



Environmental Monitoring Data

December 2022

EPL No: 11912
Licensee: Evolution Mining (Cowl) Pty Limited
Address: PO Box 210 West Wyalong NSW 2671
<http://www.epa.nsw.gov.au/licensing-and-regulation/public-registers>



Dust

Monitoring Point: 1 <McLintocks Shed>

Dust monitoring, Dust gauge located on private property to the west of ML1535 boundary

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m ² /mth)	Comments
Monthly	20/01/2022	10/02/2022	21/02/2022	2.10	
Monthly	18/02/2022	11/03/2022	21/03/2022	7.96	Water, lots of debris
Monthly	22/03/2022	14/04/2022	20/04/2022	9.03	Water very dark, bugs
Monthly	20/04/2022	09/05/2022	20/05/2022	17.96	Lots of debris, Seeds blocking funnel. Contamination suspected.
Monthly	19/05/2022	07/06/2022	20/06/2022	23.95	Algae, bugs, debris, bird poo
Monthly	22/06/2022	06/07/2022	27/07/2022	11.24	Water - Very Dark, lots of bird poo
Monthly	21/07/2022	26/07/2022	22/08/2022	4.23	Water, Insects, Algae, Bird Poo
Monthly	22/08/2022	05/09/2022	20/09/2022	1.47	
Monthly	18/09/2022	13/10/2022	25/10/2022	37.30	Water, Insects, Moths, Bird Poo, Dark in colour
Monthly	17/10/2022	04/11/2022	20/11/2022	3.66	Water, insects, dust, bird poo
Monthly	16/11/2022	30/11/2022	22/12/2022	5.64	Water - full, bird poo, insects, debris
Monthly	15/12/2022	10/01/2023	19/01/2023	3.62	Water - full, bird poo, insects, debris
Number of Samples Collected				12	
Lowest Value				1.5	
Mean of Sample				10.3	
Highest Sample Value				37.3	
Median				6.8	

Monitoring Point: 2 <Site Office>

Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

Frequency	22/12/2022	06/01/2023	20/01/2023	Particulates (g/m ² /mth)	Comments
Monthly	20/01/2022	10/02/2022	21/02/2022	3.08	
Monthly	18/02/2022	11/03/2022	21/03/2022	0.89	
Monthly	22/03/2022	14/04/2022	20/04/2022	2.88	
Monthly	20/04/2022	09/05/2022	20/05/2022	5.61	
Monthly	19/05/2022	07/06/2022	20/06/2022	8.19	Insects, debris
Monthly	22/06/2022	06/07/2022	27/07/2022	5.90	Water, Insects, Dust
Monthly	21/07/2022	26/07/2022	22/08/2022	2.32	Water, Insects, Beetle, Dust
Monthly	22/08/2022	05/09/2022	20/09/2022	2.12	
Monthly	18/09/2022	13/10/2022	25/10/2022	8.67	Water, Insects, Dust
Monthly	17/10/2022	04/11/2022	20/11/2022	36.52	Water full, dark in colour
Monthly	16/11/2022	30/11/2022	22/12/2022	9.47	Water - full, beetle, bugs, dust, debris
Monthly	15/12/2022	10/01/2023	19/01/2023	1.49	Water - full, bird poo, insects, debris
Number of Samples Collected				12	
Lowest Value				0.9	
Mean of Sample				7.3	
Highest Sample Value				36.5	
Median				4.3	

Monitoring Point: 3 <DG06>

Dust monitoring, Dust gauge located on private property to the east of ML1535 boundary

Frequency	44917	Date Obtained	Date Published	Particulates (g/m ² /mth)	Comments
Monthly	20/01/2022	10/02/2022	21/02/2022	4.96	Water - Full, beetles, debris
Monthly	18/02/2022	11/03/2022	21/03/2022	0.45	
Monthly	22/03/2022	14/04/2022	20/04/2022	3.14	
Monthly	20/04/2022	09/05/2022	20/05/2022	55.28	Bird poo and debris. Contamination suspected.
Monthly	19/05/2022	07/06/2022	20/06/2022	10.63	Insects, ladybug, beetles
Monthly	22/06/2022	06/07/2022	27/07/2022	3.42	Water, Bugs, Insects, Twigs, Debris
Monthly	21/07/2022	26/07/2022	22/08/2022	0.70	Water, insects
Monthly	22/08/2022	05/09/2022	20/09/2022	0.70	
Monthly	18/09/2022	13/10/2022	25/10/2022	1.40	Water, insects
Monthly	17/10/2022	04/11/2022	20/11/2022		No safe access to site-flooded
Monthly	16/11/2022	30/11/2022	22/12/2022		No safe access to site-flooded
Monthly	15/12/2022	10/01/2023	19/01/2023		No safe access to site-flooded
Number of Samples Collected				9	
Lowest Value				0.5	
Mean of Sample				9.0	
Highest Sample Value				55.3	
Median				3.1	

Monitoring Point: 4 <DG09>

Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

Frequency	44917	Date Obtained	Date Published	Particulates (g/m ² /mth)	Comments
Monthly	20/01/2022	10/02/2022	21/02/2022	2.19	
Monthly	18/02/2022	11/03/2022	21/03/2022	2.47	
Monthly	22/03/2022	14/04/2022	20/04/2022	1.23	
Monthly	20/04/2022	09/05/2022	20/05/2022	2.69	
Monthly	19/05/2022	07/06/2022	20/06/2022	0.79	
Monthly	22/06/2022	06/07/2022	27/07/2022	0.86	
Monthly	21/07/2022	26/07/2022	22/08/2022	0.49	
Monthly	22/08/2022	05/09/2022	20/09/2022	2.07	
Monthly	18/09/2022	13/10/2022	25/10/2022	1.84	Water, Insects, Dust
Monthly	17/10/2022	04/11/2022	20/11/2022	5.95	Water full, insects
Monthly	16/11/2022	30/11/2022	22/12/2022	0.93	Water - full, beetles, insects, Debris
Monthly	15/12/2022	10/01/2023	19/01/2023	0.85	Water - full, bird poo, insects, debris
Number of Samples Collected				12	
Lowest Value				0.5	
Mean of Sample				1.9	
Highest Sample Value				6.0	
Median				1.5	

Monitoring Point: 5 <Site 52>

Dust monitoring, Dust gauge located within ML1535 and north of the open pit

Frequency	44917	Date Obtained	Date Published	Particulates (g/m ² /mth)	Comments
Monthly	27/01/2022	10/02/2022	21/02/2022	4.25	Clear, very full, some bugs
Monthly	24/02/2022	11/03/2022	21/03/2022	0.81	
Monthly	24/03/2022	14/04/2022	20/04/2022	5.99	Murky, bugs, debris
Monthly	20/04/2022	09/05/2022	20/05/2022	4.14	
Monthly	19/05/2022	07/06/2022	20/06/2022	2.92	
Monthly	22/06/2022	06/07/2022	27/07/2022	2.54	
Monthly	21/07/2022	26/07/2022	22/08/2022	2.88	Water, Insects
Monthly	22/08/2022	05/09/2022	20/09/2022	2.52	
Monthly	18/09/2022	13/10/2022	25/10/2022	3.60	
Monthly	17/10/2022	04/11/2022	20/11/2022	47.10	Water full, dark in colour
Monthly			22/12/2022	-	Sample point submerged in lake. Replacement deployed.
Monthly			19/01/2023	-	Sample point submerged in lake. Replacement deployed.
Number of Samples Collected				10	
Lowest Value				0.8	
Mean of Sample				7.7	
Highest Sample Value				47.1	
Median				3.3	



Dust

Monitoring Point: 6 <DG01>

Dust monitoring, Dust gauge located on private property to the north of ML1535 boundary

Frequency	44917	Date Obtained	Date Published	Particulates (g/m ³ /mth)	Comments
Monthly	20/01/2022	10/02/2022	21/02/2022	2.14	
Monthly	18/02/2022	11/03/2022	21/03/2022	0.96	
Monthly	22/03/2022	14/04/2022	20/04/2022	1.56	
Monthly	20/04/2022	09/05/2022	20/05/2022	1.53	
Monthly	19/05/2022	07/06/2022	20/06/2022	1.52	
Monthly	22/06/2022	06/07/2022	27/07/2022	0.55	
Monthly	21/07/2022	26/07/2022	22/08/2022	0.46	
Monthly	22/08/2022	05/09/2022	20/09/2022	0.57	
Monthly	18/09/2022	13/10/2022	25/10/2022	0.69	
Monthly	17/10/2022	21/10/2022	20/11/2022	0.90	Water, insects
Monthly	16/11/2022	30/11/2022	22/12/2022	1.24	Water - full, insects, bugs, dust
Monthly	15/12/2022	10/01/2023	19/01/2023	1.30	Water - full, bird poo, insects, debris
Number of Samples Collected				12	
Lowest Value				0.5	
Mean of Sample				1.1	
Highest Sample Value				2.1	
Median				1.1	

Monitoring Point: 49 <HV1>

Dust monitoring, High volume sampler located on private property to the north of ML1535 boundary

