



# **Environmental Monitoring Data**

January 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/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	7.89	
Monthly					
Number of Samples Collect	ed			1	
Lowest Value				7.9	
Mean of Sample				7.9	
Highest Sample Value				7.9	
Median				7.9	

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/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	6.19	
Monthly					
Number of Samples Collecte	ed			1	
Lowest Value				6.2	
Mean of Sample					
Highest Sample Value			6.2		
Median				6.2	

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/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	2.27	
Monthly					
Number of Samples Collect	ed			1	
Lowest Value				2.3	
Mean of Sample					
Highest Sample Value					
Median				2.3	

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/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	1.64	
Monthly					
Number of Samples Collect	ed			1	
Lowest Value				1.6	
Mean of Sample				1.6	
Highest Sample Value				1.6	
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/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	2.95	
Monthly					
Number of Samples Collecte	ed			1	
Lowest Value				3.0	
Mean of Sample				3.0	
Highest Sample Value				3.0	
Median				3.0	



# Dust

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

	ı				
Frequency	Date Collected	Date Obtained	Date Published	Particulates (g/m²/mth)	Comments
Monthly	14/01/2024	06/02/2024	21/02/2024	1.04	
Monthly					
Number of Samples Collect	ed			1	
Lowest Value				1.0	
Mean of Sample					
Highest Sample Value					
Median				1.0	

Monitoring Point: 49 <HV1>
Dust monitoring, High volume sampler located on private property to the north of ML1535 boundary

	ı	1	1	Total Suspended Particles	
Frequency	Date Sampled	Date Obtained	Date Published	(μg/m³)	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	
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Every 7 days		+	-		
Every 7 days		1			
		-			
Every 7 days Every 7 days		1			
Every 7 days		1			
Number of Samples Collecte	od				
	eo			5	<del>-</del>
Lowest Value Mean of Sample				24.8 41.0	+
				41.0 75.0	+
Highest Sample Value				/5.0	<u> </u>





# **Surface Water**

Monitoring Point: 12 <DI>
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							
Monthly							
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Monthly							
Monthly							
Number of Samples	Collected			2.00	2.00	2.00	
Lowest Value				8.17	9145.00	14.00	
Mean of Sample				8.28	11639.00	16.00	
Highest Sample Vali	ue			8.38	14133.00	18.00	
Median		<u> </u>		8.28	11639.00	16.00	

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							
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Monthly							
Monthly							
Number of Sampl	es Collected			2.00	2.00	2.00	
Lowest Value				7.85	3195.00	14.00	
Mean of Sample				8.02	6615.50	34.00	
Highest Sample V	alue			8.19	10036.00	54.00	
Median				8.02	6615.50	34.00	



# Evolution

## Lake Water

Monitoring Point: 14 <P2>
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							1		
Weekly	18/01/2024	18/01/2024	21/02/2024	8.51	588.0	89				Rainfall Monitoring D	vent		1		
Weekly	22/01/2024	22/01/2024	21/02/2024	1.66	609.0	76									
Weekly	30/01/2024	30/01/2024	21/02/2024	8.52	615.0	59	_						1		
Weekly	14/14/1001														
Weekly															
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Number of Samples Collected		*	*	6	6	6									
owest Value				7.5	586.0	30.0									
fean of Sample				8.3	608.7	88.2									
Sighest Sample Value				8.7	632.0	240.0									
dedan				8.5	612.0	67.5									
					011.0								•		
1						I	г								
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	158	<0.001	0.002	<0.0001	0.001	<0.001	0.002	0.001	<0.01	76	<0.005	
Quarterly															
Quarterly						1	1		l .	1		1		1	
Quarterly															
Quarterly Quarterly owest Value				158.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.0	0.0	
Quarterly Quarterly				158.0 158.0 158.0	0.0	0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	76.0 76.0 76.0	0.0	

Monitoring Point: 15 <P2>
Ambient water quality monitoring, Surface water point within ML1535 on Lake Cowal

