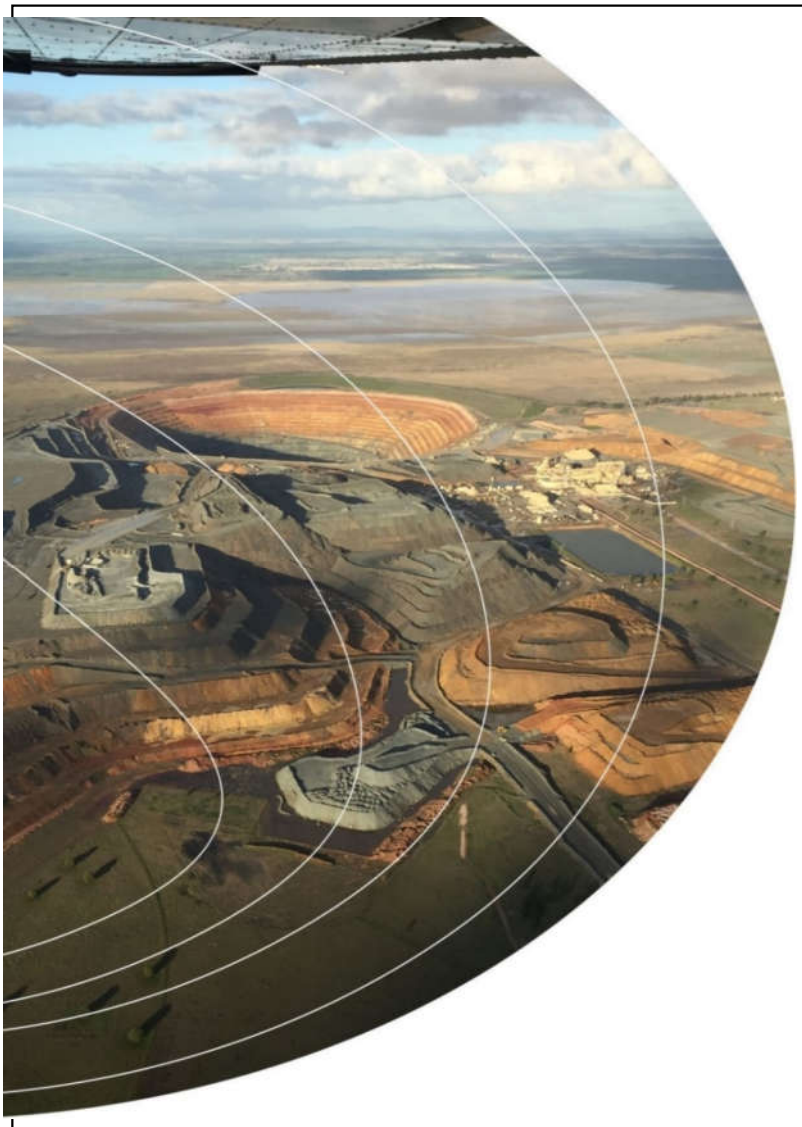

Environmental Monitoring Data

April 2024

EPL No: 11912
Licensee: Evolution Mining (Cowal) 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	14/01/2024	06/02/2024	21/02/2024	7.89	
Monthly	15/02/2024	01/03/2024	21/03/2024	4.91	
Monthly	13/03/2024	13/03/2024	23/04/2024	0.03	
Monthly	13/04/2024	06/05/2024	20/05/2024	16.11	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				0.0	
Mean of Sample				7.2	
Highest Sample Value				16.1	
Median				6.4	

Monitoring Point: 2 <Site Office>
Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m^2/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	6.19	
Monthly	15/02/2024	01/03/2024	21/03/2024	6.35	
Monthly	14/03/2023	02/04/2024	23/04/2024	1.82	
Monthly	13/04/2024	06/05/2024	20/05/2024	8.25	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				1.8	
Mean of Sample				5.7	
Highest Sample Value				8.2	
Median				6.3	

Monitoring Point: 3 <DG06>
Dust monitoring, Dust gauge located on private property to the east of ML1535 boundary

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m^2/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	2.27	
Monthly	15/02/2024	01/03/2024	21/03/2024	1.38	
Monthly	14/03/2024	02/04/2024	23/04/2024	0.45	
Monthly	13/04/2024	06/05/2024	20/05/2024	0.93	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				0.4	
Mean of Sample				1.3	
Highest Sample Value				2.3	
Median				1.2	

Monitoring Point: 4 <DG09>
Dust monitoring, Dust gauge located on private property to the south of ML1535 boundary

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m^2/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	1.64	
Monthly	15/02/2024	01/03/2024	21/03/2024	1.47	
Monthly	14/03/2024	02/04/2024	23/04/2024	0.33	
Monthly	13/04/2024	06/05/2024	20/05/2024	5.37	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				0.3	
Mean of Sample				2.2	
Highest Sample Value				5.4	
Median				1.6	

Monitoring Point: 5 <Site 52>
Dust monitoring, Dust gauge located within ML1535 and north of the open pit

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m^2/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	2.95	
Monthly	15/02/2024	01/03/2024	21/03/2024	4.04	
Monthly	14/03/2023	02/04/2024	23/04/2024	0.38	
Monthly	13/04/2024	06/05/2024	20/05/2024	4.75	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				0.4	
Mean of Sample				3.0	
Highest Sample Value				4.8	
Median				3.5	

Dust

Monitoring Point: 6 <DG01>
Dust monitoring, Dust gauge located on private property to the north of ML1535 boundary

Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m^2/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	1.04	
Monthly	15/02/2024	01/03/2024	21/03/2024	2.56	
Monthly	14/03/2024	02/04/2024	23/04/2024	0.70	
Monthly	13/04/2024	06/05/2024	20/05/2024	1.22	
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Monthly					
Number of Samples Collected				4	
Lowest Value				0.7	
Mean of Sample				1.4	
Highest Sample Value				2.6	
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 (µg/m^3)	Comments
Every 7 days	Wednesday, 3 January 2024	20/02/2024	21/02/2024	24.8	
Every 7 days	Wednesday, 10 January 2024	20/02/2024	21/02/2024	26.0	
Every 7 days	Wednesday, 17 January 2024	20/02/2024	21/02/2024	34.4	
Every 7 days	Wednesday, 24 January 2024	20/02/2024	21/02/2024	44.7	
Every 7 days	Wednesday, 31 January 2024	20/02/2024	21/02/2024	75.0	
Every 7 days	Wednesday, 7 February 2024	14/03/2024	21/03/2023	18.1	
Every 7 days	Wednesday, 14 February 2024	14/03/2024	21/03/2024	72.0	
Every 7 days	Wednesday, 21 February 2024	14/03/2024	21/03/2024	33.3	
Every 7 days	Wednesday, 28 February 2024	14/03/2024	21/03/2024	55.0	
Every 7 days	Wednesday, 6 March 2024	06/03/2024	23/04/2024	59.4	
Every 7 days	Wednesday, 13 March 2024	13/03/2024	23/04/2024	74.7	
Every 7 days	Wednesday, 20 March 2024	20/03/2024	23/04/2024	37.4	
Every 7 days	Wednesday, 27 March 2024	27/03/2024	23/04/2024	83.5	
Every 7 days	Wednesday, 3 April 2024	10/05/2024	20/05/2024	27.4	
Every 7 days	Wednesday, 10 April 2024	10/05/2024	20/05/2024	24.9	
Every 7 days	Wednesday, 17 April 2024	10/05/2024	20/05/2024	64.8	
Every 7 days	Wednesday, 24 April 2024	10/05/2024	20/05/2024	66.0	
Every 7 days					
Every 7 days					
Every 7 days			

