 17:33:05+1000	action	Stopped 110 circuit due to noise sent to park up @ 5:44.
2023-06-12 17:41:29+1000	action	All units in pit stopping by 6pm due to noise levels.
2023-06-12 18:09:11+1000	action	Pit closed by 6:15
2023-06-13 07:01:01+1000	action	Start st3 and send to 110.
2023-06-13 07:05:57+1000	action	Start drill drilling.
2023-06-13 07:22:42+1000	action	start 109 in south pit.
2023-06-13 07:27:56+1000	action	Start 216 circuit @ idle.
2023-06-13 07:34:24+1000	action	Start 216 circuit running.
2023-06-13 07:48:56+1000	action	Start 610 1st gear.
2023-06-13 07:59:27+1000	action	Stop all units in pit.
2023-06-13 08:04:37+1000	action	Start drill, 216 circuit, 610, 109
2023-06-13 08:13:55+1000	action	Walk 110 into position and start work.
2023-06-13 08:18:42+1000	action	Start 110 trucks to warm up and move into position.
2023-06-13 08:20:05+1000	action	Start 626
2023-06-13 08:25:45+1000	action	110 circuit start loading and running.
2023-06-13 08:28:24+1000	action	Start 611, 625
2023-06-13 08:32:10+1000	action	802,211,704 and legra in south pit started
2023-06-13 08:37:33+1000	action	Start 006. All allocated units running.
2023-06-13 09:55:18+1000	action	mowing in acland started
2023-06-13 12:14:56+1000	action	415 truck joining 110 circuit.
2023-06-13 12:26:20+1000	action	mowing in Acland stopped at roughly 11 am
2023-06-13 13:45:40+1000	action	208 start loading 1 truck @ 12:56
2023-06-13 17:13:50+1000	action	216 circuit went on crib @ 4:20
2023-06-13 17:36:11+1000	action	All units except 110 circuit and 802 pulling up before 6pm due to anticipated noise levels in eastern monitor.
2023-06-13 18:15:40+1000	action	Pit closed by 6:15pm
2023-06-14 06:56:47+1000	action	Plane flying around the mine
2023-06-14 06:58:16+1000	action	110 warming up

Time	Event Type	Message
2023-06-14 07:00:33+1000	action	Warming up drill
2023-06-14 07:01:13+1000	action	110 walk onto bench
2023-06-14 07:02:09+1000	action	11 truck and tiger warm up
2023-06-14 07:05:07+1000	action	110 trucks to work
2023-06-14 07:05:23+1000	action	Tiger to work
2023-06-14 07:07:53+1000	action	Drill starting to drill
2023-06-14 07:08:38+1000	action	410 and 412 start up from W/S and head to 216
2023-06-14 07:09:56+1000	action	704 and 006 warm up
2023-06-14 07:13:50+1000	action	704 and 006 to work
2023-06-14 07:17:10+1000	action	216 and dozer start up and go to work
2023-06-14 08:13:35+1000	action	School bus
2023-06-14 10:04:57+1000	action	0942 - 110 down for broken lip shroud. Parked 2 trucks with 1 heading to 216.
2023-06-14 10:16:44+1000	action	110 walking back on to bench
2023-06-14 11:18:52+1000	action	216 stopped for crib with dozers
2023-06-14 11:19:10+1000	action	110 starting to send trucks for crib
2023-06-14 12:00:32+1000	action	Very windy in Acland
2023-06-14 15:28:39+1000	action	School bus
2023-06-14 18:12:46+1000	action	All mine equipment parked except the drill
2023-06-14 21:09:09+1000	action	Start 609 on basalt pile
2023-06-14 22:04:40+1000	action	Drill stopped and shutdown
2023-06-15 02:08:41+1000	action	Testing Emergency tones
2023-06-15 06:42:41+1000	action	ST1 heading into pit to service 110
2023-06-15 06:56:25+1000	action	216 - fitter measuring bucket
2023-06-15 06:58:34+1000	action	110 and 216 trucks warm up
2023-06-15 06:58:45+1000	action	802 to work
2023-06-15 06:59:58+1000	action	Dozers to work
2023-06-15 07:00:52+1000	action	704 and 008 warm up
2023-06-15 07:03:51+1000	action	216 trucks head to 216
2023-06-15 07:12:09+1000	action	704 and 008 to work
2023-06-15 07:22:08+1000	action	216 to work
2023-06-15 07:33:03+1000	action	Stopped 802
2023-06-15 07:33:26+1000	action	110 finished service but pulling it in noise
2023-06-15 07:34:08+1000	action	Stopped MVE Dozers
2023-06-15 07:42:57+1000	action	stopped 216 and trucks
2023-06-15 07:52:39+1000	action	110 warm up
2023-06-15 07:55:36+1000	action	110 walk on to bench
2023-06-15 07:58:55+1000	action	Starting bobcat on pattern
2023-06-15 08:00:14+1000	action	415 heading to 110
2023-06-15 08:04:34+1000	action	414 to 110
2023-06-15 08:05:25+1000	action	413 to 110
2023-06-15 08:13:08+1000	action	School bus
2023-06-15 08:13:53+1000	action	MVE Dozer started
2023-06-15 08:14:21+1000	action	802 to work
2023-06-15 09:28:21+1000	action	710 heading from the W/S to the drill patten
2023-06-15 09:36:48+1000	action	208 working around C Pit doing some odd pumpy jobs
2023-06-15 14:11:26+1000	action	Car stopped at Acland park. Talking
2023-06-15 14:30:07+1000	action	Car left town
2023-06-15 20:21:16+1000	action	Start 704
2023-06-15 20:21:55+1000	action	Drill breakdown, shut for day
2023-06-15 21:08:58+1000	action	Drill fixed, start drilling
2023-06-16 00:01:32+1000	action	704 parked at ROM
2023-06-16 02:17:17+1000	action	Start 008
2023-06-16 03:40:01+1000	action	008 parked
2023-06-16 06:45:33+1000	action	ST3 from W/S to ROM
2023-06-16 07:00:20+1000	action	No Audio, Troubleshooting
2023-06-16 07:08:54+1000	action	Drill testing for a couple of minutes
2023-06-16 07:15:21+1000	action	216 trucks warm up
2023-06-16 07:16:48+1000	action	216 warm up
2023-06-16 07:18:17+1000	action	MVE Dozers warm up
2023-06-16 07:19:57+1000	action	110 warm up
2023-06-16 07:21:13+1000	action	704 and 008 warm up
2023-06-16 07:23:44+1000	action	216 trucks head to loader and start loading
2023-06-16 07:23:57+1000	action	110 walk onto bench
2023-06-16 07:28:51+1000	action	704 and 008 to work
2023-06-16 07:30:49+1000	action	ST3 to 415
2023-06-16 07:32:05+1000	action	802 and work
2023-06-16 07:34:03+1000	action	110 to work
2023-06-16 07:42:16+1000	action	Dozers to work
2023-06-16 07:57:38+1000	action	Dozers stopped
2023-06-16 07:58:42+1000	action	110 stopped
2023-06-16 08:02:33+1000	action	110 to work
2023-06-16 08:05:12+1000	action	704 stopped
2023-06-16 08:14:04+1000	action	School bus
2023-06-16 08:14:23+1000	action	Dozers to work
2023-06-16 08:17:15+1000	action	704 to work
2023-06-16 08:49:39+1000	action	211 working on the drill pattern
2023-06-16 08:50:11+1000	action	609 to work
2023-06-16 08:55:35+1000	action	Drill to work
2023-06-16 10:11:04+1000	action	Drill to work
2023-06-16 10:23:57+1000	action	Car parked in town
2023-06-16 19:25:44+1000	action	Start 710
2023-06-16 21:27:20+1000	action	211 to start Basalt pile
2023-06-16 21:32:38+1000	action	109 to start basalt pile
2023-06-16 22:27:31+1000	action	Comms tower issues 10pm
2023-06-16 22:34:31+1000	action	211 shutdown oil leak
2023-06-16 23:32:47+1000	action	Drill Sopped
2023-06-16 23:35:01+1000	action	109 stopped
2023-06-16 23:43:45+1000	action	Drill operator lunch
2023-06-17 00:37:09+1000	action	Start 023 drill

Time	Event Type	Message
2023-06-17 00:47:25+1000	action	Drill pulled up for 5 min restarting now
2023-06-17 00:49:30+1000	action	Drill pulled up
2023-06-17 00:59:43+1000	action	Drill shutdown for night
2023-06-17 01:11:02+1000	action	208 idling to see noise effect CPC hut
2023-06-17 01:18:13+1000	action	208 shutdown for noise reference
2023-06-17 01:21:08+1000	action	208 restarted
2023-06-17 01:25:22+1000	action	208 shutdown
2023-06-17 07:12:09+1000	action	Drill idle down and wait for service cart
2023-06-17 07:18:36+1000	action	110 trucks head to digger
2023-06-17 07:19:54+1000	action	802 to work
2023-06-17 07:33:13+1000	action	Bobcat to work on drill pattern
2023-06-17 07:39:27+1000	action	Plane
2023-06-17 07:45:32+1000	action	Stopped 802 and 110
2023-06-17 07:58:31+1000	action	0756 - Start 110
2023-06-17 08:07:41+1000	action	Drill to work
2023-06-17 08:14:25+1000	action	Shutdown drill
2023-06-17 08:16:14+1000	action	008 to work
2023-06-17 08:18:32+1000	action	610 to work
2023-06-17 08:23:37+1000	action	216 and trucks to work
2023-06-17 08:28:23+1000	action	704 to work
2023-06-17 08:30:06+1000	action	216 and trucks stopped
2023-06-17 08:53:41+1000	action	Drill to work
2023-06-17 09:00:11+1000	action	216 and trucks to work
2023-06-17 09:12:21+1000	action	611 start up mve
2023-06-17 09:37:40+1000	action	Drill Brokendown for air hose
2023-06-17 09:41:49+1000	action	Testing drill for breakdown
2023-06-17 18:35:17+1000	action	Start 023 drill
2023-06-17 21:07:43+1000	action	Pull 023 drill up
2023-06-17 21:16:12+1000	action	Start 023 drill
2023-06-17 21:35:03+1000	action	Park 710
2023-06-17 21:51:04+1000	action	Drill idled back
2023-06-17 22:08:23+1000	action	Drill stopped
2023-06-17 22:13:48+1000	action	Drill started
2023-06-17 22:43:45+1000	action	Start 023 drill
2023-06-17 22:48:14+1000	action	Shut down 023 drill
2023-06-18 06:43:20+1000	action	ST1 to rom to fuel 704 and 008
2023-06-18 06:48:02+1000	action	testing 409 at W/S
2023-06-18 06:50:27+1000	action	drill start up but not drilling until 0700
2023-06-18 07:02:49+1000	action	110, 802 to work
2023-06-18 07:03:15+1000	action	Drill to work
2023-06-18 07:42:10+1000	action	008 ready up
2023-06-18 07:46:19+1000	action	704 to work
2023-06-18 07:50:40+1000	action	109 to work
2023-06-18 08:06:24+1000	action	0800 - 216 and trucks to work
2023-06-18 08:10:58+1000	action	stop 110 circuit
2023-06-18 08:19:40+1000	action	Started 802 to do a rill and 110 floor
2023-06-18 08:19:56+1000	action	Started 610
2023-06-18 08:27:06+1000	action	110 to work
2023-06-18 08:27:54+1000	action	626 to work
2023-06-18 08:36:16+1000	action	All dozer to work
2023-06-18 18:10:12+1000	action	Drill to work
2023-06-18 20:44:19+1000	action	208 started
2023-06-18 23:37:16+1000	action	Basalt crew stopped for smoko
2023-06-19 02:16:05+1000	action	Drill stopped due to low fuel
2023-06-19 03:03:37+1000	action	Basalt crew finished 211 and 109
2023-06-19 04:13:08+1000	action	109 finished
2023-06-19 06:43:46+1000	action	ST1 to fill drill
2023-06-19 07:01:03+1000	action	Drill to work
2023-06-19 07:08:16+1000	action	409 to the workshop
2023-06-19 07:08:52+1000	action	110 to work
2023-06-19 07:09:24+1000	action	802 to work
2023-06-19 07:10:46+1000	action	110 trucks to work
2023-06-19 07:28:52+1000	action	216 and trucks to work
2023-06-19 07:55:47+1000	action	MVE Dozers to work
2023-06-19 07:58:01+1000	action	704 to work
2023-06-19 08:09:25+1000	action	109 to work
2023-06-19 08:25:21+1000	action	214 to work
2023-06-19 08:46:14+1000	action	Lost audio from Acland.
2023-06-19 08:56:57+1000	action	110 walking for blast
2023-06-19 13:47:51+1000	action	APC lighting a fire to the north of the mine. Not on the mine lease
2023-06-19 19:21:02+1000	action	Start 710
2023-06-20 06:45:39+1000	action	ST1 heading down to drill
2023-06-20 06:59:49+1000	action	110 to work
2023-06-20 07:00:41+1000	action	626 and 802 to work
2023-06-20 07:01:35+1000	action	Start drill to test for oil leak
2023-06-20 07:02:51+1000	action	110 truck are right to go to work
2023-06-20 07:07:01+1000	action	216, 216 trucks and 008 to work
2023-06-20 07:08:49+1000	action	409 from W/S to 216
2023-06-20 07:12:01+1000	action	704 ready up
2023-06-20 07:13:49+1000	action	109 start in MVE pit.
2023-06-20 07:20:24+1000	action	609 intc start up
2023-06-20 07:21:48+1000	action	611 start in MVE pit
2023-06-20 07:22:00+1000	action	625 starting in MVE
2023-06-20 08:15:14+1000	action	Car parked in Acland
2023-06-20 08:17:01+1000	action	Car left Acland
2023-06-20 12:49:17+1000	action	211 starting in mve
2023-06-20 14:30:33+1000	action	Drill to work
2023-06-20 18:16:08+1000	action	Drill to work
2023-06-20 20:29:35+1000	action	706 starting

Time	Event Type	Message
2023-06-21 00:15:29+1000	action	Drill idled back
2023-06-21 00:16:57+1000	action	Drill started
2023-06-21 00:25:58+1000	action	Drill idled back
2023-06-21 03:37:10+1000	action	pull up 023 drill
2023-06-21 03:45:09+1000	action	Drill to work
2023-06-21 03:58:26+1000	action	Drill parked, out of fuel
2023-06-21 07:04:30+1000	action	Drill started MVE0213
2023-06-21 07:06:22+1000	action	All production equipment in delay for Tool box meeting, only drill and service truck in pit
2023-06-21 07:52:13+1000	action	light vehicles heading out to pit
2023-06-21 08:02:06+1000	action	stopped drill started 110 digger
2023-06-21 08:11:48+1000	action	stopped 110 circuit for noise
2023-06-21 08:16:00+1000	action	started drilling
2023-06-21 08:31:25+1000	action	stopped drill at 8.26. started again at 8.30. all other machines shut down
2023-06-21 08:55:36+1000	action	610 dump dozer started
2023-06-21 09:02:14+1000	action	started 110 and 2 trucks
2023-06-21 09:12:30+1000	action	626, 110 dump dozer started
2023-06-21 09:46:21+1000	action	all allocated equipment running and 110 trucks to dump 6
2023-06-21 10:10:07+1000	action	stopped all west pit
2023-06-21 10:26:39+1000	action	west pit started at 10.15 but stopped again at 10.26
2023-06-21 10:30:35+1000	action	west pit restarted
2023-06-21 11:01:02+1000	action	stopped dozer on dump 6 and sending trucks to dump 2
2023-06-21 11:16:42+1000	action	626 dozer tramping from dump 6 to dump 2
2023-06-21 11:28:09+1000	action	110 hotseat
2023-06-21 12:23:29+1000	action	214 start 12.23 ish
2023-06-21 15:50:23+1000	action	stop 110 circuit and 109 3.50
2023-06-21 15:53:32+1000	action	Start 110 and trucks parking 109
2023-06-21 17:07:04+1000	action	west pit stopped at 17.06
2023-06-21 17:15:35+1000	action	West pit start u17.15
2023-06-21 17:22:11+1000	action	West pit stopped 17.22
2023-06-21 17:31:04+1000	action	West pit to park up 17.30
2023-06-21 18:07:34+1000	action	All units parked at 1800
2023-06-22 06:38:24+1000	action	6.35 Light Vehicle heading out into pit
2023-06-22 07:01:58+1000	action	digger and start up 700
2023-06-22 07:14:45+1000	action	2nd truck sent to 110 digger
2023-06-22 07:29:31+1000	action	Digger circuit stopped 7.29
2023-06-22 07:30:34+1000	action	digger and trucks working 7.30
2023-06-22 07:47:20+1000	action	802 go to dump 7.47
2023-06-22 07:58:57+1000	action	Drill start 7.58
2023-06-22 08:10:07+1000	action	214 and trucks start up 8.10
2023-06-22 08:10:34+1000	action	706 grader started
2023-06-22 08:15:21+1000	action	all the dozers started
2023-06-22 08:29:45+1000	action	407 to digger 8.30
2023-06-22 09:16:19+1000	action	stopped west pit at 9.07 and restarted at 9.09 when internet and servers were back up to monitor noise.
2023-06-22 09:30:49+1000	action	626 to dump 6
2023-06-22 09:59:24+1000	action	110 trucks to dump 2, 626 stopped
2023-06-22 10:02:06+1000	action	626 started and 110 trucks back to dump 6
2023-06-22 11:53:10+1000	action	server patch update had noise system down between 10.56 and 11.18. All compliant during outage.
2023-06-22 11:54:04+1000	action	trucks and workers in park in Acland just left after an hour or so of digger works.
2023-06-22 11:59:38+1000	action	drill tramping from MVE0213 to MVE0105
2023-06-22 13:17:05+1000	action	drill starting at MVE0105
2023-06-22 14:41:35+1000	action	110 trucks to dump 2 to drop noise
2023-06-22 14:46:25+1000	action	stopped and then restarted west pit and drill for the last minute of period
2023-06-22 14:59:26+1000	action	all west pit and drill stopped
2023-06-22 15:01:08+1000	action	drill and all west pit started again
2023-06-22 16:38:11+1000	action	blocker truck in position at drill
2023-06-22 17:46:23+1000	action	7.35 pulled up all west pit and drill
2023-06-22 17:46:53+1000	action	started trucks and digger to park up and drill to reposition
2023-06-22 17:51:02+1000	action	Drill and Digger parked
2023-06-22 17:57:11+1000	action	all mine equipment to be stopped and idled down by 6.00
2023-06-22 22:30:04+1000	action	started 109 digger at 10.20 pm
2023-06-22 22:30:37+1000	action	stopped 109 digger at 10.30 pm
2023-06-22 22:45:50+1000	action	started 109 digger 10.35 pm
2023-06-22 23:07:58+1000	action	stopped 109 digger
2023-06-22 23:16:36+1000	action	started 109 digger
2023-06-22 23:33:07+1000	action	stop 109 digger at 11.33pm
2023-06-22 23:45:53+1000	action	start 109 digger 11.45 pm
2023-06-22 23:53:28+1000	action	109 stopped for night due to noise limits
2023-06-23 07:01:27+1000	action	grader started 7.00
2023-06-23 07:04:55+1000	action	Dozers start up 7.05
2023-06-23 07:26:07+1000	action	214 started to do cleanup
2023-06-23 07:40:09+1000	action	stopped grader and tiger on road cleanup at 7.35 for noise
2023-06-23 07:40:33+1000	action	workshop moving some gear into shed and up to brake test area
2023-06-23 07:45:23+1000	action	802 start up 7.45
2023-06-23 07:56:10+1000	action	both tiger and grader working on cleanup in west pit
2023-06-23 08:08:22+1000	action	Drill running a pump for water 8.08
2023-06-23 08:10:07+1000	action	214 and trucks start 8.10
2023-06-23 08:58:51+1000	action	706 start up 8.58
2023-06-23 09:25:28+1000	action	Digger and 415 start 9.25
2023-06-23 09:30:52+1000	action	704 started 9.30
2023-06-23 09:50:44+1000	action	another 2 x 110 trucks joining circuit.
2023-06-23 09:51:59+1000	action	214 and trucks working 9.51
2023-06-23 10:21:03+1000	action	802 tiger swapping to 626
2023-06-23 17:13:58+1000	action	211 heading to MVE
2023-06-23 17:32:15+1000	action	407 Parked 17.32
2023-06-23 18:00:10+1000	action	gear heading to park up positions 1800
2023-06-23 19:07:05+1000	action	109 digger starting work
2023-06-23 19:40:50+1000	action	611 dozer starting up
2023-06-23 20:12:58+1000	action	stopped and park up 611 dozer
2023-06-23 20:55:02+1000	action	volvo loader wash plant in pit

Time	Event Type	Message
2023-06-23 21:56:40+1000	action	109 shutting down
2023-06-24 00:16:59+1000	action	11.55 pm 706 grader working
2023-06-24 02:57:52+1000	action	706 grader parked
2023-06-24 07:02:36+1000	action	Move truck into position in front of drill.
2023-06-24 07:17:16+1000	action	drill starting at idle, blocker truck in position
2023-06-24 07:21:46+1000	action	drill test over noise limit so shut down
2023-06-24 07:23:19+1000	action	Start 214 circuit idling and warm up.
2023-06-24 07:31:24+1000	action	214 circuit start loading, swamp dozer started.
2023-06-24 07:40:02+1000	action	Start 610 in 1st gear.
2023-06-24 07:44:21+1000	action	Start drill for another noise level test.
2023-06-24 07:48:23+1000	action	Drill start drilling.
2023-06-24 07:51:52+1000	action	start 609
2023-06-24 07:55:38+1000	action	706 start work.
2023-06-24 08:08:36+1000	action	8:05 stop pit.
2023-06-24 08:13:26+1000	action	start drill
2023-06-24 08:15:00+1000	action	start 214 circuit, swapy, 609, swamy, 610
2023-06-24 08:18:10+1000	action	Start 706
2023-06-24 08:30:59+1000	action	stopped drill at 8.28 and started again and 8.30 for noise
2023-06-24 08:32:53+1000	action	swamy and 609 can use 2nd gear.
2023-06-24 08:34:18+1000	action	Start 110 @ idle.
2023-06-24 08:44:25+1000	action	211 started building bunding in South pit.
2023-06-24 08:53:47+1000	action	412 truck sent to 110 digger.414, 415 idling.
2023-06-24 08:58:15+1000	action	414,415 started
2023-06-24 08:59:27+1000	action	008 water tuck started.
2023-06-24 09:08:27+1000	action	802 tiger started
2023-06-24 09:10:37+1000	action	626 started, 110 trucks start running to dump 6.
2023-06-24 09:43:26+1000	action	626 using 2nd gear.
2023-06-24 10:55:01+1000	action	drill starting up after breakdown
2023-06-24 10:58:05+1000	action	drill broken down again
2023-06-24 10:58:56+1000	action	Drill broken down from 9:37am
2023-06-24 11:10:34+1000	action	Drill started again.
2023-06-24 11:30:13+1000	action	110 circuit up and running after breakdown and crib break.
2023-06-24 11:32:47+1000	action	Drill down.
2023-06-24 12:02:52+1000	action	214 circuit and units on crib @ 11am ish.
2023-06-24 16:43:55+1000	action	Units on crib around 4pm.
2023-06-24 19:24:30+1000	action	Moving truck on drill pattern
2023-06-24 19:26:21+1000	action	Tramming 109 to MVE2/11
2023-06-24 19:29:05+1000	action	502 in position and shutdown
2023-06-24 19:33:06+1000	action	stopped 109 and drill
2023-06-24 19:36:28+1000	action	started tramming 109 again
2023-06-24 19:39:56+1000	action	Drill moving position at low idle
2023-06-24 19:43:04+1000	action	Drill started on high revs drilling next hole
2023-06-24 19:58:38+1000	action	Truck back in position behind drill and shutdown
2023-06-24 20:27:36+1000	action	109 starting to rake batter MVE2/11
2023-06-24 21:54:09+1000	action	stopped 109
2023-06-24 21:59:21+1000	action	started drill
2023-06-24 22:00:34+1000	action	started 109
2023-06-24 22:05:44+1000	action	stopped 109 and drill
2023-06-24 22:15:06+1000	action	started drill
2023-06-24 22:42:45+1000	action	stopped drill
2023-06-24 22:46:31+1000	action	started drill
2023-06-24 22:57:05+1000	action	stopped drill
2023-06-24 23:02:24+1000	action	start drill
2023-06-24 23:17:49+1000	action	drill stopped for crib break
2023-06-24 23:27:41+1000	action	109 started
2023-06-24 23:46:50+1000	action	starting drill
2023-06-25 00:48:10+1000	action	stopped drill
2023-06-25 00:59:19+1000	action	Start drill
2023-06-25 01:02:13+1000	action	stop drill
2023-06-25 01:24:19+1000	action	testing drill at high revs
2023-06-25 01:25:52+1000	action	starting to drill
2023-06-25 01:48:58+1000	action	stopped drill
2023-06-25 01:55:33+1000	action	start drill
2023-06-25 02:11:41+1000	action	stopped drill
2023-06-25 02:15:10+1000	action	start drill
2023-06-25 02:21:42+1000	action	stopped drill
2023-06-25 02:27:31+1000	action	109 finished and shutdown
2023-06-25 02:29:30+1000	action	start drill
2023-06-25 02:35:31+1000	action	stop drill
2023-06-25 02:45:09+1000	action	start drill
2023-06-25 03:13:39+1000	action	Start drill
2023-06-25 03:37:55+1000	action	stop drill
2023-06-25 03:44:40+1000	action	start drill
2023-06-25 03:52:52+1000	action	Drill stopped
2023-06-25 03:57:18+1000	action	Drill and 502 shutdown
2023-06-25 04:06:36+1000	action	start 502 and move into place
2023-06-25 04:09:55+1000	action	start drill and tram at low idle
2023-06-25 04:20:27+1000	action	Drill high revs and drilling 4:19am
2023-06-25 04:23:33+1000	action	drill stopped and shutdown
2023-06-25 04:24:12+1000	action	502 shutdown
2023-06-25 04:31:38+1000	action	All mine machines shutdown by 4:25am
2023-06-25 07:01:22+1000	action	Start 214 trucks and send to loader.
2023-06-25 07:02:24+1000	action	Start 609 in 1st gear.
2023-06-25 07:06:48+1000	action	Start 214 loader.
2023-06-25 07:11:38+1000	action	Start 214 loading.
2023-06-25 07:16:39+1000	action	Stap 214 to start drill first. Start swamy.
2023-06-25 07:31:18+1000	action	Start 214 circuit loading.
2023-06-25 07:35:53+1000	action	610 start in 1st gear.
2023-06-25 07:42:54+1000	action	214 broken down. Circuit stopped.

Time	Event Type	Message
2023-06-25 07:43:42+1000	action	110 circuit started at idle.
2023-06-25 07:51:54+1000	action	110 circuit start loading with 1 truck.
2023-06-25 07:59:10+1000	action	stop 110 circuit.
2023-06-25 08:00:53+1000	action	Start 110 circuit.
2023-06-25 08:06:01+1000	action	216 started for bucket calibration.
2023-06-25 08:14:14+1000	action	Stop 110 circuit.
2023-06-25 08:15:42+1000	action	Start 110 circuit.
2023-06-25 08:22:02+1000	action	211 circuit starting.
2023-06-25 08:29:13+1000	action	start 802
2023-06-25 08:43:45+1000	action	706 starting work
2023-06-25 09:04:14+1000	action	110 circuit start running to dump 6.
2023-06-25 09:04:54+1000	action	8:43am All allocated units running.
2023-06-25 09:12:19+1000	action	Move truck away from.
2023-06-25 09:17:52+1000	action	Moved truck away from drill.
2023-06-25 09:27:58+1000	action	626 started, 802 stopped for dump requirements.
2023-06-25 10:38:18+1000	action	10:25am drill broken down.
2023-06-25 11:21:23+1000	action	110 excavator down from 10:59 getting ac looked at.
2023-06-25 11:23:35+1000	action	11:19 110 excavator up and loading again.
2023-06-25 16:22:47+1000	action	110 Excavator don from 12:41- 4:17pm air conditioner getting fixed. Back running again @ 4:18pm
2023-06-25 16:23:41+1000	action	units had crib @ 11am and 3:45ish
2023-06-25 17:54:02+1000	action	214 circuit, 609, 626, 211, 008, 706, parking up by 6pm. dozers back to 1st gear.
2023-06-25 19:50:36+1000	action	started 609 and 706
2023-06-25 20:28:49+1000	action	609 parked up and shutdown
2023-06-25 22:31:42+1000	action	706 parked and shutdown
2023-06-25 23:27:02+1000	action	start 502 and backed up to drill
2023-06-25 23:41:54+1000	action	stopped drill
2023-06-25 23:45:11+1000	action	Start drill
2023-06-26 00:18:38+1000	action	start 706
2023-06-26 00:47:32+1000	action	stop drill
2023-06-26 00:48:50+1000	action	start drill no difference to east reading
2023-06-26 00:55:38+1000	action	stop drill
2023-06-26 00:59:34+1000	action	start drill
2023-06-26 01:10:56+1000	action	stop drill
2023-06-26 01:14:32+1000	action	start drill
2023-06-26 03:25:42+1000	action	Drill shutdown out of fuel
2023-06-26 03:56:50+1000	action	706 parked and shutdown
2023-06-26 07:02:06+1000	action	Swampy dozer started, 319 sent to work shop.
2023-06-26 07:04:08+1000	action	214 circuit and 610 started
2023-06-26 07:14:58+1000	action	Start drill 23 for noise test.
2023-06-26 07:20:09+1000	action	drill started drilling.
2023-06-26 07:26:15+1000	action	110 circuit started at idle to warm up.
2023-06-26 07:30:43+1000	action	110 circuit started with 1 truck.
2023-06-26 07:33:14+1000	action	Start 008
2023-06-26 07:39:09+1000	action	Start 412,415 on 110 circuit, 609 started 1st gear.
2023-06-26 07:45:53+1000	action	start 706 and 802.
2023-06-26 07:50:18+1000	action	408 started, 609 down.
2023-06-26 07:50:22+1000	action	drill stopped to break rods apart with boily
2023-06-26 08:05:11+1000	action	All dozers can use 2nd gear.
2023-06-26 09:40:58+1000	action	8:28am drill back up and running after break down. 8:13am 609 started after break down.
2023-06-26 11:54:56+1000	action	611 started work.
2023-06-26 13:53:36+1000	action	Drill 23 stopped to get hydraulic oil.
2023-06-26 13:56:36+1000	action	Wash plant, plant 1 started for testing.
2023-06-26 13:59:02+1000	action	Units went on crib around 11am. Shot fired in MVE pit at 11:33am, Units back from crib around 11:45am.
2023-06-26 14:19:29+1000	action	Drill 23 start again after getting hydraulic oil.
2023-06-26 15:44:53+1000	action	Drill trammng from Western end of MVE pit to Eastern end of MVE pit to start drilling.
2023-06-26 16:44:01+1000	action	Units on crib around 4pm.
2023-06-26 17:24:15+1000	action	008 Water truck stopping by 6pm.
2023-06-26 17:50:37+1000	action	611, 706, 609 stopping by 6pm
2023-06-26 18:13:16+1000	action	Drill starting drilling after his shift change.
2023-06-26 19:24:35+1000	action	706 grader started
2023-06-26 19:35:20+1000	action	drill stopped brakedown
2023-06-26 19:56:11+1000	action	706 grader stopped
2023-06-26 19:58:20+1000	action	216 loader starting
2023-06-26 20:06:01+1000	action	drill started
2023-06-26 20:34:53+1000	action	drill and 216 stopped 8.31 pm
2023-06-26 20:36:08+1000	action	start drill and 216
2023-06-26 20:47:29+1000	action	stopped drill and 216
2023-06-26 20:50:23+1000	action	706 grader stopped
2023-06-26 20:51:28+1000	action	drill started
2023-06-26 20:59:55+1000	action	started 706
2023-06-26 21:24:20+1000	action	stop drill and 706
2023-06-26 21:28:18+1000	action	706 start
2023-06-26 21:38:44+1000	action	start drill and 706 to west pit and other jobs
2023-06-26 22:02:19+1000	action	stop shut down drill
2023-06-26 22:04:06+1000	action	start drill
2023-06-26 22:15:03+1000	action	drill and 706 stut down
2023-06-26 22:22:51+1000	action	start drill
2023-06-26 22:27:00+1000	action	grader 706 shut down
2023-06-26 22:54:01+1000	action	start drill back up
2023-06-26 23:04:44+1000	action	706 starting up
2023-06-27 02:00:46+1000	action	stopped 706 at 1.54 and stopped drill at 1.57am
2023-06-27 02:03:49+1000	action	started 706
2023-06-27 02:04:45+1000	action	start drill
2023-06-27 02:50:04+1000	action	stopped 706 and drill
2023-06-27 03:06:03+1000	action	stop drill and 706
2023-06-27 03:41:34+1000	action	706 parked up
2023-06-27 04:15:00+1000	action	star drill
2023-06-27 04:33:07+1000	action	shut down drill
2023-06-27 04:46:24+1000	action	all mine machines shut down 4.40 am approx.

Time	Event Type	Message
2023-06-27 07:03:46+1000	action	Swampy dozer started in 1st gear.
2023-06-27 07:05:32+1000	action	110 broken down
2023-06-27 07:05:54+1000	action	216 starting with 1 truck as a test
2023-06-27 07:12:23+1000	action	109 started
2023-06-27 07:18:56+1000	action	All trucks joining 216 circuit.
2023-06-27 07:19:47+1000	action	Start 611 dozer.
2023-06-27 07:26:10+1000	action	706, 008 and 626 started work
2023-06-27 07:40:00+1000	action	Start 626 for testing. Start drill 23.
2023-06-27 07:48:40+1000	action	110 started for noise test.
2023-06-27 07:50:42+1000	action	110 trucks started to warm up and 1 sent to digger. 110 circuit started with 1 truck.
2023-06-27 08:30:18+1000	action	Dozers use 2nd gear.
2023-06-27 09:19:01+1000	action	All allocated units were able to run by 8:15am
2023-06-27 09:28:34+1000	action	610 started work.
2023-06-27 13:03:43+1000	action	Drill stopped for bit change. units on crib around 11am and returned around 11:50am.
2023-06-27 15:24:17+1000	action	006 water truck started work.
2023-06-27 16:21:45+1000	action	Units on crib around 4pm. Drill fixed and tramping from MVE0213 to MVE0107 to start new pattern.
2023-06-27 16:25:21+1000	action	006 Water truck told to stay out of West pit due to anticipated noise levels.
2023-06-27 17:50:34+1000	action	706, 006,008 stopping by 6pm.
2023-06-27 17:51:12+1000	action	5:33 drill 23 started drilling.
2023-06-27 18:09:28+1000	action	All other units in pit were ok to run to end of shift noise wise.
2023-06-27 18:10:57+1000	action	All units except drill 23 will be pulled up by 6:30pm. Drill still running.
2023-06-27 19:17:57+1000	action	drill stopped
2023-06-27 19:43:29+1000	action	start drill
2023-06-27 20:10:17+1000	action	706 grader started
2023-06-27 20:25:51+1000	action	stopped drill and grader 706
2023-06-27 20:31:27+1000	action	start 706 send to south pit
2023-06-27 20:42:35+1000	action	start 502 and drill back up
2023-06-27 22:22:52+1000	action	drill down brakedown
2023-06-27 22:31:26+1000	action	drill down brakedown possible for rest of shift
2023-06-27 22:56:36+1000	action	706 stopped



Appendix C Attended Noise Analysis to Determine Mine Spectra Contribution

New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

SLR Project No.: 620.10963.01001

10 August 2023

Historically, in conducting compliance noise survey's at NAC, SLR has undertaken frequency analysis from representative attended noise measurements where NAC mine noise has been clearly audible (or dominant) to determine those frequencies dominated by NAC contributions and assist in providing a suitable 'filter' for the analysis of the unattended noise logging. These historical attended measurements were typically during the night-time period with low or negligible ambient noise source contribution (ie wind noise, insects, traffic etc).

In-lieu of such attended measurement data being readily available for this June 2023 monitoring period, a frequency analysis was completed on the LAeq,1min one-third spectrums from a number of night-time attended noise measurements associated with the performance monitoring station correlation survey⁶ that, via a detailed review of available one-third octave band data and audio recordings, were determined to represent mine dominant periods. A summary of this analysis is contained within Table C1 (Northern Noise Compass) and Table C2 (Acland Noise Compass).

Table C1 Frequency Analysis of Mine Noise – Northern Noise Compass

Logarithmic Sum of Frequency Range (LAeq,1min dBA)				
Total	20 Hz to 1.0 kHz	20 Hz to 630 kHz	Difference – Total to ≤ 1 kHz	Difference – Total to ≤ 630 Hz
41.8	41.5	40.7	0.3	1.1
30.6	29.7	28.5	0.9	2.1
35.3	34.8	34.2	0.5	1.1
37.8	37.5	36.7	0.3	1.1
38.2	37.9	37.3	0.3	0.9
38.3	37.9	37.3	0.4	1.0
34.9	34.6	34.1	0.3	0.8
37.2	37.0	36.5	0.2	0.7
30.1	29.5	28.5	0.6	1.6
30.4	29.9	29.1	0.5	1.3
30.5	29.7	28.8	0.8	1.7
28.5	27.6	26.4	0.9	2.1
29.4	28.6	27.6	0.8	1.8
25.9	24.0	23.0	1.9	2.9
26.6	25.1	24.2	1.5	2.4
27.5	26.1	25.0	1.4	2.5
32.0	31.5	30.4	0.5	1.6
35.3	35.0	34.2	0.3	1.1
39.6	38.9	37.1	0.7	2.5
37.3	36.6	34.9	0.7	2.4
43.6	43.2	41.9	0.4	1.7
Average			0.7	1.6

Note: Numbers have been reported to 1 decimal place to facilitate this frequency analysis discussion.

⁶ The analysis undertaken for the performance monitoring station correlation surveys focused on total mine noise versus mine contribution in the range of 100 Hz to 630 Hz one-third octave band as this is the range that the directional components of the performance monitoring stations measure in. The data from these surveys has been reanalysed to cover the filters applicable to this current study (ie the inclusion of one-third octave bands below 100 Hz).



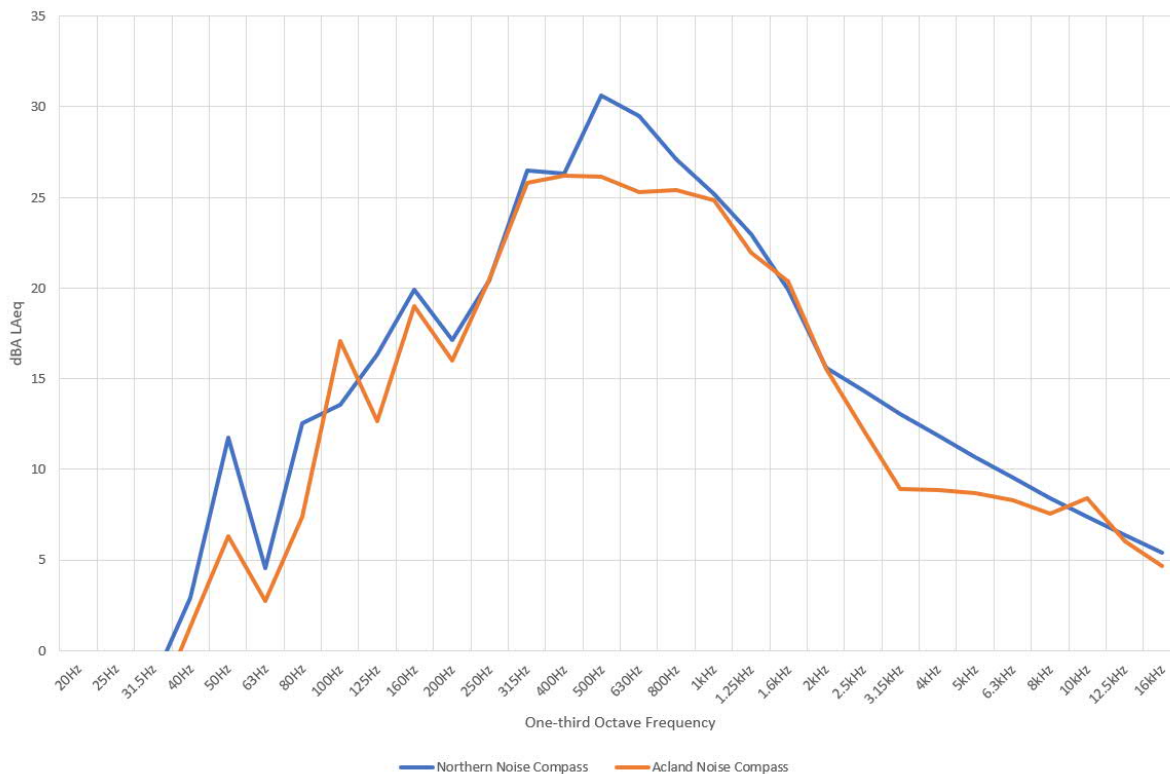
Table C2 Frequency Analysis of Mine Noise – Acland Noise Compass

Logarithmic Sum of Frequency Range (L _{Aeq,1min} dBA)				
Total	20 Hz to 1.0 kHz	20 Hz to 630 kHz	Difference – Total to ≤ 1 kHz	Difference – Total to ≤ 630 Hz
33.6	33.1	29.3	0.5	4.3
27.0	26.1	23.3	0.9	3.7
28.6	27.9	24.9	0.7	3.7
28.3	26.9	25.2	1.4	3.1
30.1	29.0	27.0	1.1	3.1
37.5	36.8	34.9	0.7	2.6
33.1	32.7	31.0	0.4	2.1
36.7	35.9	34.5	0.8	2.2
31.1	30.4	28.6	0.7	2.5
30.5	29.8	28.6	0.7	1.9
32.5	31.9	30.3	0.6	2.2
33.6	33.2	30.9	0.4	2.7
33.0	32.5	31.2	0.5	1.8
33.0	32.5	30.7	0.5	2.3
33.9	32.7	30.5	1.2	3.4
34.0	33.4	32.1	0.6	1.9
33.9	32.3	30.9	1.6	3.0
41.0	40.5	39.7	0.5	1.3
33.7	33.0	31.9	0.7	1.8
40.9	40.6	39.6	0.3	1.3
28.2	27.2	26.5	1.0	1.7
30.1	29.3	28.3	0.8	1.8
31.3	30.5	29.2	0.8	2.1
33.6	33.1	31.9	0.5	1.7
34.4	33.7	32.4	0.7	2.0
37.8	37.4	36.0	0.4	1.8
36.1	35.6	34.9	0.5	1.2
30.2	29.5	28.6	0.7	1.6
31.8	31.2	30.4	0.6	1.4
34.7	34.1	33.0	0.6	1.7
Average			0.7	2.3

Note: Numbers have been reported to 1 decimal place to facilitate this frequency analysis discussion.



Figure C1 Frequency Analysis of Mine Noise – Average NAC Attributable Noise Spectrum (LAeq,1min) – Northern Noise Compass and Acland Noise Compass



Through the frequency analysis summarised in Table C1 and Table C2, and the above summation of Figure C1, it was considered that filters at ≤ 630 Hz or ≤ 1 kHz were suitable to initially filter all the unattended noise data to determine NAC attributable noise.

SLR notes that this current analysis is based on 1-minute LAeq noise levels, however is being applied to 15-minute LAeq noise levels. The range in 1-minute LAeq noise levels are however considered to be representative of the overall LAeq range of NAC attributable noise detected during this June 2023 monitoring round. Further, for generally steady-state mine operations, the 15-minute LAeq noise level would typically be close to the average noise level of the 1-minute LAeq (although with the LAeq being an 'energy equivalent', it becomes elevated above an average noise level where short, high energy events are detected).

To assist this analysis further, the following is noted based on the summaries provided in Table C1 and Table C2:

- There tends to be an inverse relationship between overall mine noise level and correction values for both filters – that is where higher mine components were measured, the corrections were lower, and conversely where lower mine components were measured, the corrections were higher. It is the former that indicates the correction values reported and used for this monitoring period as being conservative – as NAC mine attributable noise levels approach noise levels of 35 dBA and 42 dBA LAeq (ie the NAC mine noise limits), the correction values are typically at or lower than the average correction values used for this monitoring period.
- The correction values utilised in this monitoring period are based on an average of all individual 1-minute values. When all measured mine component noise levels for a compass location are averaged, and differences calculated (ie correction values), they are equal to or 0.1 dB less than the average of individual 1-minute correction values. This is likely due to negligible variations in rounding. However, when all measured mine component noise levels for a compass location are logarithmically-averaged, and differences calculated (ie correction values), the values are 0.1 dB to 0.4 dB lower than the average of individual



1-minute correction values. Therefore the average approach adopted is considered conservative as it results in higher correction values.

- If a 75th percentile correction value was to be adopted in-lieu of the currently used average, the ≤ 630 Hz correction values would increase by 0.4 dB to 0.5 dB depending on the referenced noise compass data set, while the ≤ 1 kHz correction values would be equal to, or increase by 0.1 dB depending on the referenced noise compass data set. With reference to NML1, being the monitoring location with highest NAC mine attributable noise levels detected for this monitoring period, these changes are not considered to materially change the noise levels, nor result in reported noise levels of up to 41 dBA $L_{Aeq,15min,adj}$ exceeding the 42 dBA $L_{Aeq,15min,adj}$ noise limit.

The ≤ 630 Hz one-third octave band forms the primary filter for all compliance monitoring locations due to mine noise has generally been detectable within this frequency range (or theoretically detectable) noting the distance many location are setback from NAC. The exception is NML1 where both filters have been considered due to the proximity of this location to NAC operations and that mine noise can be clearly measured at contributing noise levels in the frequency range of 800 Hz and 1 kHz and not solely ≤ 630 Hz.