Frequency	Date Sampled	Date Obtained	Date Published	Total Suspended Particles (ug/m ³)	Comments
Every 7 days	Wednesday, 5 January 2022	11/02/2022	21/02/2022	50.1	
Every 7 days	Wednesday, 12 January 2022	11/02/2022	21/02/2022	10.4	
Every 7 days	Wednesday, 19 January 2022	11/02/2022	21/02/2022	128.0	Strong wind on run day
Every 7 days	Wednesday, 26 January 2022	11/02/2022	21/02/2022	41.2	
Every 7 days	Wednesday, 2 February 2022	11/03/2022	21/03/2022	38.0	
Every 7 days	Wednesday, 9 February 2022	11/03/2022	21/03/2022	40.1	
Every 7 days	Wednesday, 16 February 2022	11/03/2022	21/03/2022	47.4	
Every 7 days	Wednesday, 23 February 2022	11/03/2022	21/03/2022	46.0	
Every 7 days	Wednesday, 2 March 2022	13/04/2022	20/04/2022	26.7	
Every 7 days	Wednesday, 9 March 2022	13/04/2022	20/04/2022	40.4	
Every 7 days	Wednesday, 16 March 2022	13/04/2022	20/04/2022	45.1	
Every 7 days	Wednesday, 23 March 2022	13/04/2022	20/04/2022	55.8	
Every 7 days	Wednesday, 30 March 2022	13/04/2022	20/04/2022	49.8	
Every 7 days	Wednesday, 6 April 2022	11/05/2022	20/05/2022	121.0	Filter paper inserted up-side down
Every 7 days	Wednesday, 13 April 2022	11/05/2022	20/05/2022	30.2	
Every 7 days	Wednesday, 20 April 2022	11/05/2022	20/05/2022	9.0	
Every 7 days	Wednesday, 27 April 2022	11/05/2022	20/05/2022	7.1	
Every 7 days	Wednesday, 4 May 2022	10/06/2022	20/06/2022	8.2	
Every 7 days	Wednesday, 11 May 2022	10/06/2022	20/06/2022	12.8	
Every 7 days	Wednesday, 18 May 2022	10/06/2022	20/06/2022	5.6	
Every 7 days	Wednesday, 25 May 2022	10/06/2022	20/06/2022	13.9	
Every 7 days	Wednesday, 1 June 2022	08/07/2022	27/07/2022	6.7	
Every 7 days	Wednesday, 8 June 2022	08/07/2022	27/07/2022	3.4	
Every 7 days	Wednesday, 15 June 2022	08/07/2022	27/07/2022	5.1	
Every 7 days	Wednesday, 22 June 2022	08/07/2022	27/07/2022	13.2	
Every 7 days	Wednesday, 29 June 2022	08/07/2022	27/07/2022	27.5	
Every 7 days	Wednesday, 6 July 2022	15/08/2022	22/08/2022	16.9	
Every 7 days	Wednesday, 13 July 2022	15/08/2022	22/08/2022	9.5	
Every 7 days	Wednesday, 20 July 2022	15/08/2022	22/08/2022	13.0	
Every 7 days	Wednesday, 27 July 2022	15/08/2022	22/08/2022	10.5	
Every 7 days	Wednesday, 3 August 2022	16/09/2022	20/09/2022	10.2	
Every 7 days	Wednesday, 10 August 2022	16/09/2022	20/09/2022	10.8	
Every 7 days	Wednesday, 17 August 2022	16/09/2022	20/09/2022	3.2	
Every 7 days	Wednesday, 24 August 2022	16/09/2022	20/09/2022	4.2	
Every 7 days	Wednesday, 31 August 2022	13/10/2022	25/10/2022	10.2	
Every 7 days	Wednesday, 7 September 2022	13/10/2022	25/10/2022	15.3	
Every 7 days	Wednesday, 14 September 2022	13/10/2022	25/10/2022	15.8	
Every 7 days	Wednesday, 21 September 2022	13/10/2022	25/10/2022	15.6	
Every 7 days	Wednesday, 28 September 2022	13/10/2022	25/10/2022	7.2	
Every 7 days	Wednesday, 5 October 2022	11/11/2022	20/11/2022	15.1	
Every 7 days	Wednesday, 12 October 2022	11/11/2022	20/11/2022	18.3	
Every 7 days	Wednesday, 19 October 2022	11/11/2022	20/11/2022	24.4	
Every 7 days	Wednesday, 26 October 2022	11/11/2022	20/11/2022	25.0	
Every 7 days	Wednesday, 2 November 2022	23/12/2022	19/01/2022	10.6	
Every 7 days	Wednesday, 9 November 2022	23/12/2022	19/01/2022	18.6	
Every 7 days	Wednesday, 16 November 2022	23/12/2022	19/01/2022	47.0	
Every 7 days	Wednesday, 23 November 2022	23/12/2022	19/01/2022	14.1	
Every 7 days	Wednesday, 30 November 2022	23/12/2022	19/01/2022	33.5	
Every 7 days	Wednesday, 07 December 2022	16/01/2022	19/01/2022	28.9	
Every 7 days	Wednesday, 14 December 2022	16/01/2022	19/01/2022	36.1	
Every 7 days	Wednesday, 21 December 2022	16/01/2022	19/01/2022	26.7	
Every 7 days	Wednesday, 28 December 2022	16/01/2022	19/01/2022	34.2	
Number of Samples Collected				52	
Lowest Value				3.2	
Mean of Sample				26.1	
Highest Sample Value				128.0	
Median				16.4	



Surface Water

Monitoring Point: 12 <D1>

Stormwater quality monitoring, Northern waste emplacement contained water storage

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Comments
Monthly	07/01/2022	07/01/2022	21/02/2022	8.59	6353	40	
Monthly	12/01/2022	12/01/2022	21/02/2022	7.94	5564	6	Rainfall Event Monitoring
Monthly	15/02/2022	15/02/2022	21/03/2022	8.66	6106	18	
Monthly	09/03/2022	09/03/2022	20/04/2022	8.90	6742	28	
Monthly	18/03/2022	18/03/2022	20/04/2022	8.40	6286	24	Rainfall Event Monitoring
Monthly	04/04/2022	04/04/2022	20/05/2022	8.47	6864	80	
Monthly	11/04/2022	11/04/2022	20/05/2022	7.48	6318	45	Rainfall Event Monitoring
Monthly	27/04/2022	27/04/2022	20/05/2022	7.87	3908	49	Rainfall Event Monitoring
Monthly	02/05/2022	02/05/2022	20/06/2022	7.94	6160	24	Updated values - see correction log
Monthly	13/05/2022	13/05/2022	20/06/2022	7.68	3755	8	Rainfall Event Monitoring
Monthly	15/06/2022	15/06/2022	27/07/2022	7.25	3784	9	
Monthly	01/07/2022	01/07/2022	22/08/2022	7.74	4169	8	Rainfall Event Monitoring
Monthly	26/07/2022	26/07/2022	22/08/2022	7.99	5016	19	
Monthly	10/08/2022	10/08/2022	20/09/2022	7.70	4993	4	
Monthly	30/08/2022	30/08/2022	20/09/2022	7.85	5334	50	Rainfall Event Monitoring
Monthly	23/09/2022	23/09/2022	25/10/2022	7.76	6673	6	
Monthly	28/10/2022	28/10/2022	20/11/2022	6.79	4122	77	
Monthly	01/11/2022	01/11/2022	22/12/2022	6.53	3791	10	
Monthly	14/11/2022	14/11/2022	22/12/2022	7.30	3896	42	Rainfall Event Monitoring
Monthly	15/12/2022	23/12/2022	19/01/2023	9.23	4880	9	
Number of Samples Collected				20.00	20.00	20.00	
Lowest Value				6.53	3755.00	4.00	
Mean of Sample				7.90	5235.71	27.80	
Highest Sample Value				9.23	6864.40	80.00	
Median				7.86	5175.00	21.50	

Monitoring Point: 13 <D4>

Stormwater quality monitoring, Southern waste emplacement contained water storage

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Comments
Monthly	07/01/2022	07/01/2022	21/02/2022	7.86	10206	56	Rainfall Event Monitoring
Monthly	12/01/2022	12/01/2022	21/02/2022	8.67	8476	21	
Monthly	15/02/2022	15/02/2022	21/03/2022	8.95	9748	41	
Monthly	09/03/2022	09/03/2022	20/04/2022	8.54	10252	251	
Monthly	18/03/2022	18/03/2022	20/04/2022	8.26	9417	217	Rainfall Event Monitoring
Monthly	04/04/2022	04/04/2022	20/05/2022	8.38	10521	25	
Monthly	11/04/2022	11/04/2022	20/05/2022	7.92	9417	4	Rainfall Event Monitoring
Monthly	27/04/2022	27/04/2022	20/05/2022	7.89	6462	149	Rainfall Event Monitoring
Monthly	02/05/2022	02/05/2022	20/06/2022	8.71	9236	6	
Monthly	13/05/2022	13/05/2022	20/06/2022	7.51	4205	8	Rainfall Event Monitoring
Monthly	15/06/2022	15/06/2022	27/07/2022	7.90	6686	3	
Monthly	01/07/2022	01/07/2022	22/08/2022	8.00	6618	14	Rainfall Event Monitoring
Monthly	26/07/2022	26/07/2022	22/08/2022	8.33	6744	22	
Monthly	10/08/2022	10/08/2022	20/09/2022	8.18	7116	2	
Monthly	30/08/2022	30/08/2022	20/09/2022	7.30	6471	4	Rainfall Event Monitoring
Monthly	23/09/2022	23/09/2022	25/10/2022	8.30	6242	2	
Monthly	28/10/2022	28/10/2022	20/11/2022	7.01	6063	12	
Monthly	01/11/2022	01/11/2022	22/12/2022	6.43	4680	19	
Monthly	14/11/2022	14/11/2022	22/12/2022	7.57	5257	9	Rainfall Event Monitoring
Monthly	15/12/2022	15/12/2022	19/01/2023	8.63	4902	-	Lab Error.
Number of Samples Collected				20.00	20.00	19.00	
Lowest Value				6.43	4205.00	2.00	
Mean of Sample				8.02	7435.96	45.53	
Highest Sample Value				8.95	10521.10	251.00	
Median				8.09	6715.00	14.00	



Lake Water

Monitoring Point: 14 #P1
Ambient water quality monitoring, Surface water point within ML155 on Lake Cowal

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), Total Suspended Solids (mg/L), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, Highest Sample Value, Median.

Summary table for Monitoring Point 14 #P1 with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Copper (mg/L), Lead (mg/L), Molybdenum (mg/L), Nickel (mg/L), Selenium (mg/L), Total Suspended Solids (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 15 #P2
Ambient water quality monitoring, Surface water point within ML155 on Lake Cowal

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, Highest Sample Value, Median.

Summary table for Monitoring Point 15 #P2 with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Copper (mg/L), Lead (mg/L), Molybdenum (mg/L), Nickel (mg/L), Selenium (mg/L), Total Suspended Solids (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 16 #P3
Ambient water quality monitoring, Surface water point within ML155 on Lake Cowal

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), Total Suspended Solids (mg/L), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, Highest Sample Value, Median.

Summary table for Monitoring Point 16 #P3 with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Copper (mg/L), Lead (mg/L), Molybdenum (mg/L), Nickel (mg/L), Selenium (mg/L), Total Suspended Solids (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 17 #B1
Ambient water quality monitoring, Surface water point within ML155 on Lake Cowal

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), Total Suspended Solids (mg/L), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, Highest Sample Value, Median.