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	09/01/2024	09/01/2024	21/02/2024	8.38	14133	14	
Monthly	18/01/2024	18/01/2024	21/02/2024	8.17	9145	18	Rainfall Monitoring Event
Monthly	06/02/2024	06/02/2024	21/03/2024	8.43	10038	41	
Monthly	05/03/2024	05/03/2024	23/04/2024	7.46	10710	19	
Monthly	20/03/2024	20/03/2024	23/04/2024	7.13	11060	9	Rainfall Monitoring Event
Monthly	07/04/2024	07/04/2024	20/05/2024	9.01	10886	34	Rainfall Monitoring Event
Monthly	23/04/2024	23/04/2024	20/05/2024	8.00	9160	14	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				7.00	7.00	7.00	
Lowest Value				7.13	9145.00	9.00	
Mean of Sample				8.08	10733.14	21.29	
Highest Sample Value				9.01	14133.00	41.00	
Median				8.17	10710.00	18.00	

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	09/01/2024	09/01/2024	21/02/2024	7.85	10036	54	
Monthly	18/01/2024	18/01/2024	21/02/2024	8.19	3195	14	Rainfall Monitoring Event
Monthly	06/02/2024	06/02/2024	21/03/2024	8.94	1527	441	
Monthly	05/03/2024	05/03/2024	23/04/2024	-	-	-	Dry
Monthly	20/03/2024	20/03/2024	23/04/2024	7.73	21282	15	Rainfall Monitoring Event
Monthly	07/04/2024	07/04/2024	20/05/2024	8.94	30009	7	Rainfall Monitoring Event
Monthly	23/04/2024	23/04/2024	20/05/2024	7.84	28949	<1	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				6.00	6.00	5.00	
Lowest Value				7.73	1527.00	7.00	
Mean of Sample				8.25	15833.00	106.20	
Highest Sample Value				8.94	30009.00	441.00	
Median				8.02	15659.00	15.00	

Lake Water

Monitoring Point: 14 <P1>
Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Total Suspended Solids (mg/L)	Comments
Weekly	04/01/2024	04/01/2024	21/02/2024	8.37	622.0	35	
Weekly	09/01/2024	09/01/2024	21/02/2024	8.42	632.0	30	
Weekly	16/01/2024	16/01/2024	21/02/2024	7.49	586.0	240	
Weekly	18/01/2024	18/01/2024	21/02/2024	8.51	588.0	89	Rainfall Monitoring Event
Weekly	22/01/2024	22/01/2024	21/02/2024	8.66	609.0	76	
Weekly	30/01/2024	30/01/2024	21/02/2024	8.52	615.0	59	
Weekly	06/02/2024	06/02/2024	21/03/2024	8.65	636.0	80	
Weekly	15/02/2024	15/02/2024	21/03/2024	8.95	599.0	105	
Weekly	20/02/2024	20/02/2024	21/03/2024	9.20	616.2	83	
Weekly	01/03/2024	01/03/2024	23/04/2024	8.39	665.0	112	
Weekly	08/03/2024	08/03/2024	23/04/2024	8.69	614.0	79	
Weekly	14/03/2024	14/03/2024	23/04/2024	7.88	622.0	63	
Weekly	18/03/2024	18/03/2024	23/04/2024	8.19	691.0	105	
Weekly	21/03/2024	21/03/2024	23/04/2024	7.76	642.0	177	Rainfall Monitoring Event
Weekly	26/03/2024	26/03/2024	23/04/2024	8.00	701.0	69	
Weekly	03/04/2024	03/04/2024	20/05/2024	8.93	594.0	116	
Weekly	08/04/2024	08/04/2024	20/05/2024	8.91	453.0	93	Rainfall Monitoring Event
Weekly	16/04/2024	16/04/2024	20/05/2024	8.82	746.0	64	
Weekly	23/04/2024	23/04/2024	20/05/2024	8.96	696.0	65	
Weekly							
Weekly							
Weekly					

Lake Water

Monitoring Point: 17 <B1>
Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	22/01/2024	07/02/2024	21/02/2024	8.55	605.0	
Monthly	20/02/2024	20/02/2024	21/03/2024	9.18	619.2	
Monthly	18/03/2024	18/03/2024	23/04/2024	8.43	693.0	
Monthly	16/04/2024	16/04/2024	20/05/2024	8.97	740.0	
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				4	4	
Lowest Value				8.4	605.0	
Mean of Sample				8.8	664.3	
Highest Sample Value				9.2	740.0	
Median				8.8	656.1	

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	22/01/2024	07/02/2024	21/02/2024	156	<0.001	0.002	<0.0001	<0.001	<0.001	0.002	0.002	<0.01	53	<0.005	
Quarterly	16/04/2024	01/05/2024	20/05/2024	172	<0.001	0.002	<0.0001	<0.001	<0.001	0.004	0.002	<0.01	75	<0.005	
Quarterly															
Quarterly															
Lowest Value				156.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	0.0	
Mean of Sample				164.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0	0.0	
Highest Sample Value				172.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0	

Monitoring Point: 18 <B5>
Ambient water quality monitoring, Surface water point on Lake Cowal to the south-east of ML1535 boundary

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	Comments
Monthly	23/01/2024	07/02/2024	21/02/2024	6.77	204	
Monthly	20/02/2024	20/02/2024	21/03/2024	8.86	605	
Monthly	18/03/2024	18/03/2024	23/04/2024	9.03	680	
Monthly	17/04/2024	16/04/2024	20/05/2024	8.62	728	
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				4	4	
Lowest Value				6.8	204.3	
Mean of Sample				8.3	554.3	
Highest Sample Value				9.0	718.0	
Median				8.7	642.5	

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	23/01/2024	07/02/2024	21/02/2024	59	<0.001	0.003	<0.0001	0.002	<0.001	<0.001	0.003	<0.01	37	<0.005	
Quarterly	17/04/2024	01/05/2024	20/05/2024	174	<0.001	0.002	<0.0001	0.001	<0.001	0.003	0.002	<0.01	210	<0.005	
Quarterly															
Quarterly															
Lowest Value				59.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.0	0.0	
Mean of Sample				116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.5	0.0	
Highest Sample Value				174.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	210.0	0.0	

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	23/01/2024	-	-	-	-	No water present in toe drain
Monthly	27/02/2024	-	-	-	-	No water present in toe drain
Monthly	05/03/2024	-	-	-	-	No water present in toe drain
Monthly	10/04/2024	-	-	-	-	No water present in toe drain
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				0	0	
Lowest Value				0.0	0	
Mean of Sample				0.0	0	
Highest Sample Value				0.0	0	
Median				0.0	0	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (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	23/01/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	10/04/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly																								
Quarterly																								
Lowest Value				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Mean of Sample				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Highest Sample Value				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

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	23/01/2024	23/01/2024	21/02/2024	7.85	22140	
Monthly	27/02/2024	27/02/2024	21/03/2024	7.41	18716	
Monthly	05/03/2024	05/03/2024	23/04/2024	7.73	19340	
Monthly	10/04/2024	10/04/2024	20/05/2024	8.22	19721	
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				4	4	
Lowest Value				7.4	18716	
Mean of Sample				7.8	19979	
Highest Sample Value				8.2	22140	
Median				7.8	19531	

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	23/01/2024	08/02/2024	21/02/2024	216	<0.0005	<0.0005	0.0068	558	5620	0.001	0.01	<0.0002	705	0.079	0.0038	0.001	37	<0.002	3180	2950	41	4300	0.052	
Quarterly	10/04/2024	19/04/2024	20/05/2024	254	<0.0002	0.0004	0.00649	780	5560	0.0012	0.003	<0.0001	687	0.768	0.0043	0.001	42	0.0008	3160	3150	72	4780	0.098	
Quarterly																								
Quarterly																								
Lowest Value				216.0000	0.0000	0.0004	0	558	5560.000	0.0010	0.0030	0.0000	687.0000	0.0792	0.004	0.0010	37.000	0.0008	3160	2950	41.000	4300	0.052	
Mean of Sample				235.0000	0.0000	0.0004	0	669	5590.000	0.0011	0.0065	0.0000	696.0000	0.4236	0.004	0.0010	39.500	0.0008	3170	3050	56.500	4540	0.075	
Highest Sample Value				254.0000	0.0000	0.0004	0	780	5620.000	0.0012	0.0100	0.0000	705.0000	0.7680	0.004	0.0010	42.000	0.0008	3180	3150	72.000	4780	0.098	