In concluding this review, this analysis and associated frequency filter correction values may be reviewed and revised for future monitoring rounds (including when mine operations move to 24-hour operations and rail activities commence), however it is not proposed to reanalyse historical data if and when such conditions change.





Appendix D Attended Noise Monitoring Summary

New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

SLR Project No.: 620.10963.01001

10 August 2023

Table D1 Attended Noise Monitoring Results – June 2023

Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
NML1	07/06/23 7:45 am (BH)	67	55	48	33	44	30	NAC audible (steady engine noise, occasional whirs) Below noise levels contained in EA Schedule F - Table F1. Constant bird calls dominant, plane flyover event for 2 minutes. Occasional dog bark.
	07/06/23 10:00 am (BH)	68	60	52	35	49	38	NAC audible (steady engine noise from haul trucks) Below noise levels contained in EA Schedule F - Table F1. Bird calls and wind in trees dominant. Helicopter flyover audible for 3 minutes and car passby audible for 2 minutes.
	07/06/23 4:45 pm (BH)	60	53	45	38	43	38	NAC audible (steady engine noise from haul trucks, occasional gearbox whine 630-800 Hz) Below noise levels contained in EA Schedule F - Table F1. Bird calls and wind in trees also audible. Plane flyover audible for 3 minutes.
NML4	07/06/23 9:15 am (ST)	70	60	54	40	51	Mine Noise Inaudible	NAC inaudible Bird calls and wind dominant. RTN and air traffic audible for 3 minutes.
	07/06/23 1:00 pm (ST)	63	54	45	33	43	Mine Noise Inaudible	NAC inaudible Bird calls and RTN dominant. Birds calls audible for 1 minute. Faint and distant air traffic was audible.
	07/06/23 1:30 pm (ST)	54	50	47	31	42	Mine Noise Inaudible	NAC inaudible Distant RTN and birds audible for 2 minutes. Wind in trees audible for 1 minute.
NML8	07/06/23 12:00 pm (ST)	76	70	61	43	58	Mine Noise Inaudible	NAC inaudible. RTN and birds dominant. Oakey Cooyar Road in proximity and dominant. Birds and RTN audible for 3



Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
								minutes Wind in trees audible for 2 minutes.
	07/06/23 12:30 pm (ST)	68	61	54	40	51	Mine Noise Inaudible	NAC inaudible RTN from Oakey Cooyar Road, and birds were dominant Intermittent high wind audible. Birds audible for 3 minutes. RTN and wind dominant for 2 minutes.
	07/06/23 5:30 pm (ST)	64	59	54	32	50	Mine Noise Inaudible	NAC inaudible RTN from Oakey Cooyar Road was dominant. Road traffic considerably busy. Insects and wind in trees audible for 2 minutes. Garage shutters and machinery audible for 2 minutes.
NML10	07/06/23 11:00 am (ST)	64	50	43	35	41	Mine Noise Inaudible	NAC inaudible Distant RTN audible. Dominant in mid-range frequencies. Birds and Door slamming audible for 2 minutes. Constant RTN audible from Oakey Cooyar Road. Helicopter and RTN dominant for 3 minutes.
	07/06/23 11:30 am (ST)	71	51	44	35	44	Mine Noise Inaudible	NAC inaudible RTN and wind dominant. Wind picked up intermittently during measurement. Dominant heavy vehicle traffic audible for 1 minute. Insects and dog audible for 3 minutes.
	8/06/23 9:15 am (BH)	65	50	44	30	40	Mine Noise Inaudible	NAC inaudible. Birds calls and RTN from Oakey Cooyar Road dominant. Quad bike driving around property and dog panting/running also audible. Plane flyover audible for 3 minutes.
NML11	06/06/23 2:15 pm (BH)	56	51	42	30	40	Mine Noise Inaudible	NAC inaudible.



Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
								Helicopter and light aircraft flyover audible for 4 minutes. Intermittent cow bellows, RTN on Oakey Cooyar Road and occasional gate rattling also audible.
	07/06/23 10:00 am (ST)	67	59	48	33	47	Mine Noise Inaudible	NAC inaudible Cattle noise and wind dominant. Helicopter audible up to 3 minutes. RTN on Oakey Cooyar Road audible.
	07/06/23 10:30 am (ST)	66	50	41	30	39	Mine Noise Inaudible	NAC inaudible Bird calls and RTN from Oakey Cooyar Road dominant. Distant helicopter audible for 1 minute.
NML15	07/06/23 12:15 pm (BH)	55	44	38	30	36	Mine Noise Inaudible	NAC inaudible. Constant bird calls dominant, wind in trees and RTN on Oakey-Cooyar Road also audible. Car in driveway and footsteps audible for 1 minute.
	8/06/23 8:30 am (BH)	54	43	36	26	33	<25	NAC audible (haul trucks) at <25 dBA for first 30 seconds of measurement. Inaudible for remainder of measurement. Below noise levels contained in EA Schedule F - Table F1. RTN from Oakey-Cooyar Road dominant, including low frequency trailer rumble from trucks on worn road surface. Intermittent distant hand drill noise from Energex worker in distance. Plane flyover audible 2 minutes.
	8/06/23 10:15 am (BH)	56	43	37	29	34	Mine Noise Inaudible	NAC inaudible. RTN from Oakey-Cooyar Road dominant, including low frequency trailer rumble from trucks on worn road surface. Wind in trees also audible.



Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
								Plane flyover audible for 2 minutes.
NML16	07/06/23 11:45 am (BH)	58	50	44	32	41	Mine Noise Inaudible	NAC inaudible. Wind in trees and constant birdsong dominant. Car passby on Acland-Silverleigh Road and plane flyover event dominant for short periods. Distant steady state RTN on Oakey-Cooyar Road occasionally audible.
	8/06/23 8:00 am (BH)	67	54	39	26	42	Mine Noise Inaudible	NAC inaudible. Cows and constant bird calls dominant. Distant RTN from Oakey-Cooyar Road also audible. Plane flyover audible for 2 minutes. Car passby audible for 1 minute.
	8/06/23 9:45 am (BH)	55	47	38	26	35	Mine Noise Inaudible	NAC inaudible. Constant crow bellows and wind in trees dominant. Distant RTN from Oakey-Cooyar Road and cows grazing also audible.
NML18	07/06/23 11:15 am (BH)	65	57	41	30	43	Mine Noise Inaudible	NAC inaudible. Noise from nearby piggers and steady state RTN on Oakey-Cooyar Road dominant. Plane flyover and car passby events on Greenwood Boah Road audible.
	07/06/23 5:15 pm (BH)	68	61	47	29	47	Mine Noise Inaudible	NAC inaudible. Plane flyover (circles back around) audible for 9 minutes. Intermittent engine and mechanical impact noises from tractor in nearby field. Car and truck passby events on Greenwood Boah Road audible 2 minutes. Distant steady state RTN on Oakey-Cooyar Road also audible.
	8/06/23 7:30 am (BH)	66	56	47	31	44	Mine Noise Inaudible	NAC inaudible. Frequent dog barking and crows dominant.



Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
								Intermittent engine and mechanical impact noises from tractor in nearby field also audible. Plane flyover audible for 2 minutes.
NML34	07/06/23 10:30 am (BH)	64	51	42	32	41	Mine Noise Inaudible	NAC inaudible. Bird calls and wind in trees dominant. Occasional dogs barking and RTN also audible for periods.
	07/06/23 1:15 pm (BH)	54	48	44	32	41	Mine Noise Inaudible	NAC inaudible. Constant bird calls and wind blowing in trees dominant. Plane flyovers audible for 3 minutes. Distant RTN also audible for brief periods.
	07/06/23 3:30 pm (BH)	52	46	43	35	40	Mine Noise Inaudible	NAC inaudible. Bird calls and insects dominant. Wind in trees audible for brief periods.
NML35	07/06/23 8:45 am (BH)	55	47	40	30	37	Mine Noise Inaudible	NAC inaudible. Distant plane flyover and RTN audible. Constant birdsong dominant and occasional wind noise in trees audible.
	07/06/23 1:45 pm (BH)	53	43	39	26	35	Mine Noise Inaudible	NAC inaudible. Birdsong and wind whistling through barn dominant. Plane flyover audible for 2 minutes.
	07/06/23 2:45 pm (BH)	72	68	44	30	53	Mine Noise Inaudible	NAC inaudible. Helicopter flying overhead dominant for 2 minutes. Constant bird calls, wind rushing through barn and cow hoof movement also audible.
NML38	07/06/23 9:15 am (BH)	56	46	43	34	40	Mine Noise Inaudible	NAC Inaudible. Constant bird calls, wind whistling through barn and creaking from windmill dominant. Plane flyover audible for 3 minutes.
	07/06/23 2:15 pm (BH)	55	47	42	31	39	Mine Noise Inaudible	NAC inaudible. Constant bird calls, wind whistling through barn and



Sensitive Receptor Location	Start Date & Time	Measured Noise Level in dB, 15-min					NAC LAeq, adj 15min ¹	Description of Acoustic Environment
		L _{Amax}	L _{A1}	L _{A10}	L _{A90}	L _{Aeq}		
								creaking from windmill dominant. Plane flyover events audible for 4 minutes.
	07/06/23 4:15 pm (BH)	71	66	45	30	51	Mine Noise Inaudible	NAC inaudible. Wind rushing through shed dominant, occasional bird calls and chickens scratching in dirt also audible. Helicopter flyover dominant for 2 minutes.
Background Location	07/06/23 2:15 pm (ST)	47	43	37	29	34	Mine Noise Inaudible	NAC inaudible. High wind RTN from Oakey Cooyar Road was audible.
	07/06/23 2:30 pm (ST)	54	44	39	31	36	Mine Noise Inaudible	NAC inaudible. High wind RTN from Oakey Cooyar Road was audible.
	07/06/23 4:30 pm (ST)	58	51	46	38	43	Mine Noise Inaudible	NAC inaudible. Helicopter, birds and RTN from Oakey Cooyar Road was dominant.

Note 1: This represents the corrected LAeq attributable to NAC noise including any corrections as noted. Where NAC was inaudible, a 'N/A' is noted in this cell.





Appendix E Unattended Noise Monitoring Summary

New Acland Coal – Stage 3 Noise Survey June 2023

New Acland Coal Pty Ltd

SLR Project No.: 620.10963.01001

10 August 2023

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq 15min totals - for Report		Raw LAeq 15min 1/3 Spectrum																															
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (°C)	Humidity (%)	LAMax	LAlmax	LA1	LA10	LA90	LAeq	LAeq 1 kHz (incl +0.7 dB correction)	LAeq 630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz
2023/06/07 07:00	Night	NML1	SVAN 977 SN:90019	1.1	10	0	10.7	100	67	69	58	52	36	48	36	23	Comments (dominant/noteworthy sources).																													
2023/06/07 07:15	Day	NML1	SVAN 977 SN:90019	2.5	112	0	11.4	100	64	66	58	51	36	47	35	-14	-10	-6	6	5	5	7	7	6	7	6	8	12	15	17	21	27	34	42	42	41	35	36	39	36	35	26	19	9	2	
2023/06/07 07:30	Day	NML1	SVAN 977 SN:90019	2.9	117	0	12	100	66	67	59	52	35	48	36	-12	-8	-3	5	11	13	12	9	9	11	12	15	18	19	22	26	32	41	41	41	40	33	37	37	35	29	23	16	7	1	
2023/06/07 07:45	Day	NML1	SVAN 977 SN:90019	2.5	103	0	13.1	99	65	67	59	52	35	48	35	-11	-2	0	7	10	13	17	21	17	14	15	14	17	20	24	25	27	33	43	43	42	34	34	35	28	21	13	6	2		
2023/06/07 08:00	Day	NML1	SVAN 977 SN:90019	2.9	111	0	14	93	70	72	55	48	33	45	36	-10	-2	4	10	12	15	19	22	25	24	25	23	26	29	31	32	30	31	41	41	41	33	32	40	38	34	27	21	11	2	
2023/06/07 08:15	Day	NML1	SVAN 977 SN:90019	3.6	110	0	14	94	74	77	57	46	32	47	36	-11	-5	2	11	9	9	15	16	21	16	14	23	20	28	28	26	27	27	33	38	38	29	33	36	35	30	20	13	5	2	
2023/06/07 08:30	Day	NML1	SVAN 977 SN:90019	3.6	107	0	14.8	89	72	77	56	44	32	44	35	-10	-4	4	10	10	14	18	20	21	21	22	23	23	25	27	27	27	29	34	35	33	33	34	45	36	28	27	22	15	4	
2023/06/07 08:45	Day	NML1	SVAN 977 SN:90019	4.7	101	0	15.2	87	63	65	56	45	32	43	33	-8	-4	3	7	11	15	18	22	27	25	27	27	27	33	32	30	29	28	31	30	31	29	30	37	30	26	20	12	6	2	
2023/06/07 09:00	Day	NML1	SVAN 977 SN:90019	5.8	81	0	15.7	82	70	71	63	47	33	48	36	8	7	5	18	21	25	24	29	29	28	29	34	36	38	40	38	38	37	39	38	36	31	30	32	27	20	11	5	2		
2023/06/07 09:15	Day	NML1	SVAN 977 SN:90019	4.7	90	0	15.8	82	71	72	66	50	33	51	37	9	5	12	18	22	24	22	27	29	31	35	34	36	39	42	42	42	41	42	42	41	42	42	41	37	34	27	22	15	7	2
2023/06/07 09:30	Day	NML1	SVAN 977 SN:90019	9.0	82	0	16.5	75	60	63	50	44	37	42	38	-4	0	3	7	13	18	21	25	20	20	23	21	24	27	29	30	30	30	30	30	31	30	29	30	34	31	28	24	18	9	3
2023/06/07 09:45	Day	NML1	SVAN 977 SN:90019	8.6	86	0	16.5	72	75	76	59	50	39	49	46	3	13	4	13	25	23	26	25	26	24	27	31	36	38	37	36	37	35	35	38	37	34	31	45	38	29	28	22	13	4	
2023/06/07 10:00	Day	NML1	SVAN 977 SN:90019	7.9	82	0	18	66	74	75	57	46	36	49	38	4	4	4	10	11	14	17	18	18	20	20	22	26	28	30	31	31	31	31	32	36	37	38	46	37	31	29	23	14	5	
2023/06/07 10:15	Day	NML1	SVAN 977 SN:90019	9.0	77	0	16.9	67	68	69	60	52	35	49	39	3	11	4	11	20	17	20	21	19	21	22	24	28	30	31	32	33	41	44	43	33	32	31	25	18	10	3				
2023/06/07 10:30	Day	NML1	SVAN 977 SN:90019	7.2	90	0	17.1	67	67	72	49	43	37	41	38	1	5	5	8	13	13	18	22	21	22	20	21	24	26	30	31	31	32	32	31	28	28	29	29	27	24	18	9	3		
2023/06/07 10:45	Day	NML1	SVAN 977 SN:90019	9.0	89	0	17.5	63	89	91	62	45	38	58	39	-4	0	4	7	12	11	14	18	16	17	19	22	26	28	31	34	35	41	50	55	51	40	40	41	43	45	37	32	18	4	
2023/06/07 11:00	Day	NML1	SVAN 977 SN:90019	7.9	89	0	17.7	62	70	72	55	44	37	44	38	-4	0	3	9	13	17	18	19	17	16	19	22	24	27	29	31	31	31	31	38	37	36	31	32	31	28	25	18	10	3	
2023/06/07 11:15	Day	NML1	SVAN 977 SN:90019	7.9	90	0	18.8	58	62	64	50	44	36	42	38	-4	0	4	8	11	12	15	17	16	17	19	22	24	27	30	32	32	31	32	31	29	28	35	28	27	25	23	17	9	3	
2023/06/07 11:30	Day	NML1	SVAN 977 SN:90019	7.2	87	0	19.4	54	60	61	51	43	35	41	37	-6	0	4	7	11	12	16	17	16	17	18	19	22	25	28	30	30	29	30	33	32	29	31	29	29	27	24	18	9	3	
2023/06/07 11:45	Day	NML1	SVAN 977 SN:90019	9.7	84	0	19.4	53	71	73	54	45	38	45	37	3	7	3	10	13	16	24	25	17	21	22	21	23	25	28	29	29	29	31	37	37	34	36	36	37	32	29	22	12	4	
2023/06/07 12:00	Day	NML1	SVAN 977 SN:90019	10.8	68	0	19.5	52	80	63	51	46	37	43	38	4	8	3	13	17	19	23	22	22	22	22	22	24	26	28	29	30	30	32	37	36	30	29	29	28	27	24	19	12	6	
2023/06/07 12:15	Day	NML1	SVAN 977 SN:90019	8.6	69	0	19.9	51	81	63	47	42	35	40	36	-2	0	4	9	12	18	14	16	19	19	18	20	22	25	27	28	29	31	32	30	28	31	29	28	26	26	22	16	10		
2023/06/07 12:30	Day	NML1	SVAN 977 SN:90019	10.8	63	0	20	49	58	61	50	45	36	42	38	0	3	5	10	12	13	18	22	17	17	19	22	25	27	29	32	32	34	34	32	32	34	32	27	27	25	20	13	6		
2023/06/07 12:45	Day	NML1	SVAN 977 SN:90019	7.9	72	0	20.4	50	66	69	53	43	36	43	37	-7	-2	2	6	9	18	13	17	15	17	19	22	24	27	29	29	30	32	35	38	30	27	26	25	23	21	15	8	3		
2023/06/07 13:00	Day	NML1	SVAN 977 SN:90019	7.6	73	0	20.6	49	68	71	51	45	37	43	38	-1	1	4	11	12	14	13	19	17	18	21	22	25	27	29	30	31	31	32	37	35	30	30	31	33	29	26	20	12	4	
2023/06/07 13:15	Day	NML1	SVAN 977 SN:90019	10.1	69	0	20.3	49	52	54	47	42	35	40	37	-5	0	4	10	12	14	15	21	29	20	19	23	23	26	28	29	30	30	30	30	29	28	25	24	24	24	23	22	17	11	5
2023/06/07 13:30	Day	NML1	SVAN 977 SN:90019	9.0	68	0	19.9	50	68	70	63	45	33	48	37	-5	-1	4	9	11	12	14	36	40	33	33	36	33	35	36	36	37	36	34	30	31	31	29	29	29	24	17	11	3		
2023/06/07 13:45	Day	NML1	SVAN 977 SN:90019	10.8	55	0	20.3	48	58	60	46	42	35	40	36	-4	0	5	10	12	13	15	17	17	18	20	21	24	26	29	30	30	30	29	29	27	26	31	25	25	24	23	17	9	3	
2023/06/07 14:00	Day	NML1	SVAN 977 SN:90019	9.0	49	0	20.1	49	68	70	45	40	34	39	36	-5	-1	4	9	13	12	15	16	16	16	18	19	22	24	27	28	29	28	27	24	26	26	28	26	20	14	7	2			
2023/06/07 14:15	Day	NML1	SVAN 977 SN:90019	9.4	48	0	20.4	48	71	72	57	43	34	45	36	-6	0	5	10	14	15	16	18	18	20	21	21	23	24	27	29	31	34	37	39	34	34	31	35	29	22	20	11	4		
2023/06/07 14:30	Day	NML1	SVAN 977 SN:90019	11.2	46	0	20.1	48	67	68	57	43	36	44	39	-3	1	6	10	14																										

End Time	Time Period	Location	Logger	Mine Weather Data					Raw 15-minute Statistical Data					Logsum LAeq 15min totals - for Report		Raw LAeq 15min 1/3 Spectrum																										
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (°C)	Humidity (%)	LAMax	LAlmax	LA1	LA10	LA90	LAeq	LAeq 51 kHz (incl +0.7 dB correction)	LAeq 630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz
2023/06/09 11:30	Day	NML1	SVAN 977 SN:90019	9.4	204	0	15.9	68	68	69	60	51	35	48	38	2.3	Comments (dominant/noteworthy sources)																									
2023/06/09 11:45	Day	NML1	SVAN 977 SN:90019	9.4	215	0	16.2	66	71	74	61	52	34	49	37	33																										
2023/06/09 12:00	Day	NML1	SVAN 977 SN:90019	9.0	223	0	17.2	60	67	69	51	41	29	40	34	31																										
2023/06/09 12:15	Day	NML1	SVAN 977 SN:90019	9.0	200	0	17.5	58	63	64	59	50	32	53	36	32	helicopter - 4mins excluded																									
2023/06/09 12:30	Day	NML1	SVAN 977 SN:90019	10.4	214	0	18	55	63	68	50	42	33	40	32	30																										
2023/06/09 12:45	Day	NML1	SVAN 977 SN:90019	10.8	225	0	18	51	75	77	65	51	31	51	32	31	plane - 3mins excluded																									
2023/06/09 13:00	Day	NML1	SVAN 977 SN:90019	12.2	202	0	18.1	51	67	69	53	45	33	43	35	34																										
2023/06/09 13:15	Day	NML1	SVAN 977 SN:90019	9.4	227	0	18.8	48	69	71	56	47	32	44	32	31	helicopter - 2mins excluded																									
2023/06/09 13:30	Day	NML1	SVAN 977 SN:90019	11.5	209	0	18.8	47	63	64	54	45	33	43	35	34																										
2023/06/09 13:45	Day	NML1	SVAN 977 SN:90019	11.2	205	0	18	48	74	77	56	46	33	46	34	30																										
2023/06/09 14:00	Day	NML1	SVAN 977 SN:90019	9.7	214	0	18.7	46	78	80	64	50	34	52	37	30																										
2023/06/09 14:15	Day	NML1	SVAN 977 SN:90019	9.0	200	0	19	45	64	66	55	47	34	44	34	32																										
2023/06/09 14:30	Day	NML1	SVAN 977 SN:90019	11.5	224	0	19.1	44	77	78	70	62	37	59	43	37																										
2023/06/09 14:45	Day	NML1	SVAN 977 SN:90019	8.3	208	0	19	45	71	73	62	56	32	52	36	32	plane - 3mins excluded																									
2023/06/09 15:00	Day	NML1	SVAN 977 SN:90019	9.7	219	0	19	44	65	67	56	45	31	43	34	32	plane - 5mins excluded																									
2023/06/09 15:15	Day	NML1	SVAN 977 SN:90019	11.9	217	0	18.9	44	61	63	56	48	35	45	37	36																										
2023/06/09 15:30	Day	NML1	SVAN 977 SN:90019	10.1	217	0	18.8	43	57	61	57	41	33	39	36	34																										
2023/06/09 15:45	Day	NML1	SVAN 977 SN:90019	10.4	221	0	18.5	43	60	62	50	42	35	40	35	35																										
2023/06/09 16:00	Day	NML1	SVAN 977 SN:90019	9.7	216	0	18.4	43	61	62	54	45	34	42	31	28																										
2023/06/09 16:15	Day	NML1	SVAN 977 SN:90019	11.2	221	0	18.1	44	64	65	59	44	33	44	33	33																										
2023/06/09 16:30	Day	NML1	SVAN 977 SN:90019	8.6	225	0	17.8	44	63	64	52	42	32	40	36	37																										
2023/06/09 16:45	Day	NML1	SVAN 977 SN:90019	6.8	226	0	16.9	46	64	67	54	44	29	42	30	26																										
2023/06/09 17:00	Day	NML1	SVAN 977 SN:90019	6.5	227	0	16.1	47	63	65	56	47	31	44	33	31	Helicopter - 2mins excluded																									
2023/06/09 17:15	Day	NML1	SVAN 977 SN:90019	4.3	215	0	15.2	51	71	72	61	51	32	48	34	29																										
2023/06/09 17:30	Day	NML1	SVAN 977 SN:90019	4.7	212	0	14.5	52	57	59	52	43	26	40	39	37																										
2023/06/09 17:45	Day	NML1	SVAN 977 SN:90019	4.0	180	0	14.1	54	43	46	36	32	25	29	29	29																										
2023/06/09 18:00	Day	NML1	SVAN 977 SN:90019	4.3	187	0	13.7	56	52	54	44	33	26	32	31	31																										
2023/06/09 18:15	Evening	NML1	SVAN 977 SN:90019	4.0	213	0	13.7	56	59	64	45	33	22	32	23	23	RTN, animal and plane - 4mins excluded																									
2023/06/09 18:30	Evening	NML1	SVAN 977 SN:90019	3.6	216	0	13.6	57	37	41	29	25	19	22	21	20																										
2023/06/10 07:00	Night	NML1	SVAN 977 SN:90019	2.2	57	0	3.6	100	64	68	58	49	33	46	32	23																										
2023/06/10 07:15	Day	NML1	SVAN 977 SN:90019	4.7	27	0	4.5	100	66	68	60	49	34	47	34	29																										
2023/06/10 07:30	Day	NML1	SVAN 977 SN:90019	5.0	359	0	4.9	98	59	61	52	44	38	43	40	39	Mine Noise - tonal at 100Hz																									
2023/06/10 07:45	Day	NML1	SVAN 977 SN:90019	5.0	7	0	6.2	90	67	69	63	60	42	56	42	37																										
2023/06/10 08:00	Day	NML1	SVAN 977 SN:90019	1.4	48	0	9.6	81	73	75	59	50	37	48	38	33																										
2023/06/10 08:15	Day	NML1	SVAN 977 SN:90019	3.2	349	0	9	73	74	66	61	39	56	42	35	35																										
2023/06/10 08:30	Day	NML1	SVAN 977 SN:90019	3.6	9	0	9.8	78	67	69	61	53	37	50	38	35	plane - 3mins excluded																									
2023/06/10 08:45	Day	NML1	SVAN 977 SN:90019	2.2	61	0	11.3	71	77	80	64	53	33	52	36	33																										
2023/06/10 09:00	Day	NML1	SVAN 977 SN:90019	2.9	139	0	11.6	70	79	82	55	46	32	48	34	31																										
2023/06/10 09:15	Day	NML1	SVAN 977 SN:90019	3.6	165	0	12.2	69	66	69	58	46	31	45	34	29																										
2023/06/10 09:30	Day	NML1	SVAN 977 SN:90019	5.0	151	0	12.8	64	73	74	62	53	32	50	36	30																										
2023/06/10 09:45	Day	NML1	SVAN 977 SN:90019	5.4	151	0	13.3	62	71	73	60	51	32	48	35	31	plane - 3mins excluded																									
2023/06/10 10:00	Day	NML1	SVAN 977 SN:90019	6.5	154	0	14.2	56	67	69	60	53	34	49	38	32																										
2023/06/10 10:15	Day	NML1	SVAN 977 SN:90019	7.2	165	0	14.8	54	69	72	50	41	30	39	32	29																										
2023/06/10 10:30	Day	NML1	SVAN 977 SN:90019	7.2	154	0	15.4	51	61	64	50	43	31	40	33	32																										
2023/06/10 10:45	Day	NML1	SVAN 977 SN:90019	5.0	140	0	16	49	64	67	57	41	31	43	34	31	plane - 1min excluded																									
2023/06/10 11:00	Day	NML1	SVAN 977 SN:90019	4.0	220	0	16.4	47	61	63	54	43	32	41	34	33	plane - 3mins excluded																									
2023/06/10 11:15	Day	NML1	SVAN 977 SN:90019	4.0	212	0	17	46	59	61	52	44	33	40	37	37																										
2023/06/10 11:30	Day	NML1	SVAN 977 SN:90019	4.0	22	0	17.5	44	59	62	48	41	29	38	36	36																										
2023/06/10 11:45	Day	NML1	SVAN 977 SN:90019	4.0	294	0	17.8	43	53	55	48	39	25	36	34	35																										
2023/06/10 12:00	Day	NML1	SVAN 977 SN:90019	3.2	197	0	18.2	41	59	60	51	40	26	39	32	32																										
2023/06/10 12:15	Day	NML1	SVAN 977 SN:90019	2.2	147	0	18.5	40	55	58	47	33	27	36	32	32																										
2023/06/10 12:30	Day	NML1	SVAN 977 SN:90019	4.3	192	0	18.8	38	61	62	51	41	25	39	32	31	plane - 1min excluded																									
2023/06/10 12:45	Day	NML1	SVAN 977 SN:90019	3.6	83	0	19.6	37	75	77	62	41	28	49	45	36																										
2023/06/10 13:00	Day	NML1	SVAN 977 SN:90019	6.5	221	0	19.7	37	61	64	50	41	27	39	29	23																										
2023/06/10 13:15	Day	NML1	SVAN 977 SN:90019	3.2	184	0	19.8	36	71	73	53	44	28	42	30	28	Helicopter - 2min excluded																									
2023/06/10 13:30	Day	NML1	SVAN 977 SN:90019	5.0	145	0	19.7	36	55	57	47	40	27	37	32	31																										
2023/06/10 13:45	Day	NML1	SVAN 977 SN:90019	3.6	282	0	20.5	34	64	65	51	40	28	39	30	26																										
2023/06/10 14:00	Day	NML1	SVAN 977 SN:90019	4.3	157	0	20.4	34	57	59	53	43	27	40	30	25																										
2023/06/10 14:15	Day	NML1	SVAN 977 SN:90019	5.8	214	0	20.8	34	55	59	49	40	28	37	32	32																										
2023/06/10 14:30	Day	NML1	SVAN 977 SN:90019	5.8	197	0	20.5	34	61	64	48	41	29	39	32	32																										
2023/06/10 14:45	Day	NML1	SVAN 977 SN:90019	6.1	242	0	20.6	33	65	67	48	41	30	39	37	37																										
2023/06/10 15:00	Day	NML1	SVAN 977 SN:90019	6.1	252	0	20.7	33	65	66	50	42	30	40	35	32																										
2023/06/10 15:15	Day	NML1	SVAN 977 SN:90019	6.5	279	0	20.8	32	55	58	50	42	31	39	30	30	plane - 3mins excluded																									
2023/06/10 15:30	Day	NML1	SVAN 977 SN:90019	5.0	283	0	21	32	52	54	46	40	33	37	35	35																										
2023/06/10 15:45	Day	NML1	SVAN 977 SN:90019	5.4	268	0	20.7	32	65	67	49	41	32	39	35	36																										
2023/06/10 16:00	Day	NML1	SVAN 97																																							

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq 15min totals - for Report		Raw LAeq 15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	Lmax	Lmin	LA1	LA10	LA90	LAeq	LAeq 1 kHz (incl +0.7 dB correction)	LAeq 630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/11 17:00	Day	NML1	SVAN 977 SN:90019	4.7	49	0	17.5	55	65	67	56	44	36	44	37	2.3	Comments (dominant/noteworthy sources)																															
2023/06/11 17:15	Day	NML1	SVAN 977 SN:90019	4.0	61	0	16.7	56	65	67	54	47	35	44	37		-9	-1	3	10	9	13	12	15	15	17	17	18	24	26	30	30	30	29	35	35	39	32	31	31	31	25	18	11	5	2		
2023/06/11 17:30	Day	NML1	SVAN 977 SN:90019	5.0	75	0	16.3	59	53	56	45	39	33	37	35		-10	-1	3	9	10	7	14	17	19	19	18	18	24	25	29	29	29	28	32	34	34	32	36	37	35	30	25	18	7	2		
2023/06/11 17:45	Day	NML1	SVAN 977 SN:90019	5.0	82	0	15.5	66	51	53	42	40	36	38	36		-9	-1	2	7	9	9	15	19	18	16	19	18	24	25	28	27	27	26	28	28	25	25	24	24	19	15	12	7	4	2		
2023/06/11 18:00	Day	NML1	SVAN 977 SN:90019	7.6	72	0	16	65	57	57	50	44	35	41	38		-8	-1	1	7	10	10	17	20	19	17	22	20	26	26	29	28	26	26	24	25	32	27	25	18	16	15	10	5	2			
2023/06/11 18:15	Evening	NML1	SVAN 977 SN:90019	4.3	94	0	14.9	70	47	51	37	36	34	35	26		-10	-4	0	6	10	17	23	23	27	23	28	22	30	26	30	30	29	28	28	26	28	33	27	26	19	17	14	9	5	3		
2023/06/11 18:30	Evening	NML1	SVAN 977 SN:90019	4.7	105	0	14.2	75	49	53	36	35	33	34	26		-14	-12	-11	-2	4	-2	3	5	5	3	7	9	12	15	17	18	18	18	17	18	28	30	33	22	17	16	14	9	4	2		
2023/06/12 07:00	Night	NML1	SVAN 977 SN:90019	1.1	274	0	9.5	100	64	67	54	47	36	44	33		-13	-9	-5	1	9	9	8	8	10	12	14	16	18	19	21	25	30	39	38	37	31	31	30	33	26	20	13	6	1			
2023/06/12 07:15	Day	NML1	SVAN 977 SN:90019	1.4	209	0	10	100	63	66	56	46	36	44	39		-9	0	2	7	9	12	14	16	14	14	22	21	30	26	28	30	31	32	37	36	35	30	35	35	30	18	13	7	1			
2023/06/12 07:30	Day	NML1	SVAN 977 SN:90019	1.1	193	0	10.4	100	63	64	58	46	33	45	38		-9	1	2	6	11	13	16	17	17	18	19	22	24	25	27	26	28	34	39	38	32	35	39	30	31	30	26	19	12	4	1	
2023/06/12 07:45	Day	NML1	SVAN 977 SN:90019	1.1	177	0	11.2	100	66	68	62	53	36	50	40		-11	-5	3	9	10	13	22	26	16	19	23	20	26	25	30	33	35	45	45	44	35	34	32	31	31	22	15	5	1			
2023/06/12 08:00	Day	NML1	SVAN 977 SN:90019	0.7	254	0	11.6	100	64	66	59	45	36	45	35		-11	-5	4	10	11	12	17	18	16	13	16	17	22	23	25	26	26	30	39	40	39	30	29	30	26	21	12	4	1			
2023/06/12 08:15	Day	NML1	SVAN 977 SN:90019	0.4	137	0	12.2	100	79	80	60	46	37	52	38		-8	-3	7	10	13	14	21	23	18	14	17	18	22	25	27	29	28	34	45	47	35	34	37	39	36	30	21	10	3			
2023/06/12 08:30	Day	NML1	SVAN 977 SN:90019	1.1	8	0	12.6	99	72	74	56	46	36	46	36		-9	-3	5	7	11	14	18	21	19	14	16	17	21	24	26	28	27	30	34	45	47	35	34	43	36	31	26	19	12	2		
2023/06/12 08:45	Day	NML1	SVAN 977 SN:90019	3.6	65	0	14.2	94	70	72	62	53	36	50	38		-9	-3	1	6	10	9	16	22	17	17	20	17	21	24	28	30	29	32	43	44	43	41	38	36	36	34	27	20	10	2		
2023/06/12 09:00	Day	NML1	SVAN 977 SN:90019	5.4	74	0	16.2	84	68	70	60	48	35	47	37		-8	-2	3	5	8	8	17	22	15	15	17	17	22	23	27	29	29	32	40	43	40	30	31	31	29	22	14	6	2			
2023/06/12 09:15	Day	NML1	SVAN 977 SN:90019	5.8	60	0	16.6	82	72	75	53	44	36	44	37		-7	-2	3	5	8	11	16	21	15	15	17	19	22	24	28	30	29	38	32	35	39	29	35	37	35	27	21	13	3			
2023/06/12 09:30	Day	NML1	SVAN 977 SN:90019	6.5	72	0	16.5	82	62	64	56	48	36	46	37		-8	-2	3	6	8	14	20	25	20	21	20	23	24	28	29	29	30	35	37	36	32	37	38	35	32	26	18	9	2			
2023/06/12 09:45	Day	NML1	SVAN 977 SN:90019	7.6	68	0	16.9	79	76	78	64	53	39	52	39		-7	-1	4	7	10	12	16	18	17	18	20	21	20	23	25	29	31	31	34	45	46	44	41	44	40	38	38	35	28	17	6	
2023/06/12 10:00	Day	NML1	SVAN 977 SN:90019	6.1	49	0	16.9	79	62	64	55	47	36	44	34		-9	-3	2	7	11	11	13	16	13	16	15	17	19	21	24	26	27	29	36	39	39	30	29	27	28	23	17	11	6	2		
2023/06/12 10:15	Day	NML1	SVAN 977 SN:90019	5.0	61	0	17.9	74	71	72	61	52	35	49	37		-9	0	2	8	12	10	13	12	14	15	16	21	21	24	28	29	32	44	44	44	34	32	31	32	30	24	15	6	2			
2023/06/12 10:30	Day	NML1	SVAN 977 SN:90019	5.4	33	0	17.8	73	66	67	55	47	34	45	38		-2	8	6	13	16	19	21	21	22	21	20	23	23	26	31	31	31	31	36	38	38	29	30	32	32	27	26	18	8	2		
2023/06/12 10:45	Day	NML1	SVAN 977 SN:90019	5.4	50	0	18.7	70	61	63	54	47	33	43	36		0	6	3	12	22	25	22	23	24	25	25	29	31	32	32	30	30	29	32	37	37	31	22	21	21	12	8	4	2			
2023/06/12 11:00	Day	NML1	SVAN 977 SN:90019	6.5	80	0	18.6	71	58	60	50	40	33	39	35		-1	1	4	8	12	14	13	17	17	22	18	18	22	24	27	27	28	26	29	28	28	24	23	28	30	27	21	13	6	2		
2023/06/12 11:15	Day	NML1	SVAN 977 SN:90019	7.2	76	0	18.7	70	73	75	57	46	34	46	36		-8	-3	3	6	11	10	14	20	16	20	19	18	24	24	27	28	28	30	40	39	40	32	31	34	31	26	20	10	3			
2023/06/12 11:30	Day	NML1	SVAN 977 SN:90019	10.4	71	0	19.7	64	64	66	53	43	34	42	36		-5	-1	4	5	11	8	11	16	16	20	18	19	23	25	27	28	28	28	34	36	35	27	28	29	29	27	23	17	9	3		
2023/06/12 11:45	Day	NML1	SVAN 977 SN:90019	9.0	67	0	19	65	62	64	49	43	36	41	37		-1	2	6	9	13	19	21	25	23	24	24	21	24	25	29	30	29	29	31	31	34	32	27	26	24	21	16	8	3			
2023/06/12 12:00	Day	NML1	SVAN 977 SN:90019	9.4	40	0	19	64	61	66	53	46	35	43	36		-8	-3	3	6	12	11	11	14	13	13	17	18	21	23	27	29	29	29	36	37	35	31	30	27	27	24	20	15	7	2		
2023/06/12 12:15	Day	NML1	SVAN 977 SN:90019	8.6	48	0	19.6	63	61	62	48	42	34	39	37		-3	1	4	7	11	11	12	15	15	19	20	22	25	28	30	30	29	33	28	26	25	30	25	23	22	22	18	12	7			
2023/06/12 12:30	Day	NML1	SVAN 977 SN:90019	7.6	73	0	19.2	65	67	70	53	45	35	43	36		2	6	4	10	19	15	22	19	17	21	21	24	24	27	30	32	31	29	30	31	30	31	30	32	33	34	36	32	27	21	10	3
2023/06/12 12:45	Day	NML1	SVAN 977 SN:90019	7.6	46	0																																										

End Time	Wind	Temp	Location	Logger	Main Weather Data	Wind Speed	Wind Dir	Barrel	Temp	RH	Humidity	Wind Max	Wind Dir Max	LAT	LON	Lign	Lign/Land/Catchment	Sea Level (msl) 175 Degrees																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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21-06-2023 14:14	Sea	NA	SEAN ETT 500-049	4.2	243	40	193.3	31	65	55	40	230	23	153	148	143	138	133	128	123	118	113	108	103	98	93	88	83	78	73	68	63	58	53	48	43	38	33	28	23	18	13	8	3	-2	-7	-12	-17	-22	-27	-32	-37	-42	-47	-52	-57	-62	-67	-72	-77	-82	-87	-92	-97	-102	-107	-112	-117	-122	-127	-132	-137	-142	-147	-152	-157	-162	-167	-172	-177	-182	-187	-192	-197	-202	-207	-212	-217	-222	-227	-232	-237	-242	-247	-252	-257	-262	-267	-272	-277	-282	-287	-292	-297	-302	-307	-312	-317	-322	-327	-332	-337	-342	-347	-352	-357	-362	-367	-372	-377	-382	-387	-392	-397	-402	-407	-412	-417	-422	-427	-432	-437	-442	-447	-452	-457	-462	-467	-472	-477	-482	-487	-492	-497	-502	-507	-512	-517	-522	-527	-532	-537	-542	-547	-552	-557	-562	-567	-572	-577	-582	-587	-592	-597	-602	-607	-612	-617	-622	-627	-632	-637	-642	-647	-652	-657	-662	-667	-672	-677	-682	-687	-692	-697	-702	-707	-712	-717	-722	-727	-732	-737	-742	-747	-752	-757	-762	-767	-772	-777	-782	-787	-792	-797	-802	-807	-812	-817	-822	-827	-832	-837	-842	-847	-852	-857	-862	-867	-872	-877	-882	-887	-892	-897	-902	-907	-912	-917	-922	-927	-932	-937	-942	-947	-952	-957	-962	-967	-972	-977	-982	-987	-992	-997	-1002	-1007	-1012	-1017	-1022	-1027	-1032	-1037	-1042	-1047	-1052	-1057	-1062	-1067	-1072	-1077	-1082	-1087	-1092	-1097	-1102	-1107	-1112	-1117	-1122	-1127	-1132	-1137	-1142	-1147	-1152	-1157	-1162	-1167	-1172	-1177	-1182	-1187	-1192	-1197	-1202	-1207	-1212	-1217	-1222	-1227	-1232	-1237	-1242	-1247	-1252	-1257	-1262	-1267	-1272	-1277	-1282	-1287	-1292	-1297	-1302	-1307	-1312	-1317	-1322	-1327	-1332	-1337	-1342	-1347	-1352	-1357	-1362	-1367	-1372	-1377	-1382	-1387	-1392	-1397	-1402	-1407	-1412	-1417	-1422	-1427	-1432	-1437	-1442	-1447	-1452	-1457	-1462	-1467	-1472	-1477	-1482	-1487	-1492	-1497	-1502	-1507	-1512	-1517	-1522	-1527	-1532	-1537	-1542	-1547	-1552	-1557	-1562	-1567	-1572	-1577	-1582	-1587	-1592	-1597	-1602	-1607	-1612	-1617	-1622	-1627	-1632	-1637	-1642	-1647	-1652	-1657	-1662	-1667	-1672	-1677	-1682	-1687	-1692	-1697	-1702	-1707	-1712	-1717	-1722	-1727	-1732	-1737	-1742	-1747	-1752	-1757	-1762	-1767	-1772	-1777	-1782	-1787	-1792	-1797	-1802	-1807	-1812	-1817	-1822	-1827	-1832	-1837	-1842	-1847	-1852	-1857	-1862	-1867	-1872	-1877	-1882	-1887	-1892	-1897	-1902	-1907	-1912	-1917	-1922	-1927	-1932	-1937	-1942	-1947	-1952	-1957	-1962	-1967	-1972	-1977	-1982	-1987	-1992	-1997	-2002	-2007	-2012	-2017	-2022	-2027	-2032	-2037	-2042	-2047	-2052	-2057	-2062	-2067	-2072	-2077	-2082	-2087	-2092	-2097	-2102	-2107	-2112	-2117	-2122	-2127	-2132	-2137	-2142	-2147	-2152	-2157	-2162	-2167	-2172	-2177	-2182	-2187	-2192	-2197	-2202	-2207	-2212	-2217	-2222	-2227	-2232	-2237	-2242	-2247	-2252	-2257	-2262	-2267	-2272	-2277	-2282	-2287	-2292	-2297	-2302	-2307	-2312	-2317	-2322	-2327	-2332	-2337	-2342	-2347	-2352	-2357	-2362	-2367	-2372	-2377	-2382	-2387	-2392	-2397	-2402	-2407	-2412	-2417	-2422	-2427	-2432	-2437	-2442	-2447	-2452	-2457	-2462	-2467	-2472	-2477	-2482	-2487	-2492	-2497	-2502	-2507	-2512	-2517	-2522	-2527	-2532	-2537	-2542	-2547	-2552	-2557	-2562	-2567	-2572	-2577	-2582	-2587	-2592	-2597	-2602	-2607	-2612	-2617	-2622	-2627	-2632	-2637	-2642	-2647	-2652	-2657	-2662	-2667	-2672	-2677	-2682	-2687	-2692	-2697	-2702	-2707	-2712	-2717	-2722	-2727	-2732	-2737	-2742	-2747	-2752	-2757	-2762	-2767	-2772	-2777	-2782	-2787	-2792	-2797	-2802	-2807	-2812	-2817	-2822	-2827	-2832	-2837	-2842	-2847	-2852	-2857	-2862	-2867	-2872	-2877	-2882	-2887	-2892	-2897	-2902	-2907	-2912	-2917	-2922	-2927	-2932	-2937	-2942	-2947	-2952	-2957	-2962	-2967	-2972	-2977	-2982	-2987	-2992	-2997	-3002	-3007	-3012	-3017	-3022	-3027	-3032	-3037	-3042	-3047	-3052	-3057	-3062	-3067	-3072	-3077	-3082	-3087	-3092	-3097	-3102	-3107	-3112	-3117	-3122	-3127	-3132	-3137	-3142	-3147	-3152	-3157	-3162	-3167	-3172	-3177	-3182	-3187	-3192	-3197	-3202	-3207	-3212	-3217	-3222	-3227	-3232	-3237	-3242	-3247	-3252	-3257	-3262	-3267	-3272	-3277	-3282	-3287	-3292	-3297	-3302	-3307	-3312	-3317	-3322	-3327	-3332	-3337	-3342	-3347	-3352	-3357	-3362	-3367	-3372	-3377	-3382	-3387	-3392	-3397	-3402	-3407	-3412	-3417	-3422	-3427	-3432	-3437	-3442	-3447	-3452	-3457	-3462	-3467	-3472	-3477	-3482	-3487	-3492	-3497	-3502	-3507	-3512	-3517	-3522	-3527	-3532	-3537	-3542	-3547	-3552	-3557	-3562	-3567	-3572	-3577	-3582	-3587	-3592	-3597	-3602	-3607	-3612	-3617	-3622	-3627	-3632	-3637	-3642	-3647	-3652	-3657	-3662	-3667	-3672	-3677	-3682	-3687	-3692	-3697	-3702	-3707	-3712	-3717	-3722	-3727	-3732	-3737	-3742	-3747	-3752	-3757	-3762	-3767	-3772	-3777	-3782	-3787	-3792	-3797	-3802	-3807	-3812	-3817	-3822	-3827	-3832	-3837	-3842	-3847	-3852	-3857	-3862	-3867	-3872	-3877	-3882	-3887	-3892	-3897	-3902	-3907	-3912	-3917	-3922	-3927	-3932	-3937	-3942	-3947	-3952	-3957	-3962	-3967	-3972	-3977	-3982	-3987	-3992	-3997	-4002	-4007	-4012	-4017	-4022	-4027	-4032	-4037	-4042	-4047	-4052	-4057	-4062	-4067	-4072	-4077	-4082	-4087	-4092	-4097	-4102	-4107	-4112	-4117	-4122	-4127	-4132	-4137	-4142	-4147	-4152	-4157	-4162	-4167	-4172	-4177	-4182	-4187	-4192	-4197	-4202	-4207	-4212	-4217	-4222	-4227	-4232	-4237	-4242	-4247	-4252	-4257	-4262	-4267	-4272	-4277	-4282	-4287	-4292	-4297	-4302	-4307	-4312	-4317	-4322	-4327	-4332	-4337	-4342	-4347	-4352	-4357	-4362	-4367	-4372	-4377	-4382	-4387	-4392	-4397	-4402	-4407	-4412	-4417	-4422	-4427	-4432	-4437	-4442	-4447	-4452	-4457	-4462	-4467	-4472	-4477	-4482	-4487	-4492	-4497	-4502	-4507	-4512	-4517	-4522	-4527	-4532	-4537	-4542	-4547	-4552	-4557	-4562	-4567	-4572	-4577	-4582	-4587	-4592	-4597	-4602	-4607	-4612	-4617	-4622	-4627	-4632	-4637	-4642	-4647	-4652	-4657	-4662	-4667	-4672	-4677	-4682	-4687	-4692	-4697	-4702	-4707	-4712	-4717	-4722	-4727	-4732	-4737	-4742	-4747	-4752	-4757	-4762	-4767	-4772	-4777	-4782	-4787	-4792	-4797	-4802	-4807	-4812	-4817	-4822	-4827	-4832	-4837	-4842	-4847	-4852	-4857	-4862	-4867	-4872	-4877	-4882	-4887	-4892	-4897	-4902	-4907	-4912	-4917	-4922	-4927	-4932	-4937	-4942	-4947	-4952	-4957	-4962	-4967	-4972	-4977	-4982	-4987	-4992	-4997	-5002	-5007	-5012	-5017	-5022	-5027	-5032	-5037	-5042	-5047	-5052	-5057	-5062	-5067	-5072	-5077	-5082	-5087	-5092	-5097	-5102	-5107	-5112	-5117	-5122	-5127	-5132	-5137	-5142	-5147	-5152	-5157	-5162	-5167	-5172	-5177	-5182	-5187	-5192	-5197	-5202	-5207	-5212	-5217	-5222	-5227	-5232	-5237	-5242	-5247	-5252	-5257	-5262	-5267	-5272	-5277	-5282	-5287	-5292	-5297	-5302	-5307	-5312	-5317	-5322	-5327	-5332	-5337	-5342	-5347	-5352	-5357	-5362	-5367	-5372	-5377	-5382	-5387	-5392	-5397	-5402	-5407	-5412	-5417	-5422	-5427	-5432	-5437	-5442	-5447	-5452	-5457	-5462	-5467	-5472	-5477	-5482	-5487	-5492	-5497	-5502	-5507	-5512	-5517	-5522	-5527	-5532	-5537	-5542	-5547	-5552	-5557	-5562	-5567	-5572	-5577	-5582	-5587	-5592	-5597	-5602	-5607	-5612	-5617	-5622	-5627	-5632	-5637	-5642	-5647	-5652	-5657	-5662	-5667	-5672	-5677	-5682	-5687	-5692	-5697	-5702	-5707	-5712	-5717	-5722	-5727	-5732	-5737	-5742	-5747	-5752	-5757	-5762	-5767	-5772	-5777	-5782	-5787	-5792	-5797	-5802	-5807	-5812	-5817	-5822	-5827	-5832	-5837	-5842	-5847	-5852	-5857	-5862	-5867	-5872	-5877