Summary table for Monitoring Point 17 #B1 with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Copper (mg/L), Lead (mg/L), Molybdenum (mg/L), Nickel (mg/L), Selenium (mg/L), Total Suspended Solids (mg/L), Zinc (mg/L), Comments.



Lake Water

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	24/01/2022	04/02/2022	23/02/2022	7.56	240.3	
Monthly	16/02/2022	16/02/2022	23/02/2022	8.56	311.8	
Monthly	16/03/2022	16/03/2022	20/04/2022	7.67	327.6	
Monthly	13/04/2022	13/04/2022	20/04/2022	8.53	360.8	
Monthly	11/05/2022	11/05/2022	20/06/2022	8.36	301.6	
Monthly	02/06/2022	02/06/2022	27/07/2022	7.44	253.3	
Monthly	07/07/2022	07/07/2022	23/08/2022	8.55	292.3	
Monthly	06/08/2022	06/08/2022	20/09/2022	7.07	213.6	
Monthly	20/09/2022	20/09/2022	29/10/2022	7.3	217.6	
Monthly	17/10/2022	21/10/2022	20/11/2022	8.04	223.0	
Monthly	15/11/2022	15/11/2022	20/12/2022	7.39	162.8	
Monthly	24/12/2022	19/01/2023	19/01/2023	7.33	156	
Number of Samples Collected						
				32	32	
Range Value						
				6.6	155.2	
Mean of Sample						
				7.6	247.8	
Highest Sample Value						
				8.6	361.8	
Median						
				7.6	281.2	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)	Comments
Quarterly	24/01/2022	24/01/2022	23/02/2022	86	<0.001	0.004	<0.0001	0.002	<0.001	<0.001	0.002	<0.01	41	<0.005	
Quarterly	13/04/2022	28/04/2022	20/05/2022	150	<0.001	0.003	<0.0001	0.002	<0.001	<0.001	0.001	<0.01	60	<0.005	
Quarterly	07/07/2022	13/07/2022	22/08/2022	79	<0.001	0.002	<0.0001	0.002	<0.001	<0.001	0.002	<0.01	43	<0.005	
Quarterly	17/10/2022	21/10/2022	20/11/2022	66	<0.001	0.003	<0.0001	0.004	<0.001	<0.001	0.001	<0.01	38	<0.005	

Monitoring Point: 18 (86)
 Ambient water quality monitoring, Surface water point on Lake Cowal to the south-east of ML1555 boundary

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	24/01/2022	04/02/2022	23/02/2022	7.31	292	
Monthly	16/02/2022	16/02/2022	23/02/2022	8.68	325	
Monthly	16/03/2022	16/03/2022	20/04/2022	7.93	337	
Monthly	13/04/2022	12/04/2022	20/04/2022	8.02	348	
Monthly	11/05/2022	11/05/2022	27/07/2022	7.77	388	
Monthly	02/06/2022	02/06/2022	27/07/2022	7.69	354	
Monthly	07/07/2022	07/07/2022	23/08/2022	7.58	305	
Monthly	06/08/2022	06/08/2022	20/09/2022	7.35	275	
Monthly	20/09/2022	21/09/2022	29/10/2022	7.37	207	
Monthly	17/10/2022	21/10/2022	20/11/2022	7.34	186	
Monthly	15/11/2022	15/11/2022	20/12/2022	7.3	142	
Monthly	24/12/2022	19/01/2023	19/01/2023	7.08	143	
Number of Samples Collected						
				32	32	
Range Value						
				7.1	140.8	
Mean of Sample						
				7.6	252.7	
Highest Sample Value						
				8.6	361.2	
Median						
				7.6	281.2	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)	Comments
Quarterly	24/01/2022	24/01/2022	23/02/2022	96	<0.001	0.005	<0.0001	0.001	<0.001	<0.001	0.003	<0.01	25	<0.005	
Quarterly	13/04/2022	28/04/2022	20/05/2022	156	<0.001	0.003	<0.0001	0.002	<0.001	<0.001	0.003	<0.01	45	<0.005	
Quarterly	07/07/2022	13/07/2022	22/08/2022	81	<0.001	0.003	<0.0001	0.002	<0.001	<0.001	0.002	<0.01	69	<0.005	
Quarterly	17/10/2022	21/10/2022	20/11/2022	74	<0.001	0.003	<0.0001	0.002	<0.001	<0.001	0.001	<0.01	22	<0.005	



Groundwater

Monitoring Point: 19 «P555A-R»
Groundwater quality monitoring. Piezometer located up gradient of southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 26 «PP03»
Groundwater quality monitoring. Piezometer located near the processing plant area

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 27 «PP04»
Groundwater quality monitoring. Piezometer located near the processing plant area

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: 30 «P423A»
Groundwater quality monitoring. Piezometer located down gradient of southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.



Groundwater

Monitoring Point: S3 <P083B>
Groundwater quality monitoring, Pit dewatering bore

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: S4 <P085B>
Groundwater quality monitoring, Pit dewatering bore

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: S7 <TWL06A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.

Monitoring Point: S8 <TWL06B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Includes summary rows for Number of Samples Collected, Lowest Value, Mean of Sample, and Highest Sample Value.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments.



Groundwater

Monitoring Point: 59 <IW05A>
Groundwater quality monitoring. Groundwater monitoring bore located to the south of the southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Rows include monthly data from 25/01/2022 to 12/12/2022 and summary rows for lowest, mean, and highest values.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments. Rows include quarterly data from 20/01/2022 to 14/10/2022 and summary rows.

Monitoring Point: 60 <IW05B>
Groundwater quality monitoring. Groundwater monitoring bore located to the south of the southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Rows include monthly data from 25/01/2022 to 12/12/2022 and summary rows.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments. Rows include quarterly data from 25/01/2022 to 14/10/2022 and summary rows.

Monitoring Point: 61 <IW06A>
Groundwater quality monitoring. Groundwater monitoring bore located to the south of the southern tailings storage facility

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Field - pH (units), Field - Electrical Conductivity (µS/cm), SWL (m), Comments. Rows include monthly data from 24/01/2022 to 12/12/2022 and summary rows.

Table with columns: Frequency, Date Sampled, Date Obtained, Date Published, Alkalinity (mg/L), Antimony (mg/L), Arsenic (mg/L), Cadmium (mg/L), Calcium (mg/L), Chloride (mg/L), Copper (mg/L), Cyanide WAD (mg/L), Iron (mg/L), Lead (mg/L), Magnesium (mg/L), Manganese (mg/L), Molybdenum (mg/L), Nickel (mg/L), Potassium (mg/L), Selenium (mg/L), Sodium (mg/L), Sulphate (mg/L), Total Dissolved Solids (mg/L), Total Hardness (mg/L), Zinc (mg/L), Comments. Rows include quarterly data from 24/01/2022 to 14/10/2022 and summary rows.



Waste Rock Leachate

Monitoring Point: 41 <Northern Waste Emplacement> Northern Waste Emplacement leachate quality monitoring

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	04/01/2022	-	-	-	-	No water present in toe drain
Monthly	02/02/2022	-	-	-	-	No water present in toe drain
Monthly	02/03/2022	-	-	-	-	No water present in toe drain
Monthly	13/04/2022	-	-	-	-	No water present in toe drain
Monthly	10/05/2022	-	-	-	-	No water present in toe drain
Monthly	07/06/2022	-	-	-	-	No water present in toe drain
Monthly	19/07/2022	-	-	-	-	No water present in toe drain
Monthly	02/08/2022	-	-	-	-	No water present in toe drain
Monthly	05/09/2022	-	-	-	-	No water present in toe drain
Monthly	17/10/2022	-	-	-	-	No water present in toe drain
Monthly	24/11/2022	-	-	-	-	No water present in toe drain
Monthly	06/12/2022	-	-	-	-	No water present in toe drain
Number of Samples Collected						0
Lowest Value						0.0
Mean of Sample						0.0
Highest Sample Value						0.0
Median						0.0

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Zinc (mg/L)	Comments	
Quarterly	04/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	13/04/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	22/12/2022	06/01/2023	20/01/2023	872	-	-	0.0002	318	10500	0.003	-	-	0.0002	812	0.146	0.0013	0.0081	27	0.002	6330	22400	2470	0.013	-	
Quarterly	17/10/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain

Monitoring Point: 42 <Southern Waste Emplacement> Southern Waste Emplacement leachate quality monitoring

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	04/01/2022	-	21/02/2022	8.02	15771	
Monthly	02/02/2022	02/02/2022	21/03/2022	8.67	17314	
Monthly	02/03/2022	02/03/2022	20/04/2022	7.56	11077	
Monthly	13/04/2022	-	20/05/2022	7.86	16940	
Monthly	10/05/2022	10/05/2022	20/06/2022	7.51	14958	
Monthly	07/06/2022	07/06/2022	27/07/2022	7.73	12869	
Monthly	19/07/2022	19/07/2022	22/08/2022	6.72	13320	
Monthly	02/08/2022	02/08/2022	20/09/2022	7.65	13227	
Monthly	05/09/2022	05/09/2022	25/10/2022	7.67	14785	
Monthly	17/10/2022	18/10/2022	20/11/2022	7.30	16451	
Monthly	24/11/2022	24/11/2022	22/12/2022	7.25	21697	
Monthly	06/12/2022	21/12/2022	19/01/2023	7.35	19659	
Number of Samples Collected						12
Lowest Value						6.7
Mean of Sample						7.6
Highest Sample Value						8.7
Median						7.6