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	23/01/2024	-	-	-	-	No water present in toe drain
Monthly	27/02/2024	-	-	-	-	No water present in toe drain
Monthly	05/03/2024	-	-	-	-	No water present in toe drain
Monthly	10/04/2024	-	-	-	-	No water present in toe drain
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				0	0	
Lowest Value				0.0	0	
Mean of Sample				0.0	0	
Highest Sample Value				0.0	0	
Median				0.0	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	23/01/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly	10/04/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No water present in toe drain
Quarterly																								
Quarterly																								
Lowest Value				0.0000	0.0000	0.0000	0	0	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0	0	0.000	0	0.000	
Mean of Sample				0.0000	0.0000	0.0000	0	0	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0	0	0.000	0	0.000	
Highest Sample Value				0.0000	0.0000	0.0000	0	0	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0	0	0.000	0	0.000	

Groundwater

Monitoring Point: 19 <PSSSA-R>
Groundwater quality monitoring, Piezometer located up gradient of southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.76	32273	20.570	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.76	31920	20.555	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.59	31833	20.600	
Monthly	11/04/2024	11/04/2024	20/05/2024	6.94	31827	20.570	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.6	31827	20.555	
Mean of Sample				6.8	31963	20.574	
Highest Sample Value				6.9	32273	20.600	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	748	<0.0005	<0.0005	<0.0002	274	8930	<0.001	<0.004	<0.005	<0.0002	787	0.0462	0.0015	0.0037	23	0.003	5920	2440	24500	3920	<0.005	
Quarterly	11/04/2024	19/04/2024	20/05/2024	818	<0.0005	<0.0005	0.0005	298	9680	<0.001	-	0.010	<0.0002	884	0.0309	0.0028	0.0082	31	0.003	6480	2450	25100	4380	0.007	
Quarterly																									
Quarterly																									
Lowest Value				748.0	0.0000	0.0000	0.0005	274	8930	0.0000	0.0000	0.0100	0.0000	787	0.0309	0.0015	0.0037	23	0.0030	5920	2440	24500	3920	0.0070	
Mean of Sample				783.0	0.0000	0.0000	0.0005	286	9305	0.0000	0.0000	0.0100	0.0000	835.5000	0.0386	0.0022	0.0060	27	0.0030	6200	2445	24800	4150	0.0070	
Highest Sample Value				818.0	0.0000	0.0000	0.0005	298	9680	0.0000	0.0000	0.0100	0.0000	884	0.0462	0.0028	0.0082	31	0.0030	6480	2450	25100	4380	0.0070	

Monitoring Point: 26 <PP03>
Groundwater quality monitoring, Piezometer located near the processing plant area 8.94 1527 441

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.65	50023	17.425	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.64	48511	17.315	
Monthly	19/03/2024	19/03/2024	23/04/2024	6.04	46959	17.300	pH probe calibration error
Monthly	02/04/2024	02/04/2024	20/05/2024	6.53	49105	17.225	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.0	46959	17.225	
Mean of Sample				6.5	48649	17.316	
Highest Sample Value				6.7	50023	17.425	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	407	<0.0005	<0.0005	<0.0002	828	14300	0.003	<0.004	0.006	0.0008	1720	0.003	<0.0001	0.0008	58	0.01	9260	3380	41400	9150	0.02	
Quarterly	02/04/2024	11/04/2024	20/05/2024	447	<0.0005	<0.0005	<0.0002	696	16300	0.001	<0.004	0.033	0.0007	1720	0.0048	<0.0001	<0.0005	79	0.01	8940	3340	33300	8820	0.013	
Quarterly																									
Quarterly																									
Lowest Value				407.0	0.0000	0.0000	0.0000	696	14300	0.0010	0.0000	0.0060	0.0007	1720	0.0030	0.0000	0.0008	58	0.0090	8940	3340	33300	8820	0.0130	
Mean of Sample				427.0	0.0000	0.0000	0.0000	762	15300	0.0020	0.0000	0.0195	0.0008	1720	0.0039	0.0000	0.0008	69	0.0095	9100	3360	37350	8985	0.0165	
Highest Sample Value				447.0	0.0000	0.0000	0.0000	828	16300	0.0030	0.0000	0.0330	0.0008	1720	0.0048	0.0000	0.0008	79	0.0100	9260	3380	41400	9150	0.0200	

Monitoring Point: 27 <PP04>
Groundwater quality monitoring, Piezometer located near the processing plant area

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.59	49241	15.675	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.60	48310	15.615	
Monthly	19/03/2024	19/03/2024	23/04/2024	6.03	42769	15.620	pH probe calibration error
Monthly	02/04/2024	02/04/2024	20/05/2024	6.58	48748	15.580	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.0	42769	15.580	
Mean of Sample				6.5	47267	15.623	
Highest Sample Value				6.6	49241	15.675	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	477	<0.0005	<0.0005	<0.0002	789	13800	<0.004	<0.004	<0.005	<0.0002	1610	0.0031	0.0001	0.0024	52	0.009	9230	3480	40500	8600	0.018	
Quarterly	02/04/2024	11/04/2024	20/05/2024	517	<0.0005	<0.0005	<0.0002	689	15900	<0.001	<0.004	0.007	<0.0002	1660	0.0022	0.0005	0.0042	74	0.009	9020	3660	32600	8560	0.016	
Quarterly																									
Quarterly																									
Lowest Value				477.0	0.0000	0.0000	0.0000	689	13800	0.0030	0.0000	0.0070	0.0000	1610	0.0022	0.0001	0.0024	52	0.0090	9020	3480	32600	8560	0.0160	
Mean of Sample				497.0	0.0000	0.0000	0.0000	739	14850	0.0030	0.0000	0.0070	0.0000	1635	0.0027	0.0003	0.0033	63	0.0090	9125	3570	36550	8580	0.0170	
Highest Sample Value				517.0	0.0000	0.0000	0.0000	789	15900	0.0030	0.0000	0.0070	0.0000	1660	0.0031	0.0005	0.0042	74	0.0090	9230	3660	40500	8600	0.0180	

Monitoring Point: 30 <P417A>
Groundwater quality monitoring, Piezometer located down gradient of southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.58	46945	11.010	
Monthly	22/02/2024	22/02/2024	21/03/2024	6.53	46677	10.985	
Monthly	14/03/2024	14/03/2024	23/04/2024	5.87	45007	10.98	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.75	46423	10.970	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.9	45007	10.970	
Mean of Sample				6.4	46263	10.986	
Highest Sample Value				6.8	46945	11.010	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	450	<0.0005	<0.0005	0.001	654	13100	0.025	<0.004	1.82	<0.0002	1550	0.125	0.0065	0.476	38	0.01	8750	3150	38900	8020	<0.005	
Quarterly	03/04/2024	11/04/2024	20/05/2024	495	<0.0005	<0.0005	0.0003	545	14000	0.001	-	0.006	<0.0002	1540	0.0088	0.0063	0.0074	53	0.009	8280	3180	31900	7700	<0.005	
Quarterly																									
Quarterly																									
Lowest Value				450.0	0.0000	0.0000	0.0003	545	13100	0.0010	0.0000	0.0060	0.0000	1540	0.0088	0.0063	0.0074	38	0.0090	8280	3150	31900	7700	0.0000	
Mean of Sample				472.5	0.0000	0.0000	0.0007	600	13550	0.0130	0.0000	0.9130	0.0000	1545	0.0669	0.0064	0.2417	46	0.0095	8515	3165	35400	7860	0.0000	
Highest Sample Value				495.0	0.0000	0.0000	0.0010	654	14000	0.0250	0.0000	1.8200	0.0000	1550	0.1250	0.0065	0.4760	53	0.0100	8750	3180	38900	8020	0.0000	