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data				LAeq	Logsum LAeq15min LAeq s630 Hz (incl +1.6 dB correction)	Raw LAeq 15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1			LA10	LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/07 07:00	Night	NML8	SVAN 977 SN-69507	1.1	10	0	10.7	100	75	77	60	55	40	52	1.6 Comments (dominant/noteworthy sources)																																
2023/06/07 07:15	Day	NML8	SVAN 977 SN-69507	2.5	112	0	11.4	100	65	68	58	53	37	49	45	RTN dominant	-4	3	11	18	22	25	30	29	24	20	18	23	29	34	36	40	44	45	47	45	38	34	34	32	31	29	20	12	8	5	
2023/06/07 07:30	Day	NML8	SVAN 977 SN-69507	2.9	117	0	12	100	66	69	58	53	37	49	43	RTN dominant	0	5	9	14	18	23	23	23	22	18	18	22	28	32	34	39	43	43	42	39	35	32	33	31	32	31	21	15	9	5	
2023/06/07 07:45	Day	NML8	SVAN 977 SN-69507	2.5	103	0	13.1	99	62	62	56	52	39	48	42	Truck and Aircraft Noise, 3min excluded	-2	2	11	17	21	27	28	27	27	23	20	22	26	30	34	38	42	43	41	39	36	33	32	35	36	33	25	20	15	6	
2023/06/07 08:00	Day	NML8	SVAN 977 SN-69507	2.9	111	0	14	93	69	70	60	53	37	50	41	RTN, 1min excluded	-4	1	8	15	20	24	28	27	25	21	19	24	27	32	36	41	43	43	41	41	35	34	35	36	37	36	27	20	14	6	
2023/06/07 08:15	Day	NML8	SVAN 977 SN-69507	3.6	110	0	14	94	67	69	59	54	39	51	43	RTN dominant	-4	0	7	12	18	28	30	29	28	23	23	25	26	31	34	39	43	44	43	41	40	36	33	33	31	31	24	19	14	7	
2023/06/07 08:30	Day	NML8	SVAN 977 SN-69507	3.6	107	0	14.8	89	65	68	58	53	40	49	42	RTN dominant	-3	2	8	13	20	24	26	27	25	20	19	22	25	30	33	38	42	43	42	40	36	33	33	31	31	24	19	14	6		
2023/06/07 08:45	Day	NML8	SVAN 977 SN-69507	4.7	101	0	15.2	87	61	63	53	58	44	55	45	RTN dominant	-1	3	9	15	19	25	30	32	24	21	18	22	26	29	31	34	37	40	43	44	45	43	43	43	43	42	39	37	33	27	
2023/06/07 09:00	Day	NML8	SVAN 977 SN-69507	5.9	81	0	15.7	82	66	67	59	54	41	51	40	Wind Noise, 4min excluded	5	9	12	17	22	25	30	28	28	24	21	24	28	31	35	39	42	43	42	41	39	37	37	36	35	31	28	25	19		
2023/06/07 09:15	Day	NML8	SVAN 977 SN-69507	4.7	90	0	15.8	82	75	78	63	54	42	51	44	Wind Noise dominant	7	6	9	17	19	24	30	26	29	22	22	26	29	32	35	39	42	43	46	47	42	40	37	39	40	36	31	25	18	10	
2023/06/07 09:30	Day	NML8	SVAN 977 SN-69507	9.0	82	0	16.5	75	70	73	60	55	43	51	43	Wind Noise dominant	3	5	8	12	18	22	25	27	25	23	25	27	29	31	34	37	41	42	40	38	37	38	42	43	43	41	34	29	22	14	
2023/06/07 09:45	Day	NML8	SVAN 977 SN-69507	8.6	86	0	16.5	72	67	70	58	54	45	51	45	Wind Noise dominant	5	11	12	15	22	25	28	31	30	26	27	31	34	35	36	39	42	43	41	40	39	38	40	40	40	39	33	27	21	13	
2023/06/07 10:00	Day	NML8	SVAN 977 SN-69507	7.9	82	0	18	66	66	70	60	54	45	51	45	Wind Noise dominant	8	16	9	15	25	25	29	28	27	30	29	32	33	35	36	38	41	42	41	39	37	39	39	40	39	32	26	20	12		
2023/06/07 10:15	Day	NML8	SVAN 977 SN-69507	9.0	77	0	16.9	67	65	67	56	51	40	47	43	RTN dominant	9	15	11	16	24	24	27	28	26	26	25	29	31	33	34	36	39	40	38	37	35	33	33	34	36	33	26	21	15	7	
2023/06/07 10:30	Day	NML8	SVAN 977 SN-69507	7.2	90	0	17.1	67	64	66	58	53	44	50	40	RTN and Aircraft Noise, 2min excluded	0	4	8	12	17	21	27	26	27	25	23	26	29	32	35	38	41	42	40	38	37	36	40	40	40	40	33	26	19	11	
2023/06/07 10:45	Day	NML8	SVAN 977 SN-69507	9.0	89	0	17.5	63	61	62	59	53	41	54	41	Wind and Aircraft Noise, 4min excluded	2	4	8	13	18	22	28	26	22	21	23	26	29	33	37	39	41	42	41	42	45	47	47	46	43	38	33	26	20	12	
2023/06/07 11:00	Day	NML8	SVAN 977 SN-69507	7.9	89	0	17.7	62	68	69	59	54	44	51	41	RTN and Aircraft Noise, 2min excluded	4	10	14	19	22	25	29	27	25	21	23	26	29	32	34	38	40	41	40	38	38	38	41	40	40	41	33	26	20	12	
2023/06/07 11:15	Day	NML8	SVAN 977 SN-69507	7.9	90	0	18.8	58	61	62	55	51	41	48	41	Aircraft Noise, 4min excluded	-1	4	11	20	19	23	31	31	33	23	25	26	29	31	33	36	39	40	39	37	35	35	35	35	33	30	25	18	10		
2023/06/07 11:30	Day	NML8	SVAN 977 SN-69507	7.2	87	0	19.4	54	61	65	57	51	38	48	42	Wind Noise dominant	2	7	10	14	18	26	25	27	25	22	24	26	29	32	34	37	39	40	39	38	37	36	37	36	35	31	26	20	12		
2023/06/07 11:45	Day	NML8	SVAN 977 SN-69507	9.7	84	0	19.4	53	61	62	56	49	39	47	41	RTN dominant	2	5	7	11	17	21	27	28	25	22	23	25	28	30	32	35	38	39	38	36	35	34	35	33	31	28	23	16	9		
2023/06/07 12:00	Day	NML8	SVAN 977 SN-69507	10.8	68	0	19.5	52	79	84	57	50	40	49	45	RTN dominant	1	5	5	10	17	28	28	22	28	33	32	34	40	38	34	35	36	37	36	37	37	37	37	36	36	30	25	19	15		
2023/06/07 12:15	Day	NML8	SVAN 977 SN-69507	8.6	69	0	19.9	51	73	77	67	59	41	55	45	Aircraft Noise, 5min excluded	4	7	10	14	18	25	32	25	30	28	24	29	32	34	37	40	41	41	40	37	36	41	48	48	48	48	40	33	27	21	
2023/06/07 12:30	Day	NML8	SVAN 977 SN-69507	10.8	63	0	20	49	65	69	57	52	39	48	38	RTN, 3min excluded	4	5	10	12	16	21	25	21	20	19	20	23	25	28	30	32	35	36	35	34	34	37	41	40	40	40	32	25	19	12	
2023/06/07 12:45	Day	NML8	SVAN 977 SN-69507	7.9	72	0	20.4	50	69	71	60	54	40	50	37	Aircraft Noise, 3min excluded	-4	1	6	13	16	21	29	28	28	24	22	24	26	29	32	34	36	37	37	36	35	34	38	43	41	42	44	34	27	21	14
2023/06/07 13:00	Day	NML8	SVAN 977 SN-69507	7.6	73	0	20.6	49	61	64	54	49	39	46	37	RTN, 3min excluded	-1	3	9	13	19	21	26	23	23	21	21	24	26	29	31	34	37	38	36	35	34	35	36	35	34	28	23	16	9		
2023/06/07 13:15	Day	NML8	SVAN 977 SN-69507	10.1	69	0	20.3	49	61	65	56	50	42	47	39	RTN and Aircraft Noise, 4min excluded	2	4	8	11	17	22	27	23	23	21	21	24	26	29	32	35	37	39	37	36	35	37	38	35	37	38	35	30	24	17	10
2023/06/07 13:30	Day	NML8	SVAN 977 SN-69507	9.0	68	0	19.9	50	66	69	57	51	41	48	40	RTN and Aircraft Noise, 5min excluded	1	3	7	12	17	21	27	25	24	22	22	26	27	30	32	35	38	39	38	36	35	37	39	35	38	39	31	24	18	12	
2023/06/07 13:45	Day	NML8	SVAN 977 SN-69507	10.8	55	0	20.3	48	54	57	53	50	41	47	40	RTN, 3min excluded	3	5	8	11	15	22	23	22	20	19	22	25	27	29	31	34	37	38	37	36	34	35	36	36	35	34	30	25	18	11	
2023/06/07 14:00	Day	NML8	SVAN 977 SN-69507	9.0	49	0	20.1	49	59	61	53	49	40	46	39	RTN, 3min excluded	-1	2	7	10	15	20	21	21	21	19	21	24	26	28	31	33	36	37	36	35	34	35	36	39	31	24	18	12			
2023/06/07 14:15	Day	NML8	SVAN 977 SN-69507	9.4	48	0	20.4	48	61	63	55	50	38	47	41	RTN, 3min excluded	6	8	14	18	22	29	29																								

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					LAeq	Raw LAeq 15min 1/3 Spectrum																									
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz
2023/06/09 11:10	Day	NML8	SVAN 977 SN:69507	7.2	214	0	15.4	71	60	63	55	51	34	46	1.6 Comments (dominant/noteworthy sources)																								
2023/06/09 11:30	Day	NML8	SVAN 977 SN:69507	9.4	204	0	15.9	68	74	77	58	51	35	49	39 Wind Noise, 5min excluded																								
2023/06/09 11:45	Day	NML8	SVAN 977 SN:69507	9.4	215	0	16.2	66	61	62	57	50	32	46	39 RTN, 5min excluded																								
2023/06/09 12:00	Day	NML8	SVAN 977 SN:69507	9.0	223	0	17.2	60	62	63	58	52	34	48	41																								
2023/06/09 12:15	Day	NML8	SVAN 977 SN:69507	9.0	200	0	17.5	58	71	72	64	53	36	50	39 Aircraft Noise, 3min excluded																								
2023/06/09 12:30	Day	NML8	SVAN 977 SN:69507	10.4	214	0	18	55	71	75	62	51	37	50	46 RTN dominant																								
2023/06/09 12:45	Day	NML8	SVAN 977 SN:69507	10.8	225	0	18	51	64	68	59	50	37	47	38 RTN, 4min excluded																								
2023/06/09 13:00	Day	NML8	SVAN 977 SN:69507	12.2	202	0	18.1	51	62	64	57	50	37	46	39 Aircraft Noise, 3min excluded																								
2023/06/09 13:15	Day	NML8	SVAN 977 SN:69507	9.4	227	0	18.8	48	63	65	58	52	37	48	39 RTN and Aircraft Noise, 4min excluded																								
2023/06/09 13:30	Day	NML8	SVAN 977 SN:69507	11.5	209	0	18.8	47	65	66	58	52	38	48	41 Aircraft Noise, 5min excluded																								
2023/06/09 13:45	Day	NML8	SVAN 977 SN:69507	11.2	205	0	18	48	58	61	56	52	38	48	37 Wind Noise, 5min excluded																								
2023/06/09 14:00	Day	NML8	SVAN 977 SN:69507	9.7	214	0	18.7	46	68	71	62	53	39	50	37 Wind Noise, 5min excluded																								
2023/06/09 14:15	Day	NML8	SVAN 977 SN:69507	9.0	200	0	19	45	68	68	61	53	38	50	42 Wind and Aircraft Noise, 4min excluded																								
2023/06/09 14:30	Day	NML8	SVAN 977 SN:69507	11.5	224	0	19.1	44	70	74	58	53	40	49	46 Wind Noise dominant																								
2023/06/09 14:45	Day	NML8	SVAN 977 SN:69507	8.3	208	0	19	45	69	71	61	54	37	50	41 RTN, Person Nearby and Aircraft Noise, 4min excluded																								
2023/06/09 15:00	Day	NML8	SVAN 977 SN:69507	9.7	219	0	19	44	77	82	65	55	39	53	46 RTN dominant																								
2023/06/09 15:15	Day	NML8	SVAN 977 SN:69507	11.9	227	0	18.9	44	76	79	59	52	39	50	47 RTN dominant																								
2023/06/09 15:30	Day	NML8	SVAN 977 SN:69507	10.1	217	0	18.8	43	63	68	57	52	42	49	43 RTN dominant																								
2023/06/09 15:45	Day	NML8	SVAN 977 SN:69507	10.4	221	0	18.5	43	62	63	57	51	36	47	41 Aircraft Noise, 1min excluded																								
2023/06/09 16:00	Day	NML8	SVAN 977 SN:69507	9.7	216	0	18.4	43	63	65	59	52	37	49	42 Wind Noise, 2min excluded																								
2023/06/09 16:15	Day	NML8	SVAN 977 SN:69507	11.2	221	0	18.1	44	62	63	58	52	39	49	41 Aircraft Noise, 3min excluded																								
2023/06/09 16:30	Day	NML8	SVAN 977 SN:69507	8.6	225	0	17.8	44	59	61	56	53	39	49	42 RTN, 3min excluded																								
2023/06/09 16:45	Day	NML8	SVAN 977 SN:69507	6.8	226	0	16.9	46	65	70	56	52	34	47	41 RTN dominant																								
2023/06/09 17:00	Day	NML8	SVAN 977 SN:69507	6.5	227	0	16.1	47	76	81	64	56	39	53	50 RTN dominant																								
2023/06/09 17:15	Day	NML8	SVAN 977 SN:69507	4.3	215	0	15.2	51	76	81	61	55	38	52	47 RTN dominant																								
2023/06/09 17:30	Day	NML8	SVAN 977 SN:69507	4.7	212	0	14.5	52	86	87	74	55	37	62	42 RTN and Aircraft Noise, 3min excluded																								
2023/06/09 17:45	Day	NML8	SVAN 977 SN:69507	4.0	180	0	14.1	54	61	62	58	55	35	50	42 RTN and Aircraft Noise, 5min excluded																								
2023/06/09 18:00	Day	NML8	SVAN 977 SN:69507	4.3	187	0	13.7	56	65	66	62	55	34	51	42 RTN and Aircraft Noise, 4min excluded																								
2023/06/09 18:15	Evening	NML8	SVAN 977 SN:69507	4.0	213	0	13.7	56	66	68	62	56	28	52	47 RTN dominant																								
2023/06/09 18:30	Evening	NML8	SVAN 977 SN:69507	3.6	216	0	13.6	57	64	65	61	57	27	52	47 RTN dominant																								
2023/06/10 07:00	Night	NML8	SVAN 977 SN:69507	2.2	57	0	3.6	100	68	70	59	51	31	48	40 RTN dominant																								
2023/06/10 07:15	Day	NML8	SVAN 977 SN:69507	4.7	27	0	4.5	100	75	78	58	52	34	48	39																								
2023/06/10 07:30	Day	NML8	SVAN 977 SN:69507	5.0	359	0	4.9	98	63	64	57	52	33	47	41																								
2023/06/10 07:45	Day	NML8	SVAN 977 SN:69507	5.0	7	0	6.2	90	66	70	57	51	34	46	38																								
2023/06/10 08:00	Day	NML8	SVAN 977 SN:69507	1.4	18	0	8.6	81	74	76	58	53	34	49	40 Aircraft Noise, 2min excluded																								
2023/06/10 08:15	Day	NML8	SVAN 977 SN:69507	3.2	349	0	9.5	79	72	74	59	51	35	48	40																								
2023/06/10 08:30	Day	NML8	SVAN 977 SN:69507	3.6	9	0	9.8	78	60	62	54	50	31	45	38																								
2023/06/10 08:45	Day	NML8	SVAN 977 SN:69507	2.2	61	0	11.3	71	59	63	56	51	33	46	38 RTN, 1min excluded																								
2023/06/10 09:00	Day	NML8	SVAN 977 SN:69507	2.9	139	0	11.6	70	80	82	72	50	30	57	40																								
2023/06/10 09:15	Day	NML8	SVAN 977 SN:69507	3.6	165	0	12.2	69	82	84	73	51	31	57	38 Person Nearby and Aircraft Noise, 4min excluded																								
2023/06/10 09:30	Day	NML8	SVAN 977 SN:69507	5.0	151	0	12.8	64	70	74	64	60	35	55	51 Music Dominant																								
2023/06/10 09:45	Day	NML8	SVAN 977 SN:69507	5.4	151	0	13.3	62	72	76	64	59	33	53	38 Music and RTN, 5min excluded																								
2023/06/10 10:00	Day	NML8	SVAN 977 SN:69507	6.5	154	0	14.2	56	60	63	55	50	32	46	38																								
2023/06/10 10:15	Day	NML8	SVAN 977 SN:69507	7.2	165	0	14.8	54	63	64	56	51	32	46	41																								
2023/06/10 10:30	Day	NML8	SVAN 977 SN:69507	7.2	154	0	15.4	51	67	70	60	52	34	48	43 RTN dominant																								
2023/06/10 10:45	Day	NML8	SVAN 977 SN:69507	5.0	140	0	16	49	66	68	56	50	30	46	39 RTN, 1min excluded																								
2023/06/10 11:00	Day	NML8	SVAN 977 SN:69507	4.0	200	0	16.4	47	60	62	54	49	30	45	36																								
2023/06/10 11:15	Day	NML8	SVAN 977 SN:69507	4.0	212	0	17	46	74	78	57	47	28	47	37																								
2023/06/10 11:30	Day	NML8	SVAN 977 SN:69507	4.0	22	0	17.5	46	61	63	54	47	29	43	36																								
2023/06/10 11:45	Day	NML8	SVAN 977 SN:69507	4.0	284	0	17.8	43	69	72	60	51	32	48	38																								
2023/06/10 12:00	Day	NML8	SVAN 977 SN:69507	3.2	197	0	18.2	41	56	59	53	46	31	42	36																								
2023/06/10 12:15	Day	NML8	SVAN 977 SN:69507	2.2	147	0	18.5	40	60	61	54	49	31	44	38 Aircraft Noise, 2min excluded																								
2023/06/10 12:30	Day	NML8	SVAN 977 SN:69507	4.3	192	0	18.8	38	56	58	52	47	30	43	40																								
2023/06/10 12:45	Day	NML8	SVAN 977 SN:69507	3.6	83	0	19.6	37	66	70	56	48	30	45	38 RTN, 5min excluded																								
2023/06/10 13:00	Day	NML8	SVAN 977 SN:69507	6.5	221	0	19.7	37	68	73	53	48	30	44	36																								
2023/06/10 13:15	Day	NML8	SVAN 977 SN:69507	3.2	184	0	19.8	36	54	57	50	46	32	41	34																								
2023/06/10 13:30	Day	NML8	SVAN 977 SN:69507	5.0	145	0	19.7	36	56	57	52	47	33	43	37																								
2023/06/10 13:45	Day	NML8	SVAN 977 SN:69507	3.6	282	0	20.5	34	63	64	57	48	33	45	41																								
2023/06/10 14:00	Day	NML8	SVAN 977 SN:69507	4.3	157	0	20.4	34	61	65	53	47	33	43	37																								
2023/06/10 14:15	Day	NML8	SVAN 977 SN:69507	5.8	214	0	20.8	34	77	80	60	48	34	49	36 Person Nearby and local machine impulsive noise, 3min excluded																								
2023/06/10 14:30	Day	NML8	SVAN 977 SN:69507	5.8	197	0	20.5	34	88	89	81	51	34	65	41																								
2023/06/10 14:45	Day	NML8	SVAN 977 SN:69507	6.1	242	0	20.6	33	59	62	52	47	34	43	37																								
2023/06/10 15:00	Day	NML8	SVAN 977 SN:69507	6.1	252	0	20.7	33	82	86	75	54	35	60	50 RTN dominant																								
2023/06/10 15:15	Day	NML8	SVAN 977 SN:69507	6.5	279	0	20.8	32	81	85	64	52	34	52	49 RTN dominant																								
2023/06/10 15:30	Day	NML8	SVAN 977 SN:69507	5.0	283	0	21	32	76	80	60	51	35	49	47 RTN dominant																								
2023/06/10 15:45	Day	NML8	SVAN 977 SN:69507	5.4	268	0	20.7	32	64	68	53	48	34	44	38																								
2023/06/10 16:00	Day	NML8	SVAN 977 SN:69507	5.0	210	0	20.4	33	69	72	58	50	35	48	38 Aircraft Noise, 3min excluded																								
2023/06/10 16:15	Day	NML8	SVAN 977 SN:69507	4.7	214	0	20.1	33	79	82	60	50	34	51	40																								
2023/06/10 16:30	Day	NML8	SVAN 977 SN:69507	4.3	211	0	19.7	34	76	81	57	52	37	50	42 RTN dominant																								
2023/06/10 16:45	Day	NML8	SVAN 977 SN:69507	3.6	200	0	18.9	36	79	81	61	51																											

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					LAeq	Logsum LAeq 15min (incl +1.6 dB correction)	Raw LAeq 15min 1/3 Spectrum																															
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10			LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	
2023/06/11 15:30	Day	NML8	SVAN 977 SN-69507	6.5	64	0	20.6	44	57	60	52	48	28	42	36	1.6 Comments (dominant/noteworthy sources)																														
2023/06/11 15:45	Day	NML8	SVAN 977 SN-69507	7.9	28	0	20.4	43	60	63	54	48	32	44	35	-8	-2	3	8	14	18	20	20	20	15	14	17	18	22	27	31	35	36	34	32	30	28	31	25	25	21	17	12	8	5	
2023/06/11 16:00	Day	NML8	SVAN 977 SN-69507	7.2	61	0	19.9	46	66	67	57	50	38	47	41	-8	1	7	10	14	17	20	21	24	18	15	18	20	23	26	30	33	35	33	31	30	31	34	33	33	35	29	20	14	7	
2023/06/11 16:15	Day	NML8	SVAN 977 SN-69507	7.9	58	0	19.6	48	66	69	56	49	37	46	37	-5	-1	5	13	20	23	26	30	32	22	21	23	26	29	32	35	38	39	38	37	35	34	36	35	34	34	28	22	16	9	
2023/06/11 16:30	Day	NML8	SVAN 977 SN-69507	9.4	43	0	18.8	50	67	71	58	51	34	47	41	-9	-3	1	6	13	19	20	20	19	16	16	19	22	24	28	32	36	38	37	37	34	30	33	35	36	31	28	23	17	8	
2023/06/11 16:45	Day	NML8	SVAN 977 SN-69507	6.1	50	0	18.2	52	81	86	57	52	32	51	37	-3	2	8	11	22	21	24	29	21	21	25	26	27	32	35	37	40	40	39	37	34	31	39	29	27	24	20	15	10	5	
2023/06/11 17:00	Day	NML8	SVAN 977 SN-69507	4.7	49	0	17.5	55	88	89	67	59	43	61	41	-7	-3	3	8	17	20	23	27	23	21	25	28	27	29	35	41	45	43	44	41	38	40	37	33	29	26	21	15	12	7	
2023/06/11 17:15	Day	NML8	SVAN 977 SN-69507	4.0	61	0	16.7	56	66	70	60	55	39	51	37	-10	-4	1	6	15	22	25	25	25	25	31	34	34	38	42	43	46	46	47	47	52	55	55	53	49	46	42	39	35	29	24
2023/06/11 17:30	Day	NML8	SVAN 977 SN-69507	5.0	75	0	16.3	59	80	83	57	49	38	54	37	-11	-4	-3	1	10	13	16	15	14	14	15	17	20	25	29	32	36	40	44	37	40	52	41	43	43	38	30	26	18	11	
2023/06/11 17:45	Day	NML8	SVAN 977 SN-69507	5.0	82	0	15.5	66	59	60	55	51	35	46	39	-8	-3	1	6	14	19	20	23	16	14	14	18	22	26	30	35	39	41	38	34	32	26	25	23	21	18	13	9	5		
2023/06/11 18:00	Day	NML8	SVAN 977 SN-69507	7.6	72	0	16	65	62	64	56	46	35	43	39	-9	-5	1	8	15	19	19	21	21	19	19	21	27	30	30	33	36	37	34	32	32	26	25	22	20	17	13	9	5		
2023/06/11 18:15	Evening	NML8	SVAN 977 SN-69507	4.3	94	0	14.9	70	62	63	58	53	35	48	43	-2	-1	7	11	16	20	23	22	20	17	18	22	27	31	35	39	41	42	39	36	34	32	29	26	23	21	18	14	11	5	
2023/06/11 18:30	Evening	NML8	SVAN 977 SN-69507	4.7	105	0	14.2	75	59	60	55	52	35	47	40	-3	-2	8	14	19	21	21	19	15	16	21	25	29	32	36	41	43	40	36	33	31	27	25	23	21	18	13	9	5		
2023/06/12 07:00	Night	NML8	SVAN 977 SN-69507	1.1	274	0	9.2	100	63	65	60	56	35	51	44	5	-2	8	14	17	22	25	23	22	19	17	21	27	31	35	41	45	46	43	40	37	32	34	33	34	28	23	16	10	5	
2023/06/12 07:15	Day	NML8	SVAN 977 SN-69507	1.4	209	0	10	100	64	64	60	53	33	49	42	2	6	16	20	20	28	39	25	20	25	20	25	24	26	32	34	38	41	43	41	38	35	31	29	26	28	17	11	8	5	
2023/06/12 07:30	Day	NML8	SVAN 977 SN-69507	1.1	193	0	10.4	100	70	72	59	53	34	49	42	4	8	12	19	23	24	26	25	26	20	20	22	26	31	35	38	41	43	41	40	36	35	35	40	32	30	20	17	10	5	
2023/06/12 07:45	Day	NML8	SVAN 977 SN-69507	1.1	177	0	11.2	100	64	67	58	54	36	50	43	-4	3	10	16	20	24	31	29	29	21	19	22	27	30	34	38	41	42	41	40	37	36	36	36	36	26	19	14	7		
2023/06/12 08:00	Day	NML8	SVAN 977 SN-69507	0.7	254	0	11.6	100	79	80	61	52	32	51	41	-4	3	8	14	21	26	29	29	27	23	20	20	25	30	31	35	39	41	43	42	38	46	36	39	41	34	26	22	15	6	
2023/06/12 08:15	Day	NML8	SVAN 977 SN-69507	0.4	137	0	12.2	100	61	63	53	48	29	44	37	-8	-2	4	11	15	20	22	21	20	16	13	17	19	25	28	32	36	38	37	35	32	29	28	27	24	17	11	7	4		
2023/06/12 08:30	Day	NML8	SVAN 977 SN-69507	1.1	8	0	12.6	99	77	79	57	50	34	49	41	-3	2	13	13	22	32	26	27	27	22	21	21	24	27	30	35	38	40	40	39	40	39	38	37	37	36	23	20	18	6	
2023/06/12 08:45	Day	NML8	SVAN 977 SN-69507	3.6	65	0	14.2	94	61	62	57	51	36	48	41	2	8	13	16	21	25	29	25	24	20	20	21	25	29	31	35	39	39	38	36	36	39	38	37	32	29	22	16	11	5	
2023/06/12 09:00	Day	NML8	SVAN 977 SN-69507	5.4	74	0	16.2	84	60	63	56	50	40	47	40	-1	4	7	13	21	23	24	24	24	27	24	23	24	27	31	33	37	40	40	39	37	35	33	32	31	30	28	25	20	16	8
2023/06/12 09:15	Day	NML8	SVAN 977 SN-69507	5.8	60	0	16.6	82	62	65	53	48	35	45	39	-6	-1	2	6	14	17	19	22	23	23	23	24	26	28	30	33	36	37	37	35	34	31	32	32	31	29	24	19	13	7	
2023/06/12 09:30	Day	NML8	SVAN 977 SN-69507	6.5	72	0	16.5	82	65	67	53	49	35	45	38	-2	2	5	10	15	20	27	28	22	19	19	21	22	25	28	33	36	37	37	36	34	32	32	32	33	23	17	11	6		
2023/06/12 09:45	Day	NML8	SVAN 977 SN-69507	7.6	68	0	16.9	79	60	62	53	48	33	44	38	-5	5	8	14	17	20	27	21	20	22	17	21	21	25	28	33	36	37	36	34	33	31	32	30	30	20	14	9	5		
2023/06/12 10:00	Day	NML8	SVAN 977 SN-69507	6.1	49	0	16.9	79	65	66	54	48	34	45	36	-5	2	5	10	15	19	21	22	20	17	17	20	22	25	28	31	35	36	38	37	36	32	31	30	29	28	23	17	11	6	
2023/06/12 10:15	Day	NML8	SVAN 977 SN-69507	5.0	61	0	17.9	74	66	71	58	50	34	47	37	-4	3	7	13	20	31	39	27	27	25	22	28	31	32	35	37	38	37	35	33	32	35	34	32	31	22	15	9	5		
2023/06/12 10:30	Day	NML8	SVAN 977 SN-69507	5.4	33	0	17.8	73	62	63	57	49	36	46	42	2	5	6	13	19	22	32	31	29	26	25	26	29	32	32	34	36	37	36	34	32	32	34	34	33	33	26	21	15	8	
2023/06/12 10:45	Day	NML8	SVAN 977 SN-69507	5.4	50	0	18.7	70	65	68	59	51	32	47	38	7	12	4	14	24	24	26	26	28	30	34	35	37	38	38	38	38	37	36	34	31	30	31	31	32	31	24	19	15	7	
2023/06/12 11:00	Day	NML8	SVAN 977 SN-69507	6.5	80	0	18.6	71	63	64	60	51	39	48	42	3	11	11	18	22	29	33	29	31	25	25	30	31	34	35	37	40	40	39	38	36	35	36	34	34	34	26	20	14	7	
2023/06/12 11:15	Day	NML8	SVAN 977 SN-69507	7.2	76	0	18.7	70	66	68	56	48	38	45	38	-3	1</																													

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					LAeq	LAeq s630 Hz (incl +1.6 dB correction)	1.6 Comments (dominant/noteworthy sources)	Raw LAeq 15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	Lmax	L1max	LA1	LA10				LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz	3.15kHz z	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz z	16kHz		
2023/06/07 07:00	Night	NML10	SVAN 977 SN-99021	1.1	10	0	10.7	100	65	67	53	48	35	45	1.6	37	Road Traffic Dominant	-11	-5	1	6	10	13	12	8	9	14	16	18	20	26	29	33	35	33	34	31	31	32	36	38	34	31	31	15	5	2	
2023/06/07 07:15	Day	NML10	SVAN 977 SN-99021	2.5	112	0	11.4	100	65	67	58	48	36	46	3.6	35	Road Traffic Noise, 2 min excluded	-7	-3	2	6	11	12	11	9	10	13	16	18	18	24	29	33	35	32	34	33	36	38	39	40	34	31	28	16	5	1	
2023/06/07 07:30	Day	NML10	SVAN 977 SN-99021	2.9	117	0	12	100	66	68	61	54	39	50	3.6	37	Road Traffic Noise, 4min excluded	-9	-5	3	8	11	18	20	21	20	14	19	19	22	25	31	35	39	38	41	42	44	42	41	39	34	31	27	15	5	1	
2023/06/07 07:45	Day	NML10	SVAN 977 SN-99021	2.5	103	0	13.1	99	71	72	65	56	38	53	3.6	36		-10	-5	0	5	14	19	20	15	13	19	18	15	21	26	33	37	39	38	41	48	48	45	42	47	37	33	31	16	5	2	
2023/06/07 08:00	Day	NML10	SVAN 977 SN-99021	2.9	111	0	14	93	72	73	65	48	36	50	3.6	35		-10	-5	0	6	11	14	16	12	9	12	12	12	16	20	26	31	35	36	34	37	45	45	42	40	38	36	29	19	6	2	
2023/06/07 08:15	Day	NML10	SVAN 977 SN-99021	3.6	110	0	14	94	75	71	74	62	56	36	5.2	35	Aircraft Passover, 1min excluded	-10	-6	-1	4	9	18	18	19	21	21	24	27	24	26	28	32	34	36	45	45	46	37	37	39	38	35	22	8	2		
2023/06/07 08:30	Day	NML10	SVAN 977 SN-99021	3.5	107	0	14.8	89	75	78	60	50	38	50	3.6	35		-9	-3	2	10	11	14	15	16	18	22	17	19	22	26	31	35	35	39	39	44	42	40	30	14	5	2					
2023/06/07 08:45	Day	NML10	SVAN 977 SN-99021	4.7	101	0	15.2	87	69	71	59	50	39	48	3.6	35	Road Traffic Noise, 4min excluded	-7	-2	4	12	15	16	17	24	12	27	22	24	24	24	27	31	34	34	37	39	36	35	39	41	38	36	30	24	11	3	
2023/06/07 09:00	Day	NML10	SVAN 977 SN-99021	5.8	81	0	15.7	82	62	64	53	47	38	44	3.6	35		-4	0	4	8	12	14	19	12	12	14	15	17	19	22	26	30	33	32	34	32	32	36	33	31	27	16	6	2			
2023/06/07 09:15	Day	NML10	SVAN 977 SN-99021	4.7	90	0	15.8	82	72	74	60	50	39	49	3.6	35	Road Traffic Noise, 2 min excluded	-2	-2	2	12	10	14	18	14	15	18	21	22	24	27	29	30	33	34	34	35	37	39	42	40	37	37	32	22	10	3	
2023/06/07 09:30	Day	NML10	SVAN 977 SN-99021	9.0	82	0	16.5	75	77	79	61	51	41	51	3.6	36	Aircraft Passover, 3min excluded	-1	-1	4	1	7	15	18	21	30	22	21	24	25	26	29	30	31	33	33	40	41	37	39	41	39	44	29	13	6		
2023/06/07 09:45	Day	NML10	SVAN 977 SN-99021	8.6	86	0	16.5	72	69	70	59	50	39	48	3.6	37	Aircraft Passover and Wind Noise, 5min excluded	6	13	4	17	24	22	25	26	28	25	30	34	37	38	37	39	39	36	35	34	34	35	35	33	31	29	19	9	3		
2023/06/07 10:00	Day	NML10	SVAN 977 SN-99021	7.9	82	0	18	66	63	64	57	49	38	46	3.6	34	Aircraft Passover and Wind Noise, 2min excluded	9	17	4	14	24	18	26	24	23	35	32	34	33	35	36	36	35	31	32	33	33	33	34	33	30	32	18	7	2		
2023/06/07 10:15	Day	NML10	SVAN 977 SN-99021	9.0	77	0	16.9	67	65	69	53	47	37	44	3.6	32	Aircraft Passover, 4min excluded	9	15	3	16	22	18	24	23	20	28	28	31	32	31	32	31	31	31	31	30	30	32	34	35	31	29	24	15	6	2	
2023/06/07 10:30	Day	NML10	SVAN 977 SN-99021	7.2	90	0	17.1	67	61	64	49	45	39	43	3.6	36	Car Passby, 2min excluded	-3	0	3	9	11	13	18	22	25	23	20	22	23	26	28	31	32	33	34	33	40	41	37	39	41	39	44	29	13	6	
2023/06/07 10:45	Day	NML10	SVAN 977 SN-99021	9.0	89	0	17.5	63	65	67	53	45	40	44	3.6	36		-2	0	3	6	9	12	21	18	14	17	19	21	23	26	28	31	32	33	37	36	36	33	32	32	31	29	25	17	8	3	
2023/06/07 11:00	Day	NML10	SVAN 977 SN-99021	7.9	89	0	17.7	62	68	69	55	46	36	44	3.6	36	Car Passby, 2min excluded	-3	2	6	9	15	20	22	17	18	19	21	23	24	26	29	32	34	34	37	37	35	34	31	30	30	27	16	8	3		
2023/06/07 11:15	Day	NML10	SVAN 977 SN-99021	7.9	90	0	18.8	58	62	66	49	42	35	41	3.6	34		-9	-4	1	7	8	11	18	17	14	17	19	21	24	25	28	30	30	31	31	31	29	30	27	26	25	19	12	5			
2023/06/07 11:30	Day	NML10	SVAN 977 SN-99021	7.2	87	0	19.4	54	84	89	52	44	36	49	3.6	35	Person nearby, 2min excluded	-3	-1	3	7	11	15	19	21	25	25	32	37	32	34	34	34	35	36	38	40	39	40	40	36	34	35	36	30	19	12	6
2023/06/07 11:45	Day	NML10	SVAN 977 SN-99021	9.7	84	0	19.4	53	70	73	51	44	35	44	3.6	35		-6	-3	0	4	9	13	24	25	17	17	19	20	22	23	25	28	29	30	30	30	30	31	35	39	33	29	30	22	13	6	
2023/06/07 12:00	Day	NML10	SVAN 977 SN-99021	10.8	68	0	19.5	52	71	71	63	46	34	49	3.6	34	Car Passby, 2min excluded	-1	9	7	10	15	21	19	21	26	28	27	29	29	29	31	34	40	42	41	41	40	38	35	34	32	30	28	25	18	10	4
2023/06/07 12:15	Day	NML10	SVAN 977 SN-99021	8.6	69	0	19.9	51	55	60	48	45	36	42	3.6	36	Road Traffic Noise, 1min excluded	-6	-3	2	5	8	15	17	16	28	28	20	22	24	25	27	29	31	32	31	32	32	30	31	30	28	25	18	10	4		
2023/06/07 12:30	Day	NML10	SVAN 977 SN-99021	10.8	63	0	20	49	76	78	54	44	37	48	3.6	35	Car Passby, 1min excluded	-8	-3	2	9	9	13	18	21	21	24	28	29	30	31	34	38	41	41	40	38	37	35	34	33	32	31	27	19	11	5	
2023/06/07 12:45	Day	NML10	SVAN 977 SN-99021	7.9	72	0	20.4	50	63	65	49	43	35	41	3.6	33		-11	-6	-2	2	6	9	18	11	12	15	18	19	21	23	25	27	28	28	29	29	29	29	29	30	32	32	33	28	16	8	3
2023/06/07 13:00	Day	NML10	SVAN 977 SN-99021	7.6	73	0	20.6	49	50	54	45	43	36	40	3.6	33		-10	-5	0	4	9	11	12	11	12	15	17	19	21	23	26	28	30	30	30	30	29	28	25	22	15	7	2				
2023/06/07 13:15	Day	NML10	SVAN 977 SN-99021	10.1	69	0	20.3	49	59	61	52	44	37	43	3.6	35		-7	-5	0	3	7	11	14	12	15	16	18	20	22	24	27	30	31	31	33	35	35	31	31	30	28	27	25	18	11	4	
2023/06/07 13:30	Day	NML10	SVAN 977 SN-99021	9.0	68	0	19.9	50	66	68	50	42	35	41	3.6	33		-7	-4	-1	4	7	13	16	13	14	15	17	18	21	23	25	27	29	31	32	34	33	29	28	28	28	24	15	7	3		
2023/06/07 13:45	Day	NML10	SVAN 977 SN-99021	10.8	55	0	20.3	48	56	59	47	44	37	41	3.6	35		-3	0	4	4	7	10	14	13	14	17	19	21	23	25	27	29	30	31	32	32	31	30	29	29	28	25	17	9	3		
2023/06/07 14:00	Day	NML10	SVAN 977 SN-99021	9.0	49	0	20.1	49	53	58	43	39	33	37	3.6	30		-4	-5	1	4	7	9	15	11	11	14	15	16	18	20	22	24															