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Zinc (mg/L)	Comments	
Quarterly	04/01/2022	11/01/2022	21/02/2022	188	0.0004	0.0007	0.00373	589	5480	0.0015	0.008	<0.0001	594	0.020	0.006	0.0006	34	0.0016	2720	2990	14700	3920	0.025	-	
Quarterly	13/04/2022	22/04/2022	20/05/2022	253	0.0004	0.0005	0.00394	631	4900	0.0013	<0.00100	<0.00010	583	0.095	0.0047	0.0007	34	0.0016	2610	3060	13400	3980	0.051	-	
Quarterly	22/12/2022	27/07/2022	22/08/2022	265	<0.0005	<0.0005	0.0054	615	5400	<0.001	<0.005	<0.0002	601	1.09	0.0041	0.0007	35	<0.002	2730	3110	12600	4010	0.088	-	
Quarterly	17/10/2022	18/10/2022	20/11/2022	240	<0.0005	<0.0005	0.0059	598	5780	<0.001	0.006	<0.0002	655	1.050	0.0046	<0.0005	36	<0.002	3070	2970	14800	4190	0.056	-	
Lowest Value				188.0000	0.0004	0.0005	0	589	4900.000	0.0013	0.0060	0.0000	0.0000	583.0000	0.0195	0.004	0.0006	34.0000	0.0016	2610	2970	12600.000	3920	0.025	-
Mean of Sample				236.5000	0.0004	0.0006	0	608	5390.000	0.0014	0.0070	0.0000	608.2500	0.5417	0.005	0.0007	34.7500	0.0016	2783	3013	13875.000	4023	0.051	-	
Highest Sample Value				265.0000	0.0004	0.0007	0	631	5780.000	0.0015	0.0080	0.0000	655.0000	1.0900	0.006	0.0007	36.0000	0.0016	3070	3110	14800.000	4190	0.088	-	

Monitoring Point: 43 <Perimeter Waste Emplacement> Perimeter Waste Emplacement leachate quality monitoring

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	04/01/2022	-	-	-	-	No water present in toe drain
Monthly	02/02/2022	-	-	-	-	No water present in toe drain
Monthly	02/03/2022	-	-	-	-	No water present in toe drain
Monthly	13/04/2022	-	-	-	-	No water present in toe drain
Monthly	10/05/2022	-	-	-	-	No water present in toe drain
Monthly	07/06/2022	-	-	-	-	No water present in toe drain
Monthly	19/07/2022	-	-	-	-	No water present in toe drain
Monthly	02/08/2022	-	-	-	-	No water present in toe drain
Monthly	20/09/2022	-	-	-	-	No water present in toe drain
Monthly	17/10/2022	-	-	-	-	No water present in toe drain
Monthly	24/11/2022	-	-	-	-	No water present in toe drain
Monthly	06/12/2022	-	-	-	-	No water present in toe drain
Number of Samples Collected						0
Lowest Value						0.0
Mean of Sample						0.0
Highest Sample Value						0.0
Median						0.0

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	Chloride (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Magnesium (mg/L)	Manganese (mg/L)	Molybdenum (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Sodium (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)	Total Hardness (mg/L)	Zinc (mg/L)	Comments	
Quarterly	04/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	13/04/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	22/12/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	17/10/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain



Ambient Noise

Q1 Noise Monitoring

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	N01	08/02/2022	21/02/2022	21/03/2022	23	24	
Laurel Park	N11	08/02/2022	21/02/2022	21/03/2022	<20	<20	35
Lakeview III (New Westella)	N09	08/02/2022	21/02/2022	21/03/2022	33	33	38
Bramboyne	N10	08/02/2022	21/02/2022	21/03/2022	<20	22	35
The Glen	N12	08/02/2022	21/02/2022	21/03/2022	<20	<20	37
Caloola 2	N15	08/02/2022	21/02/2022	21/03/2022	25	25	35
Lakeview & II (Lakeview)	N17	08/02/2022	21/02/2022	21/03/2022	33	33	36
Foxman Downs 2	N16	08/02/2022	21/02/2022	21/03/2022	32	32	36

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	N01	09/02/2022	21/02/2022	21/03/2022	24	23	
Laurel Park	N11	09/02/2022	21/02/2022	21/03/2022	<20	<20	35
Lakeview III (New Westella)	N09	09/02/2022	21/02/2022	21/03/2022	<20	<20	38
Bramboyne	N10	09/02/2022	21/02/2022	21/03/2022	<20	<20	35
The Glen	N12	09/02/2022	21/02/2022	21/03/2022	<20	<20	37
Caloola 2	N15	09/02/2022	21/02/2022	21/03/2022	<20	<20	35
Lakeview & II (Lakeview)	N17	09/02/2022	21/02/2022	21/03/2022	<20	<20	36
Foxman Downs 2	N16	09/02/2022	21/02/2022	21/03/2022	<20	<20	36

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Night dB(A) LAFmax	Comments
				Mine Contributed LA _{eq(15min)} dBA	Mine Contributed LA _{eq(15min)} dBA			
	22/12/2022	06/01/2023	20/01/2023	872		0.0002	318	0.003
New Lake Foreshore	N01	09/02/2022	21/02/2022	21/03/2022	23	23	-	-
Laurel Park	N11	09/02/2022	21/02/2022	21/03/2022	<20	<20	35	52
Lakeview III (New Westella)	N09	10/02/2022	21/02/2022	21/03/2022	<20	<20	38	52
Bramboyne	N10	09/02/2022	21/02/2022	21/03/2022	<20	<20	35	52
The Glen	N12	09/02/2022	21/02/2022	21/03/2022	<20	<20	37	52
Caloola 2	N15	10/02/2022	21/02/2022	21/03/2022	22	24	35	52
Lakeview & II (Lakeview)	N17	10/02/2022	21/02/2022	21/03/2022	<20	<20	36	52
Foxman Downs 2	N16	09/02/2022	21/02/2022	21/03/2022	22	20	36	52

<20 - Mine noise emission inaudible or barely audible

Q2 Noise Monitoring

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	N01	16/05/2022	01/06/2022	20/06/2022	36	39	
Laurel Park	N11	16/05/2022	01/06/2022	20/06/2022	<20	<20	35
Lakeview III (New Westella)	N09	16/05/2022	01/06/2022	20/06/2022	25	25	38
Bramboyne	N10	16/05/2022	01/06/2022	20/06/2022	<20	<20	35
The Glen	N12	16/05/2022	01/06/2022	20/06/2022	<20	<20	37
Caloola 2	N15	16/05/2022	01/06/2022	20/06/2022	22	23	35
Lakeview & II (Lakeview)	N17	16/05/2022	01/06/2022	20/06/2022	24	22	36
Foxman Downs 2	N16	16/05/2022	01/06/2022	20/06/2022	<20	<20	36

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	N01	17/05/2022	01/06/2022	20/06/2022	30	31	-
Laurel Park	N11	17/05/2022	01/06/2022	20/06/2022	<20	<20	35
Lakeview III (New Westella)	N09	17/05/2022	01/06/2022	20/06/2022	<20	<20	38
Bramboyne	N10	17/05/2022	01/06/2022	20/06/2022	<20	<20	35
The Glen	N12	17/05/2022	01/06/2022	20/06/2022	<20	<20	37
Caloola 2	N15	17/05/2022	01/06/2022	20/06/2022	<20	<20	35
Lakeview & II (Lakeview)	N17	17/05/2022	01/06/2022	20/06/2022	<20	<20	36
Foxman Downs 2	N16	17/05/2022	01/06/2022	20/06/2022	<20	<20	36

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Night dB(A) LAFmax	Comments
				Survey 1	Survey 2			
New Lake Foreshore	N01	17/05/2022	01/06/2022	20/06/2022	33	37	-	-
Laurel Park	N11	17/05/2022	01/06/2022	20/06/2022	<20	<20	35	52
Lakeview III (New Westella)	N09	18/05/2022	01/06/2022	20/06/2022	<20	<20	38	52
Bramboyne	N10	17/05/2022	01/06/2022	20/06/2022	<20	<20	35	52
The Glen	N12	17/05/2022	01/06/2022	20/06/2022	<20	<20	37	52
Caloola 2	N15	18/05/2022	01/06/2022	20/06/2022	<20	<20	35	52
Lakeview & II (Lakeview)	N17	17/05/2022	01/06/2022	20/06/2022	<20	<20	36	52
Foxman Downs 2	20/09/2022	17/05/2022	01/06/2022	20/06/2022	<20	<20	36	52

<20 - Mine noise emission inaudible or barely audible



Ambient Noise

Q3 Noise Monitoring

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	02/08/2022	11/08/2022	22/08/2022	30	35	-	Drill rig operating on edge of lake. Not a compliance point.
Laurel Park	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	
Lakeview (New Westella)	02/08/2022	11/08/2022	22/08/2022	<20	<20	38	
Bramboyne	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	
The Glen	02/08/2022	11/08/2022	22/08/2022	<20	<20	37	
Caloola 2	02/08/2022	11/08/2022	22/08/2022	32	30	35	
Lakeview I & II (Lakeview)	02/08/2022	11/08/2022	22/08/2022	<20	<20	36	
Foxman Downs 2	02/08/2022	11/08/2022	22/08/2022	31	29	36	

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore	02/08/2022	11/08/2022	22/08/2022	33	34	-	
Laurel Park	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	
Lakeview (New Westella)	02/08/2022	11/08/2022	22/08/2022	29	30	38	
Bramboyne	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	
The Glen	02/08/2022	11/08/2022	22/08/2022	<20	<20	37	
Caloola 2	02/08/2022	11/08/2022	22/08/2022	25	23	35	
Lakeview I & II (Lakeview)	02/08/2022	11/08/2022	22/08/2022	31	31	36	
Foxman Downs 2	02/08/2022	11/08/2022	22/08/2022	22	<20	36	

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Night dB(A) LAFmax	Comments
				Survey 1	Survey 2			
New Lake Foreshore	02/08/2022	11/08/2022	22/08/2022	32	30	-	-	
Laurel Park	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	52	
Lakeview (New Westella)	02/08/2022	11/08/2022	22/08/2022	23	23	38	52	
Bramboyne	02/08/2022	11/08/2022	22/08/2022	<20	<20	35	52	
The Glen	02/08/2022	11/08/2022	22/08/2022	<20	<20	37	52	
Caloola 2	02/08/2022	11/08/2022	22/08/2022	33	33	35	52	
Lakeview I & II (Lakeview)	02/08/2022	11/08/2022	22/08/2022	<20	<20	36	52	
Foxman Downs 2	02/08/2022	11/08/2022	22/08/2022	28	28	36	52	