Groundwater

Monitoring Point: 31 <P417B>

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.67	41786	10.970	
Monthly	22/02/2024	22/02/2024	21/03/2024	6.63	43120	10.943	
Monthly	14/03/2024	14/03/2024	23/04/2024	5.99	42561	10.94	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.89	41804	10.94	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.0	41804	10.940	
Mean of Sample				6.5	42818	10.948	
Highest Sample Value				6.9	43786	10.970	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	233	<0.0005	<0.0005	<0.0002	524	12500	0.003	<0.004	0.006	0.0006	1430	0.0019	0.0004	0.002	20	0.009	8010	2800	35500	7200	0.02	
Quarterly	03/04/2024	11/04/2024	20/05/2024	260	<0.0005	<0.0005	<0.0002	450	12900	0.002	-	0.007	0.0005	1370	0.0034	0.0004	0.0011	30	0.009	7360	2810	29300	6760	0.04	
Quarterly																									
Quarterly																									
Lowest Value				233.0	0.0000	0.0000	0.0000	450	12500	0.0020	0.0000	0.0060	0.0005	1370	0.0019	0.0004	0.0011	20	0.0090	7360	2800	29300	6760	0.0200	
Mean of Sample				246.5	0.0000	0.0000	0.0000	487	12700	0.0025	0.0000	0.0065	0.0006	1400	0.0027	0.0004	0.0016	25	0.0090	7685	2805	32400	6980	0.0300	
Highest Sample Value				260.0	0.0000	0.0000	0.0000	524	12900	0.0030	0.0000	0.0070	0.0006	1430	0.0034	0.0004	0.0020	30	0.0090	8010	2810	35500	7200	0.0400	

Monitoring Point: 32 <P418A>
Groundwater quality monitoring, Piezometer located down gradient of northern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.57	49358	6.250	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.57	48627	6.170	
Monthly	06/03/2024	06/03/2024	23/04/2024	5.82	46228	6.120	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.74	48552	6.070	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.8	46228	6.070	
Mean of Sample				6.4	48191	6.153	
Highest Sample Value				6.7	49358	6.250	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	508	<0.0005	<0.0005	<0.0002	528	17600	0.01	<0.004	0.223	<0.0002	1550	0.405	0.004	0.0172	23	<0.002	10600	4570	39400	7700	0.007	
Quarterly	03/04/2024	11/04/2024	20/05/2024	554	<0.0005	<0.0005	<0.0002	441	15200	0.002	-	0.091	<0.0002	1460	0.279	0.0028	0.0038	37	<0.002	9570	4930	33600	7110	0.009	
Quarterly																									
Quarterly																									
Lowest Value				508.0	0.0000	0.0000	0.0000	441	15200	0.002	0.000	0.091	0.0000	1460	0.2790	0.0028	0.0038	23	0.0000	9570	4570	33600	7110	0.0070	
Mean of Sample				531.0	0.0000	0.0000	0.0000	485	16400	0.006	0.000	0.157	0.0000	1505	0.3420	0.0034	0.0105	30	0.0000	10085	4750	36500	7405	0.0080	
Highest Sample Value				554.0	0.0000	0.0000	0.0000	528	17600	0.010	0.000	0.223	0.0000	1550	0.4050	0.0040	0.0172	37	0.0000	10600	4930	39400	7700	0.0090	

Monitoring Point: 33 <P418B>
Groundwater quality monitoring, Piezometer located down gradient of northern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.45	47073	6.300	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.45	46436	6.225	
Monthly	06/03/2024	06/03/2024	23/04/2024	5.73	42205	6.190	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.61	46093	6.120	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.7	42205	6.120	
Mean of Sample				6.3	45452	6.209	
Highest Sample Value				6.6	47073	6.300	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	616	<0.0005	<0.0005	<0.0002	382	13000	0.16	<0.004	0.053	0.001	1290	0.024	0.0062	0.1700	14	0.006	9710	4540	36000	6270	0.078	
Quarterly	03/04/2024	11/04/2024	20/05/2024	639	<0.0005	<0.0005	<0.0002	341	13600	0.054	-	0.055	<0.0002	1370	0.0815	0.0051	0.1130	26	0.005	9620	4550	31300	6490	0.043	
Quarterly																									
Quarterly																									
Lowest Value				616.0	0.0000	0.0000	0.0000	341	13000	0.0540	0.0000	0.0530	0.0010	1290	0.0240	0.0051	0.1130	14	0.0050	9620	4540	31300	6270	0.0430	
Mean of Sample				627.5	0.0000	0.0000	0.0000	362	13300	0.1070	0.0000	0.0540	0.0010	1330	0.0528	0.0057	0.1415	20	0.0055	9665	4545	33650	6380	0.0605	
Highest Sample Value				639.0	0.0000	0.0000	0.0000	382	13600	0.1600	0.0000	0.0550	0.0010	1370	0.0815	0.0062	0.1700	26	0.0060	9710	4550	36000	6490	0.0780	

Groundwater

Monitoring Point: 36 <PDB1A>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.52	54830	16.7	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.49	54227	16.765	
Monthly	15/03/2024	15/03/2024	23/04/2024	5.78	53089	16.800	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.60	54451	16.79	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.8	53089	16.700	
Mean of Sample				6.3	54149	16.764	
Highest Sample Value				6.6	54830	16.800	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	0.0036	<0.0005	0.0041	978	15500	0.002	<0.005	<0.0002	1780	3.02	0.0007	0.0036	37	0.002	10000	4200	45800	9770	0.006	
Quarterly	03/04/2024	11/04/2024	20/05/2024	0.0242	<0.0005	0.0025	1460	17200	0.002	0.011	<0.0002	1660	2.41	0.001	0.0182	221	<0.002	9520	3440	37300	10500	0.008	
Quarterly																							
Quarterly																							
Lowest Value				0.0036	0.0000	0.0025	978	15500	0.002	0.0110	0.0000	1660	2.4100	0.0007	0.004	37	0.002	9520	3440	37300	9770	0.006	
Mean of Sample				0.0139	0.0000	0.0033	1219	16350	0.002	0.0110	0.0000	1720	2.7150	0.0009	0.011	129	0.002	9760	3820	41550	10135	0.007	
Highest Sample Value				0.0242	0.0000	0.0041	1460	17200	0.002	0.0110	0.0000	1780	3.0200	0.0010	0.018	221	0.002	10000	4200	45800	10500	0.008	

Monitoring Point: 38 <PDB3A>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	7.04	49808.1	81.100	
Monthly	23/02/2024	23/02/2024	21/03/2024	7.10	49498	81.105	
Monthly	19/03/2024	19/03/2024	23/04/2024	6.50	44719	81.250	pH probe calibration error
Monthly	11/04/2024	11/04/2024	20/05/2024	7.46	47726.0	81.190	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.5	44719	81.100	
Mean of Sample				7.0	47938	81.161	
Highest Sample Value				7.5	49808	81.250	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	0.0067	0.0013	0.0054	1010	13800	0.01	0.007	0.001	1720	0.09	0.0068	0.0154	44	0.006	8500	3610	43000	9600	0.395	
Quarterly	11/04/2024	19/04/2024	20/05/2024	0.0102	0.0016	0.0049	1120	17300	0.014	0.019	0.0016	1910	0.118	0.0069	0.0219	66	0.005	9330	3860	45100	10700	0.498	
Quarterly																							
Quarterly																							
Lowest Value				0.0067	0.0013	0.0049	1010	13800	0.010	0.0070	0.0010	1720	0.0864	0.0068	0.015	44	0.005	8500	3610	43000	9600	0.395	
Mean of Sample				0.0085	0.0015	0.0052	1065	15550	0.012	0.0130	0.0013	1815	0.1022	0.0069	0.019	55	0.006	8915	3735	44050	10150	0.447	
Highest Sample Value				0.0102	0.0016	0.0054	1120	17300	0.014	0.0190	0.0016	1910	0.1180	0.0069	0.022	66	0.006	9330	3860	45100	10700	0.498	