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Conductivity (µS/cm)	Comments
Monthly	22/01/2024	07/02/2024	21/02/2024	8.64	603	
Monthly						
Monthly						
Monthly						
Monthly						
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Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected						
Lowest Value				8.6	603.0	
Mean of Sample				8.6	603.0	
Highest Sample Value				8.6	603.0	
Median				8.6	603.0	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Artimony (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	155	40.001	0.002	<0.0001	100.0	<0.001	0.002	0.002	<0.01	83	40.005	
Quarterly															
Quarterly															
Quarterly															
Lowest Value			155.0	0.0	0.0	0.0	9	0.0	9	0.0	0.0	83.0	0.0		
Mean of Sample				155.0	0.0	0.0	0.0	9	0.0	9	0.0	0.0	83.0	0.0	
Highest Sample Value	sext Sample Value			155.0	00	0.0	9	9	0.0	000	0.0	0.0	82.0	0.0	

Monitoring Point: 16 <P2>
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	8.49	623.0	40	
Weekly	09/01/2024	09/01/2024	21/02/2024	5.49	627.0	28	
Weekly	16/01/2024	16/01/2024	21/02/2024	7.25	592.0	254	
Weekly	18/01/2024	18/01/2024	21/02/2024	8.47	586.0	142	Rainfall Monitoring Event
Weekly	22/01/2024	22/01/2024	21/02/2024	8.65	603.0	87	
Weekly	30/01/2024	30/01/2024	21/02/2024	8.72	653.0	66	
Weekly							
Weekly							
Weekly							
Weekly							
Weekly							
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Number of Samples Collected				6	6	6	
Lowest Value				7.3	586.0	28.0	
Mean of Sample				1.1	614.0	102.8	
Highest Sample Value				8.7	653.0	254.0	
Median				8.5	613.0	76.5	1

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Artimony (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	165	<0.001	0.002	40.0000	0.001	<0.001	0.002	0.001	<0.01	87	<0.005	
Quarterly															
Quarterly															
Quarterly															
Lowest Value				165.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	87.0	0.0	
Mean of Sample				165.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	87.0	0.0	
Highest Sample Value				165.0	0.0	0.0	00	0	0.0	0.0	0.0	0.0	87.0	0.0	





## Lake Water

# Monitoring Point: 17 <815 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 (µ5/cm)	Comments
Monthly	22/01/2024	07/02/2024	21/02/2024	8.55	605.0	
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
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Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				- 1	1	
Lowest Value				8.6	605.0	
Mean of Sample				8.6	605.0	
Highest Sample Value				8.6	605.0	
Median				8.6	605.0	

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	40.0001	<0.001	<0.001	0.002	0.002	40.01	53	<0.005	
Quarterly															
Quarterly															
Quarterly															
Lowest Value				156.0	90	0.0	0.0	00	0.0	0.0	0.0	0.0	51.0	0.0	
Mean of Sample				156.0	90	0.0	0.0	00	0.0	0.0	0.0	0.0	51.0	0.0	
Highest Sample Value				156.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.0	0.0	

# Monitoring Polet: 18 -486Ambient 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 (µ5/cm)	Comments
Monthly	23/01/2024	07/02/2024	21/02/2024	6.77	204	
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samples Collected				- 1	- 1	
Lowest Value				6.8	204.3	
Mean of Sample				6.8	204.3	
Highest Sample Value				6.8	204.3	
				6.8	204.3	

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	100.0	0.003	40.01	37	<0.005	
Quarterly															
Quarterly															
Quarterly															
Lowest Value				59.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	37.0	0.0	
Mean of Sample				59.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	37.0	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						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samp	oles Collected			0	0	
Lowest Value				0.0	0	
Mean of Sample				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																							
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 V	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	1

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						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samp	iles Collected			1	1	
Lowest Value				7.9	22140	
Mean of Sample				7.9	22140	
Highest Sample \	Value			7.9	22140	
Median				7.9	22140	

Frequency	Date Sampled	Date Obtained		Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium Chloride (mg/L) (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																							
Quarterly																							
Quarterly																							
Lowest Value				216.0000	0.0000	0.0000	0	558 5620.000	0.0010	0.0100	0.0000	705.0000	0.0792	0.004	0.0010	37.000	0.0000	3180	2950	41.000	4300	0.052	
Mean of Sample				216.0000	0.0000	0.0000	0	558 5620.000	0.0010	0.0100	0.0000	705.0000	0.0792	0.004	0.0010	37.000	0.0000	3180	2950	41.000	4300	0.052	
Highest Sample \	'alue			216.0000	0.0000	0.0000	0	558 5620.000	0.0010	0.0100	0.0000	705.0000	0.0792	0.004	0.0010	37.000	0.0000	3180	2950	41.000	4300	0.052	