<20 - Mine noise emission inaudible or barely audible

Q4 Noise Monitoring

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore		02/12/2022	22/12/2022	40	44	-	
Laurel Park		02/12/2022	22/12/2022	<20	<20	35	
Lakeview (New Westella)		02/12/2022	22/12/2022	<20	<20	38	
Bramboyne		02/12/2022	22/12/2022	<20	<20	35	
The Glen		02/12/2022	22/12/2022	<20	<20	37	
Caloola 2	21/11/2022	02/12/2022	22/12/2022	<20	<20	35	
Lakeview I & II (Lakeview)		02/12/2022	22/12/2022	<20	<20	36	
Foxman Downs 2		02/12/2022	22/12/2022	<20	<20	36	

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Comments
				Survey 1	Survey 2		
New Lake Foreshore		02/12/2022	22/12/2022	40	42	-	
Laurel Park		02/12/2022	22/12/2022	<20	<20	35	
Lakeview (New Westella)		02/12/2022	22/12/2022	<20	<20	38	
Bramboyne		02/12/2022	22/12/2022	<20	<20	35	
The Glen		02/12/2022	22/12/2022	<20	<20	37	
Caloola 2		02/12/2022	22/12/2022	<20	<20	35	
Lakeview I & II (Lakeview)		02/12/2022	22/12/2022	<20	<20	36	
Foxman Downs 2		02/12/2022	22/12/2022	<20	<20	36	

<20 - Mine noise emission inaudible or barely audible

Location	Date Sampled	Date Obtained	Date Published	Mine Contributed LA _{eq(15min)} dBA		Noise Criteria LA _{eq(15min)} dBA	Night dB(A) LAFmax	Comments
				Survey 1	Survey 2			
New Lake Foreshore		02/12/2022	22/12/2022	37	37	-	-	
Laurel Park		02/12/2022	22/12/2022	25	25	35	52	
Lakeview (New Westella)		02/12/2022	22/12/2022	<20	<20	38	52	
Bramboyne		02/12/2022	22/12/2022	<20	<20	35	52	
The Glen		02/12/2022	22/12/2022	<20	<20	37	52	
Caloola 2		02/12/2022	22/12/2022	<20	<20	35	52	
Lakeview I & II (Lakeview)		02/12/2022	22/12/2022	<20	<20	36	52	
Foxman Downs 2		02/12/2022	22/12/2022	<20	<20	36	52	

<20 - Mine noise emission inaudible or barely audible



Blasting & Ground Vibration

SEPTEMBER									
903-3058 903-534	Friday, 02 September 2022	13:39:28	05/10/2022	23/10/2022	5	115	0.08	91.5	
921-544 921-114	Monday, 5 September 2022	12:35:53	05/10/2022	23/10/2022	5	115	0.09	88.0	
912-209	Wednesday, 7 September 2022	12:48:29	05/10/2022	23/10/2022	5	115	0.09	88.0	
894-516 894-104	Friday, 9 September 2022	12:27:36	05/10/2022	23/10/2022	5	115	0.07	91.5	
912-205	Sunday, 11 September 2022	13:04:53	05/10/2022	23/10/2022	5	95	0.08	88.0	
921-543 921-115	Monday, 12 September 2022	13:00:36	05/10/2022	23/10/2022	5	115	0.08	94.0	
903-313	Tuesday, 13 September 2022	12:50:38	05/10/2022	23/10/2022	5	115	0.07	88.0	
921-118	Friday, 16 September 2022	12:34:32	05/10/2022	23/10/2022	5	115	0.08	94.0	
903-3058	Saturday, 17 September 2022	12:35:33	05/10/2022	23/10/2022	5	115	0.08	95.9	
921-119	Sunday, 18 September 2022	16:59:25	05/10/2022	23/10/2022	5	95	0.09	91.5	
903-535	Monday, 19 September 2022	12:28:40	05/10/2022	23/10/2022	5	115	0.08	100.0	
912-216	Tuesday, 20 September 2022	12:29:34	05/10/2022	23/10/2022	5	115	0.08	81.9	
921-117 921-116	Saturday, 24 September 2022	12:34:51	05/10/2022	23/10/2022	5	115			Unit off line
885-202	Tuesday, 27 September 2022	10:12:51	05/10/2022	23/10/2022	5	115	0.10	88.0	
903-306	Wednesday, 28 September 2022	12:36:27	05/10/2022	23/10/2022	5	115	0.08	81.9	
OCTOBER									
912-206	Saturday, 1 October 2022	12:35:38	05/11/2022	20/11/2022	5	115	0.07	88.0	
903-314	Tuesday, 4 October 2022	13:47:42	05/11/2022	20/11/2022	5	115	0.08	81.9	
903-315	Thursday, 6 October 2022	13:30:38	05/11/2022	20/11/2022	5	115	0.07	88.0	
903-536 903-538	Friday, 7 October 2022	10:59:53	05/11/2022	20/11/2022	5	115	0.08	95.9	
912-214 903-439 903-637	Monday, 10 October 2022	15:26:59	05/11/2022	20/11/2022	5	115	0.07	81.9	
894-105	Wednesday, 12 October 2022	15:07:28	05/11/2022	20/11/2022	5	115	0.08	88.0	
912-208	Thursday, 13 October 2022	12:35:44	05/11/2022	20/11/2022	5	115	0.08	94.0	
903-301	Saturday, 15 October 2022	12:42:53	05/11/2022	20/11/2022	5	115	0.09	88.0	
903-541	Sunday, 16 October 2022	13:55:56	05/11/2022	20/11/2022	5	95	0.07	91.5	
903-540 903-542	Tuesday, 18 October 2022	12:40:37	05/11/2022	20/11/2022	5	115	0.08	81.9	
903-309	Wednesday, 19 October 2022	15:15:42	05/11/2022	20/11/2022	5	115	0.09	81.9	
894-106	Saturday, 23 October 2022	12:42:48	05/11/2022	20/11/2022	5	115	0.07	94.0	
912-215	Sunday, 23 October 2022	13:30:23	05/11/2022	20/11/2022	5	95	0.09	81.9	
912-217	Monday, 24 October 2022	12:41:46	05/11/2022	20/11/2022	5	115	0.09	88.0	
894-113 894-617	Tuesday, 25 October 2022	16:14:04	05/11/2022	20/11/2022	5	115	0.08	100.0	
912-220	Saturday, 29 October 2022	14:42:12	05/11/2022	20/11/2022	5	115	0.08	94.0	
NOVEMBER									
894-114 & 894-518	Friday, 4 November 2022	10:46:14	07/12/2022	22/12/2022	5	115	0.08	91.5	
912-207	Sunday, 6 November 2022	12:33:35	07/12/2022	22/12/2022	5	95	0.08	88.0	
903-307A	Monday, 7 November 2022	12:42:11	07/12/2022	22/12/2022	5	115	0.07	81.9	
903-319	Friday, 11 November 2022	08:40:02	07/12/2022	22/12/2022	5	115	0.09	81.9	
903-307B & 894-519	Saturday, 12 November 2022	13:19:34	07/12/2022	22/12/2022	5	115	0.08	81.9	
894-102	Wednesday, 16 November 2022	12:23:39	07/12/2022	22/12/2022	5	115	0.14	91.5	
903-308	Thursday, 17 November 2022	12:23:24	07/12/2022	22/12/2022	5	115	0.09	91.5	
903-318	Friday, 18 November 2022	12:29:17	07/12/2022	22/12/2022	5	115	0.08	81.9	
903-316	Saturday, 20 November 2022	13:26:05	07/12/2022	22/12/2022	1	95	0.08	95.9	
894-112	Wednesday, 23 November 2022	12:35:08	07/12/2022	22/12/2022	5	115	0.11	88.0	
903-300	Thursday, 24 November 2022	12:38:25	07/12/2022	22/12/2022	5	115	0.08	81.9	
894-107	Saturday, 26 November 2022	12:41:23	07/12/2022	22/12/2022	5	115	0.07	88.0	
894-108	Monday, 28 November 2022	12:25:43	07/12/2022	22/12/2022	5	115	0.08	88.0	
885-203	Wednesday, 30 November 2022	12:37:18	07/12/2022	22/12/2022	5	115	0.09	81.9	
DECEMBER									
894-101	Thursday, 1 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.07	81.9	
903-317	Sunday, 4 December 2022	15:35:00	04/01/2023	19/01/2023	1	95	0.07	81.9	
894-523 894-115	Tuesday, 6 December 2022	15:07:00	04/01/2023	19/01/2023	5	115	0.07	100.0	
894-116	Friday, 9 December 2022	17:26:00	04/01/2023	19/01/2023	5	115	0.08	88.0	
894-109	Monday, 13 December 2022	12:24:00	04/01/2023	19/01/2023	5	115	0.09	106.0	
894-111	Wednesday, 14 December 2022	12:39:00	04/01/2023	19/01/2023	5	115	0.09	101.0	
894-120	Friday, 16 December 2022	12:22:00	04/01/2023	19/01/2023	5	115	0.09	81.9	
885-204	Sunday, 18 December 2022	12:21:00	04/01/2023	19/01/2023	1	95	0.07	91.5	
885-205A	Wednesday, 21 December 2022	12:28:00	04/01/2023	19/01/2023	5	115	0.09	81.9	
876-519	Wednesday, 21 December 2022	12:27:00	04/01/2023	19/01/2023	5	115	0.08	81.9	
885-201	Saturday, 24 December 2022	12:17:00	04/01/2023	19/01/2023	5	115	0.08	91.5	
885-205B 894-524	Monday, 26 December 2022	11:01:00	04/01/2023	19/01/2023	1	95	0.07	81.9	
885-209	Wednesday, 28 December 2022	12:25:00	04/01/2023	19/01/2023	5	115	0.07	88.0	
884-117 876-520	Thursday, 29 December 2022	12:37:00	04/01/2023	19/01/2023	5	115	0.07	88.0	