Monitoring Point: 40 <PDB5A>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.39	54140	33.380	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.40	53505	33.536	
Monthly	19/03/2024	19/03/2024	23/04/2024	5.68	51567	33.640	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.56	54422	33.600	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.7	51567	33.380	
Mean of Sample				6.3	53409	33.539	
Highest Sample Value				6.6	54422	33.640	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	<0.0005	0.0046	0.0036	763	15500	0.002	0.179	<0.0002	1940	0.0415	0.0024	0.109	39	0.003	9610	3250	46100	9890	0.035	
Quarterly	03/04/2024	11/04/2024	20/05/2024	<0.0005	0.0046	0.0052	720	17800	0.003	0.007	<0.0002	2040	0.0273	0.0006	0.0251	69	0.003	9720	3370	38000	10200	0.039	
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0046	0.0036	720	15500	0.002	0.0070	0.0000	1940	0.0273	0.0006	0.025	39	0.003	9610	3250	38000	9890	0.035	
Mean of Sample				0.0000	0.0046	0.0044	742	16650	0.003	0.0930	0.0000	1990	0.0344	0.0015	0.067	54	0.003	9665	3310	42050	10045	0.037	
Highest Sample Value				0.0000	0.0046	0.0052	763	17800	0.003	0.1790	0.0000	2040	0.0415	0.0024	0.109	69	0.003	9720	3370	46100	10200	0.039	

Monitoring Point: 52 <PDB1B>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	7.08	7157.2	4.780	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.54	27754	4.725	
Monthly	07/03/2024	07/03/2024	23/04/2024	5.50	27257	4.840	pH probe calibration error
Monthly	03/04/2024	03/04/2024	20/05/2024	6.76	20329	4.870	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.5	7157	4.725	
Mean of Sample				6.5	20624	4.804	
Highest Sample Value				7.1	27754	4.870	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	<0.0005	0.001	<0.0002	77	2320	0.012	0.112	<0.0002	152	0.037	0.0013	0.0187	8	<0.002	1420	434	5130	818	<0.005	
Quarterly	03/04/2024	11/04/2024	20/05/2024	<0.0005	0.0008	0.0004	542	11800	0.007	0.137	0.0003	1340	0.190	0.0009	0.0195	28	<0.002	6520	3040	26700	6870	0.17	
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0008	0.0004	77	2320	0.007	0.1120	0.0003	152	0.0368	0.0009	0.019	8	0.000	1420	434	5130	818	0.173	
Mean of Sample				0.0000	0.0009	0.0004	310	7060	0.010	0.1245	0.0003	746	0.1134	0.0011	0.019	18	0.000	3970	1737	15915	3844	0.173	
Highest Sample Value				0.0000	0.0010	0.0004	542	11800	0.012	0.1370	0.0003	1340	0.1900	0.0013	0.020	28	0.000	6520	3040	26700	6870	0.173	

Groundwater

Monitoring Point: S3 <PDB3B>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.09	52108	17.760	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.07	51370	17.72	
Monthly	15/03/2024	15/03/2024	23/04/2024	5.37	50490	17.800	pH probe calibration error
Monthly	11/04/2024	11/04/2024	20/05/2024	6.33	51637	17.86	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.4	50490	17.720	
Mean of Sample				6.0	51401	17.785	
Highest Sample Value				6.3	52108	17.860	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	<0.0005	<0.0005	0.0008	1100	15000	0.002	0.01	<0.0002	2130	0.0226	0.0021	0.0087	45	0.016	9100	5080	47000	11500	<0.005	
Quarterly	11/04/2024	19/04/2024	20/05/2024	<0.0005	<0.0005	0.0007	1050	17100	0.001	0.007	<0.0002	2060	0.0235	0.0009	0.0307	54	0.016	8880	5190	47600	11100	0.014	
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0000	0.0007	1050	15000	0.001	0.0070	0.0000	2060	0.0226	0.0009	0.009	45	0.016	8880	5080	47000	11100	0.014	
Mean of Sample				0.0000	0.0000	0.0008	1075	16050	0.002	0.0085	0.0000	2095	0.0231	0.0015	0.020	50	0.016	8990	5135	47300	11300	0.014	
Highest Sample Value				0.0000	0.0000	0.0008	1100	17100	0.002	0.0100	0.0000	2130	0.0235	0.0021	0.031	54	0.016	9100	5190	47600	11500	0.014	

Monitoring Point: S4 <PDB5B>
Groundwater quality monitoring, Pit dewatering bore

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	5.94	49965	13.985	
Monthly	23/02/2024	23/02/2024	21/03/2024	5.94	49395	14.35	
Monthly	15/03/2024	15/03/2024	23/04/2024	5.22	48379	14.160	pH probe calibration error
Monthly	16/04/2024	16/04/2024	20/05/2024	7.16	46959	14.615	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.2	46959	13.985	
Mean of Sample				6.1	48675	14.278	
Highest Sample Value				7.2	49965	14.615	

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
Quarterly	22/01/2024	05/02/2024	21/02/2024	<0.0005	0.001	0.0015	793	14100	0.007	0.131	<0.0002	1770	0.0199	0.078	0.0649	41	<0.002	8840	3320	42900	9270	0.006	
Quarterly	16/04/2024	01/05/2024	20/05/2024	0.0161	0.0019	0.00119	2670	16000	0.106	0.033	0.002	1340	0.0984	0.0208	0.155	43	0.0013	7340	2470	41200	12200	0.488	
Quarterly																							
Quarterly																							
Lowest Value				0.0161	0.0010	0.0012	793	14100	0.007	0.0330	0.0020	1340	0.0199	0.0208	0.065	41	0.001	7340	2470	41200	9270	0.006	
Mean of Sample				0.0161	0.0015	0.0013	1732	15050	0.057	0.0820	0.0020	1555	0.0592	0.0494	0.110	42	0.001	8090	2895	42050	10735	0.247	
Highest Sample Value				0.0161	0.0019	0.0015	2670	16000	0.106	0.1310	0.0020	1770	0.0984	0.0780	0.155	43	0.001	8840	3320	42900	12200	0.488	

Monitoring Point: S7 <IWL06A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.7	44692	3.510	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.72	44208	3.460	
Monthly	07/03/2024	07/03/2024	23/04/2024	5.82	42958	3.430	pH probe calibration error
Monthly	10/04/2024	10/04/2024	20/05/2024	6.79	44374	3.280	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.8	42958	3.280	
Mean of Sample				6.5	44058	3.420	
Highest Sample Value				6.8	44692	3.510	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	371	<0.0005	<0.0005	<0.0002	786	12400	<0.001	<0.004	0.023	<0.0002	1400	0.0607	0.0017	0.017	42	0.006	8080	3100	37000	7730	0.011	
Quarterly	10/04/2024	19/04/2024	20/05/2024	415	<0.0005	<0.0005	<0.0002	838	14600	0.002	<0.004	0.031	<0.0002	1470	0.0456	0.0012	0.018	54	0.006	8450	3230	38200	8140	0.007	
Quarterly																									
Quarterly																									
Lowest Value				371.0	0.0000	0.0000	0.0000	786	12400	0.0020	0.0000	0.0230	0.0000	1400	0.0456	0.0012	0.0170	42	0.0060	8080	3100	37000	7730	0.0070	
Mean of Sample				393.0	0.0000	0.0000	0.0000	812	13500	0.0020	0.0000	0.0270	0.0000	1435	0.0532	0.0015	0.0175	48	0.0060	8265	3165	37600	7935	0.0090	
Highest Sample Value				415.0	0.0000	0.0000	0.0000	838	14600	0.0020	0.0000	0.0310	0.0000	1470	0.0607	0.0017	0.0180	54	0.0060	8450	3230	38200	8140	0.0110	