End Time	Time Period	Location	Logger	Mine Weather Data					Raw 15-minute Statistical Data					LAeq	LAeq s630 Hz correction	1.5 Comments (dominant/noteworthy sources)	Raw LAeq 15min 1/3 Spectrum																												
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10	LA90				20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz	3.15kHz z	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz z
2023/06/09 11:15	Day	NML10	SVAN 977 SN-99021	7.2	214	0	15.4	71	60	61	52	45	35	42	1	-1	3	11	13	16	20	23	27	25	28	31	27	25	28	31	33	32	33	32	32	27	28	26	23	22	18	8	4	1	
2023/06/09 11:30	Day	NML10	SVAN 977 SN-99021	9.4	204	0	15.9	68	61	65	51	45	34	42	-3	2	3	7	14	16	26	27	19	20	21	19	23	25	28	31	34	33	32	30	29	27	29	30	29	32	32	17	5	2	
2023/06/09 11:45	Day	NML10	SVAN 977 SN-99021	9.4	215	0	16.2	66	64	66	54	47	34	44	-3	0	2	6	11	13	17	20	22	17	18	20	21	25	28	32	34	34	36	37	36	29	30	26	25	24	21	13	6	2	
2023/06/09 12:00	Day	NML10	SVAN 977 SN-99021	9.0	223	0	17.2	60	64	66	50	45	36	43	3	1	5	14	13	16	22	21	16	17	20	21	24	27	30	33	35	34	34	34	32	28	29	27	25	24	22	15	7	2	
2023/06/09 12:15	Day	NML10	SVAN 977 SN-99021	9.0	200	0	17.5	58	71	73	64	52	36	50	9	2	13	26	19	30	32	32	29	34	38	37	41	41	42	41	40	38	37	37	35	28	32	36	32	28	22	16	9	4	
2023/06/09 12:30	Day	NML10	SVAN 977 SN-99021	10.4	214	0	18	55	80	81	67	56	38	55	2	4	7	12	14	15	15	14	16	19	21	24	27	31	34	36	37	39	48	50	50	41	38	38	34	34	28	19	10	4	
2023/06/09 12:45	Day	NML10	SVAN 977 SN-99021	10.8	225	0	18	51	69	71	54	50	37	47	-3	3	5	10	15	15	19	15	14	18	20	22	24	27	31	33	34	35	41	41	40	31	28	25	25	22	16	10	4		
2023/06/09 13:00	Day	NML10	SVAN 977 SN-99021	12.2	202	0	18.1	51	64	66	54	49	38	46	3	5	7	10	13	17	25	21	19	24	23	24	26	29	31	32	34	35	40	40	38	29	28	27	26	26	24	17	9	3	
2023/06/09 13:15	Day	NML10	SVAN 977 SN-99021	9.4	227	0	18.8	48	63	65	56	49	39	46	4	6	8	11	13	17	22	21	18	19	20	22	25	29	32	34	36	36	39	39	39	29	27	26	26	24	20	13	7		
2023/06/09 13:30	Day	NML10	SVAN 977 SN-99021	11.5	209	0	18.8	47	57	59	49	45	36	42	3	-2	8	12	12	19	21	19	17	19	21	22	24	27	30	34	35	34	31	29	28	24	24	23	22	21	20	14	8	3	
2023/06/09 13:45	Day	NML10	SVAN 977 SN-99021	11.2	205	0	18	48	68	70	59	50	35	48	9	5	12	21	20	25	30	34	28	28	31	35	38	38	38	39	38	37	37	36	34	31	29	28	24	24	17	9	4		
2023/06/09 14:00	Day	NML10	SVAN 977 SN-99021	9.7	214	0	18.7	65	65	62	56	51	38	47	43	11	18	28	27	26	30	34	28	26	25	27	30	33	35	36	36	39	41	40	31	30	27	26	25	22	15	7	3		
2023/06/09 14:15	Day	NML10	SVAN 977 SN-99021	9.0	200	0	19	45	67	68	64	57	43	56	5	7	12	21	26	37	31	32	40	44	39	31	35	36	39	42	48	49	47	47	47	43	41	40	36	32	28	19	8	3	
2023/06/09 14:30	Day	NML10	SVAN 977 SN-99021	11.5	224	0	19.1	44	68	70	64	57	39	53	0	3	21	29	28	27	27	37	38	34	37	39	37	37	37	38	41	40	46	48	45	36	34	32	29	26	20	12	6	2	
2023/06/09 14:45	Day	NML10	SVAN 977 SN-99021	8.3	208	0	19	45	56	58	51	47	40	44	-3	0	6	10	12	15	20	25	20	18	19	20	22	26	29	33	35	35	38	36	34	32	31	30	26	22	19	12	6	2	
2023/06/09 15:00	Day	NML10	SVAN 977 SN-99021	9.7	219	0	19	44	57	58	52	47	40	45	0	3	6	8	12	14	17	18	21	20	26	27	26	29	31	35	36	36	38	35	32	29	31	30	25	22	19	12	6	2	
2023/06/09 15:15	Day	NML10	SVAN 977 SN-99021	11.9	227	0	18.9	44	60	63	52	47	41	45	-6	-2	1	5	11	13	14	20	19	17	19	19	23	26	29	33	36	35	39	37	34	32	34	31	26	22	19	13	6	2	
2023/06/09 15:30	Day	NML10	SVAN 977 SN-99021	10.1	217	0	18.8	43	74	76	65	54	42	53	-3	1	5	10	13	13	19	18	17	19	21	23	26	30	33	36	38	47	47	47	47	47	47	37	36	34	31	25	16	8	2
2023/06/09 15:45	Day	NML10	SVAN 977 SN-99021	10.4	221	0	18.5	43	70	72	60	51	43	49	-6	-2	3	9	14	18	36	32	25	24	25	27	30	33	35	37	37	43	43	41	34	35	35	31	27	22	14	6	2		
2023/06/09 16:00	Day	NML10	SVAN 977 SN-99021	9.7	216	0	18.4	43	59	60	54	50	42	47	-6	-1	2	7	12	13	16	18	15	21	18	20	23	28	32	34	36	37	42	41	39	31	31	32	26	22	19	12	5	2	
2023/06/09 16:15	Day	NML10	SVAN 977 SN-99021	11.2	221	0	18.1	44	66	68	55	51	43	48	-3	-1	3	7	12	13	16	19	18	19	21	22	25	28	31	34	36	37	44	41	39	33	31	31	26	22	19	12	6	2	
2023/06/09 16:30	Day	NML10	SVAN 977 SN-99021	8.6	225	0	17.8	44	65	68	56	50	44	48	-3	2	5	15	16	16	20	20	16	18	19	22	23	28	32	36	37	42	38	36	40	35	31	26	21	18	11	5	2		
2023/06/09 16:45	Day	NML10	SVAN 977 SN-99021	6.8	226	0	16.9	46	63	65	52	48	44	46	-11	-3	2	7	12	10	13	17	13	16	16	16	16	20	24	29	34	35	36	43	37	34	34	30	29	24	18	14	7	4	1
2023/06/09 17:00	Day	NML10	SVAN 977 SN-99021	6.5	227	0	16.1	47	69	71	63	51	46	51	-4	16	22	12	21	29	25	29	27	31	34	34	39	39	41	43	43	42	45	39	33	29	29	24	17	13	10	4	1		
2023/06/09 17:15	Day	NML10	SVAN 977 SN-99021	4.3	215	0	15.2	51	58	60	51	49	40	46	-5	0	4	8	13	14	17	18	24	19	19	22	25	29	33	37	38	38	41	36	33	24	26	24	20	14	9	6	4	1	
2023/06/09 17:30	Day	NML10	SVAN 977 SN-99021	4.7	212	0	14.5	52	56	58	53	48	39	45	42	5	9	12	13	18	20	21	27	28	25	31	27	31	34	36	38	37	35	33	36	26	22	16	13	11	6	4	1		
2023/06/09 17:45	Day	NML10	SVAN 977 SN-99021	4.0	180	0	14.1	54	68	70	62	49	36	49	-11	-5	0	9	12	12	18	24	21	18	24	22	25	30	33	37	38	38	40	43	43	32	32	24	26	25	16	9	4	2	
2023/06/09 18:00	Day	NML10	SVAN 977 SN-99021	4.3	187	0	13.7	56	59	61	53	49	37	45	-9	0	2	10	16	15	26	18	25	30	28	28	32	36	36	36	37	38	34	30	29	26	19	16	10	8	7	5	3	1	
2023/06/09 18:15	Evening	NML10	SVAN 977 SN-99021	4.0	213	0	13.7	56	55	56	50	46	30	43	-10	-5	0	3	11	12	19	23	25	23	18	21	26	31	33	33	37	36	32	28	23	18	14	13	9	9	8	6	4	1	
2023/06/09 18:30	Evening	NML10	SVAN 977 SN-99021	3.6	216	0	13.6	57	53	56	50	47	27	42	-10	-5	0	4	9	10	15	15	20	24	18	22	26	31	32	34	37	36	32	28	23	17	14	13	14	17	15	10	5	2	
2023/06/10 07:00	Night	NML10	SVAN 977 SN-99021	2.2	57	0	3.6	100	66	67	56	46	34	45	-9	-2																													

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot (incl +1.6 dB correction)	Raw LAeq,15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAMax	LALmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	
2023/06/07 07:00	Night	NML11	SVAN 977 SN-99018	1.1	10	0	10.7	100	74	76	65	49	35	52	1.6	Comments (dominant/noteworthy sources).																														
2023/06/07 07:15	Day	NML11	SVAN 977 SN-99018	2.5	112	0	11.4	100	71	74	57	46	32	46	33	-11	-1	0	5	11	11	17	14	14	13	12	13	19	24	28	32	34	36	41	46	46	40	41	40	38	33	30	21	12	2	
2023/06/07 07:30	Day	NML11	SVAN 977 SN-99018	2.9	117	0	12	100	62	64	55	47	33	44	33	-8	-1	2	6	12	14	15	14	13	12	11	12	16	21	24	29	31	31	36	35	39	30	35	40	35	31	30	17	7	1	
2023/06/07 07:45	Day	NML11	SVAN 977 SN-99018	2.5	103	0	13.1	99	61	64	52	44	30	41	33	-11	-6	1	6	9	16	21	22	17	9	11	12	17	20	23	27	29	30	34	33	36	37	37	35	30	28	26	15	6	1	
2023/06/07 08:00	Day	NML11	SVAN 977 SN-99018	2.9	111	0	14	93	67	68	62	55	31	51	36	-9	0	5	9	13	15	14	18	19	20	23	23	25	31	32	37	45	43	46	35	35	36	29	22	18	9	2				
2023/06/07 08:15	Day	NML11	SVAN 977 SN-99018	3.6	110	0	14	94	71	72	57	47	31	46	36	-10	-5	-1	4	7	15	17	16	19	23	21	24	20	24	25	31	32	28	30	32	38	37	34	37	39	32	31	20	9	2	
2023/06/07 08:30	Day	NML11	SVAN 977 SN-99018	3.6	107	0	14.8	89	71	74	62	57	31	52	35	-10	-5	-1	3	6	10	12	10	11	8	8	10	13	17	23	33	32	37	40	41	40	40	45	45	46	41	37	27	17	5	
2023/06/07 08:45	Day	NML11	SVAN 977 SN-99018	4.7	101	0	15.2	87	67	69	58	47	29	45	36	-10	-6	-2	4	7	9	12	24	31	26	17	22	23	20	23	33	32	37	40	34	32	34	39	38	35	34	22	9	2		
2023/06/07 09:00	Day	NML11	SVAN 977 SN-99018	5.6	81	0	15.7	82	66	68	57	46	31	44	30	-5	0	1	6	13	11	16	16	14	13	11	14	16	19	21	23	24	28	37	38	37	35	32	29	29	27	16	6	1		
2023/06/07 09:15	Day	NML11	SVAN 977 SN-99018	4.7	90	0	15.8	82	67	70	62	50	35	49	32	-3	-4	0	7	6	8	11	10	11	13	15	18	22	24	26	28	30	39	45	42	37	41	36	34	31	27	20	8	2		
2023/06/07 09:30	Day	NML11	SVAN 977 SN-99018	9.0	82	0	16.5	75	73	75	64	54	35	52	2	9	0	11	23	24	27	31	25	24	29	33	36	37	35	35	35	36	45	45	44	38	42	39	36	32	29	20	11	2		
2023/06/07 09:45	Day	NML11	SVAN 977 SN-99018	8.6	86	0	16.5	72	75	76	67	59	35	55	3	16	9	14	28	28	31	31	33	35	38	42	42	42	42	42	42	42	41	47	48	48	40	39	35	35	34	23	13	5		
2023/06/07 10:00	Day	NML11	SVAN 977 SN-99018	7.9	82	0	18	66	87	91	67	54	36	57	5	11	19	9	16	21	20	23	25	29	37	38	38	40	40	43	41	44	47	49	48	49	46	47	44	42	38	31	22	12		
2023/06/07 10:15	Day	NML11	SVAN 977 SN-99018	9.0	77	0	16.9	67	69	70	59	48	33	47	3	11	18	3	16	21	16	22	21	24	27	34	32	36	35	38	37	34	36	36	36	30	27	26	30	28	31	32	18	7	2	
2023/06/07 10:30	Day	NML11	SVAN 977 SN-99018	7.2	90	0	17.1	67	77	79	51	43	32	48	3	-7	-5	-1	2	5	9	19	25	22	24	34	31	28	30	29	29	40	43	40	35	30	32	34	27	26	23	17	9	3		
2023/06/07 10:45	Day	NML11	SVAN 977 SN-99018	9.0	89	0	17.5	63	64	67	51	40	30	39	29	-9	-5	-2	2	4	6	20	16	9	10	14	13	15	19	20	22	24	24	28	29	32	30	26	29	30	29	17	8	2		
2023/06/07 11:00	Day	NML11	SVAN 977 SN-99018	7.9	89	0	17.7	62	63	67	49	42	35	40	34	-3	-2	3	5	14	15	20	16	17	16	17	20	21	24	25	27	28	28	30	32	29	29	29	30	29	26	20	10	3		
2023/06/07 11:15	Day	NML11	SVAN 977 SN-99018	7.9	90	0	18.8	58	57	61	50	41	32	39	31	-5	-3	2	4	6	8	11	12	11	12	15	16	19	21	22	24	25	25	28	28	28	28	29	32	29	31	29	17	8	2	
2023/06/07 11:30	Day	NML11	SVAN 977 SN-99018	7.2	87	0	19.4	54	60	65	53	43	32	41	32	-7	-2	0	3	9	10	16	15	16	15	17	18	20	21	23	25	26	26	27	31	27	28	29	29	30	35	34	21	9	3	
2023/06/07 11:45	Day	NML11	SVAN 977 SN-99018	9.7	84	0	19.4	53	62	65	55	46	31	44	35	1	3	4	6	11	12	27	27	18	20	21	17	19	21	23	24	25	26	29	31	34	35	39	32	30	32	30	18	8	2	
2023/06/07 12:00	Day	NML11	SVAN 977 SN-99018	10.8	68	0	19.5	52	68	71	59	50	35	47	34	-4	-2	0	4	17	10	18	16	14	18	19	19	24	25	24	26	30	33	35	37	39	39	40	40	35	34	33	23	14	6	
2023/06/07 12:15	Day	NML11	SVAN 977 SN-99018	8.6	69	0	19.9	51	65	67	57	46	33	45	35	-4	-2	1	4	6	13	12	15	28	24	18	22	23	24	25	26	26	28	28	36	39	37	33	36	33	30	29	26	20	12	5
2023/06/07 12:30	Day	NML11	SVAN 977 SN-99018	10.8	63	0	20	49	62	67	51	43	34	41	33	-3	0	2	4	6	8	10	11	12	13	15	17	21	24	25	26	28	28	29	30	32	32	31	30	30	19	10	3			
2023/06/07 12:45	Day	NML11	SVAN 977 SN-99018	7.9	72	0	20.4	50	65	67	57	45	32	44	31	-5	-4	0	2	6	8	13	10	11	12	14	16	19	21	23	25	26	28	33	36	32	34	32	32	33	33	21	11	4		
2023/06/07 13:00	Day	NML11	SVAN 977 SN-99018	7.6	73	0	20.6	49	81	83	65	55	32	53	31	-8	-5	-3	0	4	6	10	11	10	11	14	15	19	20	23	27	29	35	46	49	48	36	36	37	35	33	30	19	9	2	
2023/06/07 13:15	Day	NML11	SVAN 977 SN-99018	10.1	69	0	20.3	49	71	73	62	47	33	48	31	-5	-3	0	2	5	8	10	10	14	13	14	16	18	21	23	25	27	29	41	44	39	34	38	39	33	31	28	19	10	2	
2023/06/07 13:30	Day	NML11	SVAN 977 SN-99018	9.0	68	0	19.9	50	65	68	52	43	32	41	28	-10	-7	-3	0	4	9	11	15	16	11	12	14	16	18	20	21	22	23	25	26	28	33	35	36	31	28	26	16	6	2	
2023/06/07 13:45	Day	NML11	SVAN 977 SN-99018	10.8	55	0	20.3	48	65	67	49	41	29	39	28	-9	-8	-3	0	3	5	9	8	9	11	11	13	16	18	21	22	24	24	25	27	27	29	32	33	32	24	22	15	8	2	
2023/06/07 14:00	Day	NML11	SVAN 977 SN-99018	9.0	49	0	20.1	49	77	80	57	43	31	45	30	-10	-7	-2	1	4	7	11	10	10	11	12	14	16	18	23	24	24	30	32	30	31	34	42	39	31	30	22	13	5		
2023/06/07 14:15	Day	NML11	SVAN 977 SN-99018	9.4	48	0	20.4	48	66	69	58	47	31	45	35	-5	-1	3	7	11	12	14	20	28	23	12	15	16	18	22	20	23	26	35	36	34	39	35	35	32	30	31	27	20	9	2
2023/06/07 14:30	Day	NML11	SVAN 977 SN-99018	11.2	46	0	20.1	48	75	78	64	47	28	51	37	-8	-4	1	4	6	11	28	31	21	24	19	20	21	25	25																

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					LAeq	Logsum LAeq15min tot (incl +1.6 dB correction)	Raw LAeq,15min 1/3 Spectrum																															
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10			LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	
2023/06/09 11:15	Day	NML11	SVAN 977 SN-99018	7.2	214	0	15.4	71	69	70	56	46	33	45	1.6 Comments (dominant/noteworthy sources).																															
2023/06/09 11:30	Day	NML11	SVAN 977 SN-99018	9.4	204	0	15.9	68	62	64	56	48	34	45	-1	1	3	13	13	18	20	23	25	29	26	24	26	28	31	33	32	30	31	37	34	34	38	35	28	23	17	8	2			
2023/06/09 11:45	Day	NML11	SVAN 977 SN-99018	9.4	215	0	16.2	66	64	67	57	47	33	45	-3	1	3	7	13	26	28	31	21	20	22	21	23	29	30	32	33	32	36	39	37	32	32	32	28	24	21	14	7	1		
2023/06/09 12:00	Day	NML11	SVAN 977 SN-99018	9.0	223	0	17.2	60	71	73	62	47	35	49	-6	-3	1	5	8	13	21	28	29	17	19	19	19	22	26	30	32	36	36	37	32	35	36	32	28	25	17	9	2			
2023/06/09 12:15	Day	NML11	SVAN 977 SN-99018	9.0	200	0	17.5	58	64	68	57	49	33	46	7	3	10	20	16	23	30	28	23	28	31	31	35	37	41	41	40	39	36	36	36	30	30	32	30	28	18	8	2			
2023/06/09 12:30	Day	NML11	SVAN 977 SN-99018	10.4	214	0	18	55	59	60	52	44	34	42	-3	-1	3	8	11	13	14	14	13	13	15	16	19	24	27	31	33	32	33	34	32	28	26	26	27	24	15	6	1			
2023/06/09 12:45	Day	NML11	SVAN 977 SN-99018	10.8	225	0	18.5	51	70	73	67	51	36	53	-2	5	7	10	14	15	19	16	15	17	19	21	25	29	32	34	35	36	44	50	48	35	32	35	37	33	29	20	9	2		
2023/06/09 13:00	Day	NML11	SVAN 977 SN-99018	12.2	202	0	18.1	51	70	72	58	47	36	47	9	11	14	15	17	20	20	19	19	22	22	23	26	30	32	33	34	35	38	41	38	32	31	32	33	33	31	24	14	4		
2023/06/09 13:15	Day	NML11	SVAN 977 SN-99018	9.4	227	0	18.8	48	72	74	64	45	36	50	4	6	7	9	12	17	23	19	16	16	18	20	23	26	29	32	34	34	43	46	42	32	32	31	30	30	27	19	9	2		
2023/06/09 13:30	Day	NML11	SVAN 977 SN-99018	11.5	209	0	18.8	47	75	77	69	47	37	54	9	10	11	13	14	17	19	18	19	22	27	25	28	31	33	37	39	46	50	49	36	36	32	33	35	30	23	12	4			
2023/06/09 13:45	Day	NML11	SVAN 977 SN-99018	11.2	205	0	18	48	75	77	70	51	36	55	18	5	18	28	22	30	33	36	31	33	34	39	42	45	46	45	45	42	45	47	46	35	36	34	32	31	26	19	9	2		
2023/06/09 14:00	Day	NML11	SVAN 977 SN-99018	9.7	214	0	18.7	46	55	57	51	47	38	43	4	6	8	12	14	19	16	15	16	17	18	21	25	29	32	35	35	34	33	32	32	30	31	31	31	29	27	19	10	2		
2023/06/09 14:15	Day	NML11	SVAN 977 SN-99018	9.0	200	0	19	45	58	60	53	48	39	45	6	8	9	11	14	17	20	24	25	21	24	28	31	34	36	36	35	35	34	32	30	31	31	31	31	31	30	22	12	3		
2023/06/09 14:30	Day	NML11	SVAN 977 SN-99018	11.5	224	0	19.1	44	68	69	62	46	36	48	1	3	5	8	10	13	20	34	38	27	36	38	36	37	36	37	35	34	33	32	30	31	32	28	27	26	23	16	7	2		
2023/06/09 14:45	Day	NML11	SVAN 977 SN-99018	8.3	208	0	19	45	68	70	60	49	37	48	2	4	8	11	13	15	24	30	21	18	21	24	28	31	34	35	35	41	42	40	32	31	30	28	27	25	17	8	2			
2023/06/09 15:00	Day	NML11	SVAN 977 SN-99018	9.7	219	0	19	44	63	65	56	47	35	45	-1	2	5	8	10	13	18	26	30	22	26	27	28	30	32	34	35	34	35	36	33	32	33	31	27	26	22	15	7	2		
2023/06/09 15:15	Day	NML11	SVAN 977 SN-99018	11.9	227	0	18.9	44	63	65	57	48	39	46	3	4	6	8	11	14	15	18	18	15	20	22	24	28	32	34	35	34	38	39	39	35	34	33	30	29	26	18	9	2		
2023/06/09 15:30	Day	NML11	SVAN 977 SN-99018	10.1	217	0	18.8	43	61	64	53	45	36	43	39	1	4	9	10	11	17	18	22	26	28	30	32	34	35	33	33	34	33	32	31	29	27	26	23	16	8	2				
2023/06/09 15:45	Day	NML11	SVAN 977 SN-99018	10.4	221	0	18.5	43	55	60	51	45	37	43	40	1	3	5	8	10	15	19	25	26	22	24	22	25	30	32	34	35	34	31	29	28	29	28	29	28	25	18	9	3		
2023/06/09 16:00	Day	NML11	SVAN 977 SN-99018	9.7	216	0	18.4	43	65	66	56	46	35	45	39	1	2	4	7	9	11	13	12	13	17	18	20	24	29	32	34	35	34	36	38	37	29	29	28	26	23	16	7	2		
2023/06/09 16:15	Day	NML11	SVAN 977 SN-99018	11.2	221	0	18.1	44	69	71	63	46	36	49	38	1	0	3	6	9	11	13	16	18	18	19	21	24	27	30	33	34	34	41	43	44	33	32	31	30	28	24	16	7	2	
2023/06/09 16:30	Day	NML11	SVAN 977 SN-99018	8.6	225	0	17.8	44	61	65	56	48	37	46	39	1	4	7	9	11	16	14	13	13	15	20	23	27	32	35	35	34	36	35	35	34	39	36	30	29	27	18	8	2		
2023/06/09 16:45	Day	NML11	SVAN 977 SN-99018	8.6	226	0	16.9	46	62	65	55	47	36	44	-2	-3	3	7	8	8	11	10	10	10	12	17	22	26	31	35	35	34	34	37	35	31	32	32	31	27	24	14	6	1		
2023/06/09 17:00	Day	NML11	SVAN 977 SN-99018	6.5	227	0	16.1	47	69	71	65	52	37	51	49	1	2	4	10	14	29	28	35	31	27	33	35	37	39	40	42	42	41	41	38	32	31	35	29	29	28	14	5	1		
2023/06/09 17:15	Day	NML11	SVAN 977 SN-99018	4.3	215	0	15.2	51	68	70	62	48	33	48	38	1	2	8	12	11	16	15	18	16	17	20	25	29	31	33	34	36	40	43	42	32	29	36	32	31	30	15	5	1		
2023/06/09 17:30	Day	NML11	SVAN 977 SN-99018	4.7	212	0	14.5	52	58	61	52	46	38	43	41	3	7	9	12	14	21	23	27	25	28	28	30	32	32	33	33	35	34	32	22	20	18	19	17	16	7	3	1			
2023/06/09 17:45	Day	NML11	SVAN 977 SN-99018	4.0	180	0	14.1	54	50	53	47	43	34	40	38	1	2	6	14	12	14	12	14	21	18	15	18	22	26	30	32	34	33	30	27	25	17	20	19	13	11	9	6	3	1	
2023/06/09 18:00	Day	NML11	SVAN 977 SN-99018	4.3	187	0	13.7	56	56	57	52	48	35	44	43	1	2	13	15	18	23	16	22	27	26	28	33	37	35	34	36	35	31	26	20	15	15	14	9	8	7	5	3	1		
2023/06/09 18:15	Evening	NML11	SVAN 977 SN-99018	4.0	213	0	13.7	56	50	51	47	43	31	40	38	1	2	13	15	18	23	16	22	27	26	28	33	37	35	34	36	35	31	26	20	15	14	11	8	7	6	5	3	1		
2023/06/09 18:30	Evening	NML11	SVAN 977 SN-99018	3.6	216	0	13.6	57	50	51	46	43	29	40	38	1	2	13	15	18	23	16	22	27	26	28	33	37	35	34	36	35	31	26	20	15	14	11	8	7	6	5	3	1		
2023/06/10 07:00	Night	NML11	SVAN 977 SN-99018	2.2	57	0	3.0	100	79	82	61	51	31	49	37	1	2	2	12	7	7	7	7	7	7	7	11	18	23	26	28	33	33	35	42	44	44	36	36	35	34	29	25	14	6	1
202																																														

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					LLeq	Logsum LAeq15min tot (incl +1.6 dB correction)	Raw LAeq,15min 1/3 Spectrum																															
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10			LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	
2023/06/11 15:30	Day	NML11	SVAN 977 SN-99018	6.5	64	0	20.6	44	71	72	58	43	28	47	27	1.6 Comments (dominant/noteworthy sources).																														
2023/06/11 15:45	Day	NML11	SVAN 977 SN-99018	7.9	28	0	20.4	43	70	71	60	42	28	47	29	-14	-11	-7	-4	1	2	4	6	7	7	9	11	13	16	18	23	22	27	36	40	44	32	34	31	29	33	31	18	6	2	
2023/06/11 16:00	Day	NML11	SVAN 977 SN-99018	7.2	61	0	19.9	46	72	74	65	47	33	51	31	-13	-8	-4	0	4	5	6	7	9	8	10	11	14	17	19	25	23	29	35	42	44	31	34	30	29	27	21	14	6	2	
2023/06/11 16:15	Day	NML11	SVAN 977 SN-99018	8.9	58	0	19.6	48	82	83	51	40	28	39	29	-15	-12	-9	-5	4	5	9	7	7	8	8	10	14	18	20	26	20	30	33	29	26	27	25	22	17	10	4	1	1	1	1
2023/06/11 16:30	Day	NML11	SVAN 977 SN-99018	9.4	43	0	18.8	50	81	84	64	42	28	41	27	-16	-12	-7	-5	1	4	7	8	7	6	7	8	10	17	20	22	23	26	30	35	33	31	32	30	26	27	24	13	5	1	
2023/06/11 16:45	Day	NML11	SVAN 977 SN-99018	6.1	50	0	18.2	52	81	82	55	44	27	43	37	-14	-11	-6	-3	0	8	27	31	23	22	26	16	16	21	25	26	29	35	36	31	28	28	35	29	23	20	11	5	1		
2023/06/11 17:00	Day	NML11	SVAN 977 SN-99018	4.7	49	0	17.5	55	64	65	57	44	27	43	37	-16	-12	-7	-3	2	7	8	6	7	8	9	9	13	17	18	21	25	28	37	34	35	30	32	35	32	25	12	6	1		
2023/06/11 17:15	Day	NML11	SVAN 977 SN-99018	4.0	61	0	16.7	56	66	68	58	49	28	46	28	-16	-12	-8	-5	0	2	6	9	12	9	8	5	9	13	22	22	23	33	40	39	41	31	28	28	30	29	27	15	5	1	
2023/06/11 17:30	Day	NML11	SVAN 977 SN-99018	5.0	75	0	16.3	59	60	62	54	42	28	41	27	-16	-14	-10	-6	-2	1	3	4	5	7	11	8	12	19	19	21	20	29	31	32	35	27	22	25	27	32	17	5	1		
2023/06/11 17:45	Day	NML11	SVAN 977 SN-99018	5.0	82	0	15.5	66	72	73	60	33	28	46	21	-16	-12	-9	-6	-2	2	2	3	4	5	4	6	9	12	13	15	24	27	39	41	43	29	27	22	23	21	16	9	4	1	
2023/06/11 18:00	Day	NML11	SVAN 977 SN-99018	7.6	72	0	16	65	59	62	41	31	26	31	27	-14	-10	-8	-3	2	9	11	20	21	22	16	12	14	15	16	17	17	19	16	18	22	23	17	17	10	9	7	5	3	1	
2023/06/11 18:15	Evening	NML11	SVAN 977 SN-99018	4.3	94	0	14.9	70	57	60	32	29	25	28	22	-13	-9	-6	-3	0	4	4	0	-1	2	3	7	9	12	14	15	20	18	15	14	23	18	16	17	10	9	8	5	3	1	
2023/06/11 18:30	Evening	NML11	SVAN 977 SN-99018	4.7	105	0	14.2	75	39	42	34	31	25	28	24	-15	-10	-9	-4	-1	3	6	4	0	5	7	6	7	11	14	16	19	20	20	15	12	22	16	13	13	10	10	8	6	3	1
2023/06/12 07:00	Night	NML11	SVAN 977 SN-99018	1.1	274	0	9.5	100	56	60	48	40	27	37	28	-9	-6	0	2	4	10	10	5	3	7	11	10	13	17	20	22	23	25	29	30	28	26	28	27	23	20	18	7	3	1	
2023/06/12 07:15	Day	NML11	SVAN 977 SN-99018	1.4	209	0	10	100	72	73	67	48	28	52	29	-9	-4	2	5	6	15	17	7	2	3	11	8	13	19	19	23	29	35	43	47	48	38	38	37	35	32	23	16	6	1	
2023/06/12 07:30	Day	NML11	SVAN 977 SN-99018	1.1	193	0	10.4	100	67	68	58	46	31	45	30	-9	-4	1	3	7	9	13	15	13	14	13	17	17	20	21	23	26	30	37	40	39	32	35	31	28	27	28	18	5	1	
2023/06/12 07:45	Day	NML11	SVAN 977 SN-99018	1.1	177	0	11.2	100	67	70	58	50	34	47	36	-12	-6	1	4	8	16	28	31	18	19	23	15	16	17	20	23	26	29	38	39	40	38	35	30	29	29	19	7	1		
2023/06/12 08:00	Day	NML11	SVAN 977 SN-99018	0.7	254	0	11.6	100	77	78	61	49	31	50	29	-12	-7	-2	2	5	11	11	12	6	7	12	8	11	15	21	25	29	33	38	41	44	44	34	37	34	31	29	17	7	1	
2023/06/12 08:15	Day	NML11	SVAN 977 SN-99018	0.4	137	0	12.2	100	72	73	67	49	31	52	30	-10	-8	-3	3	4	9	10	7	8	9	18	10	16	17	20	26	29	37	45	48	47	46	36	36	38	37	30	23	16	7	1
2023/06/12 08:30	Day	NML11	SVAN 977 SN-99018	1.1	8	0	12.6	99	73	74	64	56	28	52	29	-11	-6	0	3	6	13	13	9	8	8	4	7	13	13	19	25	29	35	46	47	47	37	36	34	33	32	29	16	6	1	
2023/06/12 08:45	Day	NML11	SVAN 977 SN-99018	3.6	65	0	14.2	94	69	72	64	53	30	51	27	-10	-3	1	5	7	8	14	7	5	4	5	9	12	14	17	24	25	30	43	44	46	38	39	40	36	36	35	20	9	2	
2023/06/12 09:00	Day	NML11	SVAN 977 SN-99018	5.4	74	0	16.2	84	71	74	61	47	29	47	27	-12	-8	-4	1	6	6	8	7	7	7	7	9	12	16	20	23	25	26	33	36	35	34	41	43	39	35	33	22	12	2	
2023/06/12 09:15	Day	NML11	SVAN 977 SN-99018	5.8	60	0	16.6	82	67	70	58	47	27	45	26	26	Aircraft Passover, 2min excluded	-13	-9	-5	-1	2	11	17	28	27	20	27	29	24	25	27	27	30	36	39	38	32	34	33	30	25	22	13	5	2
2023/06/12 09:30	Day	NML11	SVAN 977 SN-99018	6.5	72	0	16.5	82	69	73	54	46	30	44	35	-11	-7	-4	0	2	11	30	28	18	18	22	18	18	20	19	21	23	26	35	35	34	32	34	37	32	28	28	18	9	2	
2023/06/12 09:45	Day	NML11	SVAN 977 SN-99018	7.6	68	0	16.9	79	67	69	55	46	27	44	33	-12	-7	-3	0	3	4	9	7	7	10	10	11	13	18	25	30	28	31	34	35	36	35	36	34	30	30	24	17	10	4	
2023/06/12 10:00	Day	NML11	SVAN 977 SN-99018	6.1	49	0	16.9	79	60	62	54	44	26	41	23	-12	-7	-3	1	4	5	8	7	6	6	5	6	8	12	14	18	20	21	29	34	33	31	33	34	31	27	21	12	6	1	
2023/06/12 10:15	Day	NML11	SVAN 977 SN-99018	5.0	61	0	17.9	74	72	75	51	42	28	41	29	-12	-7	-4	0	3	7	16	7	8	10	11	14	14	17	20	24	23	32	34	31	34	33	31	28	24	20	14	7	2		
2023/06/12 10:30	Day	NML11	SVAN 977 SN-99018	5.4	33	0	17.8	73	73	74	55	46	30	45	32	-9	-7	-4	1	4	9	20	24	26	17	15	16	17	18	20	23	28	38	37	37	34	36	34	27	25	21	15	6	2		
2023/06/12 10:45	Day	NML11	SVAN 977 SN-99018	5.4	50	0	18.7	70	70	71	61	52	32	49	32	8	12	2	14	24	26	26	27	32	33	37	38	39	41	38	37	35	36	37	39	38	36	33	29	30	27	15	7	2		
2023/06/12 11:00	Day	NML11	SVAN 977 SN-99018	6.5	80	0	18.6	71	64	66	55	48	31	44	34	9	16	14	21	23	23	26	24	23	22	24	25	28	31	31	30	32	32	34	38	32	31	33	32	30	32	29	15	6	2	
2023/06/12 11:15	Day	NML11	SVAN 977 SN-99018	7.2	76	0	18.7	70	59	62	54	42	29	41	26	-12	-8	-5	0	2	4	7	9	5	6	8	11	14	16	18	20	21</														

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min	Raw LAeq15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/07 07:00	Night	NML15	SVAN 977 SN:69757	1.1	10	0	10.7	100	57	59	47	36	20	35	22	2.3 Comments (dominant/noteworthy sources).																															
2023/06/07 07:15	Day	NML15	SVAN 977 SN:69757	2.5	112	0	11.4	100	70	73	55	35	20	42	-13	-10	-5	11	3	3	9	4	1	-1	3	6	5	8	12	15	17	19	21	21	19	24	24	28	27	28	8	3	0				
2023/06/07 07:30	Day	NML15	SVAN 977 SN:69757	2.9	117	0	12	100	64	68	45	37	26	36	30	-13	-9	-4	11	4	4	9	3	2	4	4	6	6	8	11	14	17	21	27	26	21	29	32	34	35	36	15	7	2			
2023/06/07 07:45	Day	NML15	SVAN 977 SN:69757	2.5	103	0	13.1	99	69	73	42	37	27	36	31	-13	-9	-2	12	12	15	21	18	12	8	8	14	10	15	18	25	23	21	24	23	22	20	19	20	28	31	27	12	3	0		
2023/06/07 08:00	Day	NML15	SVAN 977 SN:69757	2.9	111	0	14	93	70	73	50	42	29	41	34	-12	-8	-2	11	5	9	14	13	21	12	15	24	20	26	23	25	24	23	26	23	22	24	29	32	35	33	17	6	3			
2023/06/07 08:15	Day	NML15	SVAN 977 SN:69757	3.6	110	0	14	94	62	65	48	37	26	36	30	-12	-8	-3	12	6	10	13	10	16	10	11	18	13	20	20	21	21	23	25	23	25	26	29	27	26	25	22	11	4	0		
2023/06/07 08:30	Day	NML15	SVAN 977 SN:69757	3.6	107	0	14.8	89	77	78	62	39	25	49	27	-13	-8	-3	12	5	7	11	8	10	8	9	12	11	15	18	19	24	31	31	35	44	43	40	36	34	31	15	6	2			
2023/06/07 08:45	Day	NML15	SVAN 977 SN:69757	4.7	101	0	15.2	87	59	62	48	40	24	37	36	-12	-8	-3	11	5	8	12	20	29	27	14	24	26	18	17	19	19	20	25	26	26	26	25	24	26	21	19	7	3	0		
2023/06/07 09:00	Day	NML15	SVAN 977 SN:69757	5.8	81	0	15.7	82	69	70	61	42	25	47	27	-12	-8	-3	12	6	10	13	10	16	10	11	24	20	26	23	25	24	23	26	37	37	37	36	35	29	25	25	27	26	13	6	1
2023/06/07 09:15	Day	NML15	SVAN 977 SN:69757	4.7	90	0	15.8	82	64	67	55	39	27	41	31	-1	-4	0	14	7	15	15	14	11	10	13	15	16	19	22	23	23	23	24	24	28	29	25	28	34	35	23	10	3			
2023/06/07 09:30	Day	NML15	SVAN 977 SN:69757	9.0	82	0	16.5	75	78	79	69	47	31	55	33	-12	19	3	20	32	27	34	34	34	38	42	44	45	46	47	47	46	44	42	41	38	33	28	25	29	32	31	21	8	2		
2023/06/07 09:45	Day	NML15	SVAN 977 SN:69757	8.6	86	0	16.5	72	68	70	62	44	30	47	33	-1	11	1	10	22	14	28	28	29	31	35	37	35	38	39	39	39	45	30	28	25	30	28	30	32	30	18	10	4			
2023/06/07 10:00	Day	NML15	SVAN 977 SN:69757	7.9	82	0	18	66	66	68	55	41	30	42	32	-1	5	0	2	8	8	12	19	16	26	25	26	29	32	33	34	33	32	30	28	26	24	23	24	26	27	25	19	13	7		
2023/06/07 10:15	Day	NML15	SVAN 977 SN:69757	9.0	77	0	16.9	67	67	69	60	46	30	46	30	2	12	1	10	20	14	29	28	29	30	34	36	34	37	37	38	38	35	33	32	30	23	21	23	28	28	25	16	11	5		
2023/06/07 10:30	Day	NML15	SVAN 977 SN:69757	7.2	90	0	17.1	67	56	59	45	39	30	36	32	-4	-2	0	7	5	8	16	22	20	14	14	16	18	21	23	23	24	24	25	25	24	21	22	24	25	26	24	16	10	4		
2023/06/07 10:45	Day	NML15	SVAN 977 SN:69757	9.0	89	0	17.5	63	56	59	40	35	29	33	30	-8	-5	-2	7	4	6	19	14	7	9	11	14	16	19	20	21	22	21	21	21	24	20	19	18	15	10	4					
2023/06/07 11:00	Day	NML15	SVAN 977 SN:69757	7.9	89	0	17.7	62	65	67	47	38	29	38	31	-4	-2	0	7	8	13	17	14	11	10	12	15	17	20	22	23	23	24	32	31	30	24	23	24	25	23	21	17	11	5		
2023/06/07 11:15	Day	NML15	SVAN 977 SN:69757	7.9	90	0	18.8	58	60	61	47	40	29	37	32	-1	-1	3	8	6	9	11	10	11	13	14	19	19	22	24	25	25	27	30	28	28	26	25	24	23	23	22	19	14	7		
2023/06/07 11:30	Day	NML15	SVAN 977 SN:69757	7.2	87	0	19.4	54	59	62	46	40	30	38	34	-1	2	3	8	8	12	15	13	15	16	18	20	21	23	25	26	26	27	29	25	24	24	23	21	21	21	16	9				
2023/06/07 11:45	Day	NML15	SVAN 977 SN:69757	9.7	84	0	19.4	53	49	51	43	37	27	35	33	-5	1	0	7	11	12	24	19	14	19	18	19	18	19	20	22	23	23	23	23	23	23	22	21	21	23	22	18	13	7		
2023/06/07 12:00	Day	NML15	SVAN 977 SN:69757	10.8	68	0	19.5	52	55	57	42	38	30	35	32	-2	2	1	8	12	10	16	14	12	14	15	18	19	22	23	24	24	25	26	27	28	26	27	28	22	22	22	20	14	8		
2023/06/07 12:15	Day	NML15	SVAN 977 SN:69757	8.6	69	0	19.9	51	75	80	47	40	31	41	35	1	4	5	7	8	9	13	16	14	12	22	24	17	19	22	23	24	27	26	27	30	29	29	28	30	30	27	20	11			
2023/06/07 12:30	Day	NML15	SVAN 977 SN:69757	10.8	63	0	20	49	55	58	45	38	29	36	32	-2	0	2	7	7	8	10	12	11	12	14	17	19	21	23	24	25	25	25	24	23	25	26	24	22	22	20	14	8			
2023/06/07 12:45	Day	NML15	SVAN 977 SN:69757	7.9	72	0	20.4	50	77	81	58	46	31	47	38	-2	4	2	8	8	9	13	18	20	25	28	29	31	36	41	42	43	33	35	35	33	34	30	29	28	28	27	25	19	10		
2023/06/07 13:00	Day	NML15	SVAN 977 SN:69757	7.6	73	0	20.6	49	55	59	44	37	29	35	31	-2	0	1	7	4	6	9	9	10	13	14	16	18	21	22	23	23	23	22	22	21	22	24	26	25	21	19	13	7			
2023/06/07 13:15	Day	NML15	SVAN 977 SN:69757	10.1	69	0	20.3	49	43	46	39	35	28	32	30	-7	-5	-2	7	3	6	9	13	21	15	13	16	17	18	20	21	21	22	22	21	19	19	19	19	19	18	15	10	4			
2023/06/07 13:30	Day	NML15	SVAN 977 SN:69757	9.0	68	0	19.9	50	67	71	55	41	31	42	37	-2	-2	1	8	7	11	10	20	22	22	23	27	26	27	27	28	26	27	26	25	27	33	34	31	36	30	23	20	14	8		
2023/06/07 13:45	Day	NML15	SVAN 977 SN:69757	10.8	55	0	20.3	48	52	55	42	35	27	33	28	-4	-3	-1	7	3	5	8	8	8	11	11	14	15	18	19	20	21	21	21	23	25	21	21	20	21	21	19	16	11	5		
2023/06/07 14:00	Day	NML15	SVAN 977 SN:69757	9.0	49	0	20.1	49	47	49	39	34	27	31	28	-6	-3	-1	8	5	7	14	10	7	11	12	14	16	18	20	20	21	20	19	20	18	18	19	19	18	17	14	9	4			
2023/06/07 14:15	Day	NML15	SVAN 977 SN:69757	9.4	48	0	20.4	48	58	60	50	39	28	37	35	-1	2	6	11	11	12	19	26	28	18	14	17	17	20	21	22	23	25	26	24	26	30	24	20	20	17	12	6				
2023/06/07 14:30	Day	NML15	SVAN 977 SN:69757	11.2	46	0	20.1	48	54	56	45	36	27	34	32	-5	-3	0	8	5	14	24	24	15	17	17	16	16	18	20	20	21	21	23	23	23											