Blasting & Ground Vibration

SEPTEMBER									
903-305A 903-534	Friday, 02 September 2022	13:39:28	05/10/2022	23/10/2022	5	115	0.14	91.5	
921-544 921-114	Monday, 5 September 2022	12:35:53	05/10/2022	23/10/2022	5	115	0.11	88.0	
912-209	Wednesday, 7 September 2022	12:48:29	05/10/2022	23/10/2022	5	115	0.13	91.5	
894-516 894-104	Friday, 9 September 2022	12:27:36	05/10/2022	23/10/2022	5	115	0.16	104.9	
912-205	Sunday, 11 September 2022	13:04:53	05/10/2022	23/10/2022	5	95	0.12	94.0	
921-543 921-115	Monday, 12 September 2022	13:00:36	05/10/2022	23/10/2022	5	115	0.09	91.5	
903-313	Tuesday, 13 September 2022	12:50:38	05/10/2022	23/10/2022	5	115	0.14	88.0	
921-118	Friday, 16 September 2022	12:34:32	05/10/2022	23/10/2022	5	115	0.11	98.8	
903-305B	Saturday, 17 September 2022	12:35:33	05/10/2022	23/10/2022	5	115	0.12	101.9	
921-119	Sunday, 18 September 2022	12:59:25	05/10/2022	23/10/2022	5	95	0.11	88.0	
903-535	Monday, 19 September 2022	12:28:40	05/10/2022	23/10/2022	5	115	0.08	88.0	
912-216	Tuesday, 20 September 2022	12:29:34	05/10/2022	23/10/2022	5	115	0.08	88.0	
921-117 921-116	Saturday, 24 September 2022	12:34:51	05/10/2022	23/10/2022	5	115	0.10	81.9	
885-202	Tuesday, 27 September 2022	10:12:51	05/10/2022	23/10/2022	5	115	0.19	91.5	
903-306	Wednesday, 28 September 2022	12:36:27	05/10/2022	23/10/2022	5	115	0.12	88.0	
OCTOBER									
912-206	Saturday, 1 October 2022	12:35:38	05/11/2022	20/11/2022	5	115	0.10	88.0	
903-314	Tuesday, 4 October 2022	13:47:42	05/11/2022	20/11/2022	5	115	0.15	88.0	
903-315	Thursday, 6 October 2022	13:30:38	05/11/2022	20/11/2022	5	115	0.12	100.0	
903-536 903-538	Friday, 7 October 2022	10:59:53	05/11/2022	20/11/2022	5	115	0.07	101.9	
912-214 903-539 903-537	Monday, 10 October 2022	10:26:59	05/11/2022	20/11/2022	5	115	0.09	88.0	
894-105	Wednesday, 12 October 2022	15:07:28	05/11/2022	20/11/2022	5	115	0.16	98.8	
912-208	Thursday, 13 October 2022	12:39:44	05/11/2022	20/11/2022	5	115	0.10	109.5	
903-301	Saturday, 15 October 2022	12:42:53	05/11/2022	20/11/2022	5	115	0.10	81.9	
903-541	Sunday, 16 October 2022	13:55:56	05/11/2022	20/11/2022	5	95	0.08	81.9	
903-540 903-542	Tuesday, 18 October 2022	12:40:37	05/11/2022	20/11/2022	5	115	0.08	100.0	
903-309	Wednesday, 19 October 2022	10:15:42	05/11/2022	20/11/2022	5	115	0.11	88.0	
894-106	Saturday, 23 October 2022	12:42:48	05/11/2022	20/11/2022	5	115	0.14	97.5	
912-215	Sunday, 24 October 2022	13:30:23	05/11/2022	20/11/2022	5	95	0.11	88.0	
912-217	Monday, 24 October 2022	12:41:46	05/11/2022	20/11/2022	5	115	0.08	94.0	
894-113 894-517	Tuesday, 25 October 2022	16:14:04	05/11/2022	20/11/2022	5	115	0.18	94.0	
912-220	Saturday, 29 October 2022	14:42:12	05/11/2022	20/11/2022	5	115	0.09	94.0	
NOVEMBER									
894-114 & 894-518	Friday, 4 November 2022	10:46:14	07/12/2022	22/12/2022	5	115	0.18	88.0	
912-207	Sunday, 6 November 2022	12:33:35	07/12/2022	22/12/2022	1	95	0.08	95.9	Assessed to be not related to blasting practices and resulted from localised environmental facto
903-307A	Monday, 7 November 2022	12:42:11	07/12/2022	22/12/2022	5	115	0.09	88.0	
903-318	Friday, 11 November 2022	08:40:02	07/12/2022	22/12/2022	5	115	0.10	81.9	
903-307B & 894-519	Saturday, 12 November 2022	13:19:34	07/12/2022	22/12/2022	5	115	0.09	91.5	
894-102	Wednesday, 16 November 2022	12:23:39	07/12/2022	22/12/2022	5	115	0.14	104.2	
903-308	Thursday, 17 November 2022	12:23:24	07/12/2022	22/12/2022	5	115	0.09	108.4	
903-318	Friday, 18 November 2022	12:29:17	07/12/2022	22/12/2022	5	115	0.09	91.5	
903-316	Sunday, 20 November 2022	13:26:05	07/12/2022	22/12/2022	1	95	0.09	101.0	Assessed to be not related to blasting practices and resulted from localised environmental facto
894-112	Wednesday, 23 November 2022	12:35:08	07/12/2022	22/12/2022	5	115	0.15	102.8	
903-320	Thursday, 24 November 2022	12:38:25	07/12/2022	22/12/2022	5	115	0.09	94.0	
894-107	Saturday, 26 November 2022	12:41:23	07/12/2022	22/12/2022	5	115	0.12	94.0	
894-108	Monday, 28 November 2022	12:25:43	07/12/2022	22/12/2022	5	115	0.09	91.5	
885-203	Wednesday, 30 November 2022	12:37:18	07/12/2022	22/12/2022	5	115	0.13	88.0	
DECEMBER									
894-101	Thursday, 1 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.09	95.9	
903-317	Sunday, 4 December 2022	10:35:00	04/01/2023	19/01/2023	1	95	0.09	97.5	Assessed to be not related to blasting practices and resulted from localised environmental facto
894-533 894-115	Tuesday, 6 December 2022	10:07:00	04/01/2023	19/01/2023	5	115	0.13	88.0	
894-116	Friday, 9 December 2022	17:20:00	04/01/2023	19/01/2023	5	115	0.12	88.0	
894-109	Monday, 12 December 2022	12:24:00	04/01/2023	19/01/2023	5	115	0.09	94.0	
894-111	Wednesday, 14 December 2022	12:35:00	04/01/2023	19/01/2023	5	115	0.09	97.5	
894-120	Friday, 16 December 2022	12:22:00	04/01/2023	19/01/2023	5	115	0.08	81.9	
885-204	Sunday, 18 December 2022	12:21:00	04/01/2023	19/01/2023	1	95	0.14	95.9	Assessed to be not related to blasting practices and resulted from localised environmental facto
885-205A	Wednesday, 21 December 2022	12:28:00	04/01/2023	19/01/2023	5	115	0.12	88.0	
878-519	Wednesday, 21 December 2022	12:27:00	04/01/2023	19/01/2023	5	115	0.08	95.9	
885-201	Saturday, 24 December 2022	12:17:00	04/01/2023	19/01/2023	5	115	0.13	91.5	
885-205B 894-524	Monday, 26 December 2022	11:01:00	04/01/2023	19/01/2023	1	95	0.09	91.5	
885-209	Wednesday, 28 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.09	98.8	
894-117 878-520	Thursday, 29 December 2022	12:37:00	04/01/2023	19/01/2023	5	115	0.09	91.5	