Monitoring Point: S8 <IWL06B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	22/01/2024	22/01/2024	21/02/2024	6.62	44075	3.240	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.59	43674	3.210	
Monthly	07/03/2024	07/03/2024	23/04/2024	5.79	42536	3.150	pH probe calibration error
Monthly	10/04/2024	10/04/2024	20/05/2024	6.68	41638	3.100	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				5.8	42536	3.100	
Mean of Sample				6.4	43481	3.175	
Highest Sample Value				6.7	44075	3.240	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	548	<0.0005	<0.0005	0.0003	645	12600	0.004	<0.004	0.052	<0.0002	1480	0.0832	0.0032	0.453	39	0.006	7970	3120	36200	7700	<0.005	
Quarterly	10/04/2024	19/04/2024	20/05/2024	610	<0.0005	<0.0005	<0.0002	685	14000	0.006	<0.004	0.034	<0.0002	1600	0.0389	0.003	0.272	49	0.006	8490	3530	36900	8300	0.015	
Quarterly																									
Quarterly																									
Lowest Value				548.0	0.0000	0.0000	0.0003	645	12600	0.0040	0.0000	0.0340	0.0000	1480	0.0389	0.0030	0.2720	39	0.0060	7970	3120	36200	7700	0.0150	
Mean of Sample				579.0	0.0000	0.0000	0.0003	665	13300	0.0050	0.0000	0.0430	0.0000	1540	0.0611	0.0031	0.3625	44	0.0060	8230	3325	36550	8000	0.0150	
Highest Sample Value				610.0	0.0000	0.0000	0.0003	685	14000	0.0060	0.0000	0.0520	0.0000	1600	0.0832	0.0032	0.4530	49	0.0060	8490	3530	36900	8300	0.0150	

Groundwater

Monitoring Point: 59 <IWL05A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.59	41718	3.340	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.58	41333	3.262	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.36	41221	3.300	
Monthly	10/04/2024	10/04/2024	20/05/2024	6.76	41428	3.340	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				3	4	4	
Lowest Value				6.4	41221	3.262	
Mean of Sample				6.6	41425	3.311	
Highest Sample Value				6.8	41718	3.340	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	672	<0.0005	<0.0005	<0.0002	302	11400	0.004	<0.004	0.019	<0.0002	1310	0.0726	0.0504	0.428	49	0.011	8180	3130	33400	6150	<0.005	
Quarterly	10/04/2024	19/04/2024	20/05/2024	725	<0.0005	<0.0005	<0.0002	365	13000	0.002	<0.004	0.007	<0.0002	1520	0.0473	0.0253	0.287	57	0.011	9130	3320	34000	7170	0.011	
Quarterly																									
Quarterly																									
Lowest Value				672.0	0.0000	0.0000	0.0000	302	11400	0.0020	0.0000	0.0070	0.0000	1310	0.0473	0.0253	0.2870	49	0.0110	8180	3130	33400	6150	0.0110	
Mean of Sample				698.5	0.0000	0.0000	0.0000	334	12200	0.0030	0.0000	0.0130	0.0000	1415	0.0600	0.0379	0.3575	53	0.0110	8655	3225	33700	6660	0.0110	
Highest Sample Value				725.0	0.0000	0.0000	0.0000	365	13000	0.0040	0.0000	0.0190	0.0000	1520	0.0726	0.0504	0.4280	57	0.0110	9130	3320	34000	7170	0.0110	

Monitoring Point: 60 <IWL05B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.61	42980	2.940	
Monthly	23/02/2024	23/02/2024	21/03/2024	6.59	42655	2.880	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.42	42485	2.96	
Monthly	10/04/2024	10/04/2024	20/05/2024	6.79	42809	2.940	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.4	42485	2.880	
Mean of Sample				6.6	42732	2.930	
Highest Sample Value				6.8	42980	2.960	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	430	<0.0005	<0.0005	<0.0002	135	11800	0.049	<0.004	1.02	<0.0002	1380	0.0828	0.0112	0.443	39	0.002	8230	2860	35200	6020	<0.005	
Quarterly	10/04/2024	19/04/2024	20/05/2024	457	<0.0005	<0.0005	<0.0002	186	14100	0.102	<0.004	2.44	<0.0002	1640	0.143	0.0367	1.250	48	0.002	9470	2860	34500	7220	<0.005	
Quarterly																									
Quarterly																									
Lowest Value				430.0	0.0000	0.0000	0.0000	135	11800	0.0490	0.0000	1.0200	0.0000	1380	0.0828	0.0112	0.4430	39	0.0020	8230	2860	34500	6020	0.0000	
Mean of Sample				443.5	0.0000	0.0000	0.0000	161	12950	0.0755	0.0000	1.7300	0.0000	1510	0.1129	0.0240	0.8465	44	0.0020	8850	2860	34850	6620	0.0000	
Highest Sample Value				457.0	0.0000	0.0000	0.0000	186	14100	0.1020	0.0000	2.4400	0.0000	1640	0.1430	0.0367	1.2500	48	0.0020	9470	2860	35200	7220	0.0000	

Monitoring Point: 61 <IWL04A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.81	35398	29.430	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.82	34926	29.440	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.63	34793	29.500	
Monthly	11/04/2024	11/04/2024	20/05/2024	6.97	34922	29.470	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.6	34793	29.430	
Mean of Sample				6.8	35010	29.460	
Highest Sample Value				7.0	35398	29.500	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	737	0.0008	<0.0005	<0.0002	340	9370	0.003	<0.004	0.016	<0.0002	930	0.0228	0.0033	0.0743	46	0.004	7010	2930	27500	4680	0.015	
Quarterly	11/04/2024	19/04/2024	20/05/2024	771	0.0006	<0.0005	<0.0002	353	10600	0.004	<0.004	0.023	<0.0002	1040	0.0325	0.0026	0.0599	50	0.004	7350	2920	26800	5160	0.015	
Quarterly																									
Quarterly																									
Lowest Value				737.0	0.0006	0.0000	0.0000	340	9370	0.0030	0.0000	0.0160	0.0000	930	0.0228	0.0026	0.0599	46	0.0040	7010	2920	26800	4680	0.0150	
Mean of Sample				754.0	0.0007	0.0000	0.0000	347	9985	0.0035	0.0000	0.0195	0.0000	985	0.0277	0.0030	0.0671	48	0.0040	7180	2925	27150	4920	0.0150	
Highest Sample Value				771.0	0.0008	0.0000	0.0000	353	10600	0.0040	0.0000	0.0230	0.0000	1040	0.0325	0.0033	0.0743	50	0.0040	7350	2930	27500	5160	0.0150	

Groundwater

Monitoring Point: 62 <IWL04B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	-	-	-	Dry
Monthly	21/02/2024	21/02/2024	21/03/2024	-	-	-	Dry
Monthly	06/03/2024	06/03/2024	23/04/2024	-	-	-	Dry
Monthly	11/04/2024	11/04/2024	20/05/2024	-	-	-	Dry
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				0	0	0	
Lowest Value				0.0	0	0.000	
Mean of Sample				0.0	0	0.000	
Highest Sample Value				0.0	0	0.000	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly	11/04/2024	19/04/2024	20/05/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly																									
Quarterly																									
Lowest Value				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	
Mean of Sample				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	
Highest Sample Value				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	