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min	Raw LAeq15min 1/3 Spectrum																											
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmaz	LAlmax	LA1	LA10		LA90	LAeq	LAeq S630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz
2023/06/09 11:00	Day	NML15	SVAN 977 SN:69757	7.9	220	0	14.8	80	52	56	40	34	29	33	30	2.3 Comments (dominant/noteworthy sources).																									
2023/06/09 11:15	Day	NML15	SVAN 977 SN:69757	7.2	214	0	15.4	71	61	63	50	42	31	39	35	3	1 min excl, Helicopter																								
2023/06/09 11:30	Day	NML15	SVAN 977 SN:69757	9.4	204	0	15.9	68	49	52	43	38	32	36	35	-1	4																								
2023/06/09 11:45	Day	NML15	SVAN 977 SN:69757	9.4	215	0	16.2	66	78	81	53	42	32	46	33	-7	3																								
2023/06/09 12:00	Day	NML15	SVAN 977 SN:69757	9.0	223	0	17.2	60	69	71	60	41	31	46	35	11	-3																								
2023/06/09 12:15	Day	NML15	SVAN 977 SN:69757	9.0	200	0	17.5	58	59	60	53	45	30	42	34	-4	1																								
2023/06/09 12:30	Day	NML15	SVAN 977 SN:69757	10.4	214	0	18	55	62	64	50	39	30	39	33	-9	-5																								
2023/06/09 12:45	Day	NML15	SVAN 977 SN:69757	10.8	225	0	18	51	49	53	42	38	32	36	35	-3	2																								
2023/06/09 13:00	Day	NML15	SVAN 977 SN:69757	12.2	202	0	18.1	51	62	64	44	39	31	38	34	-7	-4																								
2023/06/09 13:15	Day	NML15	SVAN 977 SN:69757	9.4	227	0	18.8	48	67	70	53	40	33	42	36	-10	-4																								
2023/06/09 13:30	Day	NML15	SVAN 977 SN:69757	11.5	209	0	18.8	47	56	60	48	39	30	37	35	-5	-2																								
2023/06/09 13:45	Day	NML15	SVAN 977 SN:69757	11.2	205	0	18	48	76	79	68	44	33	53	35	11	0																								
2023/06/09 14:00	Day	NML15	SVAN 977 SN:69757	9.7	214	0	18.7	46	47	48	43	40	29	37	36	-1	0																								
2023/06/09 14:15	Day	NML15	SVAN 977 SN:69757	9.0	200	0	19	45	67	72	51	41	31	39	37	7	12																								
2023/06/09 14:30	Day	NML15	SVAN 977 SN:69757	11.5	224	0	19.1	44	63	65	57	42	34	43	35	-6	-4																								
2023/06/09 14:45	Day	NML15	SVAN 977 SN:69757	8.3	208	0	19	45	52	55	45	41	32	38	36	0	1																								
2023/06/09 15:00	Day	NML15	SVAN 977 SN:69757	9.7	219	0	19	44	58	59	50	41	32	39	33	-11	-6																								
2023/06/09 15:15	Day	NML15	SVAN 977 SN:69757	11.9	227	0	18.9	44	64	68	48	40	31	39	36	-11	-7																								
2023/06/09 15:30	Day	NML15	SVAN 977 SN:69757	10.1	217	0	18.8	43	53	55	46	40	32	37	35	-10	-6																								
2023/06/09 15:45	Day	NML15	SVAN 977 SN:69757	10.4	221	0	18.5	43	52	55	46	41	32	38	36	-9	-5																								
2023/06/09 16:00	Day	NML15	SVAN 977 SN:69757	9.7	216	0	18.4	43	62	65	46	40	33	39	34	-10	-7																								
2023/06/09 16:15	Day	NML15	SVAN 977 SN:69757	11.2	221	0	18.1	44	60	63	50	40	32	39	37	-10	-5																								
2023/06/09 16:30	Day	NML15	SVAN 977 SN:69757	8.6	225	0	17.8	44	50	53	44	39	31	37	34	-6	-3																								
2023/06/09 16:45	Day	NML15	SVAN 977 SN:69757	6.8	226	0	16.9	46	58	60	47	40	31	37	36	-13	-6																								
2023/06/09 17:00	Day	NML15	SVAN 977 SN:69757	6.5	227	0	16.1	47	54	55	48	41	33	39	37	-6	6																								
2023/06/09 17:15	Day	NML15	SVAN 977 SN:69757	4.3	215	0	15.2	51	53	54	46	38	31	37	36	-10	-4																								
2023/06/09 17:30	Day	NML15	SVAN 977 SN:69757	4.7	212	0	14.5	52	46	49	42	39	33	36	37	-8	-2																								
2023/06/09 17:45	Day	NML15	SVAN 977 SN:69757	4.0	180	0	14.1	54	46	49	39	37	32	35	34	-13	-7																								
2023/06/09 18:00	Day	NML15	SVAN 977 SN:69757	4.3	187	0	13.7	56	55	56	49	41	33	39	37	-13	-4																								
2023/06/09 18:15	Evening	NML15	SVAN 977 SN:69757	4.0	213	0	13.7	56	52	53	44	39	33	37	33	-12	-7																								
2023/06/09 18:30	Evening	NML15	SVAN 977 SN:69757	3.6	216	0	13.6	57	49	51	42	38	32	36	31	-16	-11																								
2023/06/10 07:00	Night	NML15	SVAN 977 SN:69757	2.2	57	0	3.6	100	53	55	47	39	22	36	29	-15	-9																								
2023/06/10 07:15	Day	NML15	SVAN 977 SN:69757	4.7	27	0	4.5	100	58	61	41	34	23	33	29	-8	-6																								
2023/06/10 07:30	Day	NML15	SVAN 977 SN:69757	5.0	359	0	4.9	98	60	61	48	39	29	37	34	-13	-6																								
2023/06/10 07:45	Day	NML15	SVAN 977 SN:69757	5.0	7	0	6.2	90	59	63	46	40	33	38	34	-13	-6																								
2023/06/10 08:00	Day	NML15	SVAN 977 SN:69757	1.4	18	0	8.6	81	63	66	52	44	33	41	37	-13	-6																								
2023/06/10 08:15	Day	NML15	SVAN 977 SN:69757	3.2	349	0	9.5	79	64	65	63	55	32	51	36	-11	0																								
2023/06/10 08:30	Day	NML15	SVAN 977 SN:69757	3.6	9	0	9.8	78	57	59	50	43	32	40	34	-10	-1																								
2023/06/10 08:45	Day	NML15	SVAN 977 SN:69757	2.2	61	0	11.3	71	52	55	44	38	26	35	33	-14	-6																								
2023/06/10 09:00	Day	NML15	SVAN 977 SN:69757	2.9	139	0	11.6	70	74	75	61	42	26	49	28	-16	-9																								
2023/06/10 09:15	Day	NML15	SVAN 977 SN:69757	3.6	165	0	12.2	69	66	68	58	39	25	44	26	-14	-9																								
2023/06/10 09:30	Day	NML15	SVAN 977 SN:69757	5.0	151	0	12.8	64	68	72	49	34	25	41	25	-15	-9																								
2023/06/10 09:45	Day	NML15	SVAN 977 SN:69757	5.4	151	0	13.3	62	67	70	55	45	23	43	29	-15	-9																								
2023/06/10 10:00	Day	NML15	SVAN 977 SN:69757	6.5	154	0	14.2	56	66	68	46	33	23	36	23	-15	-10																								
2023/06/10 10:15	Day	NML15	SVAN 977 SN:69757	7.2	165	0	14.8	54	63	67	49	37	26	38	30	-11	-6																								
2023/06/10 10:30	Day	NML15	SVAN 977 SN:69757	7.2	154	0	15.4	51	65	68	46	39	25	36	30	-15	-10																								
2023/06/10 10:45	Day	NML15	SVAN 977 SN:69757	5.0	140	0	16	49	54	56	41	34	24	31	29	-17	-11																								
2023/06/10 11:00	Day	NML15	SVAN 977 SN:69757	4.0	220	0	16.4	47	63	67	50	37	26	38	32	-16	-9																								
2023/06/10 11:15	Day	NML15	SVAN 977 SN:69757	4.0	212	0	17	46	68	70	62	45	26	48	29	-12	-6																								
2023/06/10 11:30	Day	NML15	SVAN 977 SN:69757	4.0	22	0	17.5	44	65	67	59	39	23	45	26	-15	-2																								
2023/06/10 11:45	Day	NML15	SVAN 977 SN:69757	4.0	294	0	17.8	43	58	61	47	34	24	34	24	-13	-11																								
2023/06/10 12:00	Day	NML15	SVAN 977 SN:69757	3.2	197	0	18.2	41	52	54	38	31	23	30	25	-16	-12																								
2023/06/10 12:15	Day	NML15	SVAN 977 SN:69757	2.2	147	0	18.5	40	50	52	42	35	25	32	31	-12	-7																								
2023/06/10 12:30	Day	NML15	SVAN 977 SN:69757	4.3	192	0	18.8	38	62	63	53	38	24	40	29	-15	-11																								
2023/06/10 12:45	Day	NML15	SVAN 977 SN:69757	3.6	83	0	19.6	37	54	56	46	34	23	33	25	-15	-12																								
2023/06/10 13:00	Day	NML15	SVAN 977 SN:69757	6.5	221	0	19.7	37	69	72	46	43	25	39	35	-6	8																								
2023/06/10 13:15	Day	NML15	SVAN 977 SN:69757	3.2	184	0	19.8	36	47	49	38	32	24	29	29	-16	-11																								
2023/06/10 13:30	Day	NML15	SVAN 977 SN:69757	5.0	145	0	19.7	36	64	67	48	36	25	36	32	-16	-9																								
2023/06/10 13:45	Day	NML15	SVAN 977 SN:69757	3.6	282	0	20.5	34	48	51	39	33	24	30	25	-14	-9																								
2023/06/10 14:00	Day	NML15	SVAN 977 SN:69757	4.3	157	0	20.4	34	54	56	42	32	26	31	27	-14	-7																								
2023/06/10 14:15	Day	NML15	SVAN 977 SN:69757	5.8	214	0	20.8	34	60	61	52	38	25	39	26	-16	-11																								
2023/06/10 14:30	Day	NML15	SVAN 977 SN:69757	5.8	197	0	20.5	34	60	63	40	32	25	33	27	-17	-12																								
2023/06/10 14:45	Day	NML15	SVAN 977 SN:69757	6.1	242	0	20.6	33	48	51	41	34	26	32	27	-13	-8																								
2023/06/10 15:00	Day	NML15	SVAN 977 SN:69757	6.1	252	0	20.7	33	55	58	47	38	24	35	36	-17	-12																								
2023/06/10 15:15	Day	NML15	SVAN 977 SN:69757	6.5	279	0	20.8	32	55	57	47	36</																													

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min	Raw LAeq15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmaz	LAlmax	LA1	LA10		LA90	LAeq	LAeq S630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz
2023/06/11 15:15	Day	NML15	SVAN 977 SN:69757	6.8	77	0	20.6	43	53	55	45	37	26	34	26	2.3 Comments (dominant/noteworthy sources).																														
2023/06/11 15:30	Day	NML15	SVAN 977 SN:69757	6.5	64	0	20.6	44	60	64	47	36	24	35	22	-11	-8	-5	8	0	1	5	6	6	7	9	11	13	15	17	18	18	18	20	22	23	27	22	24	26	25	16	9	3		
2023/06/11 15:45	Day	NML15	SVAN 977 SN:69757	7.9	28	0	20.4	43	54	57	47	37	23	35	23	-17	-11	-6	8	-1	-1	4	3	8	4	6	7	9	11	13	14	15	15	17	18	24	25	27	29	28	17	7	2			
2023/06/11 16:00	Day	NML15	SVAN 977 SN:69757	7.2	61	0	19.9	46	55	58	44	34	25	33	25	-12	-10	-6	9	2	3	6	5	6	5	7	9	11	14	15	18	20	18	20	22	24	24	27	28	24	21	14	7	2		
2023/06/11 16:15	Day	NML15	SVAN 977 SN:69757	7.9	58	0	19.6	48	64	67	49	38	25	38	25	-15	-10	-5	11	3	4	8	5	5	4	5	8	11	14	17	18	20	24	30	31	28	32	27	22	21	22	21	14	6	1	
2023/06/11 16:30	Day	NML15	SVAN 977 SN:69757	9.4	43	0	18.8	50	61	64	48	36	26	36	26	-13	-10	-5	10	1	2	6	3	5	5	7	8	11	13	16	17	19	19	21	24	26	27	29	26	26	21	22	18	9	3	
2023/06/11 16:45	Day	NML15	SVAN 977 SN:69757	6.1	50	0	18.2	52	64	65	49	39	24	38	33	-16	-12	-5	11	1	9	24	26	16	17	21	15	14	15	17	18	19	18	21	24	29	31	27	24	27	26	30	24	6	1	
2023/06/11 17:00	Day	NML15	SVAN 977 SN:69757	4.7	49	0	17.5	55	58	62	47	34	22	34	24	-17	-11	-5	12	2	6	8	1	-2	-1	2	4	8	11	14	18	20	18	24	19	16	21	24	23	27	28	23	11	4	0	
2023/06/11 17:15	Day	NML15	SVAN 977 SN:69757	4.0	61	0	16.7	56	62	64	43	33	21	33	22	-17	-13	-7	10	1	0	9	10	10	9	10	10	5	7	9	12	14	15	21	22	20	15	18	21	24	28	23	14	4	1	
2023/06/11 17:30	Day	NML15	SVAN 977 SN:69757	5.0	75	0	16.3	59	48	51	40	33	22	30	22	-18	-13	-8	10	2	4	10	1	3	5	-1	7	8	10	11	13	13	19	20	19	19	18	17	20	24	21	8	3	0		
2023/06/11 17:45	Day	NML15	SVAN 977 SN:69757	5.0	82	0	15.5	66	43	46	37	35	28	33	21	-17	-12	-7	10	2	1	7	-1	0	-1	-1	7	6	8	10	15	16	13	11	11	28	31	13	15	12	9	8	6	3	1	
2023/06/11 18:00	Day	NML15	SVAN 977 SN:69757	7.6	72	0	16	65	58	62	41	39	35	37	28	-15	-9	-7	10	3	9	12	13	13	20	18	14	17	15	14	15	15	12	11	9	34	33	13	14	11	10	9	18	20	3	1
2023/06/11 18:15	Evening	NML15	SVAN 977 SN:69757	4.3	94	0	14.9	70	47	51	40	39	35	37	23	-16	-11	-6	9	1	0	7	0	-2	-2	0	3	7	11	15	15	18	13	12	10	35	32	13	14	11	10	8	14	6	2	
2023/06/11 18:30	Evening	NML15	SVAN 977 SN:69757	4.7	105	0	14.2	75	40	42	39	38	33	36	21	-16	-12	-8	8	0	-1	6	1	-2	-1	1	4	7	10	12	14	14	12	10	9	35	29	11	13	10	10	8	6	3	2	
2023/06/12 07:00	Night	NML15	SVAN 977 SN:69757	1.1	274	0	9.5	100	64	66	51	33	22	39	23	-12	-8	-2	9	3	4	8	3	1	2	3	5	8	10	13	17	18	19	22	20	23	29	34	28	35	28	21	12	6	1	
2023/06/12 07:15	Day	NML15	SVAN 977 SN:69757	1.4	209	0	10	100	62	63	46	34	24	34	22	-13	-8	-4	10	4	4	8	2	1	-1	1	3	7	10	12	16	19	20	28	28	27	18	24	18	21	19	15	5	2	0	
2023/06/12 07:30	Day	NML15	SVAN 977 SN:69757	1.1	193	0	10.4	100	67	61	41	24	46	29	23	-2	-9	-3	13	7	14	29	30	28	29	31	35	34	34	34	34	36	36	36	36	36	35	32	28	26	24	22	9	3	0	
2023/06/12 07:45	Day	NML15	SVAN 977 SN:69757	1.1	177	0	11.2	100	53	56	42	34	22	31	23	-13	-9	-2	8	4	10	21	19	12	14	18	17	14	13	14	18	19	17	23	21	17	19	15	15	11	7	3	0			
2023/06/12 08:00	Day	NML15	SVAN 977 SN:69757	0.7	254	0	11.6	100	53	56	39	32	23	30	23	-14	-10	-3	9	2	3	7	8	0	-1	2	5	10	10	11	17	20	17	22	22	22	14	17	20	17	16	14	5	2	0	
2023/06/12 08:15	Day	NML15	SVAN 977 SN:69757	0.4	137	0	12.2	100	60	64	47	33	22	35	22	-13	-9	-2	9	3	6	8	3	0	0	2	5	6	9	11	16	18	17	20	20	17	15	19	24	30	30	25	12	4	0	
2023/06/12 08:30	Day	NML15	SVAN 977 SN:69757	1.1	8	0	12.6	99	55	59	43	31	21	31	22	-14	-8	-1	11	9	5	8	1	-2	3	5	4	8	10	16	18	17	20	21	19	20	26	20	16	14	5	2	0			
2023/06/12 08:45	Day	NML15	SVAN 977 SN:69757	3.6	65	0	14.2	94	54	58	41	35	25	32	24	-12	-8	-4	9	11	4	7	3	2	2	6	8	9	12	14	18	20	24	24	20	18	19	20	21	23	23	10	4	0		
2023/06/12 09:00	Day	NML15	SVAN 977 SN:69757	5.4	74	0	16.2	84	52	55	42	36	27	33	25	-12	-8	-4	8	10	4	6	4	3	4	8	10	11	15	17	19	20	19	21	20	18	18	20	23	24	26	26	14	6	1	
2023/06/12 09:15	Day	NML15	SVAN 977 SN:69757	5.8	60	0	16.6	82	55	58	45	38	27	35	26	-12	-7	-3	7	10	9	12	13	13	11	19	17	18	20	22	24	22	23	23	19	19	21	22	26	28	25	13	6	1		
2023/06/12 09:30	Day	NML15	SVAN 977 SN:69757	6.5	72	0	16.5	82	57	58	53	39	27	39	27	-9	-7	-3	8	11	12	25	26	30	26	26	29	27	27	28	28	27	27	25	22	18	19	17	20	21	20	13	8	2		
2023/06/12 09:45	Day	NML15	SVAN 977 SN:69757	7.6	68	0	16.9	79	57	61	43	35	27	33	29	-8	-5	-1	9	17	8	9	10	10	10	11	13	15	16	19	20	21	24	24	21	20	21	22	21	21	21	21	10	5	2	
2023/06/12 10:00	Day	NML15	SVAN 977 SN:69757	6.1	49	0	16.9	79	61	64	51	40	29	39	27	-10	-8	-4	7	2	3	7	6	6	6	9	10	12	14	17	18	20	20	21	28	28	24	25	24	31	29	32	32	25	9	2
2023/06/12 10:15	Day	NML15	SVAN 977 SN:69757	5.0	61	0	17.9	74	59	62	49	41	30	38	28	-6	-4	-2	6	3	7	9	8	8	10	12	15	16	19	20	21	24	29	30	24	22	26	29	28	31	30	19	11	5		
2023/06/12 10:30	Day	NML15	SVAN 977 SN:69757	5.4	33	0	17.8	73	60	64	45	36	29	36	34	-8	-5	-2	8	5	9	16	22	26	16	14	19	19	25	21	25	24	23	24	23	24	23	23	26	15	9	3				
2023/06/12 10:45	Day	NML15	SVAN 977 SN:69757	5.4	50	0	18.7	70	51	52	45	39	31	36	35	-1	5	-2	12	19	21	16	17	18	17	18	23	25	25	24	24	24	25	25	21	22	23	24	23	22	21	15	10	4		
2023/06/12 11:00	Day	NML15	SVAN 977 SN:69757	6.5	80	0	18.6	71	64	66	57	44	28	44	31	8	18	14	21	23	25	29	30	31	30	33	32	34	35	32	34	33	31	32	31	29	25	24	26	24	22	19	16	11	5	

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data						Logsum LAeq 15min totals - f																Raw LAeq 15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlm	LA1	LA10	LA90	LAeq	LAeq ≤630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz																	
2023/06/09 12:30	Day	NML16	SVAN 977 SN-99035	10.4	214	0	18	55	63	65	55	48	29	44	23	Comments (dominant/noteworthy sources).																10	12	15	18	21	25	28	30	32	33	33	33	32	31	30	31	30	33	34	34	27	26	24	24	22	19	16	12	7		
2023/06/09 12:45	Day	NML16	SVAN 977 SN-99035	10.8	225	0	18	51	64	65	58	52	31	47	42	Excl'd, wind noise dominant																8	11	13	17	21	24	28	29	30	30	29	29	28	30	31	34	40	42	42	33	28	24	23	21	17	15	11	6			
2023/06/09 13:00	Day	NML16	SVAN 977 SN-99035	12.2	202	0	18.1	51	62	64	57	51	32	47	48	Excl'd, wind noise dominant																14	17	19	21	24	28	31	34	36	37	37	37	37	36	35	33	30	33	30	33	32	28	28	26	25	24	22	19	15	10	
2023/06/09 13:15	Day	NML16	SVAN 977 SN-99035	9.4	227	0	18.8	48	65	66	55	47	32	44	44	Excl'd, wind noise dominant																10	13	14	18	22	25	28	30	31	32	32	32	31	31	34	35	33	33	34	32	26	25	24	23	20	18	16	12	7		
2023/06/09 13:30	Day	NML16	SVAN 977 SN-99035	11.5	209	0	18.8	47	74	75	64	52	33	52	49	Excl'd, wind noise dominant																9	12	14	17	22	25	32	32	36	35	33	33	32	32	31	38	42	42	41	43	44	44	39	36	32	30	27	22	18	12	6
2023/06/09 13:45	Day	NML16	SVAN 977 SN-99035	11.2	205	0	18	48	75	76	67	52	34	53	54	Excl'd, wind noise dominant																15	16	20	22	25	28	36	36	37	38	40	43	43	45	45	43	41	39	37	35	31	28	26	25	23	21	18	14	9		
2023/06/09 14:00	Day	NML16	SVAN 977 SN-99035	9.7	214	0	18.7	46	76	77	62	50	32	51	52	Excl'd, wind noise dominant																11	14	16	19	25	37	38	38	38	38	37	38	39	41	41	44	42	40	38	36	35	34	33	31	28	24	21	18	14	9	
2023/06/09 14:15	Day	NML16	SVAN 977 SN-99035	9.0	200	0	19	45	65	66	57	47	33	45	45	Excl'd, wind noise dominant																11	14	16	19	22	27	28	30	32	33	33	33	33	33	33	32	31	29	28	30	31	28	29	25	22	22	20	18	15	11	6
2023/06/09 14:30	Day	NML16	SVAN 977 SN-99035	11.5	224	0	19.1	44	64	66	57	50	32	46	46	Excl'd, wind noise dominant																12	15	17	19	23	26	30	32	34	35	36	37	37	36	34	32	31	33	34	32	31	30	26	25	22	20	17	14	8		
2023/06/09 14:45	Day	NML16	SVAN 977 SN-99035	8.3	208	0	19	45	64	65	52	47	32	43	43	Excl'd, wind noise dominant																10	12	14	17	21	25	28	30	32	32	32	32	31	28	27	26	26	29	33	32	29	28	27	30	24	20	16	12	7		
2023/06/09 15:00	Day	NML16	SVAN 977 SN-99035	9.7	219	0	19	44	65	68	57	49	30	46	46	Excl'd, wind noise dominant																12	14	17	20	23	26	29	32	34	35	35	35	33	31	29	28	32	36	36	30	29	25	24	22	19	16	12	7			
2023/06/09 15:15	Day	NML16	SVAN 977 SN-99035	11.9	227	0	18.9	44	59	61	53	46	30	43	43	Excl'd, wind noise dominant																10	12	15	18	22	26	29	31	33	33	33	33	31	29	28	30	31	28	29	25	26	25	22	22	20	18	15	11	6		
2023/06/09 15:30	Day	NML16	SVAN 977 SN-99035	10.1	217	0	18.8	43	64	68	56	49	33	45	45	Excl'd, wind noise dominant																12	15	17	20	23	27	30	33	34	35	35	35	34	33	32	32	31	30	29	29	27	27	29	28	26	23	17	12	7		
2023/06/09 15:45	Day	NML16	SVAN 977 SN-99035	10.4	221	0	18.5	43	63	65	56	50	32	46	46	Excl'd, wind noise dominant																13	16	18	20	24	27	30	33	35	36	36	36	35	34	33	32	32	31	29	28	26	25	23	21	18	14	9				
2023/06/09 16:00	Day	NML16	SVAN 977 SN-99035	9.7	216	0	18.4	43	67	69	58	50	35	47	47	Excl'd, wind noise dominant																13	15	18	21	25	29	32	34	36	36	36	36	35	34	34	36	36	35	34	33	31	30	28	26	23	20	17	13	7		
2023/06/09 16:15	Day	NML16	SVAN 977 SN-99035	11.2	221	0	18.1	44	62	64	55	50	35	46	46	Excl'd, wind noise dominant																13	16	17	20	24	28	32	34	36	37	36	36	36	35	33	31	29	27	28	27	26	26	28	27	29	27	19	13	4		
2023/06/09 16:30	Day	NML16	SVAN 977 SN-99035	11.8	230	0	17.8	44	62	64	55	50	35	45	45	Excl'd, wind noise dominant																12	16	18	21	24	27	29	31	31	30	29	27	25	24	34	33	30	28	27	26	26	28	26	23	13	8					
2023/06/09 16:45	Day	NML16	SVAN 977 SN-99035	6.8	226	0	16.9	46	61	63	52	41	29	39	39	35	3	8	13	17	20	22	22	22	21	19	19	19	22	26	27	27	28	30	29	27	26	27	29	27	29	30	19	10	6	2																
2023/06/09 17:00	Day	NML16	SVAN 977 SN-99035	6.5	227	0	16.1	47	67	68	55	40	28	43	43	34	1	min excld, Vehicle passby	-6	3	3	8	13	16	21	28	26	27	24	23	26	28	31	34	36	34	33	31	27	26	22	19	17	15	10	4	1															
2023/06/09 17:15	Day	NML16	SVAN 977 SN-99035	4.3	215	0	15.2	51	78	79	66	55	30	54	54	31	1	min excld, Vehicle passby	-4	2	3	9	14	25	32	27	28	29	27	27	33	33	35	37	37	39	47	49	48	40	35	32	32	31	27	21	13	5														
2023/06/09 17:30	Day	NML16	SVAN 977 SN-99035	4.7	212	0	14.5	52	62	64	54	39	29	40	40	37	-10	-5	-1	5	8	10	15	15	14	12	13	15	18	21	22	23	23	23	27	34	35	34	26	22	20	18	20	24	17	5	1															
2023/06/09 17:45	Day	NML16	SVAN 977 SN-99035	4.0	180	0	14.1	54	63	64	57	36	27	42	42	31	-11	-5	-1	5	8	10	15	18	22	18	17	18	20	24	27	32	36	36	32	29	26	23	21	24	26	15	9	7	4	1																
2023/06/09 18:00	Day	NML16	SVAN 977 SN-99035	4.3	187	0	13.7	56	66	66	49	37	25	40	40	35	1	min excld, Vehicle passby	-9	-2	2	6	10	18	22	26	29	24	21	22	23	28	29	33	34	31	29	26	23	21	17	15	12	10	11	4	1															
2023/06/09 18:15	Evening	NML16	SVAN 977 SN-99035	4.0	213	0	13.7	56	68	69	58	39	24	45	45	31	5	min excld, Vehicle and Helicopter, Wind and other movements. No mine noise	-5	0	5	10	15	21	20	23	32	26	27	22	26	29	32	37	40	38	35	32	30	27	24	21	18	15	12	13	4	1														
2023/06/09 18:30	Evening	NML16	SVAN 977 SN-99035	3.6	216	0	13.6	57	50	53	39	33	23	30	30	28	-14	-9	-5	1	5	6	10	10	12	13	10	12	15	19	19	19	19	21	22	21	17	15	23	14	11	10	9	8	7	10	3	1														
2023/06/10 07:00	Night	NML16	SVAN 977 SN-99035	2.2	57	0	3.6	100	60	63	50	42	27	39	39	28	-14	-7	-6	1	5	5	9	10	10	9	7	11	16	19	20	21	23	25	31	34	33	25	20	18	22	19	11	7	4	1																
2023/06/10 07:15	Day	NML16	SVAN 977 SN-99035	4.7	27	0	4.5	100	65	66	56	47	28	44	44	35	-10	-5	-3	5	9	11	14	16	16	16	15	15	18	22	25	30	33	35	37	39	37	31	24	24	26	24	20	8	4	1																
2023/06/10 07:30	Day	NML16	SVAN 977 SN-99035	5.0	359	0	4.9	98	71	72	56	46	28	44	44	28	-13	-6	-4	3	7	10	11	11	11	9	8	11	15	18	19	21	24	28	36	40	39	31	26	24	28	20	27	12	6	2																
2023/06/10 07:45	Day	NML16	SVAN 977 SN-99035	5.0	7	0	6.2	90	60	63	51	44	31	41	41	34	-14	-7	-4	3	6	13	10	10	11	8	8	12	16	30	19	22																														

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data						Logsum LAeq15min totals - f																	Raw LAeq15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10	LA90	LAeq	LAeq ≤630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz																		
2023/06/11 17:45	Day	NML16	SVAN 977 SN-99035	5.0	82	0	15.5	66	69	70	55	38	31	44	23	Comments (dominant/noteworthy sources)																	-14	-10	-4	3	7	11	15	17	18	19	18	18	20	25	28	35	38	37	34	30	33	32	23	24	25	19	20	17	6	2	
2023/06/11 18:00	Day	NML16	SVAN 977 SN-99035	7.6	72	0	16	65	77	78	66	46	32	54	27	34 1 min excid, Vehicle Passby																	-7	4	5	9	15	14	13	14	18	35	38	39	43	44	42	46	46	44	40	37	38	38	35	33	30	26	22	18	9	3	
2023/06/11 18:15	Evening	NML16	SVAN 977 SN-99035	4.3	94	0	14.9	70	60	61	51	38	29	39	28	37 2 min excid, Vehicle Passby																	-12	-7	-3	12	17	13	13	14	16	15	15	18	23	23	29	30	27	28	27	28	27	28	29	26	21	19	17	13	14	6	2
2023/06/11 18:30	Evening	NML16	SVAN 977 SN-99035	4.7	105	0	14.2	75	63	64	52	37	29	40	29	29 2 min excid, Vehicle passby and Dogs																	-14	-9	-5	0	5	7	11	16	15	14	15	15	18	25	25	30	34	33	30	28	31	25	16	14	12	10	8	6	4	1	
2023/06/12 07:00	Night	NML16	SVAN 977 SN-99035	1.1	274	0	9.5	100	60	62	53	43	24	40	23	23 3 min excid, Vehicle Passby																	-12	-7	-3	2	5	7	11	7	8	7	4	5	6	7	9	17	23	23	31	37	35	27	25	29	25	18	12	6	3	1	
2023/06/12 07:15	Day	NML16	SVAN 977 SN-99035	1.4	209	0	10	100	78	80	69	48	25	55	30	30 2 min excid, Vehicle Passby																	-11	-6	-1	3	13	19	17	22	26	23	24	21	25	28	31	36	39	39	49	52	47	35	36	33	35	33	28	22	16	5	
2023/06/12 07:30	Day	NML16	SVAN 977 SN-99035	1.1	193	0	10.4	100	68	69	60	48	24	46	29	29 3 min excid, Vehicle Passby																	-8	-7	1	5	8	13	18	21	20	20	21	22	23	28	31	33	35	35	39	40	39	29	27	26	24	26	24	13	4	1	
2023/06/12 07:45	Day	NML16	SVAN 977 SN-99035	1.1	177	0	11.2	100	67	68	57	43	24	44	28	28 3 min excid, Vehicle Passby																	-12	-9	-3	0	4	13	18	20	10	18	15	9	11	11	12	17	19	27	36	39	40	29	26	27	22	18	13	6	4	1	
2023/06/12 08:00	Day	NML16	SVAN 977 SN-99035	0.7	254	0	11.6	100	67	70	61	55	24	50	33	33 3 min excid, Vehicle Passby																	-12	-8	-2	0	5	11	12	15	13	14	14	16	20	23	28	34	35	42	46	45	31	28	26	23	16	8	4	1			
2023/06/12 08:15	Day	NML16	SVAN 977 SN-99035	0.4	137	0	12.2	100	68	71	57	43	23	44	37	37 3 min excid, Vehicle Passby																	-11	-6	0	4	10	15	16	18	20	21	21	23	27	33	36	35	35	38	38	29	26	27	22	17	11	7	4	1			
2023/06/12 08:30	Day	NML16	SVAN 977 SN-99035	1.1	8	0	12.6	99	67	68	55	40	22	42	32	32 1 min excid, Vehicle Passby																	-6	-1	6	12	15	22	19	22	23	22	22	26	27	29	31	32	31	34	35	35	28	25	22	22	20	13	8	5	1		
2023/06/12 08:45	Day	NML16	SVAN 977 SN-99035	3.6	65	0	14.2	94	65	67	53	38	25	41	36	36 2 min excid, Vehicle passby																	-9	-4	-1	4	12	12	15	18	16	19	17	18	20	23	26	31	33	32	32	32	31	25	24	22	24	21	13	5	2		
2023/06/12 09:00	Day	NML16	SVAN 977 SN-99035	5.4	74	0	16.2	84	71	72	58	38	25	46	29	29 2 min excid, Vehicle passby																	-7	-2	3	8	18	19	21	24	25	25	24	31	29	34	38	39	37	37	36	35	31	29	27	26	25	23	15	8	3		
2023/06/12 09:15	Day	NML16	SVAN 977 SN-99035	5.8	60	0	16.6	82	57	59	43	35	25	34	29	29 1 min excid, Helicopter																	-3	0	4	8	12	13	14	16	15	13	13	14	16	18	22	27	26	24	23	21	20	19	20	22	19	14	8	5	2		
2023/06/12 09:30	Day	NML16	SVAN 977 SN-99035	6.5	72	0	16.5	82	62	63	57	44	27	44	35	35 1 min excid, Helicopter																	-2	1	4	8	13	17	20	23	33	28	25	33	29	31	30	29	28	30	35	36	36	25	24	23	19	16	13	8	5	2	
2023/06/12 09:45	Day	NML16	SVAN 977 SN-99035	7.5	68	0	16.9	79	65	66	58	43	28	44	38	38 1 min excid, Wind																	2	5	8	12	15	18	20	21	22	21	20	20	21	24	29	34	36	35	34	35	36	35	30	25	26	29	28	16	8	4	
2023/06/12 10:00	Day	NML16	SVAN 977 SN-99035	6.1	49	0	16.9	79	66	67	56	39	28	42	34	34 1 min excid, Wind																	2	4	7	11	14	17	34	22	22	28	24	21	22	26	27	29	31	29	33	36	34	29	27	24	23	24	23	13	8	4	
2023/06/12 10:15	Day	NML16	SVAN 977 SN-99035	5.0	61	0	17.9	74	64	65	57	44	30	44	34	34 1 min excid, Wind																	6	8	11	14	17	20	22	24	24	24	23	23	25	28	32	35	35	35	35	32	27	24	23	22	18	13	9	5			
2023/06/12 10:30	Day	NML16	SVAN 977 SN-99035	5.4	33	0	17.8	73	65	67	60	53	32	49	35	35 5 mins excid, Wind																	7	10	12	16	19	22	24	26	26	28	26	25	25	26	28	31	33	42	44	44	33	32	29	29	23	15	11	6			
2023/06/12 10:45	Day	NML16	SVAN 977 SN-99035	5.4	50	0	18.7	70	63	65	56	45	31	43	36	36 1 min excid, Helicopter																	4	9	9	17	23	25	23	25	27	23	24	24	25	25	26	24	25	27	32	35	35	29	25	26	35	34	29	16	10	7	
2023/06/12 11:00	Day	NML16	SVAN 977 SN-99035	6.5	80	0	18.6	71	66	67	59	50	28	46	32	32 2 min excid, Helicopter																	8	19	16	24	27	28	32	33	34	36	34	30	29	32	32	32	32	34	38	38	36	30	24	22	22	20	11	7	3		
2023/06/12 11:15	Day	NML16	SVAN 977 SN-99035	7.2	76	0	18.7	70	63	64	52	39	28	40	35	35 2 min excid, Helicopter																	2	6	8	11	14	16	18	20	20	21	20	19	20	22	24	28	30	29	32	32	30	29	24	24	22	22	21	12	8	4	
2023/06/12 11:30	Day	NML16	SVAN 977 SN-99035	10.4	71	0	19.7	64	65	66	56	45	30	43	37	37 1 min excid, Wind																	7	10	11	15	18	21	23	25	27	26	25	26	25	25	27	31	35	36	35	32	32	31	31	27	27	30	28	17	11	6	
2023/06/12 11:45	Day	NML16	SVAN 977 SN-99035	9.0	67	0	19	65	64	66	60	50	29	47	34	34 5 min excid, Wind and Helicopter																	13	21	17	24	26	27	30	33	33	34	33	35	35	36	36	37	36	35	36	35	31	29	24	21	19	12	7	3			
2023/06/12 12:00	Day	NML16	SVAN 977 SN-99035	9.4	40	0	19	64	66	67	58	47	29	45	32	32 2 min excid, Helicopter																	2	5	7	10	14	16	18	19	19	18	18	19	20	21	27	37	40	41	30	27	24	24	25	22	13	8	4				
2023/06/12 12:15	Day	NML16	SVAN 977 SN-99035	8.6	48	0	19.6	63	62	62	50	41	29	39	36	36 7 min excid, Wind																	7	10	12	14	17	20	23	24	24	24	23	23	22	23	24	26	28	31	30	30	25	25	24	23	21	19	14	10	5		
2023/06/12 12:30	Day	NML16	SVAN 977 SN-99035	7.6	73	0	19.2	65	63	64	53	42	27	41	35	35 1 min excid, Wind																	1	6	6	10	17	16	22	20	20	19	19	21	24	29	33	32	32	33	33	28	27	22	21	18	14	10	7	3			
2023/06/12 12:45	Day	NML16	SVAN 977 SN-99035	7.6	46	0	19	64	64	64	54	42	28	41	36	36 6 min excid, Wind																	6	9	10	13	16	19	21	23	23	23	23	23	24	28	30	33	34	34	33	27	25	24	24	22	18	13	9	4			
2023/06/12 13:00	Day	NML16	SVAN 977 SN-99035	6.8	59	0	19.3	64	61	63	49	38	25	37	29	29 2 min excid, Wind																	0	2	5	9	12	15	17	18	17	16	16	15	14	14	15	16	16	2													

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min LAeq, s630 dB (incl +2.3 dB correction)	Raw LAeq, 15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (°C)	Humidity (%)	LAmax	LAlmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz z	3.15kHz z	4kHz	5kHz	6.3kHz	8kHz	10kHz z	12.5kHz z	16kHz	
2023/06/07 07:00	Night	NML18	SVAN 977 SN:69720	1.1	10	0	10.7	100	64	66	52	45	26	41	27	2.3 Comments (dominant/noteworthy sources)																														
2023/06/07 07:15	Day	NML18	SVAN 977 SN:69720	2.5	112	0	11.4	100	59	61	53	43	27	40	26	-13	-8	-4	0	5	6	7	6	2	0	2	5	8	9	13	23	24	26	36	37	34	26	23	23	22	19	14	9	6	4	
2023/06/07 07:30	Day	NML18	SVAN 977 SN:69720	2.9	117	0	12	100	69	71	64	46	28	49	30	-13	-9	-4	-1	3	10	13	15	14	6	5	11	13	13	19	26	24	32	44	44	42	34	36	31	34	32	26	16	9	4	
2023/06/07 07:45	Day	NML18	SVAN 977 SN:69720	2.5	103	0	13.1	99	58	60	46	37	22	35	31	-12	-9	-4	-1	6	11	17	14	13	17	18	21	18	18	20	24	20	21	26	28	28	18	19	22	19	17	14	9	7	4	
2023/06/07 08:00	Day	NML18	SVAN 977 SN:69720	2.9	111	0	14	93	60	61	52	41	20	39	34	-12	-8	-3	2	6	10	15	15	18	15	15	24	20	25	23	27	31	29	31	29	30	24	28	25	27	21	15	9	7	4	
2023/06/07 08:15	Day	NML18	SVAN 977 SN:69720	3.6	110	0	14	94	68	70	58	43	28	44	37	-8	-4	0	4	9	17	21	20	20	21	22	26	23	28	29	33	37	36	35	34	33	29	28	37	33	22	22	19	9	4	
2023/06/07 08:30	Day	NML18	SVAN 977 SN:69720	3.6	107	0	14.8	89	62	63	58	49	29	46	36	-9	-4	1	5	10	16	30	24	22	21	20	26	24	28	29	33	35	35	38	39	38	33	33	29	28	25	18	11	6	4	
2023/06/07 08:45	Day	NML18	SVAN 977 SN:69720	4.7	101	0	15.2	87	78	79	63	51	28	54	35	-6	0	4	9	15	29	31	26	29	30	33	30	38	43	43	47	45	45	45	43	37	34	31	28	24	18	11	7	4		
2023/06/07 09:00	Day	NML18	SVAN 977 SN:69720	5.8	81	0	15.8	82	65	67	55	43	29	42	35	-4	3	10	15	14	18	17	19	15	15	15	23	19	21	24	27	25	27	35	36	34	28	28	31	30	21	18	14	9	5	
2023/06/07 09:15	Day	NML18	SVAN 977 SN:69720	4.7	90	0	15.8	82	58	59	51	39	27	38	35	-1	1	3	6	10	16	18	21	22	19	15	15	18	21	24	29	31	32	29	27	25	25	23	24	22	22	18	12	8	5	
2023/06/07 09:30	Day	NML18	SVAN 977 SN:69720	9.0	82	0	16.5	75	74	75	68	52	32	54	38	6	13	7	17	27	29	37	30	31	37	39	43	44	44	46	46	45	44	42	40	36	33	30	28	26	23	19	13	8	5	
2023/06/07 09:45	Day	NML18	SVAN 977 SN:69720	8.6	86	0	16.5	72	66	67	59	50	31	46	38	11	17	5	9	18	16	27	23	27	33	32	36	36	38	39	38	36	34	33	31	27	23	23	21	20	19	18	13	9	5	
2023/06/07 10:00	Day	NML18	SVAN 977 SN:69720	7.9	82	0	18	66	60	62	52	38	29	38	32	-1	1	4	7	14	14	14	14	15	14	15	17	18	21	23	26	29	28	31	31	24	28	24	21	19	16	12	8	5		
2023/06/07 10:15	Day	NML18	SVAN 977 SN:69720	9.0	77	0	16.9	67	71	72	60	48	29	47	34	11	19	5	14	20	16	24	22	27	34	31	36	35	39	41	40	39	34	33	30	27	21	20	19	19	19	18	13	9	5	
2023/06/07 10:30	Day	NML18	SVAN 977 SN:69720	7.2	90	0	17.7	48	51	38	36	31	34	32	32	1	4	5	7	11	17	13	16	14	15	15	16	18	20	23	26	26	25	23	22	21	20	19	19	20	19	18	13	8	5	
2023/06/07 10:45	Day	NML18	SVAN 977 SN:69720	9.0	89	0	17.5	63	63	64	50	37	31	39	32	3	4	5	6	8	10	16	12	11	11	13	15	18	20	23	26	26	26	33	32	32	24	21	20	20	19	18	12	8	5	
2023/06/07 11:00	Day	NML18	SVAN 977 SN:69720	7.9	89	0	17.7	62	60	62	50	39	32	39	35	3	5	7	8	11	18	19	16	18	17	18	18	21	24	26	29	30	29	23	24	23	24	20	19	13	9	5				
2023/06/07 11:15	Day	NML18	SVAN 977 SN:69720	7.9	90	0	18.8	58	52	54	44	38	30	36	32	5	6	8	9	10	12	14	14	14	14	14	16	17	19	21	23	26	27	25	24	23	21	21	22	21	20	15	10	6		
2023/06/07 11:30	Day	NML18	SVAN 977 SN:69720	7.2	87	0	19.4	54	64	65	56	40	29	42	37	5	8	7	11	14	14	18	17	17	19	19	20	22	25	27	31	35	35	34	34	24	24	23	23	22	20	14	10	6		
2023/06/07 11:45	Day	NML18	SVAN 977 SN:69720	9.7	84	0	19.4	53	80	85	51	41	30	46	36	7	9	8	11	14	20	23	21	22	24	28	29	28	26	28	28	33	33	36	37	33	35	36	33	33	35	33	31	27	19	11
2023/06/07 12:00	Day	NML18	SVAN 977 SN:69720	10.8	68	0	19.5	52	59	60	46	42	30	39	36	8	11	11	11	15	14	18	17	15	17	19	22	23	25	27	28	29	29	29	26	25	26	26	25	19	13	8				
2023/06/07 12:15	Day	NML18	SVAN 977 SN:69720	8.6	69	0	19.9	51	52	54	45	41	32	38	35	8	10	11	11	12	13	14	14	15	15	15	18	21	23	24	26	28	28	27	27	26	25	26	25	26	25	19	13	8		
2023/06/07 12:30	Day	NML18	SVAN 977 SN:69720	10.8	63	0	20	49	63	64	44	41	32	39	35	6	8	9	9	11	12	14	14	14	14	14	17	20	22	24	26	27	28	28	30	32	31	25	24	24	25	24	18	12	7	
2023/06/07 12:45	Day	NML18	SVAN 977 SN:69720	7.9	72	0	20.4	50	63	65	57	43	31	43	34	7	9	10	10	12	14	15	14	15	16	16	18	20	22	23	26	27	28	28	36	39	37	27	26	25	26	26	24	19	13	8
2023/06/07 13:00	Day	NML18	SVAN 977 SN:69720	7.6	73	0	20.6	49	55	58	46	37	30	36	33	4	6	7	9	12	12	13	14	15	14	15	17	19	22	24	26	27	26	26	24	24	24	23	24	22	20	15	10	6		
2023/06/07 13:15	Day	NML18	SVAN 977 SN:69720	10.1	69	0	20.3	49	62	64	54	51	31	45	36	3	6	7	7	9	10	12	21	30	22	18	23	21	22	23	24	25	25	27	32	33	23	34	43	23	24	16	12	7		
2023/06/07 13:30	Day	NML18	SVAN 977 SN:69720	9.0	68	0	19.9	50	62	64	55	43	29	42	35	2	4	5	7	10	13	13	19	23	18	21	24	22	25	25	26	27	27	34	35	36	24	26	32	26	24	16	11	7		
2023/06/07 13:45	Day	NML18	SVAN 977 SN:69720	10.8	55	0	20.3	48	62	64	54	41	28	41	33	6	8	9	9	10	11	13	13	13	14	16	18	20	22	24	26	26	27	33	34	36	24	24	27	24	24	23	17	12	7	
2023/06/07 14:00	Day	NML18	SVAN 977 SN:69720	9.0	49	0	20.1	49	59	60	54	42	31	41	35	7	8	9	11	13	14	19	18	17	19	19	21	22	24	26	28	30	31	30	28	26	24	31	38	23	23	22	17	12	8	
2023/06/07 14:15	Day	NML18	SVAN 977 SN:69720	9.4	48	0	20.4	48	59	61	54	50	28	44	34	4	7	9	10	12	14	16	22	21	18	17	17	19	21	24	26	29	28	28	30	26	35	42	24	22	23	16	11	8		
2023/06/07 14:30	Day	NML18	SVAN 977 SN:69720	11.2	46	0	20.1	48	62	64	55	52	30	49	34	2	3	5	7	11	18	23	21	14																						