Blasting & Ground Vibration

SEPTEMBER									
903-305A 903-534	Friday, 02 September 2022	13:39:28	05/10/2022	23/10/2022	5	115	0.16	91.5	
921-544 921-114	Monday, 5 September 2022	12:35:53	05/10/2022	23/10/2022	5	115	0.21	81.9	
912-209	Wednesday, 7 September 2022	12:48:29	05/10/2022	23/10/2022	5	115	0.16	88.0	
894-516 894-104	Friday, 9 September 2022	12:27:36	05/10/2022	23/10/2022	5	115	0.11	95.9	
912-205	Sunday, 11 September 2022	13:04:53	05/10/2022	23/10/2022	5	95	0.16	91.5	
921-543 921-115	Monday, 12 September 2022	13:00:36	05/10/2022	23/10/2022	5	115	0.16	88.0	
903-313	Tuesday, 13 September 2022	12:50:38	05/10/2022	23/10/2022	5	115	0.12	91.5	
921-118	Friday, 16 September 2022	12:34:32	05/10/2022	23/10/2022	5	115	0.16	91.5	
903-305B	Saturday, 17 September 2022	12:35:33	05/10/2022	23/10/2022	5	115	0.17	88.0	
921-119	Sunday, 18 September 2022	12:59:25	05/10/2022	23/10/2022	5	95	0.19	88.0	
903-535	Monday, 19 September 2022	12:28:40	05/10/2022	23/10/2022	5	115	0.10	88.0	
912-216	Tuesday, 20 September 2022	12:29:34	05/10/2022	23/10/2022	5	115	0.09	88.0	
921-117 921-116	Saturday, 24 September 2022	12:34:51	05/10/2022	23/10/2022	5	115	0.16	98.0	
885-202	Tuesday, 27 September 2022	10:12:51	05/10/2022	23/10/2022	5	115	0.16	88.0	
903-306	Wednesday, 28 September 2022	12:36:27	05/10/2022	23/10/2022	5	115	0.18	81.9	
OCTOBER									
912-206	Saturday, 1 October 2022	12:35:08	05/11/2022	20/11/2022	5	115	0.19	88.0	
903-314	Tuesday, 4 October 2022	13:47:42	05/11/2022	20/11/2022	5	115	0.18	88.0	
903-315	Thursday, 6 October 2022	13:30:38	05/11/2022	20/11/2022	5	115	0.13	81.9	
903-536 903-538	Friday, 7 October 2022	10:59:53	05/11/2022	20/11/2022	5	115	0.11	88.0	
912-214 903-539 903-537	Monday, 10 October 2022	10:26:09	05/11/2022	20/11/2022	5	115	0.13	98.0	
894-105	Wednesday, 12 October 2022	15:07:28	05/11/2022	20/11/2022	5	115	0.14	88.0	
912-208	Thursday, 13 October 2022	12:39:44	05/11/2022	20/11/2022	5	115	0.21	98.8	
903-301	Saturday, 15 October 2022	12:42:53	05/11/2022	20/11/2022	5	115	0.10	81.9	
903-541	Sunday, 16 October 2022	13:55:56	05/11/2022	20/11/2022	5	95	0.11	94.0	
903-540 903-542	Tuesday, 18 October 2022	12:40:07	05/11/2022	20/11/2022	5	115	0.09	81.9	
903-309	Wednesday, 19 October 2022	10:15:42	05/11/2022	20/11/2022	5	115	0.11	88.0	
894-106	Saturday, 23 October 2022	12:42:48	05/11/2022	20/11/2022	5	115	0.12	88.0	
912-215	Sunday, 24 October 2022	13:30:23	05/11/2022	20/11/2022	5	95	0.15	88.0	
912-217	Monday, 24 October 2022	12:41:46	05/11/2022	20/11/2022	5	115	0.13	91.5	
894-113 894-517	Tuesday, 25 October 2022	16:14:04	05/11/2022	20/11/2022	5	115	0.10	81.9	
912-220	Saturday, 29 October 2022	14:42:12	05/11/2022	20/11/2022	5	115	0.12	95.9	
NOVEMBER									
894-114 & 894-518	Friday, 4 November 2022	10:46:14	07/12/2022	22/12/2022	5	115	0.12	88.0	
912-207	Sunday, 6 November 2022	12:33:35	07/12/2022	22/12/2022	1	95	0.17	81.9	
903-307A	Monday, 7 November 2022	12:42:11	07/12/2022	22/12/2022	5	115	0.13	88.0	
903-318	Friday, 11 November 2022	08:40:02	07/12/2022	22/12/2022	5	115	0.12	88.0	
903-307B & 894-519	Saturday, 12 November 2022	13:19:34	07/12/2022	22/12/2022	5	115	0.15	95.9	
894-102	Wednesday, 16 November 2022	12:23:39	07/12/2022	22/12/2022	5	115	0.13	94.0	
903-308	Thursday, 17 November 2022	12:23:24	07/12/2022	22/12/2022	5	115	0.18	95.9	
903-318	Friday, 18 November 2022	12:29:17	07/12/2022	22/12/2022	5	115	0.09	98.8	
903-316	Sunday, 20 November 2022	13:26:05	07/12/2022	22/12/2022	1	95	0.13	95.9	Assessed to be non-related to blasting practices.
894-112	Wednesday, 23 November 2022	12:35:08	07/12/2022	22/12/2022	5	115	0.12	97.5	
903-320	Thursday, 24 November 2022	12:38:25	07/12/2022	22/12/2022	5	115	0.10	91.5	
894-107	Saturday, 26 November 2022	12:41:23	07/12/2022	22/12/2022	5	115	0.15	91.5	
894-108	Monday, 28 November 2022	12:25:43	07/12/2022	22/12/2022	5	115	0.13	94.0	
885-203	Wednesday, 30 November 2022	12:37:18	07/12/2022	22/12/2022	5	115	0.09	88.0	
DECEMBER									
884-101	Thursday, 1 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.11	91.5	
903-317	Sunday, 4 December 2022	10:35:00	04/01/2023	19/01/2023	1	95	0.20	94.0	
894-533 894-115	Tuesday, 6 December 2022	10:07:00	04/01/2023	19/01/2023	5	115	0.12	91.5	
884-116	Friday, 9 December 2022	17:26:00	04/01/2023	19/01/2023	5	115	0.16	91.5	
894-109	Monday, 12 December 2022	12:24:00	04/01/2023	19/01/2023	5	115	0.14	101.9	
894-111	Wednesday, 14 December 2022	12:35:00	04/01/2023	19/01/2023	5	115	0.12	97.5	
884-120	Friday, 16 December 2022	12:22:00	04/01/2023	19/01/2023	5	115	0.10	94.0	
885-204	Sunday, 18 December 2022	12:21:00	04/01/2023	19/01/2023	1	95	0.12	95.9	Assessed to be non related to blasting practices and resulted from localised environmental factors
885-205A	Wednesday, 21 December 2022	12:28:00	04/01/2023	19/01/2023	5	115	0.13	91.5	
878-519	Wednesday, 21 December 2022	12:27:00	04/01/2023	19/01/2023	5	115	0.09	104.9	
885-201	Saturday, 24 December 2022	12:17:00	04/01/2023	19/01/2023	5	115	0.13	91.5	
885-205B 894-524	Monday, 26 December 2022	11:01:00	04/01/2023	19/01/2023	1	95	0.11	88.0	
885-209	Wednesday, 28 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.09	98.8	
894-117 878-520	Thursday, 29 December 2022	12:37:00	04/01/2023	19/01/2023	5	115	0.11	102.8	



Blasting & Ground Vibration

SEPTEMBER									
903-305A 903-534	Friday, 02 September 2022	13:39:28	05/10/2022	23/10/2022	5	115	0.06	94.0	
921-544 921-114	Monday, 5 September 2022	12:35:53	05/10/2022	23/10/2022	5	115	0.08	81.9	
912-209	Wednesday, 7 September 2022	12:48:29	05/10/2022	23/10/2022	5	115	0.06	91.5	
894-516 894-104	Friday, 9 September 2022	12:27:36	05/10/2022	23/10/2022	5	115	0.04	94.0	
912-205	Sunday, 11 September 2022	13:04:53	05/10/2022	23/10/2022	5	95	0.08	88.0	
921-543 921-115	Monday, 12 September 2022	13:00:36	05/10/2022	23/10/2022	5	115	0.10	88.0	
903-313	Tuesday, 13 September 2022	12:50:38	05/10/2022	23/10/2022	5	115	0.03	89.0	
921-118	Friday, 16 September 2022	12:34:32	05/10/2022	23/10/2022	5	115	0.08	94.0	
903-305B	Saturday, 17 September 2022	12:35:33	05/10/2022	23/10/2022	5	115	0.05	88.8	
921-119	Sunday, 18 September 2022	12:59:25	05/10/2022	23/10/2022	5	95	0.12	89.0	
903-535	Monday, 19 September 2022	12:28:40	05/10/2022	23/10/2022	5	115	0.01	94.0	
912-216	Tuesday, 20 September 2022	12:29:34	05/10/2022	23/10/2022	5	115	0.02	88.0	
921-117 921-116	Saturday, 24 September 2022	12:34:51	05/10/2022	23/10/2022	5	115	0.13	103.5	
885-202	Tuesday, 27 September 2022	10:12:51	05/10/2022	23/10/2022	5	115	0.10	88.0	
903-306	Wednesday, 28 September 2022	12:36:27	05/10/2022	23/10/2022	5	115	0.08	81.9	
OCTOBER									
912-206	Saturday, 1 October 2022	12:35:08	05/11/2022	20/11/2022	5	115	0.14	88.0	
903-314	Tuesday, 3 October 2022	13:47:42	05/11/2022	20/11/2022	5	115	0.04	81.9	
903-315	Thursday, 6 October 2022	13:30:38	05/11/2022	20/11/2022	5	115	0.06	81.9	
903-536 903-538	Friday, 7 October 2022	10:59:53	05/11/2022	20/11/2022	5	115	0.04	97.5	
912-214 903-539 903-537	Monday, 10 October 2022	10:26:59	05/11/2022	20/11/2022	5	115	0.10	91.5	
894-105	Wednesday, 12 October 2022	15:07:28	05/11/2022	20/11/2022	5	115	0.04	100.0	
912-208	Thursday, 13 October 2022	12:39:44	05/11/2022	20/11/2022	5	115	0.12	108.0	
903-301	Saturday, 15 October 2022	12:42:53	05/11/2022	20/11/2022	5	115	0.09	88.0	
903-541	Sunday, 16 October 2022	13:55:56	05/11/2022	20/11/2022	5	95	0.05	95.9	Assessed to be not related to blasting practices and resulted form localised environmental facto
903-540 903-542	Tuesday, 18 October 2022	12:40:37	05/11/2022	20/11/2022	5	115	0.04	88.0	
903-309	Wednesday, 19 October 2022	10:15:42	05/11/2022	20/11/2022	5	115	0.10	94.0	
894-106	Saturday, 23 October 2022	12:42:48	05/11/2022	20/11/2022	5	115	0.05	100.0	
912-215	Sunday, 23 October 2022	13:30:23	05/11/2022	20/11/2022	5	95	0.16	88.0	
912-217	Monday, 24 October 2022	12:41:46	05/11/2022	20/11/2022	5	115	0.05	88.0	
894-113 894-517	Tuesday, 25 October 2022	16:14:04	05/11/2022	20/11/2022	5	115	0.04	97.5	
912-220	Saturday, 29 October 2022	14:42:12	05/11/2022	20/11/2022	5	115	0.08	101.9	
NOVEMBER									
894-114 & 894-518	Friday, 4 November 2022	10:46:14	07/12/2022	22/12/2022	5	115	0.03	81.9	
912-207	Sunday, 6 November 2022	12:33:35	07/12/2022	22/12/2022	1	95	0.10	81.9	
903-307A	Monday, 7 November 2022	12:42:11	07/12/2022	22/12/2022	5	115	0.05	81.9	
903-318	Friday, 11 November 2022	08:40:02	07/12/2022	22/12/2022	5	115	0.09	81.9	
903-307B & 894-519	Saturday, 12 November 2022	13:19:34	07/12/2022	22/12/2022	5	115	0.10	88.0	
894-102	Wednesday, 16 November 2022	12:23:39	07/12/2022	22/12/2022	5	115	0.09	91.5	
903-308	Thursday, 17 November 2022	12:23:24	07/12/2022	22/12/2022	5	115	0.08	88.0	
903-318	Friday, 18 November 2022	12:29:17	07/12/2022	22/12/2022	5	115	0.04	88.0	
903-316	Sunday, 20 November 2022	13:26:05	07/12/2022	22/12/2022	1	95	0.09	101.0	Assessed to be not related to blasting practices and resulted form localised environmental facto
894-112	Wednesday, 23 November 2022	12:35:08	07/12/2022	22/12/2022	5	115	0.08	88.0	
903-320	Thursday, 24 November 2022	12:38:25	07/12/2022	22/12/2022	5	115	0.06	88.0	
894-107	Saturday, 26 November 2022	12:41:23	07/12/2022	22/12/2022	5	115	0.05	81.9	
894-108	Monday, 28 November 2022	12:25:43	07/12/2022	22/12/2022	5	115	0.05	91.5	
885-203	Wednesday, 30 November 2022	12:37:18	07/12/2022	22/12/2022	5	115	0.03	81.9	
DECEMBER									
884-101	Thursday, 1 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.05	88.0	
903-317	Sunday, 4 December 2022	10:35:00	04/01/2023	19/01/2023	1	95	0.09	91.5	
894-533 894-115	Tuesday, 6 December 2022	10:07:00	04/01/2023	19/01/2023	5	115	0.04	94.0	
884-116	Friday, 9 December 2022	17:26:00	04/01/2023	19/01/2023	5	115	0.04	81.9	
894-109	Monday, 12 December 2022	12:24:00	04/01/2023	19/01/2023	5	115	0.06	113.1	
894-111	Wednesday, 14 December 2022	12:35:00	04/01/2023	19/01/2023	5	115	0.05	101.0	
884-120	Friday, 16 December 2022	12:22:00	04/01/2023	19/01/2023	5	115	0.04	88.0	
885-204	Sunday, 18 December 2022	12:21:00	04/01/2023	19/01/2023	1	95	0.03	81.9	
885-205A	Wednesday, 21 December 2022	12:28:00	04/01/2023	19/01/2023	5	115	0.04	88.0	
876-519	Wednesday, 21 December 2022	12:27:00	04/01/2023	19/01/2023	5	115	0.02	94.0	
885-201	Saturday, 24 December 2022	12:17:00	04/01/2023	19/01/2023	5	115	0.05	88.0	
885-205B 894-524	Monday, 26 December 2022	11:01:00	04/01/2023	19/01/2023	1	95	0.05	81.9	
885-209	Wednesday, 28 December 2022	12:29:00	04/01/2023	19/01/2023	5	115	0.03	95.9	
894-117 876-520	Thursday, 29 December 2022	12:37:00	04/01/2023	19/01/2023	5	115	0.04	103.5	