Monitoring Point: 63 <IWL03A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.84	38736	23.385	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.85	38364	23.42	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.67	38303	23.42	
Monthly	11/04/2024	11/04/2024	20/05/2024	7.04	38340	23.370	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.7	38303	23.370	
Mean of Sample				6.9	38436	23.399	
Highest Sample Value				7.0	38736	23.420	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	694	<0.0005	<0.0005	<0.0002	371	10700	0.001	<0.004	0.018	<0.0002	803	0.0054	0.0007	0.0214	21	0.006	7770	3410	29600	4230	<0.005	
Quarterly	11/04/2024	19/04/2024	20/05/2024	677	<0.0005	<0.0005	<0.0002	360	11800	0.001	<0.004	<0.005	<0.0002	891	0.0052	0.0005	0.013	28	0.005	8280	3360	31700	4570	<0.005	
Quarterly																									
Quarterly																									
Lowest Value				677.0	0.0000	0.0000	0.0000	360	10700	0.0010	0.0000	0.0180	0.0000	803	0.0052	0.0005	0.0133	21	0.0050	7770	3360	29600	4230	0.0000	
Mean of Sample				685.5	0.0000	0.0000	0.0000	366	11250	0.0010	0.0000	0.0180	0.0000	847	0.0053	0.0006	0.0174	25	0.0055	8025	3385	30650	4400	0.0000	
Highest Sample Value				694.0	0.0000	0.0000	0.0000	371	11800	0.0010	0.0000	0.0180	0.0000	891	0.0054	0.0007	0.0214	28	0.0060	8280	3410	31700	4570	0.0000	

Monitoring Point: 64 <IWL03B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	-	-	-	Dry
Monthly	21/02/2024	21/02/2024	21/03/2024	-	-	-	Dry
Monthly	06/03/2024	06/03/2024	23/04/2024	-	-	-	Dry
Monthly	11/04/2024	11/04/2024	20/05/2024	-	-	-	Dry
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				0	0	0	
Lowest Value				0.0	0	0.000	
Mean of Sample				0.0	0	0.000	
Highest Sample Value				0.0	0	0.000	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly	11/04/2024	19/04/2024	20/05/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly																									
Quarterly																									
Lowest Value				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	
Mean of Sample				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	
Highest Sample Value				0.0	0.0000	0.0000	0.0000	0	0	0.0000	0.0000	0.0000	0.0000	0	0.0000	0.0000	0.0000	0	0.0000	0	0	0	0	0.0000	

Monitoring Point: 65 <IWL02A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.85	46452	11.570	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.84	45769	11.690	
Monthly	07/03/2024	07/03/2024	23/04/2024	5.95	44962	11.640	pH probe calibration error
Monthly	10/04/2024	10/04/2024	20/05/2024	6.97	46003	11.770	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.0	44962	11.570	
Mean of Sample				6.7	45797	11.668	
Highest Sample Value				7.0	46452	11.770	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	707	<0.0005	<0.0005	<0.0002	375	12400	0.002	<0.004	0.018	<0.0002	1000	0.0196	0.0023	0.0985	30	0.033	9940	4640	36500	5050	<0.005	
Quarterly	10/04/2024	19/04/2024	20/05/2024	701	<0.0005	<0.0005	<0.0002	357	14000	0.003	<0.004	0.038	<0.0002	1060	0.0585	0.002	0.0432	36	0.03	10200	4730	34400	5260	0.006	
Quarterly																									
Quarterly																									
Lowest Value				701.0	0.0000	0.0000	0.0000	357	12400	0.0020	0.0000	0.0180	0.0000	1000	0.0196	0.0020	0.0432	30	0.0300	9940	4640	34400	5050	0.0060	
Mean of Sample				704.0	0.0000	0.0000	0.0000	366	13200	0.0025	0.0000	0.0280	0.0000	1030	0.0391	0.0022	0.0709	33	0.0315	10070	4685	35450	5155	0.0060	
Highest Sample Value				707.0	0.0000	0.0000	0.0000	375	14000	0.0030	0.0000	0.0380	0.0000	1060	0.0585	0.0023	0.0985	36	0.0330	10200	4730	36500	5260	0.0060	

Groundwater

Monitoring Point: 66 <IWL02B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	-	-	10.65	Too shallow to sample
Monthly	21/02/2024	21/02/2024	21/03/2024	7.06	49913	10.535	
Monthly	07/03/2024	07/03/2024	23/04/2024	6.77	46989	10.49	pH probe calibration error
Monthly	10/04/2024	10/04/2024	20/05/2024	7.35	45960	10.4	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				3	3	4	
Lowest Value				6.8	45960	10.400	
Mean of Sample				7.0	47621	10.519	
Highest Sample Value				7.3	49913	10.650	

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
Quarterly	23/01/2024	23/01/2024	21/02/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly	10/04/2024	19/04/2024	20/05/2024	455	<0.0005	0.0012	<0.0002	444	13700	0.004	<0.004	0.036	0.0003	1100	0.009	0.0009	0.0011	24	0.003	10300	4150	35100	5640	0.042	
Quarterly																									
Quarterly																									
Lowest Value				455.0	0.0000	0.0012	0.0000	444	13700	0.0040	0.0000	0.0360	0.0003	1100	0.0090	0.0009	0.0011	24	0.0030	10300	4150	35100	5640	0.0420	
Mean of Sample				455.0	0.0000	0.0012	0.0000	444	13700	0.0040	0.0000	0.0360	0.0003	1100	0.0090	0.0009	0.0011	24	0.0030	10300	4150	35100	5640	0.0420	
Highest Sample Value				455.0	0.0000	0.0012	0.0000	444	13700	0.0040	0.0000	0.0360	0.0003	1100	0.0090	0.0009	0.0011	24	0.0030	10300	4150	35100	5640	0.0420	

Monitoring Point: 67 <IWL01A>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.76	46698	3.810	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.76	46354	3.810	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.62	43958	3.840	
Monthly	03/04/2024	03/04/2024	20/05/2024	6.94	45149	3.850	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.6	43958	3.810	
Mean of Sample				6.8	45540	3.828	
Highest Sample Value				6.9	46698	3.850	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	537	<0.0005	<0.0005	0.0004	433	12700	0.002	<0.004	0.007	<0.0002	1170	0.0315	0.0013	0.0652	23	0.03	9500	4800	36000	5900	<0.005	
Quarterly	03/04/2024	11/04/2024	20/05/2024	588	<0.0005	<0.0005	0.0005	472	13100	0.002	<0.004	0.022	<0.0002	1330	0.0923	0.0024	0.0566	26	0.03	10600	4770	31500	6660	0.01	
Quarterly																									
Quarterly																									
Lowest Value				537.0	0.0000	0.0000	0.0004	433	12700	0.0020	0.0000	0.0070	0.0000	1170	0.0315	0.0013	0.0566	23	0.0300	9500	4770	31500	5900	0.0100	
Mean of Sample				562.5	0.0000	0.0000	0.0005	453	12900	0.0020	0.0000	0.0145	0.0000	1250	0.0619	0.0019	0.0609	25	0.0300	10050	4785	33750	6280	0.0100	
Highest Sample Value				588.0	0.0000	0.0000	0.0005	472	13100	0.0020	0.0000	0.0220	0.0000	1330	0.0923	0.0024	0.0652	26	0.0300	10600	4800	36000	6660	0.0100	

Monitoring Point: 68 <IWL01B>
Groundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.48	36511	4.150	
Monthly	21/02/2024	21/02/2024	21/03/2024	6.52	36623	4.165	
Monthly	06/03/2024	06/03/2024	23/04/2024	6.22	35466	4.150	
Monthly	03/04/2024	03/04/2024	20/05/2024	6.63	35265	4.15	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Collected				4	4	4	
Lowest Value				6.2	35265	4.150	
Mean of Sample				6.5	35966	4.154	
Highest Sample Value				6.6	36623	4.165	