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min LAeq,5630 Hz (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (°C)	Humidity (%)	LAmax	LAlmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz	3.15kHz z	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz z	16kHz		
2023/06/09 11:15	Day	NML18	SVAN 977 SN:69720	7.2	214	0	15.4	71	69	71	69	50	33	47	2.3	Comments (dominant/noteworthy sources)																															
2023/06/09 11:30	Day	NML18	SVAN 977 SN:69720	9.4	204	0	15.9	68	65	66	46	41	32	39	36	4 min exclud, helicopter	6	11	4	16	24	25	28	29	31	29	30	31	34	37	39	40	39	37	36	35	31	27	27	22	21	19	13	9	7	4	
2023/06/09 11:45	Day	NML18	SVAN 977 SN:69720	9.4	215	0	16.2	66	50	53	44	40	31	36	34		4	7	3	12	15	18	25	22	17	22	20	21	24	26	27	29	30	29	29	31	32	25	24	19	20	21	15	10	7	4	
2023/06/09 12:00	Day	NML18	SVAN 977 SN:69720	9.0	223	0	17.2	60	82	84	73	46	33	58	33	17.2 exclud, helicopter	17	7	21	33	22	36	37	37	36	42	44	47	49	50	49	50	48	46	45	44	42	39	36	32	28	24	16	10	7	5	
2023/06/09 12:15	Day	NML18	SVAN 977 SN:69720	9.0	200	0	17.5	58	74	76	69	56	32	55	32	2 min exclud, helicopter	17	7	21	33	22	36	37	37	36	42	44	47	49	50	49	50	48	46	45	44	42	39	36	32	28	24	16	10	7	5	
2023/06/09 12:30	Day	NML18	SVAN 977 SN:69720	10.4	214	0	18	55	66	68	43	38	30	37	32	2 min exclud, helicopter	17	7	21	33	22	36	37	37	36	42	44	47	49	50	49	50	48	46	45	44	42	39	36	32	28	24	16	10	7	5	
2023/06/09 12:45	Day	NML18	SVAN 977 SN:69720	10.8	225	0	18.1	51	59	61	54	46	33	42	32	2 min exclud, helicopter	-9	-5	1	4	8	9	10	10	9	9	12	14	17	22	24	27	28	28	30	28	26	20	21	20	18	16	13	10	7	5	
2023/06/09 13:00	Day	NML18	SVAN 977 SN:69720	12.2	202	0	18.1	51	68	69	56	43	33	44	32	1 min exclud, vehicle passby	-6	-2	4	9	12	24	33	25	25	24	22	21	22	27	32	35	36	35	37	33	29	26	30	28	22	20	17	11	7	5	
2023/06/09 13:15	Day	NML18	SVAN 977 SN:69720	9.4	227	0	18.8	48	67	67	57	44	31	44	34	2 min exclud, vehicle	-7	7	3	10	17	20	34	24	25	23	25	22	23	27	31	35	37	36	35	33	32	29	27	27	24	22	18	11	8	5	
2023/06/09 13:30	Day	NML18	SVAN 977 SN:69720	11.5	209	0	18.8	47	71	74	59	54	35	50	37	5 min exclud, vehicle	6	10	10	13	18	17	27	26	29	28	24	24	29	33	34	37	38	40	41	39	39	37	42	44	31	30	27	17	10	6	
2023/06/09 13:45	Day	NML18	SVAN 977 SN:69720	11.2	205	0	18	48	77	79	71	45	31	55	34	2 min exclud, helicopter / Vehicle	21	6	17	32	24	34	37	39	33	34	39	44	47	46	46	47	45	43	41	39	36	32	29	27	24	20	17	16	11	9	6
2023/06/09 14:00	Day	NML18	SVAN 977 SN:69720	9.7	214	0	18.7	46	58	59	46	41	31	38	35		-9	-4	0	5	7	10	15	12	10	11	14	17	20	23	27	29	29	28	30	29	28	23	23	20	19	17	16	12	9	7	
2023/06/09 14:15	Day	NML18	SVAN 977 SN:69720	9.0	200	0	19	45	59	62	48	41	32	39	34		-11	-3	-1	11	8	14	14	12	11	15	14	16	19	22	25	28	28	28	32	31	29	21	20	24	28	25	16	11	8	6	
2023/06/09 14:30	Day	NML18	SVAN 977 SN:69720	11.5	224	0	19.1	44	70	72	53	45	33	43	36		-9	-5	1	8	9	16	17	19	23	17	17	20	21	26	27	30	32	33	36	37	36	27	23	21	23	20	15	11	8	6	
2023/06/09 14:45	Day	NML18	SVAN 977 SN:69720	8.3	208	0	19	45	60	61	53	46	34	43	37	4 min exclud, helicopter	-2	1	3	10	14	16	20	21	27	27	26	25	25	29	30	32	34	35	35	33	30	24	26	31	22	21	17	11	7	5	
2023/06/09 15:00	Day	NML18	SVAN 977 SN:69720	9.7	219	0	19	44	58	60	56	54	43	51	36	4 min exclud, vehicle	-10	-1	2	7	10	12	17	19	22	18	17	24	23	29	30	32	33	32	33	33	29	21	42	50	23	26	30	16	14	5	
2023/06/09 15:15	Day	NML18	SVAN 977 SN:69720	11.9	227	0	18.9	44	72	74	67	52	44	54	36	2 min exclud, vehicle / airplane	-11	-6	-1	4	8	15	14	20	22	20	21	22	22	27	28	33	35	36	45	47	46	37	41	49	36	34	30	17	13	6	
2023/06/09 15:30	Day	NML18	SVAN 977 SN:69720	10.1	217	0	18.8	43	74	75	70	55	45	56	37	3 min exclud, vehicle / airplane	-8	-4	1	5	9	16	17	19	22	22	19	23	24	29	31	35	38	41	49	51	51	39	41	49	39	35	32	19	14	6	
2023/06/09 15:45	Day	NML18	SVAN 977 SN:69720	10.4	221	0	18.5	43	58	60	56	55	46	52	37		-7	0	1	4	8	13	15	20	22	20	17	21	21	26	27	31	33	33	31	30	28	25	44	50	23	26	29	17	13	6	
2023/06/09 16:00	Day	NML18	SVAN 977 SN:69720	9.7	216	0	18.4	43	62	63	57	56	51	55	37		-7	0	-1	5	9	12	17	24	20	16	19	21	25	29	32	34	34	34	33	31	29	27	49	53	25	28	28	18	14	6	
2023/06/09 16:15	Day	NML18	SVAN 977 SN:69720	11.2	221	0	18.1	44	59	61	56	55	50	54	37	1 min exclud, airplane	-8	-3	1	6	9	11	16	16	20	22	22	29	27	28	30	32	32	31	29	27	27	20	50	51	23	28	27	18	12	6	
2023/06/09 16:30	Day	NML18	SVAN 977 SN:69720	8.6	225	0	17.8	44	63	63	56	55	36	50	37	1 min exclud, vehicle	-10	-5	0	4	9	15	15	20	23	27	25	21	24	25	28	32	34	34	30	28	28	22	46	46	18	23	22	15	9	5	
2023/06/09 16:45	Day	NML18	SVAN 977 SN:69720	6.8	226	0	16.9	46	60	63	52	48	36	46	37	3 min exclud, vehicle	-11	-5	2	6	9	10	14	12	15	13	12	14	20	25	30	33	34	33	33	31	21	42	40	20	21	17	8	6	4		
2023/06/09 17:00	Day	NML18	SVAN 977 SN:69720	6.5	227	0	16.1	47	82	84	59	51	35	51	37	5 min exclud, helicopter / vehicle passby	-9	4	1	5	12	19	20	20	19	26	24	26	32	32	33	36	38	38	44	43	45	40	36	33	27	28	17	9	7	4	
2023/06/09 17:15	Day	NML18	SVAN 977 SN:69720	4.3	215	0	15.2	51	66	68	61	48	32	47	37	2 min exclud, vehicle	-5	1	6	12	13	24	28	23	28	22	25	24	26	30	33	35	37	36	35	42	40	28	29	33	31	20	17	12	7	4	
2023/06/09 17:30	Day	NML18	SVAN 977 SN:69720	4.7	212	0	14.5	52	64	66	56	44	34	43	37	2 min exclud, vehicle	-1	7	15	19	23	22	23	30	24	20	19	22	25	30	32	34	35	35	34	31	29	24	22	20	19	17	13	8	6	4	
2023/06/09 17:45	Day	NML18	SVAN 977 SN:69720	4.0	180	0	14.1	54	60	63	52	45	31	41	35	4 min exclud, vehicle	-11	-2	0	3	7	15	23	15	19	23	20	19	23	20	27	30	33	32	34	29	27	22	21	19	14	11	9	8	6	4	
2023/06/09 18:00	Day	NML18	SVAN 977 SN:69720	4.3	187	0	13.7	56	55	58	50	44	31	40	37	1 min exclud, vehicle	-12	-4	-1	4	8	10	18	13	13	20	13	21	24	27	31	32	34	34	30	27	25	21	22	19	11	10	9	8	6	4	
2023/06/09 18:15	Evening	NML18	SVAN 977 SN:69720	4.0	213	0	13.7	56	62	65	55	46	30	43	36	Excluded - Vehicles passing not mine noise	-10	-3	1	5	14	17	17	21	24	21	18	18	24	30	34	36	38	35	31	28	24	21	22	18	13	12	10	8	6	4	
2023/06/09 18:30	Evening	NML18	SVAN 977 SN:69720	3.6	216	0	13.6	57	64	67	55	43	29	42	33	Excluded - Vehicles passing not mine noise																															

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min LAeq,5630 Hz (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																										
				Wind Speed (km/hr)	Wind Direction (mm)	Rainfall (mm)	Temp (°C)	Humidity (%)	LAmax	LAlmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz	3.15kHz z	4kHz	5kHz
2023/06/11 15:30	Day	NML18	SVAN 977 SN:69720	6.5	64	0	20.6	44	57	60	63	52	47	51	27	2.3 Comments (dominant/noteworthy sources)																								
2023/06/11 15:45	Day	NML18	SVAN 977 SN:69720	7.9	28	0	20.4	43	63	63	54	53	47	51	30	2 min excld, vehicle																								
2023/06/11 16:00	Day	NML18	SVAN 977 SN:69720	7.2	61	0	19.9	46	55	56	54	53	31	50	34	-13 -8 -2 3 8 9 12 13 14 13 11 10 12 17 21 31 30 27 25 24 22 17 46 48 18 26 27 14 10 4																								
2023/06/11 16:15	Day	NML18	SVAN 977 SN:69720	7.9	58	0	19.6	48	58	60	54	52	44	51	34	-13 -9 -5 0 6 8 9 12 13 14 13 11 10 12 17 21 31 29 28 32 30 27 20 47 48 18 27 27 14 9 5																								
2023/06/11 16:30	Day	NML18	SVAN 977 SN:69720	9.4	43	0	18.8	50	63	66	53	52	44	50	32	-15 -9 -5 0 2 5 6 7 6 8 2 3 7 12 18 29 27 24 27 29 33 25 47 48 18 27 26 15 9 5																								
2023/06/11 16:45	Day	NML18	SVAN 977 SN:69720	6.1	50	0	19.2	52	64	68	53	52	29	48	32	-14 -8 -6 0 3 15 21 17 8 18 16 11 10 13 16 28 26 28 35 33 30 22 46 44 18 25 23 14 8 4																								
2023/06/11 17:00	Day	NML18	SVAN 977 SN:69720	4.7	49	0	17.5	50	61	61	48	36	24	37	32	-14 -9 -6 -1 9 12 11 13 14 14 14 12 9 14 19 22 27 32 30 27 26 24 19 26 23 13 12 10 8 4																								
2023/06/11 17:15	Day	NML18	SVAN 977 SN:69720	4.0	61	0	16.7	56	68	70	56	39	22	42	31	-14 -10 -7 -3 2 3 10 20 25 23 12 7 8 9 11 22 24 17 22 24 25 27 29 40 36 22 22 16 9 4																								
2023/06/11 17:30	Day	NML18	SVAN 977 SN:69720	5.0	75	0	16.3	59	60	63	46	40	23	36	25	-14 -11 -8 -1 4 11 5 5 3 0 1 4 7 20 14 14 20 20 28 27 29 32 19 17 17 15 11 8 6 4																								
2023/06/11 17:45	Day	NML18	SVAN 977 SN:69720	5.0	82	0	15.5	66	57	60	44	41	33	38	20	-15 -10 -8 -3 1 8 9 5 0 0 -2 -3 2 5 10 10 12 13 17 20 21 31 37 20 15 14 12 11 8 6 4																								
2023/06/11 18:00	Day	NML18	SVAN 977 SN:69720	7.6	72	0	16	65	59	60	50	43	36	42	34	-13 -7 -4 4 9 14 14 18 14 15 14 13 16 22 24 29 32 31 31 26 34 38 20 16 15 13 11 9 6 5																								
2023/06/11 18:15	Evening	NML18	SVAN 977 SN:69720	4.3	94	0	14.9	70	59	60	49	40	34	39	30	-14 -8 -4 3 11 11 11 13 14 14 15 18 13 18 23 24 28 30 29 27 26 33 34 24 18 15 13 11 8 6 4																								
2023/06/11 18:30	Evening	NML18	SVAN 977 SN:69720	4.7	105	0	14.2	75	41	42	39	37	31	35	17	-15 -11 -8 -3 -1 3 5 4 0 -2 -2 0 3 7 7 8 9 9 9 10 32 32 19 14 12 11 10 8 6 4																								
2023/06/12 07:00	Night	NML18	SVAN 977 SN:69720	1.1	274	0	9.5	100	63	64	56	45	26	43	26	-12 -7 -3 3 4 7 11 10 5 5 4 8 10 14 17 20 21 27 37 38 37 27 25 29 24 22 16 9 6 3																								
2023/06/12 07:15	Day	NML18	SVAN 977 SN:69720	1.4	209	0	10	100	64	66	59	47	28	45	33	-9 -4 1 6 13 22 28 25 32 28 20 19 22 25 28 32 35 35 37 38 40 27 28 26 25 23 15 10 6 3																								
2023/06/12 07:30	Day	NML18	SVAN 977 SN:69720	1.1	193	0	10.4	100	63	64	53	43	29	41	32	-10 -5 2 5 7 16 18 16 17 13 12 15 15 18 20 26 25 25 32 38 32 24 24 27 25 20 14 9 6 3																								
2023/06/12 07:45	Day	NML18	SVAN 977 SN:69720	1.1	177	0	11.2	100	56	59	46	39	29	36	31	-12 -7 -2 2 6 15 17 15 8 20 17 9 12 19 18 25 24 23 27 30 28 24 26 25 23 16 11 8 6 3																								
2023/06/12 08:00	Day	NML18	SVAN 977 SN:69720	0.7	254	0	11.6	100	59	62	48	40	28	37	26	-13 -9 0 1 7 11 8 9 6 1 3 8 11 16 18 20 20 21 26 34 28 25 27 27 24 19 13 9 6 3																								
2023/06/12 08:15	Day	NML18	SVAN 977 SN:69720	0.4	137	0	12.2	100	62	63	51	35	25	38	33	-11 -6 1 5 9 12 13 15 14 14 14 14 15 18 23 28 32 33 30 27 23 19 21 24 20 13 10 8 6 3																								
2023/06/12 08:30	Day	NML18	SVAN 977 SN:69720	1.1	8	0	12.6	99	74	76	70	60	26	57	37	-10 -4 0 4 8 13 14 13 17 17 16 15 21 23 25 33 35 42 51 53 51 40 40 35 38 39 30 20 9 4																								
2023/06/12 08:45	Day	NML18	SVAN 977 SN:69720	3.6	65	0	14.2	94	73	75	65	46	26	51	31	-8 -4 -1 3 7 8 9 8 6 7 7 11 15 19 20 19 26 26 35 43 47 45 34 33 31 33 33 23 13 7 4																								
2023/06/12 09:00	Day	NML18	SVAN 977 SN:69720	5.4	74	0	16.2	84	55	57	49	41	27	37	31	-7 -4 0 3 8 12 13 14 14 13 11 12 15 18 21 26 27 27 29 32 29 24 23 21 20 17 13 9 6 4																								
2023/06/12 09:15	Day	NML18	SVAN 977 SN:69720	5.8	60	0	16.6	82	59	60	50	37	27	37	27	-5 -3 0 2 6 9 12 13 10 8 13 11 13 15 17 21 22 23 31 30 31 32 30 22 20 18 18 15 13 10 7 4																								
2023/06/12 09:30	Day	NML18	SVAN 977 SN:69720	6.5	72	0	16.5	82	57	59	52	43	29	40	34	4 min excld, vehicle / helicopter / airplane																								
2023/06/12 09:45	Day	NML18	SVAN 977 SN:69720	7.6	68	0	16.9	79	76	77	54	43	28	44	36	2 min excld, vehicle																								
2023/06/12 10:00	Day	NML18	SVAN 977 SN:69720	6.1	49	0	16.9	79	55	57	51	40	33	39	37	2 min excld, vehicle																								
2023/06/12 10:15	Day	NML18	SVAN 977 SN:69720	5.0	61	0	17.9	74	60	62	47	40	32	39	37	-1 3 2 5 16 19 19 33 26 22 23 17 19 21 23 26 30 31 30 28 27 24 22 21 19 17 16 11 7 5																								
2023/06/12 10:30	Day	NML18	SVAN 977 SN:69720	5.4	33	0	17.8	73	56	58	44	39	32	37	36	2 8 8 12 18 18 20 29 23 21 21 17 18 19 21 25 25 22 27 27 25 21 22 23 23 20 17 12 8 5																								
2023/06/12 10:45	Day	NML18	SVAN 977 SN:69720	5.4	50	0	18.7	70	74	76	70	47	32	55	34	2 min excld, helicopter																								
2023/06/12 11:00	Day	NML18	SVAN 977 SN:69720	6.5	80	0	18.6	71	67	69	53	41	28	42	35	4 1 7 10 16 21 19 21 21 18 18 19 23 24 24 25 26 28 37 35 34 26 24 20 22 21 17 12 8 5																								
2023/06/12 11:15	Day	NML18	SVAN 977 SN:69720	7.2	76	0	18.7	70	61	63	56	48	30	44	32	-1 0 3 6 8 17 14 14 14 13 15 16 18 20 23 26 29 32 39 39 37 28 30 29 26 23 19 13 9 5																								
2023/06/12 11:30	Day	NML18	SVAN 977 SN:69720	10.4	71	0	19.7	64	60	63	52	40	32	40	33	1 3 4 5 7 9 11 12 17 15 15 19 21 22 24 26 26 26 31 32 31 27 30 29 31 26 22 16 10 6																								
2023/06/12 11:45	Day	NML18	SVAN 977 SN:69720	9.0	67	0	19	65	74	77	65	52	32	52	36	3 min excld, helicopter																								
2023/06/12 12:00	Day	NML18	SVAN 977 SN:69720	9.4	40	0	19	64	68	70	56	37	29	43	30	1 min excld, vehicle																								
2023/06/12 12:15	Day	NML18	SVAN 977 SN:69720	8.6	48	0	19.6	63	62	65	56	50	29	45	32	2 4 5 6 11 12 17 13 13 14 16 18 19 21 23 24 25 25 29 29 34 22 35 43 22 23 23 15 10 6																								
2023/06/12 12:30	Day	NML18	SVAN 977 SN:69720	7.6	73	0	19.2	65	65	65	60	57	32	53	33	2 min excld, helicopter																								
2023/06/12 12:45	Day	NML18	SVAN 977 SN:69720	7.6	46	0	19	64	67	68	55	37	29	41	36	4 9 11 15 29 32 28 26 27 23 25 26 28 30 31 32 33 35 35 34 28 42 52 29 27 30 17 13 8																								
2023/06/12 13:00	Day	NML18	SVAN 977 SN:69720	6.8	59	0	19.3	64	54	56	46	37	29	35	31	2 9 3 9 18 14 19 20 19 20 18 19 21 24 27 29 33 35 33 30 26 23 23 21 20 19 14 9 5																								
2023/06/12 13:15	Day	NML18	SVAN 977 SN:69720	7.9	72	0	19.3	63	70	71	58	36	29	45	31	-1 1 2 9 9 11 10 10 9 10 13 16 19 21 22 24 25 24 28 27 27 20 21 20 20 19 14 9 5																								
2023/06/12 13:30	Day	NML18	SVAN 977 SN:69720	8.6	60	0	19.1	63	58	58	53	43	30	41	36	1 4 8 17 17 30 27 21 20 21 21 21 24 30 30 31 32 33 30 29 25 22 21 21 20 14 10 6																								
2023/06/12 13:45	Day	NML18	SVAN 977 SN:69720	9.0	63	0	19.7	62	61	62	57	54	42	50	39	1 7 10 11 18 36 34 24 29 27 27 28 34 43 42 39 39 38 38 36 33 31 29 28 25 22 15 10 6																								
2023/06/12 14:00	Day	NML18	SVAN 977 SN:69720	9.7	56	0	19.9	61	64	64	57	51	35	47	35	6 11 14 16 27 34 30 29 32 31 30 28 32 36 36 37 37 37 37 37 36 34 32 31 30 28 26 19 12 7																								
2023/06/12 14:15	Day	NML18	SVAN 977 SN:69720	10.8	72	0	19.2	66	59	61	45	40	34	38	35	6 8 8 9 10 12 13 13 23 21 16 20 21 23 25 27 27 27 29 28 28 24 23 23 23 23 17 12 7																								
2023/06/12 14:30	Day	NML18	SVAN 977 SN:69720	10.1	61	0	19.4	65	65	67	56	42	32	43	35	6 8 9 10 12 17 19 20 17 22 23 20 21 22 24 26 26 27 34 37 38 30 25 24 25 24 23 17 12 7																								
2023/06/12 14:45	Day	NML18	SVAN 977 SN:69720	9.7	78	0	19.3	64	58	60	43	40	33	37	34	7 9 10 11 12 15 15 14 14 14 16 19 21 23 25 27 27 27 28 27 26 24 24 24 25 25 24 18 12 7																								
2023/06/12 15:00	Day	NML18	SVAN 977 SN:69720	10.4	76	0	19.2	64	62	64	55	42	35	42	36	1 min excld, vehicle / helicopter																								
2023/06/12 15:15	Day	NML18	SVAN 977 SN:69720	8.6	81	0	19.1	64	63	64	57	44	33	44	35	6 9 12 17 16 20 22 23 24 23 22 23 23 24 27 30 33 35 36 36 34 28 27 24 24 24 23 17 11 7																								
2023/06/12 15:30	Day	NML18	SVAN 977 SN:69720	11.2	75	0	18.8	66	69	71	57	47	32	45	36	5 7 9 11 13 14 15 15 15 16 17 20 22 24 26 30 31 32 39 39 38 29 28 25 25 23 17 12 7																								
2023/06/12 15:45	Day	NML18	SVAN 977 SN:69720	9.0	80	0	18.7	66	62	64	52	42	33	41	36	5 10 9 13 15 15 16 18 16 18 22 26 23 24 26 30 31 32 39 39 38 29 28 25 25 23 18 12 7																								
2023/06/12 16:00	Day	NML18	SVAN 977 SN:69720	11.2	79	0																																		

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data				LA90	LAeq	Logsum LAeq15min (incl +2.3 dB correction)	2.3 Comments (dominant/noteworthy sources).	Raw LAeq,15min 1/3 Spectrum																																
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	Lmax	L1max	LA1					LA10	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/07 07:00	Night	NML34	ARL NGARA SN-8781BA	1.1	40	0	10.7	100	70	N/A	61	51	28	49	36	2.3	Comments (dominant/noteworthy sources).	-8	-5	2	5	7	9	7	7	6	5	9	13	16	21	31	34	33	38	39	39	40	39	45	40	30	23	19	13	8		
2023/06/07 07:15	Day	NML34	ARL NGARA SN-8781BA	2.5	112	0	11.4	100	68	N/A	61	51	29	49	37	3	min exclud, birds and vehicle passby	-7	1	3	8	9	10	13	9	9	12	13	18	25	26	33	38	38	38	37	36	36	36	36	43	41	36	27	16	12	9	
2023/06/07 07:30	Day	NML34	ARL NGARA SN-8781BA	2.9	117	0	12	100	66	N/A	54	46	26	44	36	6	min exclud, vehicle passby / birds	-6	-3	3	7	10	14	20	20	16	21	23	23	25	31	33	34	34	32	32	31	28	36	34	32	25	14	9	8			
2023/06/07 07:45	Day	NML34	ARL NGARA SN-8781BA	2.5	103	0	13.1	99	74	N/A	59	49	33	50	37	5	min exclud, vehicle passby / birds	-2	5	9	13	17	18	16	14	15	15	18	19	22	28	36	39	38	36	34	32	34	26	42	40	42	43	24	12	10		
2023/06/07 08:00	Day	NML34	ARL NGARA SN-8781BA	2.9	111	0	14	93	67	N/A	58	44	29	45	36	4	min exclud, vehicle passby / birds	-6	-2	4	7	14	13	12	17	18	13	21	19	22	22	31	30	24	28	29	34	37	31	41	36	30	25	14	10	9		
2023/06/07 08:15	Day	NML34	ARL NGARA SN-8781BA	3.6	110	0	14	94	68	N/A	54	45	30	44	35	4	min exclud, vehicle passby / birds	-4	0	6	9	14	17	17	22	15	17	19	20	23	25	28	35	35	35	30	27	32	29	39	35	25	22	14	10	9		
2023/06/07 08:30	Day	NML34	ARL NGARA SN-8781BA	3.6	107	0	14.8	89	65	N/A	56	44	31	43	35	1	min exclud, vehicle passby / birds	1	2	9	11	13	16	17	19	20	20	21	22	24	27	26	29	30	33	32	32	31	37	35	30	27	20	12	9			
2023/06/07 08:45	Day	NML34	ARL NGARA SN-8781BA	5.7	101	0	15.2	87	69	N/A	63	53	34	50	36	3	min exclud, vehicle passby / birds	-2	2	7	8	13	21	27	31	27	28	35	32	36	34	35	34	34	37	37	38	36	35	44	44	41	31	21	15	10		
2023/06/07 09:00	Day	NML34	ARL NGARA SN-8781BA	5.8	81	0	15.7	82	60	N/A	61	44	35	42	37	7	min exclud, vehicle passby / birds	7	8	18	18	14	21	21	22	20	21	22	24	27	28	30	32	34	31	31	31	30	29	29	28	25	20	15	11			
2023/06/07 09:15	Day	NML34	ARL NGARA SN-8781BA	4.7	90	0	15.8	82	63	N/A	57	45	34	45	36	1	min exclud, vehicle passby / birds	6	9	15	17	19	21	22	22	22	24	28	31	33	34	35	34	34	34	34	34	33	31	31	29	27	21	16	11			
2023/06/07 09:30	Day	NML34	ARL NGARA SN-8781BA	9.0	82	0	16.5	75	66	N/A	57	46	38	46	37	2	min exclud, vehicle passby / birds	5	7	9	13	17	24	20	23	20	21	23	25	29	31	33	34	34	34	34	34	35	35	35	33	39	35	37	34	23	17	11
2023/06/07 09:45	Day	NML34	ARL NGARA SN-8781BA	8.6	86	0	16.5	72	65	N/A	55	49	37	46	37	3	min exclud, vehicle passby / birds	8	8	12	16	16	18	17	18	19	21	24	26	29	30	32	34	36	38	37	34	32	33	32	28	27	22	17	11			
2023/06/07 10:00	Day	NML34	ARL NGARA SN-8781BA	7.9	82	0	18	66	67	N/A	59	48	37	47	37	6	min exclud, vehicle passby / birds	6	7	9	11	13	15	15	17	20	22	23	25	27	29	31	32	33	34	32	33	34	32	37	41	46	41	37	26	18	12	
2023/06/07 10:15	Day	NML34	ARL NGARA SN-8781BA	9.0	77	0	16.9	67	72	N/A	56	48	39	48	38	3	min exclud, vehicle passby / birds	10	12	13	14	17	18	18	19	22	23	25	27	29	30	32	34	34	34	41	42	41	35	35	33	32	31	29	25	20	13	
2023/06/07 10:30	Day	NML34	ARL NGARA SN-8781BA	7.2	90	0	17.1	67	76	N/A	57	48	35	47	38	2	min exclud, vehicle passby / birds	4	5	7	9	16	17	16	17	17	19	21	22	24	28	32	33	32	34	34	35	38	38	35	34	35	37	37	35	25	18	12
2023/06/07 10:45	Day	NML34	ARL NGARA SN-8781BA	9.0	89	0	17.5	63	72	N/A	53	43	32	43	35	3	min exclud, vehicle passby / birds	4	5	7	8	10	12	13	15	17	19	20	23	25	27	27	28	29	33	35	36	35	32	31	29	26	24	20	15	11		
2023/06/07 11:00	Day	NML34	ARL NGARA SN-8781BA	7.9	89	0	17.7	62	64	N/A	52	46	37	44	37	3	min exclud, vehicle passby / birds	4	3	6	9	13	16	15	18	20	23	24	26	28	30	31	32	33	32	32	32	32	33	34	34	34	24	18	12	12		
2023/06/07 11:15	Day	NML34	ARL NGARA SN-8781BA	7.9	90	0	18.8	58	67	N/A	55	46	32	45	37	3	min exclud, vehicle passby / birds	6	7	8	10	11	13	14	16	19	21	22	24	27	28	29	31	33	34	36	35	33	32	39	33	29	27	22	17	12		
2023/06/07 11:30	Day	NML34	ARL NGARA SN-8781BA	7.2	87	0	19.4	54	79	N/A	60	46	37	51	37	5	min exclud, helicopter / wind	8	6	9	19	15	24	20	19	27	25	27	28	31	32	33	33	32	32	31	31	32	32	35	41	49	36	19	15			
2023/06/07 11:45	Day	NML34	ARL NGARA SN-8781BA	9.7	84	0	19.4	53	62	N/A	55	49	39	46	39	3	min exclud, helicopter / wind	11	11	13	18	19	27	24	21	27	29	32	34	35	35	35	35	34	35	33	32	32	33	32	33	32	24	19	13			
2023/06/07 12:00	Day	NML34	ARL NGARA SN-8781BA	10.8	68	0	19.5	52	64	N/A	54	48	32	45	37	5	min exclud, helicopter / wind	11	7	11	22	18	27	24	20	27	27	32	33	34	35	34	35	34	32	32	34	31	30	29	28	27	25	22	17	11		
2023/06/07 12:15	Day	NML34	ARL NGARA SN-8781BA	8.6	69	0	19.9	51	53	N/A	52	48	31	44	37	5	min exclud, wind	11	13	14	15	16	17	18	20	23	25	26	28	30	31	32	33	34	33	33	33	33	33	32	31	29	25	20	14			
2023/06/07 12:30	Day	NML34	ARL NGARA SN-8781BA	10.8	63	0	20	49	59	N/A	50	46	35	43	37	3	min exclud, wind	9	10	11	12	13	15	16	18	21	22	24	25	27	29	30	31	31	32	31	31	33	33	32	33	30	24	18	12			
2023/06/07 12:45	Day	NML34	ARL NGARA SN-8781BA	7.9	72	0	20.4	50	68	N/A	53	48	32	45	37	3	min exclud, wind	7	8	10	11	12	14	15	18	20	22	24	25	28	30	31	32	33	32	32	31	32	33	36	36	37	36	25	19	13		
2023/06/07 13:00	Day	NML34	ARL NGARA SN-8781BA	7.6	73	0	20.6	49	70	N/A	52	49	37	49	37	3	min exclud, wind	10	11	12	13	16	16	17	19	22	24	25	27	29	30	32	33	34	34	34	33	32	31	33	37	41	46	41	28	19	13	
2023/06/07 13:15	Day	NML34	ARL NGARA SN-8781BA	10.1	69	0	20.3	49	63	N/A	54	44	31	42	37	3	min exclud, wind / airplane	7	8	9	10	11	13	16	33	22	20	24	23	25	27	27	28	29	30	31	30	31	31	31	31	33	30	22	16	11		
2023/06/07 13:30	Day	NML34	ARL NGARA SN-8781BA	9.0	68	0	19.9	50	55	N/A	49	44	32	41	37	3	min exclud, wind / airplane	8	10	11	12	14	15	18	20	22	23	25	26	28	29	29	30	30	29	29	31	30	30	29	29	27	22	17	12			
2023/06/07 13:45	Day	NML34	ARL NGARA SN-8781BA	10.8	55	0	20.3	48	79	N/A	54	44	34	47	37	3	min exclud, SLR on Site	4	5	7	10	14	17	21	20	23	26	29	30	32	34	32	31	36	42	36	35	33	33	31	32	27	24	20	15	12		
2023/06/07 14:00	Day	NML34	ARL NGARA SN-8781BA	9.0	49	0	20.1	49	60	N/A	50	45	34	43	37	3	min exclud, SLR on Site	8	10	11	12	14	15	20	22	20	22	24	25	27	28	30	31	32	31	32	31	30	30									

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data				LA90	LAeq	Logsum LAeq15min (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																							
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	Lmax	L1max	LA1				LA10	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz
2023/06/11 15:30	Day	NML34	ARL NGARA SN-8781BA	6.5	64	0	20.6	44	59	N/A	54	46	29	42	2.3	Comments (dominant/noteworthy sources).																						
2023/06/11 15:45	Day	NML34	ARL NGARA SN-8781BA	7.9	28	0	20.4	43	67	N/A	46	40	33	39	32	5 min excid, vehicle / people talking																						
2023/06/11 16:00	Day	NML34	ARL NGARA SN-8781BA	7.2	61	0	19.9	46	78	N/A	73	50	36	58	36	2 min excid, vehicle																						
2023/06/11 16:15	Day	NML34	ARL NGARA SN-8781BA	7.9	58	0	19.6	48	59	N/A	50	46	32	41	36	3 min excid, vehicle																						
2023/06/11 16:30	Day	NML34	ARL NGARA SN-8781BA	9.4	43	0	18.8	50	68	N/A	53	43	29	43	33	1 min excid, vehicle																						
2023/06/11 16:45	Day	NML34	ARL NGARA SN-8781BA	6.1	50	0	18.2	52	68	N/A	62	44	31	47	37	3 min excid, Birds / Vehicle																						
2023/06/11 17:00	Day	NML34	ARL NGARA SN-8781BA	4.7	49	0	17.5	55	59	N/A	49	45	24	40	36	2 min excid, Birds																						
2023/06/11 17:15	Day	NML34	ARL NGARA SN-8781BA	4.0	61	0	16.7	56	57	N/A	51	44	23	40	37	2 min excid, Birds																						
2023/06/11 17:30	Day	NML34	ARL NGARA SN-8781BA	5.0	75	0	16.3	59	60	N/A	53	44	22	41	37	2 min excid, Birds																						
2023/06/11 17:45	Day	NML34	ARL NGARA SN-8781BA	5.0	82	0	15.5	66	45	N/A	34	30	23	28	13	2 min excid, Birds																						
2023/06/11 18:00	Day	NML34	ARL NGARA SN-8781BA	7.6	72	0	16	65	52	N/A	47	35	27	35	28	2 min excid, Birds																						
2023/06/11 18:15	Evening	NML34	ARL NGARA SN-8781BA	4.3	94	0	14.9	70	34	N/A	32	30	27	29	16	2 min excid, vehicle																						
2023/06/11 18:30	Evening	NML34	ARL NGARA SN-8781BA	4.7	105	0	14.2	75	56	N/A	50	44	28	39	27	2 min excid, vehicle																						
2023/06/12 07:00	Night	NML34	ARL NGARA SN-8781BA	1.1	274	0	9.5	100	69	N/A	58	47	29	46	32	5 min excid, Birds																						
2023/06/12 07:15	Day	NML34	ARL NGARA SN-8781BA	1.4	209	0	10	100	69	N/A	58	48	29	47	34	5 min excid, Birds																						
2023/06/12 07:30	Day	NML34	ARL NGARA SN-8781BA	1.1	193	0	10.4	100	60	N/A	58	46	30	45	33	2 min excid, helicopter																						
2023/06/12 07:45	Day	NML34	ARL NGARA SN-8781BA	1.1	177	0	11.2	100	62	N/A	57	51	29	47	34	2 min excid, helicopter																						
2023/06/12 08:00	Day	NML34	ARL NGARA SN-8781BA	0.7	254	0	11.6	100	64	N/A	54	48	29	44	37	4 min excid, Birds																						
2023/06/12 08:15	Day	NML34	ARL NGARA SN-8781BA	0.4	137	0	12.2	100	64	N/A	55	49	30	45	35	4 min excid, Birds																						
2023/06/12 08:30	Day	NML34	ARL NGARA SN-8781BA	1.1	8	0	12.6	99	57	N/A	48	40	27	38	35	3 min excid, vehicle																						
2023/06/12 08:45	Day	NML34	ARL NGARA SN-8781BA	3.6	65	0	14.2	94	68	N/A	55	46	29	44	36	2 min excid, vehicle																						
2023/06/12 09:00	Day	NML34	ARL NGARA SN-8781BA	5.4	74	0	16.2	84	62	N/A	57	48	29	45	37	2 min excid, vehicle																						
2023/06/12 09:15	Day	NML34	ARL NGARA SN-8781BA	5.8	60	0	16.6	82	70	N/A	57	49	32	46	37	2 min excid, vehicle																						
2023/06/12 09:30	Day	NML34	ARL NGARA SN-8781BA	6.5	72	0	16.5	82	62	N/A	53	43	33	42	36	2 min excid, vehicle																						
2023/06/12 09:45	Day	NML34	ARL NGARA SN-8781BA	7.6	68	0	16.9	79	60	N/A	48	39	32	38	32	2 min excid, vehicle																						
2023/06/12 10:00	Day	NML34	ARL NGARA SN-8781BA	6.1	49	0	16.9	79	67	N/A	60	43	30	46	32	2 min excid, helicopter																						
2023/06/12 10:15	Day	NML34	ARL NGARA SN-8781BA	5.0	61	0	17.9	74	64	N/A	55	45	35	44	35	2 min excid, helicopter																						
2023/06/12 10:30	Day	NML34	ARL NGARA SN-8781BA	5.4	33	0	18.7	73	55	N/A	50	45	32	41	34	2 min excid, helicopter																						
2023/06/12 10:45	Day	NML34	ARL NGARA SN-8781BA	5.4	50	0	17.0	70	59	N/A	52	45	32	41	34	2 min excid, helicopter																						
2023/06/12 11:00	Day	NML34	ARL NGARA SN-8781BA	6.5	80	0	18.6	71	67	N/A	47	39	26	40	33	2 min excid, helicopter																						
2023/06/12 11:15	Day	NML34	ARL NGARA SN-8781BA	7.2	76	0	18.7	70	59	N/A	50	42	31	40	31	2 min excid, helicopter																						
2023/06/12 11:30	Day	NML34	ARL NGARA SN-8781BA	10.4	71	0	19.7	64	65	N/A	54	40	30	42	31	2 min excid, helicopter																						
2023/06/12 11:45	Day	NML34	ARL NGARA SN-8781BA	9.0	67	0	19	65	58	N/A	51	42	32	40	35	2 min excid, helicopter																						
2023/06/12 12:00	Day	NML34	ARL NGARA SN-8781BA	9.4	40	0	19	64	62	N/A	51	43	32	42	36	2 min excid, helicopter																						
2023/06/12 12:15	Day	NML34	ARL NGARA SN-8781BA	8.6	48	0	19.6	63	55	N/A	50	42	31	39	34	3 min excid, helicopter																						
2023/06/12 12:30	Day	NML34	ARL NGARA SN-8781BA	7.6	73	0	19.2	65	61	N/A	55	47	29	44	34	3 min excid, helicopter																						
2023/06/12 12:45	Day	NML34	ARL NGARA SN-8781BA	7.6	46	0	19	64	65	N/A	48	42	32	41	37	3 min excid, helicopter																						
2023/06/12 13:00	Day	NML34	ARL NGARA SN-8781BA	6.8	59	0	19.3	64	59	N/A	50	41	29	39	33	3 min excid, helicopter																						
2023/06/12 13:15	Day	NML34	ARL NGARA SN-8781BA	7.9	72	0	19.3	63	64	N/A	47	42	30	41	35	3 min excid, helicopter																						
2023/06/12 13:30	Day	NML34	ARL NGARA SN-8781BA	8.6	60	0	19.1	63	63	N/A	54	43	34	42	36	2 min excid, vehicle																						
2023/06/12 13:45	Day	NML34	ARL NGARA SN-8781BA	9.0	63	0	19.7	62	63	N/A	57	43	34	44	37	3 min excid, wind																						
2023/06/12 14:00	Day	NML34	ARL NGARA SN-8781BA	9.7	56	0	19.9	61	54	N/A	49	45	36	42	37	4 min excid, wind																						
2023/06/12 14:15	Day	NML34	ARL NGARA SN-8781BA	10.8	72	0	19.2	66	70	N/A	48	45	38	45	37	3 min excid, vehicle / wind																						
2023/06/12 14:30	Day	NML34	ARL NGARA SN-8781BA	10.1	61	0	19.4	65	62	N/A	56	44	35	43	37	Excluded - Wind																						
2023/06/12 14:45	Day	NML34	ARL NGARA SN-8781BA	9.7	78	0	19.3	64	61	N/A	51	46	38	44	38	Excluded - Wind																						
2023/06/12 15:00	Day	NML34	ARL NGARA SN-8781BA	10.4	76	0	19.2	64	59	N/A	52	47	40	45	40	Excluded - Wind																						
2023/06/12 15:15	Day	NML34	ARL NGARA SN-8781BA	8.6	81	0	19.1	64	60	N/A	54	46	39	44	37	5 min excid, wind																						
2023/06/12 15:30	Day	NML34	ARL NGARA SN-8781BA	11.2	75	0	18.8	66	63	N/A	51	46	38	43	36	4 min excid, wind																						
2023/06/12 15:45	Day	NML34	ARL NGARA SN-8781BA	9.0	80	0	18.7	66	60	N/A	56	45	37	44	37	1 min excid, vehicle																						
2023/06/12 16:00	Day	NML34	ARL NGARA SN-8781BA	11.2	79	0	18.6	66	67	N/A	58	47	38	46	37	6 min excid, vehicle																						
2023/06/12 16:15	Day	NML34	ARL NGARA SN-8781BA	9.7	78	0	18.2	66	65	N/A	58	48	38	47	35	5 min excid, vehicle and wind																						
2023/06/12 16:30	Day	NML34	ARL NGARA SN-8781BA	9.7	86	0	17.9	68	62	N/A	52	46	38	43	38	2 min excid, helicopter																						
2023/06/12 16:45	Day	NML34	ARL NGARA SN-8781BA	8.6	80	0	17.2	72	59	N/A	55	47	30	44	38	3 min excid, helicopter / birds																						
2023/06/12 17:00	Day	NML34	ARL NGARA SN-8781BA	8.3	78	0	16.8	76	65	N/A	53	45	27	42	37	2 min excid, helicopter																						
2023/06/12 17:15	Day	NML34	ARL NGARA SN-8781BA	7.6	83	0	16.3	78	66	N/A	56	45	29	44	37	2 min excid, helicopter																						
2023/06/12 17:30	Day	NML34	ARL NGARA SN-8781BA	5.8	77	0	15.8	80	54	N/A	52	39	28	38	33	2 min excid, helicopter																						
2023/06/12 17:45	Day	NML34	ARL NGARA SN-8781BA	5.8	54	0	15.6	83	53	N/A	55	43	38	41	26	4 min excid, vehicle																						
2023/06/12 18:00	Day	NML34	ARL NGARA SN-8781BA	3.6	6	0	14.9	86	60	N/A	53	44	38	43	37	1 min excid, vehicle																						
2023/06/12 18:15	Evening	NML34	ARL NGARA SN-8781BA	4.0	12	0	14.3	89	57	N/A	54	45	36	43	30	4 min excid, vehicle																						
2023/06/12 18:30	Evening	NML34	ARL NGARA SN-8781BA	2.9	49	0	14	90	51	N/A	48	43	33	39	30	1 min excid, vehicle																						
2023/06/13 07:00	Night	NML34	ARL NGARA SN-8781BA	2.9	191	0	8.2	100	70	N/A	63	50	32	50	35	Excluded - vehicles, birds - not mine noise																						
2023/06/13 07:15	Day	NML34	ARL NGARA SN-8781BA	1.8	77	0	9.2	100	65	N/A	56	45	29	44	37	4 min excid, vehicle																						
2023/06/13 07:30	Day	NML34	ARL NGARA SN-8781BA	5.0	151	0	9.6	100	72	N/A	59	47	29	47	37	3 min excid, vehicle																						
2023/06/13 07:45	Day	NML34	ARL NGARA SN-8781BA	2.5	131	0	10.4	100	65	N/A	57	50	31	46	36	3 min excid, vehicle																						
2023/06/13 08:00	Day	NML34	ARL NGARA SN-8781BA	2.5	159	0	11.2	100	59	N/A	55	46	32	44	38	5 min excid, vehicle																						
2023/06/13 08:15	Day	NML34	ARL NGARA SN-8781BA	4.0	237	0	11.1	100	60	N/A	51	45	28	41	35	5 min excid, Birds / Distant RTN - not mine noise																						
2023/06/13 08:30	Day	NML34	ARL NGARA SN-8781BA	2.5	181	0	12.1	100	63	N/A	57	52	29	47	37	5 min excid, vehicle passbys																						
2023/06/13 08:45	Day	NML34																																				