Compliance Summary – Overpressure level from blasting operations must not exceeded more than 5% of the total number of blasts over a period of 12 months	Total Number of Blasts last 12 months	200	Percentage of exceedances over 12 month period	0.0%	1.6%
--	---------------------------------------	-----	--	------	------



Cyanide

Monitoring Point: 48

Water quality monitoring, automated sampler located at the processing plant

Frequency	Month	No Sampled during Month	Total Cyanide (mg/L)				Comments
			Minimum	Mean	Median	Maximum	
Weekly	January	5	2.87	8.52	8.64	12.73	
Weekly	February	3	7.06	11.96	12.02	16.79	Planned shutdown from 15-22
Weekly	March	4	7.32	9.53	8.48	13.85	
Weekly	April	4	6.62	8.30	8.62	9.34	
Weekly	May	5	2.84	8.11	7.80	15.31	1 day shutdown on 25/05/2022
Weekly	June	4	2.39	6.45	6.93	9.56	
Weekly	July	5	7.66	12.14	12.53	15.91	
Weekly	August	3	6.26	9.44	8.76	13.32	Planned shutdown from 25-29, inclement weather 22
Weekly	September	4	6.729	9.83	7.80	15.024	
Weekly	October	5	2.51	6.72	6.34	10.220	
Weekly	November	4	3.304	5.29	5.48	6.87	
Weekly	December	4	5.388	7.81	8.24	9.35	

Frequency	Month	No Sampled during Month	WAD Cyanide (mg/L)		Concentration Limits		Comments
			Minimum	Maximum	90th Percentile	100th Percentile	
Twice daily	January	62	0	6.48	20.00	30.00	
Twice daily	February	42	0	12.82	20.00	30.00	Planned shutdown from 15-22
Twice daily	March	62	0.176	21.49	20.00	30.00	1 x sample > 20ppm during previous 12 months
Twice daily	April	60	0	11.283	20.00	30.00	
Twice daily	May	63	0	36.00	20.00	30.00	2 x extra samples > 30ppm on 26/05/2022. Reported to EPA and DPE. 1 day shutdown on 25/05/2022
Twice daily	June	60	0	13.71	20.00	30.00	
Twice daily	July	62	0	11.29	20.00	30.00	
Twice daily	August	44	0	9.73	20.00	30.00	Planned shutdown from 25-29, inclement weather 22
Twice daily	September	58	0.33	10.20	20.00	30.00	Shut 07/09/2022 18:00 and 08/09/2022 06:00
Twice daily	October	62	0	10.41	20.00	30.00	
Twice daily	November	60	0	7.95	20.00	30.00	
Twice daily	December	62	0	12.61	20.00	30.00	



EPL Correction Log

Monitoring Point	Monitoring Point Type	Date Sampled	Date Obtained	Date Originally Published	Parameter	Original	Correction	Comments
63	Groundwater	12/04/2022	12/04/2022	20/05/2022	Field - pH (units)	6.82	6.87	Field data for RW02A originally published for RW03A.
63	Groundwater	12/04/2022	12/04/2022	20/05/2022	Field - Electrical Conductivity (µS/cm)	46978	39539	Field data for RW02A originally published for RW03A.
63	Groundwater	12/04/2022	12/04/2022	20/05/2022	SWL (m)	14.265	23.690	Field data for RW02A originally published for RW03A.
P417A	Groundwater	19/08/2022	19/08/2022	20/09/2022	EC	465032.00	46503	Data entry error
52	Groundwater	14/10/2022	21/10/2022	20/11/2022	Antimony	<0.0005	0.0002	Data entry error
53	Groundwater	11/05/2022	20/05/2022	20/06/2022	Lead	<0.0002	0.0002	Data entry error
12	Surface Water	02/05/2022	02/05/2022	20/06/2022	Field - Electrical Conductivity (µS/cm)	7.94	6160.00	Field data entry error
52	Groundwater	14/10/2022	21/10/2022	20/11/2022	Cadmium	0.0005	<0.0005	Data entry error
52	Groundwater	14/10/2022	21/10/2022	20/11/2022	Copper	0.0014	0.004	Data entry error
19	Groundwater	22/12/2022	06/01/2023	19/01/2023	Cadmium	0.0002	0.0006	Data entry error
26	Groundwater	12/10/2022	21/10/2022	20/11/2022	Antimony	<0.0005	0.0011	Data entry error
26	Groundwater	12/10/2022	21/10/2022	20/11/2022	Molybdenum	0.0	<0.0001	Data entry error
26	Groundwater	12/10/2022	21/10/2022	20/11/2022	Nickel	0.0005	<0.0005	Data entry error
27	Groundwater	12/10/2022	21/10/2022	20/11/2022	Alkalinity	446	538.0	Data entry error
27	Groundwater	12/10/2022	21/10/2022	20/11/2022	Total Dissolved Solids	39500	35600	Data entry error
30	Groundwater	12/10/2022	21/10/2022	20/11/2022	Total Hardness (mg/L)	7320	8220.0	Data entry error
30	Groundwater	12/10/2022	21/10/2022	20/11/2022	Total Dissolved Solids	41200	33500	Data entry error
32	Groundwater	12/10/2022	21/10/2022	20/11/2022	Copper	0.009	0.005	Data entry error
32	Groundwater	12/10/2022	21/10/2022	20/11/2022	Iron	<0.005	0.0017	Data entry error
38	Groundwater	12/10/2022	21/10/2022	20/11/2022	Arsenic	0.0005	<0.0005	Data entry error
38	Groundwater	12/10/2022	21/10/2022	20/11/2022	Cadmium	0.0002	<0.0002	Data entry error
38	Groundwater	12/10/2022	21/10/2022	20/11/2022	Lead	0.0002	<0.0002	Data entry error
38	Groundwater	12/10/2022	21/10/2022	20/11/2022	Manganese	0.013	0.0113	Data entry error
38	Groundwater	12/10/2022	21/10/2022	20/11/2022	Molybdenum	0.001	0.0022	Data entry error
52	Groundwater	14/10/2022	21/10/2022	20/11/2022	Chloride	10600.00	1060.00000	Data entry error
53	Groundwater	14/10/2022	21/10/2022	20/11/2022	Cadmium	0.0002	<0.0002	Data entry error
53	Groundwater	14/10/2022	21/10/2022	20/11/2022	Chloride	11100.00000	13700.00000	Data entry error
53	Groundwater	14/10/2022	21/10/2022	20/11/2022	Copper	<0.001	0.0010	Data entry error
57	Groundwater	14/10/2022	21/10/2022	20/11/2022	Selenium	0.0060	0.0050	Data entry error
58	Groundwater	14/10/2022	21/10/2022	20/11/2022	Cadmium	0.0002	<0.0002	Data entry error
59	Groundwater	14/10/2022	21/10/2022	20/11/2022	Cadmium	<0.0002	0.0002	Data entry error
59	Groundwater	14/10/2022	21/10/2022	20/11/2022	Iron	0.0030	0.0070	Data entry error
59	Groundwater	14/10/2022	21/10/2022	20/11/2022	Total Dissolved Solids	25300.0	30000.0	Data entry error
60	Groundwater	14/10/2022	21/10/2022	20/11/2022	Iron	<0.005	0.141	Data entry error
60	Groundwater	14/10/2022	21/10/2022	20/11/2022	Manganese	0.002	0.0515	Data entry error
61	Groundwater	14/10/2022	21/10/2022	20/11/2022	Iron	<0.005	0.0270	Data entry error
61	Groundwater	14/10/2022	21/10/2022	20/11/2022	Potassium	56.0000	44.00000	Data entry error
65	Groundwater	12/10/2022	21/10/2022	22/12/2022	Copper	<.001	0.0020	Data entry error
65	Groundwater	12/10/2022	21/10/2022	22/12/2022	Iron	<0.005	0.0090	Data entry error
65	Groundwater	12/10/2022	21/10/2022	22/12/2022	Zinc	<0.005	0.0100	Data entry error
67	Groundwater	20/12/2022	16/01/2023	19/01/2023	Zinc	0.004	0.0080	Data entry error
68	Groundwater	20/12/2022	16/01/2023	19/01/2023	Selenium	<0.002	0.0130	Data entry error
68	Groundwater	20/12/2022	16/01/2023	19/01/2023	Zinc	0.004	0.0060	Data entry error