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
Quarterly	23/01/2024	05/02/2024	21/02/2024	330	<0.0005	<0.0005	<0.0002	190	10400	0.002	<0.004	0.008	<0.0002	760	0.0328	0.0002	0.0033	2	<0.002	7520	2830	28000	3600	<0.005	
Quarterly	03/04/2024	11/04/2024	20/05/2024	386	<0.0005	<0.0005	<0.0002	242	10700	0.002	<0.004	0.014	<0.0002	827	0.0302	0.0023	0.0298	5	0.01	7860	3040	23900	4010	0.005	
Quarterly																									
Quarterly																									
Lowest Value				330.0	0.0000	0.0000	0.0000	190	10400	0.0020	0.0000	0.0080	0.0000	760	0.0302	0.0002	0.0033	2	0.0100	7520	2830	23900	3600	0.0050	
Mean of Sample				358.0	0.0000	0.0000	0.0000	216	10550	0.0020	0.0000	0.0110	0.0000	794	0.0315	0.0013	0.0166	4	0.0100	7690	2935	25950	3805	0.0050	
Highest Sample Value				386.0	0.0000	0.0000	0.0000	242	10700	0.0020	0.0000	0.0140	0.0000	827	0.0328	0.0023	0.0298	5	0.0100	7860	3040	28000	4010	0.0050	

Ambient Noise

Q1 Noise Monitoring

Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01	13/02/2024	04/03/2024	21/03/2024	25	26	-	
Laurel Park	N11	13/02/2024	04/03/2024	21/03/2024	<20	<20	35	
Lakeview III (New Westella)	N09	13/02/2024	04/03/2024	21/03/2024	<20	<20	38	
Bramboyne	N10	13/02/2024	04/03/2024	21/03/2024	<20	<20	35	
The Glen	N12	13/02/2024	04/03/2024	21/03/2024	<20	<20	37	
Caloola 2	N15	13/02/2024	04/03/2024	21/03/2024	<20	<20	35	
Lakeview I & II (Lakeview)	N17	13/02/2024	04/03/2024	21/03/2024	<20	<20	36	
Foxman Downs 2	N16	13/02/2024	04/03/2024	21/03/2024	<20	<20	36	

Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01	14/02/2024	04/03/2024	21/03/2024	39	36	-	
Laurel Park	N11	14/02/2024	04/03/2024	21/03/2024	<20	<20	35	
Lakeview III (New Westella)	N09	15/02/2024	04/03/2024	21/03/2024	<20	<20	38	
Bramboyne	N10	14/02/2024	04/03/2024	21/03/2024	<20	<20	35	
The Glen	N12	14/02/2024	04/03/2024	21/03/2024	<20	<20	37	
Caloola 2	N15	14/02/2024	04/03/2024	21/03/2024	<20	<20	35	
Lakeview I & II (Lakeview)	N17	15/02/2024	04/03/2024	21/03/2024	<20	<20	36	
Foxman Downs 2	N16	14/02/2024	04/03/2024	21/03/2024	<20	<20	36	

<20 - Mine noise emission inaudible or barely audible

Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Night dB(A) LAFmax	Comments
New Lake Foreshore	N01	14/02/2024	04/03/2024	21/03/2024	40	32	-		
Laurel Park	N11	14/02/2024	04/03/2024	21/03/2024	22	22	35		
Lakeview III (New Westella)	N09	15/02/2024	04/03/2024	21/03/2024	25	24	38		
Bramboyne	N10	15/02/2024	04/03/2024	21/03/2024	20	22	35		
The Glen	N12	14/02/2024	04/03/2024	21/03/2024	<20	<20	37		
Caloola 2	N15	14/02/2024	04/03/2024	21/03/2024	<20	<20	35		
Lakeview I & II (Lakeview)	N17	15/02/2024	04/03/2024	21/03/2024	29	28	36		
Foxman Downs 2	N16	14/02/2024	04/03/2024	21/03/2024	<20	<20	36		

<20 - Mine noise emission inaudible or barely audible

Q2 Noise Monitoring

Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Night dB(A) LAFmax	Comments
New Lake Foreshore	N01								
Laurel Park	N11								
Lakeview (New Westella)	N09								
Bramboyne	N10								
The Glen	N12								
Caloola 2	N15								
Lakeview I & II (Lakeview)	N17								
Foxman Downs 2	N16								

<20 - Mine noise emission inaudible or barely audible

Ambient Noise

Q3 Noise Monitoring

Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Night dB(A) LAFmax	Comments
New Lake Foreshore	N01								
Laurel Park	N11								
Lakeview (New Westella)	N09								
Bramboyne	N10								
The Glen	N12								
Caloola 2	N15								
Lakeview I & II (Lakeview)	N17								
Foxman Downs 2	N16								

<20 - Mine noise emission inaudible or barely audible

Q4 Noise Monitoring

Daytime Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Evening Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Comments
New Lake Foreshore	N01							
Laurel Park	N11							
Lakeview (New Westella)	N09							
Bramboyne	N10							
The Glen	N12							
Caloola 2	N15							
Lakeview I & II (Lakeview)	N17							
Foxman Downs 2	N16							

<20 - Mine noise emission inaudible or barely audible

Night time Mine Operating Intrusive Noise Levels (dBA re 20 µPa)

	Location	Date Sampled	Date Obtained	Date Published	Mine Contributed $LA_{eq(15minute)}$ - dBA Survey 1	Survey 2	Noise Criteria $LA_{eq(15minute)}$ - dBA	Night dB(A) LAFmax	Comments
New Lake Foreshore	N01								
Laurel Park	N11								
Lakeview (New Westella)	N09								
Bramboyne	N10								
The Glen	N12								
Caloola 2	N15								
Lakeview I & II (Lakeview)	N17								
Foxman Downs 2	N16								

<20 - Mine noise emission inaudible or barely audible

Blasting

Table 1: Compliance percentages for the previous 12 months

Type of Exceedance	Total Number of Blasts (12 months)	No. of Exceedences (12 Months)			
		Daily Operation	Evening Operation	Night, Sunday and Public Holiday	Total % Exceedance
Open Pit					
Vibration	160	0	0	0	0.0%
Overpressure	160	0	0	2	1.3%
Underground					
Vibration	694	0	0	0	0.0%
Overpressure	694	0	0	1	0.1%
Combined					
Vibration	854	0	0	0	0.0%
Overpressure	854	0	0	3	0.4%

Table 2: Exceedances in the past 12 months

Exceedences in the past 12 months			
Type	Location	Date	Source
Overpressure	BM01 Gumbelah Residence, BM08.1 Cowal North	16th July 2023	Open Pit
Overpressure	BM03 Coniston Residence	31st October 2023	Underground
Overpressure	BM01 Gumbelah Residence, BM02 Hillgrove Residenc	12th November 2023	Open Pit

Date obtained: 09/05/2024

Cyanide

Monitoring Point: 48
Water quality monitoring, automated sampler located at the processing plant

			Total Cyanide (mg/L)				
Frequency	**Month**	**No Sampled during Month**	**Minimum**	**Mean**	**Median**	**Maximum**	**Comments**
Weekly	January	5	4.38	7.60	6.78	13.69	
Weekly	February	4	4.27	7.17	7.35	9.74	
Weekly	March	4	2.19	4.12	3.32	7.65	
Weekly	April	5	2.45	4.08	4.39	5.34	
Weekly	May	3					
Weekly	June	4					
Weekly	July	5					
Weekly	August	3					
Weekly	September	4					
Weekly	October	5					
Weekly	November	4					
Weekly	December	4					

			WAD Cyanide (mg/L)		Concentration Limits		
Frequency	**Month**	**No Sampled during Month**	**Minimum**	**Maximum**	**90th Percentile**	**100th Percentile**	**Comments**
Twice daily	January	62	0	12.17	20.00	30.00	
Twice daily	February	58	0.016	12.50	20.00	30.00	
Twice daily	March	53	0	10.09	20.00	30.00	
Twice daily	April	58	0.036	14.00	20.00	30.00	
Twice daily	May						
Twice daily	June						
Twice daily	July						
Twice daily	August						
Twice daily	September						
Twice daily	October						
Twice daily	November						
Twice daily	December						

EPL Correction Log

Monitoring Point	Monitoring Point Type	Date Sampled	Date Obtained	Date Originally Published	Parameter	Original	Correction	Comments

EPL Exceedances

Monitoring Point	Monitoring Point Type	Date Sampled	Date Obtained	Date Reported	Parameter	Value	EPL Limit	Comments