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	Lmax	LAlmax	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/20 18:15	Evening	NML35	ARL Ngara SN:8781DD	1.2	197	0	12	44	66	N/A	61	38	23	46	2.3	Comments (dominant/noteworthy sources). helicopter - 3mins excluded	7	-8	7	15	12	21	27	28	22	24	30	31	36	38	40	40	37	33	27	21	24	18	11	14	12	12	12	11	9	6	
2023/06/20 18:30	Evening	NML35	ARL Ngara SN:8781DD	1.1	202	0	11.9	45	37	N/A	31	27	22	25	22		-16	-11	-8	-5	0	-1	0	6	7	9	11	10	9	10	11	13	13	11	8	8	16	11	10	14	12	12	11	11	9	6	
2023/06/20 18:45	Evening	NML35	ARL Ngara SN:8781DD	0.9	203	0	11.6	45	35	N/A	31	28	21	25	18		-19	-12	-8	-7	-5	-5	-2	-5	-4	-1	-3	0	3	6	9	12	13	10	8	8	20	12	10	12	11	12	11	11	9	6	
2023/06/20 19:00	Evening	NML35	ARL Ngara SN:8781DD	0.6	200	0	11.4	46	30	N/A	25	22	21	22	14		-17	-10	-8	-4	-3	-4	-4	-5	-6	-5	-4	-2	1	3	5	6	7	7	7	7	8	12	10	11	11	12	11	11	9	6	
2023/06/20 19:15	Evening	NML35	ARL Ngara SN:8781DD	1.2	189	0	11.3	46	57	N/A	27	24	21	26	19		-14	-2	-6	6	6	6	5	3	1	2	5	7	8	9	9	14	15	21	15	12	13	13	12	12	11	9	6				
2023/06/20 19:30	Evening	NML35	ARL Ngara SN:8781DD	1.8	175	0	10.8	48	37	N/A	27	23	21	23	18		-16	-5	-11	-8	-6	-5	-2	-3	-2	-2	1	4	7	10	12	11	8	8	8	11	10	11	11	12	12	11	11	9	6		
2023/06/20 19:45	Evening	NML35	ARL Ngara SN:8781DD	1.5	147	0	10.8	48	38	N/A	32	29	21	25	24		-12	-5	-6	-4	-4	-2	-1	0	0	1	4	13	16	14	16	15	11	8	8	9	9	10	11	11	12	11	11	9	6		
2023/06/20 20:00	Evening	NML35	ARL Ngara SN:8781DD	1.6	142	0	10.6	48	44	N/A	26	23	21	22	17		-12	-7	-3	-3	-2	-1	0	-1	0	-1	0	1	3	6	8	10	10	9	8	8	9	10	10	11	11	12	11	11	9	6	
2023/06/20 20:15	Evening	NML35	ARL Ngara SN:8781DD	0.6	163	0	9.8	50	46	N/A	23	21	21	22	14		-19	-6	-7	-8	-5	-2	0	-4	-3	-3	-1	-1	4	5	5	7	8	7	8	9	10	10	11	11	12	11	11	9	6		
2023/06/20 20:30	Evening	NML35	ARL Ngara SN:8781DD	0.7	121	0	10.8	52	31	N/A	24	22	21	21	15		-17	-12	-9	-4	-7	5	6	2	-3	-1	-1	0	2	4	5	6	7	6	7	8	9	10	11	11	12	11	11	9	6		
2023/06/20 20:45	Evening	NML35	ARL Ngara SN:8781DD	0.8	166	0	9.7	53	24	N/A	21	21	21	21	13		-17	-9	-7	-7	-8	-6	-4	-5	-4	-3	-4	-2	0	3	3	3	4	5	6	7	8	9	10	11	11	12	11	11	9	6	
2023/06/20 21:00	Evening	NML35	ARL Ngara SN:8781DD	0.7	216	0	9	56	26	N/A	22	21	21	21	12		-20	-12	-8	-9	-7	-5	-3	-5	-5	-4	-2	0	2	3	4	4	5	7	7	8	9	10	11	11	12	11	11	9	6		
2023/06/20 21:15	Evening	NML35	ARL Ngara SN:8781DD	0.7	184	0	9.1	55	27	N/A	23	22	21	21	14		-21	-16	-13	-11	-10	-7	-2	-5	-4	-2	-3	-1	1	4	5	5	7	6	7	8	9	10	11	11	12	11	11	9	6		
2023/06/20 21:30	Evening	NML35	ARL Ngara SN:8781DD	1.2	145	0	9.3	54	27	N/A	22	21	21	21	13		-21	-19	-16	-11	-11	-8	-4	-5	-4	-2	-4	-1	3	3	3	4	5	6	7	8	9	10	11	11	12	11	11	9	6		
2023/06/20 21:45	Evening	NML35	ARL Ngara SN:8781DD	1.0	127	0	9.2	54	48	N/A	43	22	21	28	26		-16	-18	-13	-9	-9	-7	-4	-6	-5	-3	0	2	6	12	17	22	23	17	13	10	9	9	10	11	11	12	11	11	9	6	
2023/06/20 22:00	Evening	NML35	ARL Ngara SN:8781DD	0.4	176	0	8.8	58	38	N/A	27	23	21	22	19		-2	-16	-6	-3	-5	2	6	8	3	4	3	4	6	6	7	8	6	7	7	7	8	9	10	11	11	12	11	11	9	6	
2023/06/20 22:15	Night	NML35	ARL Ngara SN:8781DD	0.7	110	0	8.9	56	30	N/A	23	21	21	21	13		-19	-14	-8	-9	-8	-6	-1	-3	-2	-2	-3	-1	1	2	3	3	4	6	7	8	9	10	11	11	12	11	11	9	6		
2023/06/20 22:30	Night	NML35	ARL Ngara SN:8781DD	1.0	151	0	7.6	69	29	N/A	22	21	21	21	14		-21	-14	-14	-11	-7	-5	-2	0	-2	-1	-1	0	4	3	4	4	4	5	6	7	8	9	10	11	11	12	11	11	9	6	
2023/06/20 22:45	Night	NML35	ARL Ngara SN:8781DD	1.1	118	0	8.5	59	35	N/A	25	23	21	22	18		-17	-11	-8	-3	1	4	8	9	7	3	3	4	4	4	5	5	4	6	7	7	8	9	10	11	11	12	11	10	9	6	
2023/06/20 23:00	Night	NML35	ARL Ngara SN:8781DD	0.5	165	0	8.1	64	27	N/A	23	22	21	21	16		-21	-14	-12	-8	-3	-1	3	1	4	1	-2	1	4	4	4	4	4	6	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/20 23:15	Night	NML35	ARL Ngara SN:8781DD	0.8	113	0	7.3	69	26	N/A	22	21	21	21	14		-22	-12	-13	-9	-7	-4	-1	-2	-3	-2	-1	1	2	3	5	4	4	4	5	6	7	8	9	10	11	11	12	11	10	9	6
2023/06/20 23:30	Night	NML35	ARL Ngara SN:8781DD	0.9	137	0	7.8	64	25	N/A	22	21	21	21	14		-22	-17	-14	-9	-8	-7	-3	-1	-3	0	-1	2	3	4	5	4	4	5	6	7	8	9	10	11	11	12	11	11	9	6	
2023/06/20 23:45	Night	NML35	ARL Ngara SN:8781DD	0.6	275	0	7.3	69	33	N/A	25	22	21	21	15		-22	-16	-14	-10	-9	-7	-3	-4	-4	-3	-2	0	4	5	7	7	7	7	7	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 00:00	Night	NML35	ARL Ngara SN:8781DD	0.5	252	0	6.7	70	25	N/A	22	21	21	21	14		-21	-17	-14	-10	-10	-6	-3	-3	-4	0	-2	-1	3	3	5	4	4	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 00:15	Night	NML35	ARL Ngara SN:8781DD	0.3	4	0	6.9	68	30	N/A	23	22	21	21	15		-20	-15	-14	-10	-7	-6	1	-2	-3	6	1	3	4	4	5	4	4	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 00:30	Night	NML35	ARL Ngara SN:8781DD	0.5	86	0	7.4	65	30	N/A	22	21	21	21	14		-21	-16	-12	-8	-6	-5	0	-3	-1	-3	-2	0	3	4	5	4	4	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 00:45	Night	NML35	ARL Ngara SN:8781DD	0.5	68	0	7.1	65	29	N/A	22	21	21	21	13		-21	-15	-13	-7	-7	-7	-3	-4	-6	-4	-2	0	3	3	4	4	4	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 01:00	Night	NML35	ARL Ngara SN:8781DD	0.2	122	0	7.3	67	27	N/A	22	21	21	21	14		-23	-16	-15	-9	-7	-7	-5	-3	-4	-4	-1	1	4	4	6	3	4	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 01:15	Night	NML35	ARL Ngara SN:8781DD	0.4	76	0	7.1	63	39	N/A	35	27	21	25	24		-21	-15	-11	-8	-4	-4	-2	1	-2	-3	-1	3	7	11	16	19	15	11	8	8	8	9	10	11	11	11	10	9	6		
2023/06/21 01:30	Night	NML35	ARL Ngara SN:8781DD	0.6	300	0	7.1	63	32	N/A	30	27	21	24	22		-21	-16	-11	-5	-2	-2	2	3	0	0	2	6	9	12	14	14	14	11	8	8	8	9	10	11	11	11	10	9	6		
2023/06/21 01:45	Night	NML35	ARL Ngara SN:8781DD	0.3	227	0	6.3	69	50	N/A	26	23	21	23	17		-21	-16	-14	-5	-2	-2	1	2	-2	-1	0	4	6	7	9	7	11	13	12	10	10	10	10								

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																															
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz
2023/06/21 22:00	Evening	NML35	ARL Ngara SN:8781DD	2.9	93	0	9.3	78	N/A	22	21	21	21	15	2.3 Comments (dominant/noteworthy sources).																														
2023/06/21 22:15	Night	NML35	ARL Ngara SN:8781DD	2.2	68	0	9	80	N/A	22	21	21	21	15	-18	-13	-11	-5	-2	2	-2	-3	-1	-3	-2	0	3	5	4	4	5	6	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/21 22:30	Night	NML35	ARL Ngara SN:8781DD	3.2	62	0	9.4	81	N/A	22	21	21	21	14	-18	-15	-12	-5	0	1	0	-2	-2	-4	-1	2	3	4	4	4	6	7	7	8	9	10	11	11	12	11	10	9	6		
2023/06/21 22:45	Night	NML35	ARL Ngara SN:8781DD	2.9	78	0	9.6	81	N/A	24	23	21	22	17	-15	-7	-6	1	6	7	4	1	0	-1	-2	1	4	6	6	6	7	7	7	8	9	10	11	11	12	11	10	9	6		
2023/06/21 23:00	Night	NML35	ARL Ngara SN:8781DD	3.6	66	0	9.7	82	N/A	27	24	21	23	20	-20	-15	-10	-4	2	2	4	6	1	0	0	4	8	11	12	10	11	10	9	8	8	9	10	11	11	12	11	10	9	6	
2023/06/21 23:15	Night	NML35	ARL Ngara SN:8781DD	4.0	67	0	10	81	N/A	24	22	21	22	16	-19	-15	-12	-5	1	2	-1	-2	-2	-3	-2	1	3	5	7	8	9	8	7	8	8	9	10	11	11	12	11	10	9	6	
2023/06/21 23:30	Night	NML35	ARL Ngara SN:8781DD	3.6	73	0	9.8	82	N/A	22	21	21	21	14	-19	-15	-12	-6	2	-2	-3	-4	-3	-4	-1	1	3	4	4	5	6	6	7	8	8	9	10	11	11	12	11	10	9	6	
2023/06/21 23:45	Night	NML35	ARL Ngara SN:8781DD	3.2	80	0	9.9	82	N/A	22	21	21	21	15	-19	-15	-11	-6	3	2	0	-2	-2	-3	-2	0	2	3	4	4	5	6	6	7	8	9	10	11	11	12	11	10	9	6	
2023/05/22 00:00	Night	NML35	ARL Ngara SN:8781DD	3.2	73	0	9.4	84	N/A	22	21	21	21	15	-19	-15	-12	-5	0	1	0	-2	-1	0	1	0	2	4	4	5	5	6	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/22 00:15	Night	NML35	ARL Ngara SN:8781DD	4.7	50	0	10.2	81	N/A	24	N/A	22	21	21	14	-19	-15	-13	-7	0	1	0	-2	-3	-5	-4	-1	1	3	3	4	5	6	7	7	8	9	10	11	11	12	11	10	9	6
2023/06/22 00:30	Night	NML35	ARL Ngara SN:8781DD	2.2	81	0	10.5	80	N/A	31	N/A	24	22	21	22	-18	-15	-13	-6	1	2	1	0	-1	-4	-3	0	3	7	7	7	7	8	9	10	11	11	12	11	10	9	6			
2023/06/22 00:45	Night	NML35	ARL Ngara SN:8781DD	1.4	342	0	10.4	81	N/A	34	N/A	24	22	21	22	-19	-15	-12	-6	2	2	3	0	-1	-3	-3	0	2	6	7	7	7	8	9	10	11	11	12	11	10	9	6			
2023/06/22 01:00	Night	NML35	ARL Ngara SN:8781DD	6.5	35	0	10.7	79	N/A	31	N/A	24	21	21	14	-21	-16	-14	-6	0	0	1	-2	-1	-4	-3	0	2	4	4	5	6	6	7	8	8	9	10	11	11	12	11	10	9	6
2023/06/22 01:15	Night	NML35	ARL Ngara SN:8781DD	6.8	47	0	11.3	77	N/A	28	N/A	22	21	21	15	-20	-16	-13	-5	0	1	2	-2	0	-3	-3	0	3	4	4	5	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/22 01:30	Night	NML35	ARL Ngara SN:8781DD	6.8	54	0	11.4	77	N/A	25	N/A	22	21	21	15	-18	-15	-13	-5	0	0	1	-3	0	-4	-3	-1	3	4	4	5	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/22 01:45	Night	NML35	ARL Ngara SN:8781DD	5.4	66	0	11.6	77	N/A	30	N/A	24	22	21	22	-20	-16	-13	-5	1	0	-1	-3	-1	-4	-3	0	4	5	6	6	7	8	9	10	11	11	12	11	10	9	6			
2023/06/22 02:00	Night	NML35	ARL Ngara SN:8781DD	4.3	81	0	11.4	78	N/A	22	N/A	22	21	21	14	-20	-17	-14	-5	0	-1	-4	-3	-2	-5	-3	-1	2	4	4	5	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/22 02:15	Night	NML35	ARL Ngara SN:8781DD	4.0	69	0	11.5	78	N/A	32	N/A	25	22	21	22	-20	-16	-12	-5	2	-1	-1	-2	1	-1	-2	0	3	5	4	5	5	6	7	8	9	10	11	11	12	11	10	9	6	
2023/06/22 02:30	Night	NML35	ARL Ngara SN:8781DD	4.3	68	0	10.7	82	N/A	32	N/A	22	21	21	14	-20	-15	-13	-6	-1	1	-2	-3	0	-3	-3	-1	2	4	4	5	5	6	7	8	9	10	11	11	12	11	11	9	6	
2023/06/22 02:45	Night	NML35	ARL Ngara SN:8781DD	3.6	62	0	11.3	80	N/A	29	N/A	22	21	21	14	-21	-16	-13	-6	1	2	0	-2	0	-4	-4	-1	1	3	3	4	5	6	7	8	8	9	10	11	11	12	11	9	6	
2023/06/22 03:00	Night	NML35	ARL Ngara SN:8781DD	4.7	58	0	11.5	79	N/A	36	N/A	23	22	21	22	-20	-15	-11	-4	1	4	6	5	5	-2	-2	1	3	4	5	5	6	7	8	8	9	10	11	11	12	11	11	9	6	
2023/06/22 03:15	Night	NML35	ARL Ngara SN:8781DD	6.1	33	0	11.5	79	N/A	34	N/A	28	22	21	22	-19	-16	-13	-6	0	1	-1	0	0	-3	-3	0	3	4	5	5	6	8	10	10	11	11	11	12	11	11	9	6		
2023/06/22 03:30	Night	NML35	ARL Ngara SN:8781DD	7.9	41	0	11.6	78	N/A	29	N/A	22	21	21	14	-18	-15	-12	-5	-1	0	-2	-2	0	-4	-3	0	3	4	4	5	5	6	7	8	9	10	10	11	11	12	11	11	9	6
2023/06/22 03:45	Night	NML35	ARL Ngara SN:8781DD	7.9	31	0	11.5	78	N/A	33	N/A	22	21	21	14	-17	-15	-12	-5	0	-1	-1	-2	0	-4	-3	-1	2	4	4	5	5	6	7	8	9	10	10	11	11	12	11	11	9	6
2023/06/22 04:00	Night	NML35	ARL Ngara SN:8781DD	6.5	27	0	11.5	78	N/A	31	N/A	23	22	21	22	-16	-13	-10	-4	1	-1	-1	-2	0	-2	-2	1	4	6	7	7	7	8	10	10	11	11	12	11	11	11	9	6		
2023/06/22 04:15	Night	NML35	ARL Ngara SN:8781DD	5.8	42	0	11.5	78	N/A	31	N/A	25	23	21	22	-13	-10	-8	-3	2	1	1	-1	2	-1	-1	3	6	7	8	8	8	9	12	11	11	12	12	12	11	9	6			
2023/06/22 04:30	Night	NML35	ARL Ngara SN:8781DD	4.7	57	0	11.1	80	N/A	31	N/A	23	22	21	22	-18	-14	-12	-4	0	1	1	-2	0	-2	-1	1	4	6	6	7	7	7	8	9	10	10	11	11	12	11	11	9	6	
2023/06/22 04:45	Night	NML35	ARL Ngara SN:8781DD	5.4	44	0	11.1	79	N/A	27	N/A	22	21	21	15	-18	-15	-12	-4	1	0	-1	-3	0	-3	-1	3	5	4	5	5	6	7	8	8	9	10	11	11	12	11	11	9	6	
2023/06/22 05:00	Night	NML35	ARL Ngara SN:8781DD	4.7	73	0	10.9	80	N/A	27	N/A	24	23	21	22	-18	-14	-11	-5	0	0	1	-2	0	-2	-2	1	4	6	10	7	8	8	8	9	10	11	11	12	11	11	9	6		
2023/06/22 05:15	Night	NML35	ARL Ngara SN:8781DD	5.0	52	0	10.8	79	N/A	49	N/A	31	21	31	28	-17	-13	-9	-3	0	1	2	2	2	1	3	9	12	15	19	24	27	23	18	15	12	10	11	11	12	11	11	9	6	
2023/06/22 05:30	Night	NML35	ARL Ngara SN:8781DD	5.4	67	0	10.9	79	N/A	31	N/A	25	22	21	22	-16	-12	-9	-4	0	3	2	0	2	-1	-1	1	5	6	7	8	8	9	10	10	11	11	12	11	11	11	9	6		
2023/06/22 05:45	Night	NML35	ARL Ngara SN:8781DD	6.1	65	0	11	78	N/A	42	N/A	30	27	21	24	-16	-12	-8	-4	0	3	5	1	3	3	2	7	12	14	13	14	15	13	10	9	9	10	11	11	12	11	11	9	6	
2023/06/22 06:00	Night	NML35	ARL Ngara SN:8781DD	3.6	97	0	10.7	79	N/A	55	N/A	31	26	22	29	-17	-12	-9	-4	1	3	4	8	7	8	3	7																		

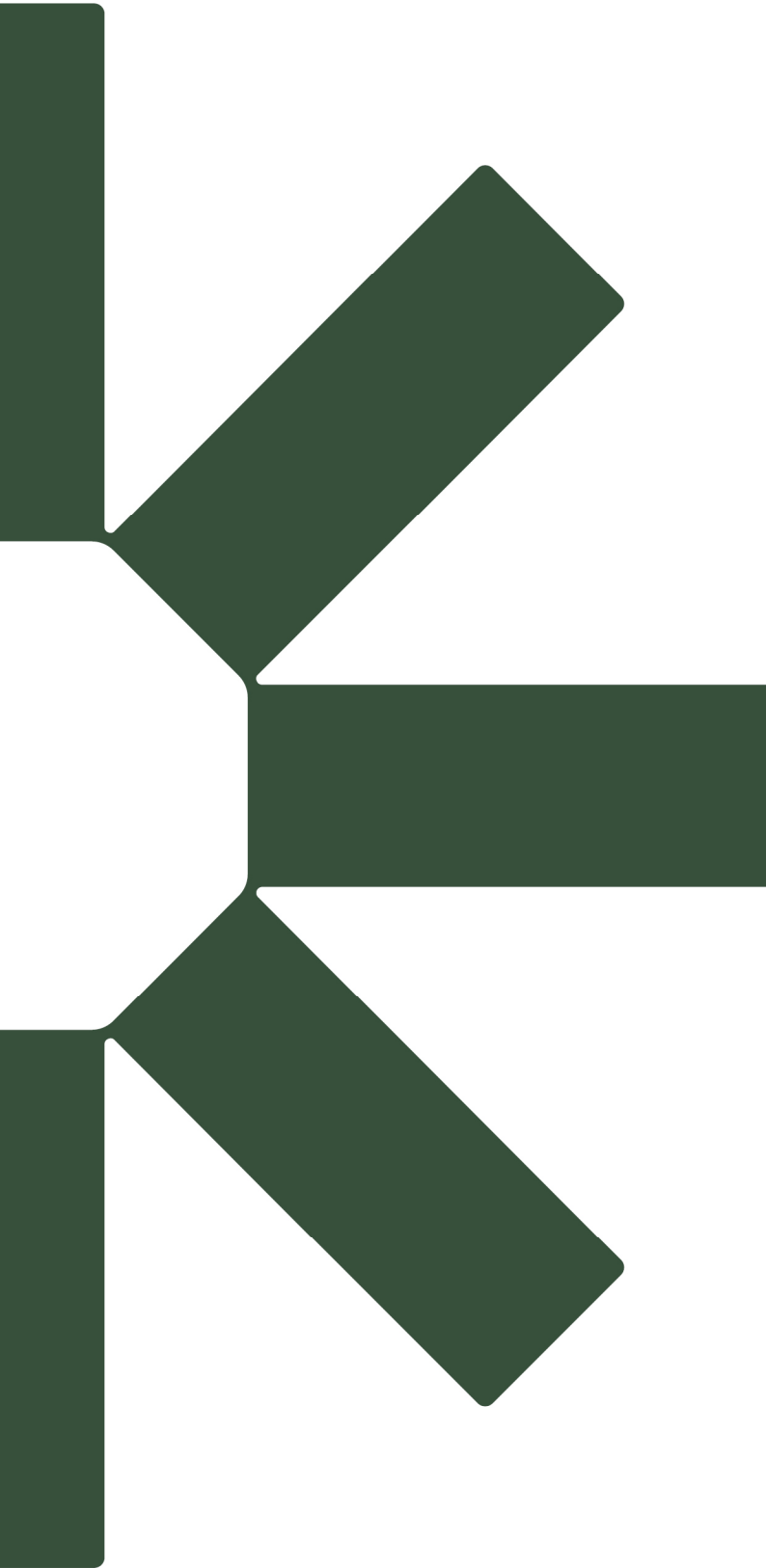
End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data				LAeq	Logsum LAeq15min tot (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																									
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmaz	LAlmaz	LA1			LA10	LA90	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz
2023/06/23 01:45	Night	NML35	ARL Ngara SN:8781DD	16.2	352	0	14.2	81	47	N/A	45	41	36	39	35	wind, excluded																							
2023/06/23 02:00	Night	NML35	ARL Ngara SN:8781DD	14.0	357	0	14	82	46	N/A	41	38	34	37	33	wind, excluded																							
2023/06/23 02:15	Night	NML35	ARL Ngara SN:8781DD	13.0	0	0	13.8	84	49	N/A	43	39	34	37	33	wind, excluded																							
2023/06/23 02:30	Night	NML35	ARL Ngara SN:8781DD	11.9	3	0	13.6	85	43	N/A	39	38	33	36	32	wind, excluded																							
2023/06/23 02:45	Night	NML35	ARL Ngara SN:8781DD	12.6	6	0	13.4	86	45	N/A	41	37	32	35	32	wind, excluded																							
2023/06/23 03:00	Night	NML35	ARL Ngara SN:8781DD	12.6	3	0	13.3	87	38	N/A	36	33	29	31	28																								
2023/06/23 03:15	Night	NML35	ARL Ngara SN:8781DD	13.3	358	0	13.4	87	40	N/A	35	32	29	31	28																								
2023/06/23 03:30	Night	NML35	ARL Ngara SN:8781DD	12.2	357	0	13.3	88	52	N/A	35	29	25	29	24																								
2023/06/23 03:45	Night	NML35	ARL Ngara SN:8781DD	13.0	354	0	13.3	88	48	N/A	40	29	24	29	30																								
2023/06/23 04:00	Night	NML35	ARL Ngara SN:8781DD	10.8	357	0	13.3	89	31	N/A	28	27	23	26	23																								
2023/06/23 04:15	Night	NML35	ARL Ngara SN:8781DD	10.4	2	0	13.2	90	32	N/A	26	24	22	23	20																								
2023/06/23 04:30	Night	NML35	ARL Ngara SN:8781DD	9.4	358	0	13.2	90	31	N/A	24	23	22	23	19																								
2023/06/23 04:45	Night	NML35	ARL Ngara SN:8781DD	7.9	351	0	13	91	43	N/A	25	23	21	22	17																								
2023/06/23 05:00	Night	NML35	ARL Ngara SN:8781DD	6.5	347	0	12.4	94	30	N/A	25	23	21	22	18																								
2023/06/23 05:15	Night	NML35	ARL Ngara SN:8781DD	7.6	347	0	12.2	95	32	N/A	27	23	21	23	19																								
2023/06/23 05:30	Night	NML35	ARL Ngara SN:8781DD	5.4	357	0	12.2	96	46	N/A	28	24	22	23	19																								
2023/06/23 05:45	Night	NML35	ARL Ngara SN:8781DD	5.4	18	0	12	96	31	N/A	27	24	21	23	19																								
2023/06/23 06:00	Night	NML35	ARL Ngara SN:8781DD	4.3	348	0	12	96	34	N/A	29	26	22	24	21																								
2023/06/23 06:15	Night	NML35	ARL Ngara SN:8781DD	7.6	0	0.9	11.8	98	68	N/A	63	51	23	49	37	Rainfall exceedance, data excluded																							
2023/06/23 06:30	Night	NML35	ARL Ngara SN:8781DD	6.8	356	0	12.3	99	66	N/A	60	52	31	48	35	rainfall audible - exclude																							
2023/06/23 06:45	Night	NML35	ARL Ngara SN:8781DD	7.6	345	0	12.4	100	56	N/A	44	36	29	34	31	rainfall audible - exclude																							
2023/06/23 07:00	Night	NML35	ARL Ngara SN:8781DD	9.7	349	0	12.5	100	66	N/A	51	37	29	41	29																								
2023/06/23 07:15	Day	NML35	ARL Ngara SN:8781DD	8.6	341	0	12.8	99	60	N/A	52	38	30	39	29																								
2023/06/23 07:30	Day	NML35	ARL Ngara SN:8781DD	9.0	339	0	13.2	98	58	N/A	53	42	30	41	35	Aircraft Noise, 2min excluded																							
2023/06/23 07:45	Day	NML35	ARL Ngara SN:8781DD	6.8	338	0	13.4	96	57	N/A	45	39	32	37	30																								
2023/06/23 08:00	Day	NML35	ARL Ngara SN:8781DD	5.4	314	0	14	93	59	N/A	49	41	35	40	37																								
2023/06/23 08:15	Day	NML35	ARL Ngara SN:8781DD	9.4	282	0	14.2	96	65	N/A	60	53	35	49	36	Rainfall exceedance, data excluded																							
2023/06/23 08:30	Day	NML35	ARL Ngara SN:8781DD	13.3	309	0	14.3	97	65	N/A	54	49	34	45	34																								
2023/06/23 08:45	Day	NML35	ARL Ngara SN:8781DD	15.5	324	0.1	14.5	95	58	N/A	48	42	35	40	35																								
2023/06/23 09:00	Day	NML35	ARL Ngara SN:8781DD	10.1	315	0	14.7	95	70	N/A	52	42	35	45	34																								
2023/06/23 09:15	Day	NML35	ARL Ngara SN:8781DD	9.7	299	0	15.4	93	58	N/A	48	39	30	38	29																								
2023/06/23 09:30	Day	NML35	ARL Ngara SN:8781DD	11.5	306	0	15.9	90	57	N/A	46	42	32	39	33																								
2023/06/23 09:45	Day	NML35	ARL Ngara SN:8781DD	13.7	306	0	16.4	88	58	N/A	54	44	34	43	34	Aircraft Noise, 2min excluded																							
2023/06/23 10:00	Day	NML35	ARL Ngara SN:8781DD	14.0	304	0	16.8	86	58	N/A	47	42	34	40	33																								
2023/06/23 10:15	Day	NML35	ARL Ngara SN:8781DD	14.4	277	0	16.4	86	54	N/A	45	42	34	39	34																								
2023/06/23 10:30	Day	NML35	ARL Ngara SN:8781DD	11.2	273	0	15.9	90	64	N/A	49	40	29	39	33																								
2023/06/23 10:45	Day	NML35	ARL Ngara SN:8781DD	11.5	270	0	15.7	92	51	N/A	40	34	28	32	28																								
2023/06/23 11:00	Day	NML35	ARL Ngara SN:8781DD	12.6	264	0	15.8	92	68	N/A	45	35	27	38	28																								
2023/06/23 11:15	Day	NML35	ARL Ngara SN:8781DD	12.2	282	0	16.2	90	58	N/A	43	36	28	35	28																								
2023/06/23 11:30	Day	NML35	ARL Ngara SN:8781DD	13.3	286	0	17	86	51	N/A	42	37	30	35	30																								
2023/06/23 11:45	Day	NML35	ARL Ngara SN:8781DD	13.7	286	0	18	82	57	N/A	46	42	34	39	37																								
2023/06/23 12:00	Day	NML35	ARL Ngara SN:8781DD	15.5	280	0	17.4	83	70	N/A	46	41	32	41	33																								
2023/06/23 12:15	Day	NML35	ARL Ngara SN:8781DD	12.2	285	0	17.5	82	56	N/A	44	40	31	37	31																								
2023/06/23 12:30	Day	NML35	ARL Ngara SN:8781DD	14.0	274	0	17.8	81	60	N/A	48	39	30	38	31																								
2023/06/23 12:45	Day	NML35	ARL Ngara SN:8781DD	13.7	276	0	18.4	77	57	N/A	47	40	32	38	32																								
2023/06/23 13:00	Day	NML35	ARL Ngara SN:8781DD	13.7	277	0	18.6	76	50	N/A	44	40	33	37	33																								
2023/06/23 13:15	Day	NML35	ARL Ngara SN:8781DD	13.3	273	0	18.9	73	54	N/A	47	39	31	37	33																								
2023/06/23 13:30	Day	NML35	ARL Ngara SN:8781DD	16.2	259	0	18.5	70	52	N/A	43	39	31	36	32																								
2023/06/23 13:45	Day	NML35	ARL Ngara SN:8781DD	17.6	264	0	18.9	67	66	N/A	46	40	32	39	32																								
2023/06/23 14:00	Day	NML35	ARL Ngara SN:8781DD	16.6	267	0	19.9	64	57	N/A	45	39	31	37	32																								
2023/06/23 14:15	Day	NML35	ARL Ngara SN:8781DD	15.5	255	0	19.9	64	56	N/A	49	40	32	39	32																								
2023/06/23 14:30	Day	NML35	ARL Ngara SN:8781DD	15.1	268	0	20.2	60	58	N/A	46	38	30	37	33																								
2023/06/23 14:45	Day	NML35	ARL Ngara SN:8781DD	18.0	257	0	20.4	56	53	N/A	48	42	32	39	33																								
2023/06/23 15:00	Day	NML35	ARL Ngara SN:8781DD	15.5	270	0	20.5	54	64	N/A	50	41	33	41	32																								
2023/06/23 15:15	Day	NML35	ARL Ngara SN:8781DD	14.0	265	0	20.5	53	71	N/A	45	39	29	41	31																								
2023/06/23 15:30	Day	NML35	ARL Ngara SN:8781DD	14.0	262	0	20.5	51	62	N/A	54	38	30	40	34	Aircraft Noise, 2min excluded																							
2023/06/23 15:45	Day	NML35	ARL Ngara SN:8781DD	14.4	263	0	20.3	52	69	N/A	59	41	29	44	34	Aircraft Noise, 2min excluded																							
2023/06/23 16:00	Day	NML35	ARL Ngara SN:8781DD	10.8	263	0	20.2	52	68	N/A	59	37	27	37	28																								
2023/06/23 16:15	Day	NML35	ARL Ngara SN:8781DD	11.2	266	0	19.9	50	51	N/A	38	32	27	31	27																								
2023/06/23 16:30	Day	NML35	ARL Ngara SN:8781DD	13.0	255	0	19.3	49	56	N/A	44	35	27	34	27																								
2023/06/23 16:45	Day	NML35	ARL Ngara SN:8781DD	10.4	264	0	18.6	50	63	N/A	47	34	27	37	25																								
2023/06/23 17:00	Day	NML35	ARL Ngara SN:8781DD	9.0	258	0	17.6	53	56	N/A	41	32	25	31	28																								
2023/06/23 17:15	Day	NML35	ARL Ngara SN:8781DD	9.4	263	0	17	54	48	N/A	40	32	25	30	27																								
2023/06/23 17:30	Day	NML35	ARL Ngara SN:8781DD	7.6	257	0	16.1	56	58	N/A	51	32	25	37	24	Aircraft Noise, 1min excluded																							
2023/06/23 17:45	Day	NML35	ARL Ngara SN:8781DD	5.8	247	0	15.4	59	42	N/A	39	38	28	35	23																								
2023/06/23 18:00	Day	NML35	ARL Ngara SN:8781DD	9.4	238	0	15.1	61	44	N/A	41	39	34	37	22																								
2023/06/23 18:15	Evening	NML35	ARL Ngara SN:8781DD	7.9	241	0	14.7	62	48	N/A	44	42	36	40	23																								
2023/06/23 18:30	Evening	NML35	ARL Ngara SN:8781DD	6.1	246	0	14.2	63	45	N/A	43	42	37	40	26																								
2023/06/23 18:45	Evening	NML35	ARL Ngara SN:8781DD	5.4	230	0	14	63	44	N/A	43	41	36	39	23																								
2023/06/23 19:00	Evening	NML35																																					

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot	Raw LAeq,15min 1/3 Spectrum																																	
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	LAeq	LAeq S630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz z	1.6kHz	2kHz	2.5kHz	3.15kHz z	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz z	16kHz	
2023/06/25 09:15	Day	NML35	ARL Ngara SN:8781DD	9.7	304	0	21.6	33	61	N/A	52	39	31	39	29	2.3 Comments (dominant/noteworthy sources).																															
2023/06/25 09:30	Day	NML35	ARL Ngara SN:8781DD	9.0	310	0	22.5	32	68	N/A	56	42	30	44	30	-6	-3	-2	0	2	5	5	6	6	7	7	10	15	18	20	24	26	27	31	32	31	24	26	33	25	25	25	13	10	7		
2023/06/25 09:45	Day	NML35	ARL Ngara SN:8781DD	10.4	296	0	23.3	30	51	N/A	44	37	28	35	28	-9	-5	-4	-2	1	4	9	5	6	7	8	11	9	12	14	17	19	22	23	24	27	26	24	20	23	25	22	19	16	12	10	7
2023/06/25 10:00	Day	NML35	ARL Ngara SN:8781DD	9.7	289	0	23.0	30	57	N/A	42	38	30	35	29	-4	-2	-1	1	2	5	7	8	9	8	8	11	15	19	21	24	26	27	27	25	25	23	22	22	19	16	13	10	7			
2023/06/25 10:15	Day	NML35	ARL Ngara SN:8781DD	12.6	298	0	24.1	29	62	N/A	50	38	31	38	30	-5	-2	0	1	3	6	11	9	9	10	9	12	16	19	22	24	27	27	28	28	29	24	23	23	24	30	26	14	10	7		
2023/06/25 10:30	Day	NML35	ARL Ngara SN:8781DD	11.9	295	0	24.7	28	63	N/A	46	39	32	38	31	-2	0	1	2	4	8	17	19	10	10	10	13	17	20	22	24	27	28	29	30	28	25	23	23	26	29	23	15	10	7		
2023/06/25 10:45	Day	NML35	ARL Ngara SN:8781DD	14.0	282	0	25	27	54	N/A	44	39	31	36	30	-2	-1	1	2	4	6	9	8	9	9	10	12	16	20	22	24	27	28	29	26	25	23	22	21	22	20	13	10	7			
2023/06/25 11:00	Day	NML35	ARL Ngara SN:8781DD	14.4	276	0	25.3	27	54	N/A	43	39	31	37	34	-2	2	3	4	6	18	24	26	11	12	13	14	17	20	22	24	27	27	27	25	23	23	22	22	24	23	14	10	7			
2023/06/25 11:15	Day	NML35	ARL Ngara SN:8781DD	15.1	268	0	25.5	26	51	N/A	42	38	31	36	31	2	4	5	6	7	9	12	11	12	12	12	15	18	21	23	24	26	26	26	25	23	23	23	22	23	22	13	10	7			
2023/06/25 11:30	Day	NML35	ARL Ngara SN:8781DD	18.4	267	0	25.5	26	60	N/A	45	40	31	37	32	2	5	6	7	8	9	11	11	12	12	13	15	19	22	23	25	27	28	29	28	27	25	24	25	24	22	19	13	10	7		
2023/06/25 11:45	Day	NML35	ARL Ngara SN:8781DD	23.8	257	0	25.8	26	66	N/A	50	42	32	41	34	10	12	12	12	13	13	14	14	15	15	15	16	18	21	24	25	27	29	30	32	29	27	26	25	27	32	30	17	11	7		
2023/06/25 12:00	Day	NML35	ARL Ngara SN:8781DD	23.8	250	0	25.6	26	57	N/A	47	43	35	40	36	3	7	10	11	12	13	14	15	15	16	16	20	23	26	27	29	30	31	32	31	30	28	27	26	25	24	22	15	11	7		
2023/06/25 12:15	Day	NML35	ARL Ngara SN:8781DD	23.9	246	0	25.5	26	62	N/A	52	47	38	44	38	10	13	15	17	16	16	17	18	18	19	20	23	26	29	30	31	33	34	36	36	35	33	31	30	29	28	23	17	12	8		
2023/06/25 12:30	Day	NML35	ARL Ngara SN:8781DD	22.7	248	0	25.5	27	54	N/A	45	41	36	39	35	6	9	11	12	14	15	16	15	16	17	19	23	25	27	28	30	30	29	27	26	26	25	25	26	25	15	11	7				
2023/06/25 12:45	Day	NML35	ARL Ngara SN:8781DD	21.2	242	0	25.7	27	55	N/A	47	44	35	41	36	8	12	13	15	15	15	16	16	17	17	18	21	24	26	28	29	31	32	32	31	30	29	28	28	27	26	25	17	11	7		
2023/06/25 13:00	Day	NML35	ARL Ngara SN:8781DD	18.7	258	0	25.9	27	70	N/A	48	44	35	42	35	4	8	11	12	13	12	13	14	14	15	16	19	22	25	27	28	30	31	31	31	31	30	30	32	36	35	27	26	12	7		
2023/06/25 13:15	Day	NML35	ARL Ngara SN:8781DD	18.7	260	0	25.9	26	63	N/A	53	45	32	42	40	8	12	15	17	17	17	17	17	20	28	31	22	23	27	28	29	30	31	31	31	30	29	29	31	31	30	28	28	16	11	8	
2023/06/25 13:30	Day	NML35	ARL Ngara SN:8781DD	21.6	248	0	26.2	25	62	N/A	53	43	34	42	35	5	9	10	13	14	15	15	15	15	16	18	22	24	26	27	29	29	30	29	28	30	34	36	35	26	21	15	11	7			
2023/06/25 13:45	Day	NML35	ARL Ngara SN:8781DD	20.5	246	0	26	25	66	N/A	50	43	35	41	36	7	10	12	14	14	15	16	16	17	17	20	23	26	27	29	30	31	31	31	29	29	29	29	33	30	27	16	11	7			
2023/06/25 14:00	Day	NML35	ARL Ngara SN:8781DD	21.6	249	0	26.4	24	61	N/A	53	45	36	43	36	6	10	12	12	13	13	13	15	15	16	16	17	20	24	26	28	29	31	36	37	33	33	29	30	28	25	22	18	14	11	7	
2023/06/25 14:15	Day	NML35	ARL Ngara SN:8781DD	21.6	262	0	26.2	24	61	N/A	49	43	35	41	36	7	10	13	13	14	14	14	15	15	16	17	20	23	26	27	29	30	32	35	32	35	32	31	29	28	27	25	25	22	15	11	7
2023/06/25 14:30	Day	NML35	ARL Ngara SN:8781DD	20.2	255	0	26.2	25	65	N/A	52	46	37	44	40	11	15	18	21	21	22	23	25	25	26	22	22	24	27	29	30	32	34	34	35	34	33	32	31	31	29	26	23	18	13	8	
2023/06/25 14:45	Day	NML35	ARL Ngara SN:8781DD	23.8	245	0	26.1	22	52	N/A	45	42	35	39	36	8	9	11	13	15	15	15	15	16	16	17	20	24	26	27	29	30	30	31	30	29	29	31	31	30	28	28	16	11	8		
2023/06/25 15:00	Day	NML35	ARL Ngara SN:8781DD	20.5	250	0	26.1	22	51	N/A	45	43	36	40	36	6	10	11	11	12	13	14	14	15	16	17	20	24	26	28	29	30	31	31	31	30	29	28	27	26	24	22	18	14	11	7	
2023/06/25 15:15	Day	NML35	ARL Ngara SN:8781DD	19.1	248	0	26.1	23	56	N/A	47	41	35	39	36	9	14	17	18	19	19	19	19	19	19	18	18	20	23	25	27	28	30	30	31	29	28	27	26	24	21	18	14	11	7		
2023/06/25 15:30	Day	NML35	ARL Ngara SN:8781DD	22.7	245	0	25.9	23	60	N/A	48	44	35	41	37	9	12	14	15	16	17	16	17	17	18	18	22	25	28	29	30	32	32	32	32	31	30	29	28	26	23	20	15	11	7		
2023/06/25 15:45	Day	NML35	ARL Ngara SN:8781DD	21.2	248	0	25.7	24	58	N/A	47	44	36	41	36	7	10	13	16	14	16	16	17	17	17	18	21	24	26	28	29	30	31	31	30	29	28	33	28	24	23	28	27	11	7		
2023/06/25 16:00	Day	NML35	ARL Ngara SN:8781DD	18.0	251	0	25.4	25	57	N/A	47	46	35	41	35	6	10	12	13	14	15	15	16	16	17	18	16	17	19	22	24	26	27	29	29	28	27	26	26	38	30	22	17	14	11	7	
2023/06/25 16:15	Day	NML35	ARL Ngara SN:8781DD	17.3	247	0	25.1	26	53	N/A	47	46	34	42	33	1	5	6	8	8	10	10	11	12	12	13	20	20	23	25	25	27	27	28	26	25	25	41	31	21	20	16	13	10	7		
2023/06/25 16:30	Day	NML35	ARL Ngara SN:8781DD	14.4	233	0	24.4	27	55	N/A	46	46	31	42	30	-6	-4	-1	1	2	4	6	7	8	10	10	14	17	20	21	23	24	24	24	24	23	22	22	42	31	22	19	15	12	10	7	
2023/06/25 16:45	Day	NML35	ARL Ngara SN:8781DD	15.1	232	0	23.6	29	53	N/A	46	4																																			

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot	Raw LAeq,15min 1/3 Spectrum																										
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz
2023/06/26 13:00	Day	NML35	ARL Ngara SN:8781DD	11.5	236	0	19.3	27	42	N/A	36	33	26	30	28	2.3 Comments (dominant/noteworthy sources).																								
2023/06/26 13:15	Day	NML35	ARL Ngara SN:8781DD	12.2	235	0	19.7	27	63	N/A	55	48	30	44	34	Aircraft Noise, 4min excluded																								
2023/06/26 13:30	Day	NML35	ARL Ngara SN:8781DD	11.5	229	0	19.6	26	73	N/A	68	62	31	58	59	Aircraft Noise Dominates																								
2023/06/26 13:45	Day	NML35	ARL Ngara SN:8781DD	12.2	220	0	19.9	26	80	N/A	72	60	29	59	60	Aircraft Noise Dominates																								
2023/06/26 14:00	Day	NML35	ARL Ngara SN:8781DD	12.6	240	0	20.1	26	63	N/A	56	48	31	44	46	Aircraft Noise Dominates																								
2023/06/26 14:15	Day	NML35	ARL Ngara SN:8781DD	13.0	254	0	20	25	53	N/A	41	36	28	34	32	Aircraft Noise, 2min excluded																								
2023/06/26 14:30	Day	NML35	ARL Ngara SN:8781DD	13.7	239	0	20	25	58	N/A	53	41	28	40	34	Aircraft Noise, 2min excluded																								
2023/06/26 14:45	Day	NML35	ARL Ngara SN:8781DD	11.5	242	0	20.3	25	73	N/A	66	44	26	51	29	Aircraft Noise, 2min excluded																								
2023/06/26 15:00	Day	NML35	ARL Ngara SN:8781DD	10.8	263	0	20.2	25	56	N/A	48	39	24	37	37	Aircraft Noise, 2min excluded																								
2023/06/26 15:15	Day	NML35	ARL Ngara SN:8781DD	13.0	236	0	20.2	25	49	N/A	36	31	25	29	25	Aircraft Noise, 2min excluded																								
2023/06/26 15:30	Day	NML35	ARL Ngara SN:8781DD	11.5	254	0	20	25	65	N/A	60	41	26	45	32	Aircraft Noise, 2min excluded																								
2023/06/26 15:45	Day	NML35	ARL Ngara SN:8781DD	8.6	252	0	19.9	25	46	N/A	36	31	24	28	24	Aircraft Noise, 2min excluded																								
2023/06/26 16:00	Day	NML35	ARL Ngara SN:8781DD	9.0	245	0	19.7	25	51	N/A	45	35	25	33	34	Aircraft Noise, 2min excluded																								
2023/06/26 16:15	Day	NML35	ARL Ngara SN:8781DD	8.3	255	0	19.3	25	65	N/A	58	43	24	44	23	Aircraft Noise, 3min excluded																								
2023/06/26 16:30	Day	NML35	ARL Ngara SN:8781DD	7.9	257	0	18.5	25	57	N/A	51	43	25	39	29	Aircraft Noise, 3min excluded																								
2023/06/26 16:45	Day	NML35	ARL Ngara SN:8781DD	6.5	253	0	17.5	26	66	N/A	46	36	23	38	22	Aircraft Noise, 3min excluded																								
2023/06/26 17:00	Day	NML35	ARL Ngara SN:8781DD	7.2	245	0	16.2	27	51	N/A	36	29	22	28	18	Aircraft Noise, 3min excluded																								
2023/06/26 17:15	Day	NML35	ARL Ngara SN:8781DD	5.4	247	0	15.4	28	51	N/A	45	32	23	32	19	Aircraft Noise, 3min excluded																								
2023/06/26 17:30	Day	NML35	ARL Ngara SN:8781DD	5.0	241	0	14.4	29	66	N/A	41	33	23	38	30	Aircraft Noise, 3min excluded																								
2023/06/26 17:45	Day	NML35	ARL Ngara SN:8781DD	6.1	241	0	13.9	30	62	N/A	55	39	22	41	27	Aircraft Noise, 2min excluded																								
2023/06/26 18:00	Day	NML35	ARL Ngara SN:8781DD	5.0	219	0	13.5	31	37	N/A	34	29	24	27	23	Aircraft Noise, 2min excluded																								
2023/06/26 18:15	Evening	NML35	ARL Ngara SN:8781DD	5.0	226	0	13.2	31	64	N/A	58	47	25	45	23	Aircraft Noise, 4min excluded																								
2023/06/26 18:30	Evening	NML35	ARL Ngara SN:8781DD	4.7	274	0	12.4	33	64	N/A	60	49	22	47	21	Aircraft Noise, 4min excluded																								
2023/06/26 18:45	Evening	NML35	ARL Ngara SN:8781DD	2.9	259	0	11.9	34	32	N/A	28	25	21	23	21	Aircraft Noise, 4min excluded																								
2023/06/26 19:00	Evening	NML35	ARL Ngara SN:8781DD	3.2	234	0	11.5	35	36	N/A	24	23	21	22	16	Aircraft Noise, 4min excluded																								
2023/06/26 19:15	Evening	NML35	ARL Ngara SN:8781DD	3.6	248	0	11.4	35	32	N/A	26	23	21	22	17	Aircraft Noise, 4min excluded																								
2023/06/26 19:30	Evening	NML35	ARL Ngara SN:8781DD	2.2	251	0	10.8	37	43	N/A	37	28	21	26	27	Aircraft Noise, 4min excluded																								
2023/06/26 19:45	Evening	NML35	ARL Ngara SN:8781DD	3.2	238	0	10.4	38	28	N/A	23	22	21	22	15	Aircraft Noise, 4min excluded																								
2023/06/26 20:00	Evening	NML35	ARL Ngara SN:8781DD	4.7	217	0	10.7	37	37	N/A	33	28	21	25	26	Aircraft Noise, 4min excluded																								
2023/06/26 20:15	Evening	NML35	ARL Ngara SN:8781DD	4.3	221	0	10.3	39	42	N/A	27	22	21	22	17	Aircraft Noise, 4min excluded																								
2023/06/26 20:30	Evening	NML35	ARL Ngara SN:8781DD	3.6	231	0	9.9	40	28	N/A	25	22	21	22	16	Aircraft Noise, 4min excluded																								
2023/06/26 20:45	Evening	NML35	ARL Ngara SN:8781DD	3.6	220	0	9.5	41	38	N/A	32	24	21	24	19	Aircraft Noise, 4min excluded																								
2023/06/26 21:00	Evening	NML35	ARL Ngara SN:8781DD	3.6	223	0	9.6	41	25	N/A	23	22	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/26 21:15	Evening	NML35	ARL Ngara SN:8781DD	3.2	228	0	9	42	34	N/A	30	24	21	23	20	Aircraft Noise, 4min excluded																								
2023/06/26 21:30	Evening	NML35	ARL Ngara SN:8781DD	2.2	253	0	9	43	27	N/A	23	22	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/26 21:45	Evening	NML35	ARL Ngara SN:8781DD	2.2	275	0	9.2	42	30	N/A	23	22	21	21	14	Aircraft Noise, 4min excluded																								
2023/06/26 22:00	Evening	NML35	ARL Ngara SN:8781DD	2.5	252	0	9.1	43	35	N/A	23	22	21	21	14	Aircraft Noise, 4min excluded																								
2023/06/26 22:15	Night	NML35	ARL Ngara SN:8781DD	0.7	270	0	9	43	31	N/A	28	23	21	22	17	Aircraft Noise, 4min excluded																								
2023/06/26 22:30	Night	NML35	ARL Ngara SN:8781DD	0.7	324	0	8.8	44	24	N/A	21	21	21	21	11	Aircraft Noise, 4min excluded																								
2023/06/26 22:45	Night	NML35	ARL Ngara SN:8781DD	1.4	286	0	9	44	33	N/A	21	21	21	21	12	Aircraft Noise, 4min excluded																								
2023/06/26 23:00	Night	NML35	ARL Ngara SN:8781DD	3.6	341	0	8.7	45	27	N/A	22	21	21	21	13	Aircraft Noise, 4min excluded																								
2023/06/26 23:15	Night	NML35	ARL Ngara SN:8781DD	2.5	10	0	8.7	44	28	N/A	24	22	21	21	16	Aircraft Noise, 4min excluded																								
2023/06/26 23:30	Night	NML35	ARL Ngara SN:8781DD	2.9	359	0	8.1	49	38	N/A	29	24	21	23	18	Aircraft Noise, 4min excluded																								
2023/06/26 23:45	Night	NML35	ARL Ngara SN:8781DD	2.9	355	0	7.9	51	30	N/A	24	21	21	21	12	Aircraft Noise, 4min excluded																								
2023/06/26 00:00	Night	NML35	ARL Ngara SN:8781DD	2.5	346	0	7.5	55	27	N/A	22	21	21	21	12	Aircraft Noise, 4min excluded																								
2023/06/27 00:15	Night	NML35	ARL Ngara SN:8781DD	3.6	342	0	6.9	58	29	N/A	22	21	21	21	13	Aircraft Noise, 4min excluded																								
2023/06/27 00:30	Night	NML35	ARL Ngara SN:8781DD	2.9	353	0	7.6	52	26	N/A	23	21	21	21	13	Aircraft Noise, 4min excluded																								
2023/06/27 00:45	Night	NML35	ARL Ngara SN:8781DD	2.9	353	0	7.4	58	24	N/A	22	21	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/27 01:00	Night	NML35	ARL Ngara SN:8781DD	2.2	358	0	7.1	58	24	N/A	22	21	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/27 01:15	Night	NML35	ARL Ngara SN:8781DD	1.4	32	0	7	57	38	N/A	21	21	21	21	12	Aircraft Noise, 4min excluded																								
2023/06/27 01:30	Night	NML35	ARL Ngara SN:8781DD	1.1	118	0	6.4	61	68	N/A	34	22	21	34	23	Aircraft Noise, 4min excluded																								
2023/06/27 01:45	Night	NML35	ARL Ngara SN:8781DD	2.5	150	0	6.3	59	37	N/A	32	26	21	23	22	Aircraft Noise, 4min excluded																								
2023/06/27 02:00	Night	NML35	ARL Ngara SN:8781DD	5.4	161	0	7.2	53	36	N/A	31	25	21	23	22	Aircraft Noise, 4min excluded																								
2023/06/27 02:15	Night	NML35	ARL Ngara SN:8781DD	4.3	159	0	7.6	49	35	N/A	23	21	21	21	14	Aircraft Noise, 4min excluded																								
2023/06/27 02:30	Night	NML35	ARL Ngara SN:8781DD	3.2	146	0	6.9	53	32	N/A	23	22	21	21	16	Aircraft Noise, 4min excluded																								
2023/06/27 02:45	Night	NML35	ARL Ngara SN:8781DD	4.7	150	0	6.2	56	60	N/A	24	22	21	25	19	Aircraft Noise, 4min excluded																								
2023/06/27 03:00	Night	NML35	ARL Ngara SN:8781DD	2.9	172	0	6.4	54	29	N/A	25	23	21	22	18	Aircraft Noise, 4min excluded																								
2023/06/27 03:15	Night	NML35	ARL Ngara SN:8781DD	2.5	162	0	4.9	65	46	N/A	28	24	21	23	21	Aircraft Noise, 4min excluded																								
2023/06/27 03:30	Night	NML35	ARL Ngara SN:8781DD	2.2	248	0	4.9	70	31	N/A	24	22	21	21	16	Aircraft Noise, 4min excluded																								
2023/06/27 03:45	Night	NML35	ARL Ngara SN:8781DD	1.1	294	0	3.9	72	27	N/A	22	21	21	21	16	Aircraft Noise, 4min excluded																								
2023/06/27 04:00	Night	NML35	ARL Ngara SN:8781DD	2.2	295	0	4	70	40	N/A	34	22	21	23	23	Aircraft Noise, 4min excluded																								
2023/06/27 04:15	Night	NML35	ARL Ngara SN:8781DD	4.3	13	0	5.3	61	26	N/A	23	21	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/27 04:30	Night	NML35	ARL Ngara SN:8781DD	5.8	16	0	5	63	28	N/A	24	22	21	21	16	Aircraft Noise, 4min excluded																								
2023/06/27 04:45	Night	NML35	ARL Ngara SN:8781DD	2.5	57	0	4.5	69	29	N/A	25	22	21	22	16	Aircraft Noise, 4min excluded																								
2023/06/27 05:00	Night	NML35	ARL Ngara SN:8781DD	2.2	108	0	4	77	39	N/A	24	21	21	21	15	Aircraft Noise, 4min excluded																								
2023/06/27 05:15	Night	NML35	ARL Ngara SN:8781DD	2.2	245	0	3.7	80	38	N/A	33	29	21	25	25	Aircraft Noise, 4min excluded																								
2023/06/27 05:30	Night	NML35	ARL Ngara SN:8781DD	4.7	339	0	3.3	79	43	N/A	28	23																												

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot (incl +2.3 dB correction)	Raw LAeq,15min 1/3 Spectrum																										
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	LAeq	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz
2023/06/09 11:15	Day	NML38	SVAN 977 SN:69756	7.2	214	0	15.4	71	58	60	49	39	28	37	34	2.3 Comments (dominant/noteworthy sources).																								
2023/06/09 11:30	Day	NML38	SVAN 977 SN:69756	9.4	204	0	15.9	68	63	64	56	48	26	44	34	Aircraft Noise, 4min excluded																								
2023/06/09 11:45	Day	NML38	SVAN 977 SN:69756	9.4	215	0	16.2	66	57	59	50	39	29	38	35	Aircraft Noise, 4min excluded																								
2023/06/09 12:00	Day	NML38	SVAN 977 SN:69756	9.0	223	0	17.2	60	54	56	48	43	30	39	36	Wind Noise, 3min excluded																								
2023/06/09 12:15	Day	NML38	SVAN 977 SN:69756	9.0	200	0	17.5	58	55	58	48	42	31	39	36	Wind Noise, 2min excluded																								
2023/06/09 12:30	Day	NML38	SVAN 977 SN:69756	10.4	214	0	18	55	53	57	48	42	27	38	37	Wind and Aircraft Noise, 5min excluded																								
2023/06/09 12:45	Day	NML38	SVAN 977 SN:69756	10.8	225	0	18.5	51	62	63	52	44	30	42	31	Aircraft Noise, 2min excluded																								
2023/06/09 13:00	Day	NML38	SVAN 977 SN:69756	12.2	202	0	18.1	51	71	72	61	45	25	48	35	Aircraft Noise, 4min excluded																								
2023/06/09 13:15	Day	NML38	SVAN 977 SN:69756	9.4	227	0	18.8	48	73	74	65	54	28	52	35	Aircraft Noise, 4min excluded																								
2023/06/09 13:30	Day	NML38	SVAN 977 SN:69756	11.5	209	0	18.8	47	64	66	44	39	28	37	35	Wind Noise, 4min excluded																								
2023/06/09 13:45	Day	NML38	SVAN 977 SN:69756	11.2	205	0	18	48	69	72	53	45	32	42	36	Wind Noise, 4min excluded																								
2023/06/09 14:00	Day	NML38	SVAN 977 SN:69756	9.7	214	0	18.7	46	64	66	51	42	29	41	37	Wind Noise, 4min excluded																								
2023/06/09 14:15	Day	NML38	SVAN 977 SN:69756	9.0	200	0	19	45	59	60	51	44	27	41	34	Aircraft Noise, 4min excluded																								
2023/06/09 14:30	Day	NML38	SVAN 977 SN:69756	11.5	224	0	19.1	44	64	65	59	43	27	45	35	Aircraft Noise, 4min excluded																								
2023/06/09 14:45	Day	NML38	SVAN 977 SN:69756	8.3	208	0	19	45	61	63	55	46	29	43	34	Aircraft Noise, 4min excluded																								
2023/06/09 15:00	Day	NML38	SVAN 977 SN:69756	9.7	219	0	19	44	67	68	58	48	30	46	37	Aircraft Noise, 4min excluded																								
2023/06/09 15:15	Day	NML38	SVAN 977 SN:69756	11.9	227	0	18.9	44	80	81	58	48	30	50	39	Aircraft Noise, 5min excluded																								
2023/06/09 15:30	Day	NML38	SVAN 977 SN:69756	10.1	217	0	18.8	43	81	82	65	45	30	55	35	Aircraft Noise, 5min excluded																								
2023/06/09 15:45	Day	NML38	SVAN 977 SN:69756	10.4	221	0	18.5	43	59	60	52	42	31	40	35	Aircraft Noise, 2min excluded																								
2023/06/09 16:00	Day	NML38	SVAN 977 SN:69756	9.7	216	0	18.4	43	56	59	46	37	28	35	32	Aircraft Noise, 2min excluded																								
2023/06/09 16:15	Day	NML38	SVAN 977 SN:69756	11.2	221	0	18.1	44	59	61	44	38	28	35	34	Aircraft Noise, 2min excluded																								
2023/06/09 16:30	Day	NML38	SVAN 977 SN:69756	8.6	225	0	17.8	44	53	55	47	38	28	36	36	Aircraft Noise, 3min excluded																								
2023/06/09 16:45	Day	NML38	SVAN 977 SN:69756	6.8	226	0	16.9	46	56	60	45	37	28	35	31	Aircraft Noise, 3min excluded																								
2023/06/09 17:00	Day	NML38	SVAN 977 SN:69756	6.5	227	0	16.1	47	65	66	61	47	26	47	32	Aircraft Noise, 3min excluded																								
2023/06/09 17:15	Day	NML38	SVAN 977 SN:69756	4.3	215	0	15.2	51	58	61	53	47	27	42	27	Aircraft Noise, 2min excluded																								
2023/06/09 17:30	Day	NML38	SVAN 977 SN:69756	4.7	212	0	14.5	52	61	64	55	39	25	40	29	Aircraft Noise, 2min excluded																								
2023/06/09 17:45	Day	NML38	SVAN 977 SN:69756	4.0	180	0	14.1	54	55	60	43	34	23	32	32	Aircraft Noise, 2min excluded																								
2023/06/09 18:00	Day	NML38	SVAN 977 SN:69756	4.3	187	0	13.7	56	44	47	31	28	22	25	23	Aircraft Noise, 3min excluded																								
2023/06/09 18:15	Evening	NML38	SVAN 977 SN:69756	4.0	213	0	13.7	56	52	55	46	36	21	34	28	Aircraft Noise, 3min excluded																								
2023/06/09 18:30	Evening	NML38	SVAN 977 SN:69756	3.6	216	0	13.6	57	45	48	34	28	20	25	24	Aircraft Noise, 3min excluded																								
2023/06/10 07:00	Night	NML38	SVAN 977 SN:69756	2.2	57	0	3.6	100	62	66	54	44	27	42	22	Aircraft Noise, 3min excluded																								
2023/06/10 07:15	Day	NML38	SVAN 977 SN:69756	4.7	27	0	4.5	100	62	66	59	51	29	47	26	Aircraft Noise, 3min excluded																								
2023/06/10 07:30	Day	NML38	SVAN 977 SN:69756	5.0	359	0	4.9	98	86	87	62	47	29	57	30	Aircraft Noise, 3min excluded																								
2023/06/10 07:45	Day	NML38	SVAN 977 SN:69756	5.0	7	0	6.2	90	71	74	50	38	27	43	25	Aircraft Noise, 3min excluded																								
2023/06/10 08:00	Day	NML38	SVAN 977 SN:69756	1.4	18	0	8.6	81	63	66	51	41	28	40	33	Aircraft Noise, 3min excluded																								
2023/06/10 08:15	Day	NML38	SVAN 977 SN:69756	3.2	349	0	9.5	79	62	65	53	46	28	42	24	Aircraft Noise, 2min excluded																								
2023/06/10 08:30	Day	NML38	SVAN 977 SN:69756	3.6	9	0	9.8	78	75	78	55	47	29	48	34	Aircraft Noise, 2min excluded																								
2023/06/10 08:45	Day	NML38	SVAN 977 SN:69756	2.2	61	0	11.3	71	67	68	58	46	27	45	30	Aircraft Noise, 2min excluded																								
2023/06/10 09:00	Day	NML38	SVAN 977 SN:69756	2.9	139	0	11.6	70	69	70	55	41	26	43	28	Aircraft Noise, 2min excluded																								
2023/06/10 09:15	Day	NML38	SVAN 977 SN:69756	3.6	165	0	12.2	69	61	64	48	40	26	37	27	RTN and Aircraft Noise, 4min excluded																								
2023/06/10 09:30	Day	NML38	SVAN 977 SN:69756	5.0	151	0	12.8	64	64	65	60	43	25	45	31	RTN, 2min excluded																								
2023/06/10 09:45	Day	NML38	SVAN 977 SN:69756	5.4	151	0	13.3	62	68	71	62	42	24	46	33	Aircraft Noise, 2min excluded																								
2023/06/10 10:00	Day	NML38	SVAN 977 SN:69756	6.5	154	0	14.2	56	70	71	62	40	24	48	30	Aircraft Noise, 2min excluded																								
2023/06/10 10:15	Day	NML38	SVAN 977 SN:69756	7.2	165	0	14.8	54	54	58	47	40	25	36	33	Aircraft Noise, 2min excluded																								
2023/06/10 10:30	Day	NML38	SVAN 977 SN:69756	7.2	154	0	15.0	51	59	60	50	39	26	37	33	Aircraft Noise, 2min excluded																								
2023/06/10 10:45	Day	NML38	SVAN 977 SN:69756	5.0	140	0	16	49	60	63	55	44	25	42	34	Aircraft Noise, 2min excluded																								
2023/06/10 11:00	Day	NML38	SVAN 977 SN:69756	4.0	220	0	16.4	47	63	68	54	43	24	41	31	RTN, 2min excluded																								
2023/06/10 11:15	Day	NML38	SVAN 977 SN:69756	4.0	212	0	17	46	64	65	51	38	23	41	34	Aircraft Noise, 2min excluded																								
2023/06/10 11:30	Day	NML38	SVAN 977 SN:69756	4.0	22	0	17.5	44	66	68	60	47	26	47	36	Aircraft Noise, 2min excluded																								
2023/06/10 11:45	Day	NML38	SVAN 977 SN:69756	4.0	194	0	17.8	43	63	64	58	47	24	45	36	Aircraft Noise, 2min excluded																								
2023/06/10 12:00	Day	NML38	SVAN 977 SN:69756	3.2	197	0	18.2	41	59	61	52	41	22	39	33	Aircraft Noise, 2min excluded																								
2023/06/10 12:15	Day	NML38	SVAN 977 SN:69756	2.2	147	0	18.5	40	67	69	58	41	22	44	27	Aircraft Noise, 2min excluded																								
2023/06/10 12:30	Day	NML38	SVAN 977 SN:69756	4.3	192	0	18.8	38	66	67	55	41	21	42	32	Aircraft Passover, 1min excluded																								
2023/06/10 12:45	Day	NML38	SVAN 977 SN:69756	3.6	83	0	19.6	37	66	67	58	50	37	21	36	Aircraft Noise, 2min excluded																								
2023/06/10 13:00	Day	NML38	SVAN 977 SN:69756	6.5	221	0	19.7	37	55	57	41	32	21	30	28	Aircraft Noise, 2min excluded																								
2023/06/10 13:15	Day	NML38	SVAN 977 SN:69756	3.2	184	0	19.8	36	53	54	45	36	21	34	34	Aircraft Noise, 2min excluded																								
2023/06/10 13:30	Day	NML38	SVAN 977 SN:69756	5.0	145	0	19.7	36	60	62	43	34	21	32	31	Aircraft Noise, 2min excluded																								
2023/06/10 13:45	Day	NML38	SVAN 977 SN:69756	3.6	282	0	20.5	34	56	58	44	32	20	32	21	Aircraft Noise, 2min excluded																								
2023/06/10 14:00	Day	NML38	SVAN 977 SN:69756	4.3	157	0	20.4	34	71	72	61	49	22	48	28	Aircraft Noise, 2min excluded																								
2023/06/10 14:15	Day	NML38	SVAN 977 SN:69756	5.8	214	0	20.8	34	93	98	60	51	22	56	29	Aircraft and Car Noise, 5min excluded																								
2023/06/10 14:30	Day	NML38	SVAN 977 SN:69756	5.8	197	0	20.5	34	57	60	49	36	20	36	35	Aircraft Noise, 3min excluded																								
2023/06/10 14:45	Day	NML38	SVAN 977 SN:69756	6.1	242	0	20.6	33	65	66	60	44	21	45	32	Aircraft Noise, 3min excluded																								
2023/06/10 15:00	Day	NML38	SVAN 977 SN:69756	6.1	252	0	20.7	33	61	61	54	38	20	40	32	Aircraft Noise, 3min excluded																								
2023/06/10 15:15	Day	NML38	SVAN 977 SN:69756	6.5	279	0	20.8	32	73	78	58	42	24	44	36	Aircraft Noise, 1min excluded																								
2023/06/10 15:30	Day	NML38	SVAN 977 SN:69756	5.0	283	0	21	32	66	67	59	44	21	45	26	Aircraft Noise, 3min excluded																								
2023/06/10 15:45	Day	NML38	SVAN 977 SN:69756	5.4	268</																																			

End Time	Time Period	Location	Logger	Mine Weather Data				Raw 15-minute Statistical Data					Logsum LAeq15min tot	Raw LAeq,15min 1/3 Spectrum																																		
				Wind Speed (km/hr)	Wind Direction	Rainfall (mm)	Temp (oC)	Humidity (%)	LAmx	LAlmx	LA1	LA10		LA90	LAeq	LLeq S630 Hz (incl +2.3 dB correction)	20Hz	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz		
2023/06/11 15:30	Day	NML38	SVAN 977 SN:69756	6.5	64	0	20.6	44	62	65	44	39	30	37	30	2.3 Comments (dominant/noteworthy sources).																																
2023/06/11 15:45	Day	NML38	SVAN 977 SN:69756	7.9	28	0	20.4	43	66	69	44	41	30	39	32	-5	-2	0	5	6	7	9	12	14	13	14	12	14	18	21	23	26	29	26	27	28	26	25	25	28	15	13	11	8	5			
2023/06/11 16:00	Day	NML38	SVAN 977 SN:69756	7.2	61	0	19.9	46	61	64	44	38	26	36	28	-2	-4	6	8	10	12	14	15	16	16	16	16	17	19	23	26	28	30	27	28	29	29	26	25	31	17	14	11	8	5			
2023/06/11 16:15	Day	NML38	SVAN 977 SN:69756	7.9	58	0	19.6	48	53	57	47	42	29	39	33	-5	-3	0	3	5	7	8	11	10	10	10	10	13	17	20	21	24	26	23	24	25	26	32	25	17	15	12	10	7	5			
2023/06/11 16:30	Day	NML38	SVAN 977 SN:69756	9.4	43	0	18.6	58	58	63	51	37	28	38	31	-1	-1	3	7	11	12	13	14	18	18	17	17	17	20	25	27	29	31	28	29	30	28	27	25	20	17	11	8	5				
2023/06/11 16:45	Day	NML38	SVAN 977 SN:69756	6.1	50	0	18.2	52	61	65	54	40	26	40	33	-4	-1	2	6	7	8	10	12	14	15	16	15	16	18	22	24	26	28	28	29	27	27	24	24	18	15	12	8	5				
2023/06/11 17:00	Day	NML38	SVAN 977 SN:69756	4.7	49	0	17.5	55	60	61	48	35	24	35	26	-14	-11	-7	1	15	18	10	7	14	9	10	11	14	16	15	16	19	27	28	28	23	26	26	17	13	9	7	4					
2023/06/11 17:15	Day	NML38	SVAN 977 SN:69756	4.0	61	0	16.7	56	51	54	44	33	22	32	24	-14	-9	-5	-2	0	3	11	12	9	10	8	12	11	12	13	12	12	15	21	20	21	25	22	17	11	9	7	4					
2023/06/11 17:30	Day	NML38	SVAN 977 SN:69756	5.0	75	0	16.3	59	49	51	37	31	23	28	25	-8	-4	2	5	7	8	9	12	8	7	7	8	12	14	17	16	14	20	19	20	20	14	14	12	13	12	10	7	4				
2023/06/11 17:45	Day	NML38	SVAN 977 SN:69756	5.0	82	0	15.5	66	46	47	38	37	30	35	27	-8	-4	2	5	7	8	9	12	8	7	8	12	15	20	17	15	14	13	12	26	34	15	13	12	14	12	13	13	5				
2023/06/11 18:00	Day	NML38	SVAN 977 SN:69756	7.6	72	0	16	65	43	48	40	36	32	35	28	-9	-4	1	3	6	11	16	21	16	7	7	7	12	15	18	16	13	11	12	10	29	32	15	13	12	11	10	11	7	4			
2023/06/11 18:15	Evening	NML38	SVAN 977 SN:69756	4.3	94	0	14.9	70	42	45	35	33	30	32	23	-10	-5	1	2	5	6	6	10	6	5	4	5	10	13	15	13	11	10	11	10	29	28	14	13	11	11	10	9	7	4			
2023/06/11 18:30	Evening	NML38	SVAN 977 SN:69756	4.7	105	0	14.2	75	43	47	33	30	20	27	23	-13	-6	-1	1	5	5	6	12	4	3	2	3	8	11	15	13	12	12	10	11	22	20	13	12	11	11	10	9	7	4			
2023/06/12 07:00	Night	NML38	SVAN 977 SN:69756	1.1	274	0	9.5	100	64	68	56	48	29	45	26	-12	-8	-5	-1	6	5	6	11	3	3	4	10	13	15	16	19	21	26	37	38	38	32	35	36	36	25	21	15	11	5			
2023/06/12 07:15	Day	NML38	SVAN 977 SN:69756	1.4	209	0	10	100	65	69	53	48	35	45	29	-13	-7	-2	0	7	8	9	12	7	8	8	11	16	19	19	23	25	30	39	40	39	30	31	30	30	27	22	16	8	5			
2023/06/12 07:30	Day	NML38	SVAN 977 SN:69756	1.1	193	0	10.4	100	75	76	68	61	30	56	35	-11	-6	1	3	7	6	8	13	11	16	17	16	12	23	24	30	31	39	51	52	50	41	40	34	37	36	31	26	17	7			
2023/06/12 07:45	Day	NML38	SVAN 977 SN:69756	1.1	177	0	11.2	100	60	62	53	45	30	42	36	-13	-7	1	3	11	15	16	20	11	17	18	12	17	16	18	33	30	23	31	32	32	31	33	32	31	22	18	12	8	4			
2023/06/12 08:00	Day	NML38	SVAN 977 SN:69756	0.7	254	0	11.6	100	67	69	59	50	31	47	29	-13	-7	0	7	9	10	17	14	11	10	8	10	16	16	18	21	22	27	36	37	38	41	41	35	27	25	20	17	12	5			
2023/06/12 08:15	Day	NML38	SVAN 977 SN:69756	0.4	137	0	12.2	100	59	61	51	43	28	39	33	-9	-2	5	10	16	12	17	18	20	23	19	16	17	18	19	25	27	24	28	30	32	32	32	26	27	22	18	12	8	4			
2023/06/12 08:30	Day	NML38	SVAN 977 SN:69756	1.1	8	0	12.6	99	52	54	45	37	26	34	25	-13	-6	-2	1	6	7	14	14	10	7	5	8	13	13	12	16	17	19	24	24	28	29	24	21	20	15	9	7	4				
2023/06/12 08:45	Day	NML38	SVAN 977 SN:69756	3.6	65	0	14.2	94	65	70	52	40	28	39	33	-7	-3	1	5	12	12	16	18	19	19	18	18	21	22	22	24	25	26	31	33	31	28	28	25	26	23	17	12	6				
2023/06/12 09:00	Day	NML38	SVAN 977 SN:69756	5.4	74	0	16.2	84	59	61	54	47	30	44	36	-3	15	9	15	14	16	19	25	24	22	23	20	21	23	24	26	28	30	35	37	37	34	34	31	26	25	19	13	8	5			
2023/06/12 09:15	Day	NML38	SVAN 977 SN:69756	5.8	60	0	16.6	82	60	64	53	45	35	43	37	5	12	11	16	22	19	24	25	24	23	23	20	21	23	24	26	27	28	30	32	32	34	35	35	30	29	28	25	24	18	13	9	5
2023/06/12 09:30	Day	NML38	SVAN 977 SN:69756	6.5	72	0	16.5	82	62	63	55	44	34	43	37	6	8	11	14	18	22	24	28	28	28	28	28	29	30	32	33	34	33	32	30	27	25	23	20	18	15	13	9	5				
2023/06/12 09:45	Day	NML38	SVAN 977 SN:69756	7.6	68	0	16.9	79	60	64	52	46	35	43	35	6	9	10	13	17	19	21	23	24	25	24	25	26	28	29	30	32	35	36	34	29	33	31	22	21	17	13	9	5				
2023/06/12 10:00	Day	NML38	SVAN 977 SN:69756	6.1	49	0	16.9	79	68	70	58	44	33	45	35	4	6	8	10	19	15	17	18	18	18	18	18	19	21	25	28	30	33	41	36	37	35	28	24	22	20	16	12	8	5			
2023/06/12 10:15	Day	NML38	SVAN 977 SN:69756	5.0	61	0	17.9	74	54	56	46	42	32	39	32	1	3	5	8	16	11	13	14	14	14	14	14	16	19	23	25	29	32	29	31	28	28	27	21	19	14	11	8	5				
2023/06/12 10:30	Day	NML38	SVAN 977 SN:69756	5.4	33	0	17.8	73	56	59	47	43	30	39	36	3	14	10	17	22	21	25	25	24	24	21	20	20	21	24	26	28	31	28	28	30	27	26	24	25	23	14	11	8	5			
2023/06/12 10:45	Day	NML38	SVAN 977 SN:69756	5.4	50	0	18.7	70	67	68	62	48	30	49	37	7	19	9	15	30	22	32	31	29	32	36	39	40	41	41	41	40	38	36	33	31	28	29	27	25	24	21	13	8	5			
2023/06/12 11:00	Day	NML38	SVAN 977 SN:69756	6.5	80	0	18.6	71	60	62	50	44	29	41	37	4	9	9	18	21	17	21	24	23	24	24	23	23	24	26	28	29	31	31	31	30	32	29	28	23	21	18	12	8	5			
2023/06/12 11:15	Day	NML38	SVAN 977 SN:69756	7.2	76	0	18.7	70	62	64	50	46	37	43	37	3	15	9	15	20	20	21	27	28	24	26	25	26																				



Making Sustainability Happen

10 August 2023

New Acland Coal Pty Ltd
Level 16/175 Eagle Street
Brisbane City QLD 4000
MDugmore@newhopegroup.com.au

Attention: Marnie Dugmore

Re: New Acland Coal Mine – Stage 3: June 2023 Noise Report – Independent Peer Review

AARC Environmental Solutions Pty Ltd (AARC) has been commissioned by New Acland Coal Pty Ltd (NAC), part of the New Hope Group, to undertake a peer review of the monthly compliance noise monitoring reports for New Acland Coal Mine Stage 3. This review addresses the June 2023 noise report.

The author of this review is Stephen Pugh, an Acoustic Engineer with over 25 years acoustics experience including in environmental and mine noise and vibration matters.

Introduction

The noise monitoring and monthly reports are to be undertaken and prepared by SLR Consulting Australia Pty Ltd (SLR) as per Environmental Authority (EA) EPML00335713 Conditions F4, F6 and Table F2. The EA refers to a noise monitoring program which is included in the NAC Noise and Vibration Management Plan (NVMP) (27/04/2023, Version 0, and labelled draft).

EA Condition F12(g) indicates that the monthly compliance report is subject to a peer review, and Condition F13 includes the following related requirement:

The environmental authority holder must, at their own cost, appoint an independent acoustic consultant to review the monthly noise report format for a twelve (12) month period following the commencement of reporting.

The monthly reports must be submitted to the administering authority.

The monthly reports must be produced to present information from noise monitoring in a manner that is clear, open and unambiguous.

The independent/peer review requirement is also included in Section 6.3 of the NVMP as follows:

In accordance with EA Condition F13, for the first 12 months of the Stage 3 Mine, the monthly Compliance Noise Monitoring Report must be reviewed by an appropriately-qualified independent acoustic consultant. This independent acoustic consultant must prepare their own (independent) report/memorandum, within two weeks of receiving the draft report, stating the process they have used to review the noise monitoring, analysis and findings and their acceptance (or otherwise) of the monthly noise monitoring report.

Review history

This monthly report addresses noise monitoring in June 2023 and was provided to AARC for review on 13/07/2023. AARC sought additional spreadsheeting on 20/07/2023 which was provided the following day on 21/07/2023. AARC provided a marked-up copy of the report to SLR and NAC on 24/07/2023. A revised report was subsequently provided to AARC on 4/08/2023.

The purpose of this report is to provide a peer review of the June 2023 SLR report (ref: 620.10963.01001, Revision: 0.2, dated 4/08/2023).

Review

The following review is provided on the basis of the SLR report, SLR spreadsheets, a previous Teams meeting where SLR demonstrated the spreadsheets associated with the analysis, and correspondence and discussions between AARC and SLR regarding the report and methodology.

The process that SLR has used to determine mine noise levels from the attended and unattended noise measurements is considered to be appropriate in that extraneous noise was considered to be removed to an acceptable standard. Selected calculations and analysis in the sample spreadsheets were reviewed and considered acceptable.

It is noted that during the May and June 2023 monitoring periods, there were only brief periods when mining activities occurred outside of daytime hours (7am to 6pm). Compliance is often more difficult in the evening and night, when noise limits reduce and when mine noise levels can be higher at residences due to meteorological conditions that favour noise propagation. Therefore, it is expected that compliance will be more challenging in future reporting months when the mine operates 24 hour/day.

It is understood that there were no rail activities during this monitoring period as the NAC rail spur is yet to be constructed, and therefore the rail noise limits in the EA did not require consideration.

This report confirms that L_{Amax} noise level refers to the maximum noise level rather than an average maximum noise level. This is the more conservative of the two approaches (i.e. more stringent) and is acceptable.

The executive summary section of the report refers to EA noise limit exceedances of 1 to 2 dB as ‘marginal’ and ‘acoustically negligible’. From discussions with SLR it is understood that ‘acoustically negligible’ is in reference to there being no discernible difference between noise levels separate by only 1 to 2 dB. AARC agree with this definition. SLR has confirmed, that whilst such an exceedance would be considered marginal and acoustically indiscernible, the exceedances would warrant further review and it would be expected that NAC would outline mitigation/management measures that were being employed at the time, and into the future. It is noted that no such exceedance has been measured, and as such a NAC response to such exceedances has not been required.

A minor comment is provided regarding the visual ‘traffic light’ summary in Table E1. It is suggested that table cells under the evening and night attended measurements should be left unshaded rather than green shading indicating compliance, because no such evening and night attended measurements have been undertaken.

The SLR report concludes that noise levels during the June 2023 monitoring period were compliant with the NAC’s EA. Upon review of the SLR report, AARC agree with this conclusion.

Summary

Overall, AARC accept the June 2023 SLR report as being in accordance with the EA, and agree with the conclusion of the SLR report that NAC mine noise levels during the June 2023 monitoring period were compliant with the NAC EA.

Yours sincerely



Stephen Pugh
Principal Engineer

Appendix 4 – Extracted Conditions

Table 9: Regulatory conditions and requirements referred to in report.

Condition	Report section
Environmental Authority	
Air Quality	
<p>(B2) All air quality indicators listed in Table B1 – Air quality monitoring requirements⁴, must be monitoring at the locations and at the frequency listed in Table B1 – Air quality monitoring requirements in accordance with the following methodologies:</p> <p>a) For dust deposition of 120 milligrams per square metre per day, averaged over 1-month, when monitored in accordance with the most recent version of Standards Australia AS/NZS 350.10.1 Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposited matter – Gravimetric method;</p> <p>b) For a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM10) suspended in the atmosphere of 50 micrograms per cubic metre e over a 24-hour averaging time¹ and 25 micrograms per cubic metre over a 1-year averaging time¹, when monitored in accordance with the most recent version of either: (i) Standards Australia AS/NZS 3580.9.6 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 high volume sampler with size-selective inlet – Gravimetric method; or (ii) Standards Australia AS/NZS 3580.9.9 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 low volume sampler – Gravimetric method; or (iii) Standards Australia AS 3580.9.8 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – PM10 continuous direct mass method using tapered element oscillating microbalance analyser.</p> <p>c) For a concentration of particulate matter suspended in the atmosphere of 90 micrograms per cubic metre over a 24-hour averaging time and 90 micrograms per cubic metre over a 1-year averaging time¹, when monitored in accordance with the most recent version of AS/NZS 3580.9.3 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – Total suspended particulate matter (TSP) – High volume sampler gravimetric method.</p> <p>d) For a concentration of particulate matter with an aerodynamic diameter of less than 2.5 micrometres (PM2.5) suspended in the atmosphere of 25 micrograms per cubic meter over a 24-hour averaging time¹ and 8 micrograms per cubic meter over a 1-year averaging time¹ when monitored in accordance with:</p> <p>(i) The most recent version of Standards Australia AS/NZS 3580.9.12 Methods for sampling and analysis of ambient air, Determination of suspended particulate matter – PM2.5 beta attenuation monitors; or</p>	Sections 2.1, and 3.1

⁴ Reproduced as Table 7 in Appendix 5 of this Report.

Condition	Report section
<p>(ii) The most recent version of <i>Standards Australia AS/NZS 3580.9.13 Methods of sampling and analysis of ambient air, Determination of suspended particulate matter – PM2.5 continuous direct mass method using a tapered element oscillating microbalance monitor</i>; or</p> <p>(iii) Another method as agreed to in writing by the administering authority.</p> <p>NOTE: 1 These limits are based upon relevant air quality objectives contained in the Environmental Protection (Air) Policy 2019 and may be automatically amended to reflect any amendment or replacement of the relevant air quality objective in the Environmental Protection (Air) Policy 2019.</p>	
<p>(B8) All continuously monitored parameters required by Table B1 – Air quality monitoring requirements and the forecasting system required by condition B5 must be made publicly available online and in real-time, presented:</p> <p>a) Spatially; and</p> <p>b) Real-time rolling over 1-hour average across all sites that can be drilled into for each location to provide:</p> <p>(i) Real-time rolling over 1-hour average data on 24-hour basis;</p> <p>(ii) Links to historical data on one hour basis; and</p> <p>(iii) Links to historical 24-hour data.</p>	<p>Please see the Real-Time Air Quality and Noise Performance Monitoring Data dashboard.</p>
Noise	
<p>(F1) The environmental authority holder must ensure that noise generated by the mining activities does not cause the criteria in Table F1 – Noise Limits (includes construction activities)⁵ to be exceeded at a noise sensitive place...</p>	<p>Section 3.2</p>
<p>(F3) The environmental authority holder must ensure that blasting does not cause the limits for peak particle velocity and air blast overpressure in Table F3 – Blasting noise limits⁶ to be exceeded at a noise sensitive place.</p>	<p>Not applicable to this Report as no blasting was conducted in the period.</p>
<p>(F6) Compliance noise monitoring and recording required by conditions F4, F5, F6, F7 and F8 must be conducted in accordance with the administering authority's Noise Measurement Manual and include the following:</p> <p>a) LA01, adj, 15 min - day, evening & night; LA10, adj, 15 min - day, evening & night; LAeq, adj, 15 min - day, evening & night and LA90, adj, 15 min - day, evening & night;</p> <p>b) background noise LA90;</p> <p>c) the level and frequency of occurrence of impulsive or tonal noise and any adjustment and penalties to statistical levels;</p> <p>d) atmospheric conditions including temperature, relative humidity and wind speed and directions;</p>	<p>Sections 2.2 and 3.2</p>

⁵ Reproduced as Table 5 in Appendix 5 of this Report.

⁶ Reproduced as Table 6 in Appendix 5 of this Report.

Condition	Report section
<p>e) effects due to any extraneous factors such as traffic noise and natural sources (e.g., insects, birds and wind);</p> <p>f) location, date and time of monitoring;</p> <p>g) if a complaint concerns low frequency noise and where permitted by the owner or occupier of the noise sensitive place: LLINeq 10 min (internal), LAeq 10 min (internal) and one third octave band measurements in LLINeq 10 min (internal) for centre frequencies in the 10 – 200 Hz range;</p> <p>h) maximum (L_{Amax}) noise levels – night (for a minimum of 30 min); and</p> <p>i) 1/3 octave band spectrums.</p>	
<p>(F13) The environmental authority holder must, at their own cost, appoint an independent acoustic consultant to review the monthly noise report format for a twelve (12) month period following the commencement of reporting.</p> <p>The monthly reports must be submitted to the administering authority.</p> <p>The monthly reports must be produced to present information from noise monitoring in a manner that is clear, open and unambiguous.</p>	Section 1.3
<p>(F15) The environmental authority holder must develop and implement a blast monitoring program to monitor compliance with Table F3 – Blasting noise limits for:</p> <p>a) At least 90% of all blasts undertaken on this site in each year at the nearest noise sensitive place to the centroid of the blast; and</p> <p>b) All blasts conducted during any time period specified by the administering authority at the nearest noise sensitive place.</p> <p>Results of the blast monitoring program must be included in the monthly compliance monitoring report required by the coordinator-General's imposed condition 3.</p>	Section 3.2.2

Appendix 5 – Environmental Authority Limits

Table 10: EA Noise Limits (including Construction).

Noise level dBA measured as	All days		
	7am – 6pm	6pm – 10pm	10pm – 7am
Noise measured at a 'Noise sensitive place'			
L _{Aeq,adj,15min} ¹	42	35	35
L _{Amax}	-	-	50
L _{Amax} - rail spur ²	-	-	56
L _{Aeq} (24hr) - rail spur ²	50		

Note:

1. All noise other than that which is distinguishable as train noise
2. Only for noise distinguishable as train noise

Table 11: EA Blasting Noise Limits.

Blasting noise limits	Sensitive place or commercial place blasting noise limits	
	Monday to Friday: 7am to 6pm Saturday: 9am to 1pm	Monday to Friday: 6pm to 7am. Saturday: 1pm to 9am. Sunday. Public Holidays.
Air blast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time	No blasting
Ground vibration peak particle velocity	5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/second peak particle velocity at any time	No blasting

Table 12: Air quality limits and monitoring requirements

Location*	Air Quality Indicator	Instrument	Frequency	Air Quality Limit	Nuisance Limit
1, 2 (Acland)	PM2.5	TEOM	Continuous	25µg/m3 (24-hr avg) 8µg/m3 (annual)	
	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day
7,8 (or an alternative location to the north of the Stage 3 New Acland mine identified in the Air Emissions Management Plan developed pursuant to condition B4).	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	
16 (East) Acland-Silverleigh Road	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day
38,39 (or an alternative location to the north-west of the Stage 3 New Acland mine identified in the Air Emissions Management Plan developed in pursuant to condition B4).	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day

15 (East)	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day
35,36 (west of mine site)	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day
37 (West)+ (trend monitoring at 37 or an alternative location to the west of Stage 3 New Acland mine identified in the Air Emissions Management Plan developed pursuant to condition B4).	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day
44 (northwest)+ (trend monitoring at 44 or an alternative location to the north-west of the Stage 3 New Acland mine identified in the Air Emissions Management Plan developed pursuant to condition B4).	PM10	TEOM	Continuous	50µg/m3 (24-hr avg) 25µg/m3 (annual)	
	TSP	Modified TEOM	Continuous	90µg/m3 (annual)	80µg/m3 (24-hr avg)
	Insoluble solids	Dust Gauge	Monthly	120mg/m2/day	120mg/m2/day