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						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Monthly						
Number of Samp	oles Collected			0	0	
Lowest Value				0.0	0	
Mean of Sample				0.0	0	
Highest Sample 1	Value			0.0	0	
Modian				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																								
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	





## Monitoring Point: 19 < P555A-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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			1	1	1	
Lowest Value				6.8	32273	20.570	
Mean of Sample				6.8	32273	20.570	
Highest Sample Val	lue			6.8	32273	20.570	

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																									
Quarterly																									
Quarterly																									
Lowest Value				748.0	0.0000	0.0000	0.0000	274	8930	0.0000	0.0000	0.0000	0.0000	787	0.0462	0.0015	0.0037	23	0.0030	5920	2440	24500	3920	0.0000	
Mean of Sample				748.0	0.0000	0.0000	0.0000	274	8930	0.0000	0.0000	0.0000	0.0000	787.0000	0.0462	0.0015	0.0037	23	0.0030	5920	2440	24500	3920	0.0000	
Highest Sample Val-	e			7/19 ()	0.0000	0.0000	0.0000	27/1	9930	0.0000	0.0000	0.0000	0.0000	797	0.0462	0.0015	0.0027	72	0.0020	5920	2440	2//500	2020	0.0000	

## Manitarina Dainte 26 «DDO2»

Monitoring Point: 26 < PPU3>

Groundwater quality monitoring Diegometer located near the processing plant area.

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comr	ments	
Monthly	22/01/2024	22/01/2024	21/02/2024	6.65	50023	17.425			
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Monthly									
Number of Sample:	s Collected			1	1	1			
Lowest Value				6.7	50023	17.425			
Mean of Sample				6.7	50023	17.425			
Highest Sample Val	ue			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 Solid: (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																									
Quarterly																									
Quarterly																									
Lowest Value				407.0	0.0000	0.0000	0.0000	828	14300	0.0030	0.0000	0.0060	0.0008	1720	0.0030	0.0000	0.0008	58	0.0100	9260	3380	41400	9150	0.0200	
Mean of Sample				407.0	0.0000	0.0000	0.0000	828	14300	0.0030	0.0000	0.0060	0.0008	1720	0.0030	0.0000	0.0008	58	0.0100	9260	3380	41400	9150	0.0200	
Highest Sample Valu	ue			407.0	0.0000	0.0000	0.0000	929	1/200	0.0020	0.0000	0.0060	0.0008	1720	0.0020	0.0000	0.0008	5.0	0.0100	9260	2290	41400	9150	0.0200	

## Monitoring Point: 27 < PP04>

roundwater quality monitoring, Piezometer located near the processing plant area

Comments

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	(ma/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	0.003	<0.004	<0.005	<0.0002	1610	0.0031	0.0001	0.0024	52	0.009	9230	3480	40500	8600	0.018	
Quarterly																									
Quarterly																									
Quarterly																									
Lowest Value				477.0	0.0000	0.0000	0.0000	789	13800	0.0030	0.0000	0.0000	0.0000	1610	0.0031	0.0001	0.0024	52	0.0090	9230	3480	40500	8600	0.0180	
Mean of Sample				477.0	0.0000	0.0000	0.0000	789	13800	0.0030	0.0000	0.0000	0.0000	1610	0.0031	0.0001	0.0024	52	0.0090	9230	3480	40500	8600	0.0180	
Highest Sample Val	e			477.0	0.0000	0.0000	0.0000	789	13800	0.0030	0.0000	0.0000	0.0000	1610	0.0031	0.0001	0.0024	52	0.0090	9230	3480	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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			1	1	1	
Lowest Value				6.6	46945	11.010	
Mean of Sample				6.6	46945	11.010	
Highest Sample Val	lue			6.6	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																									
Quarterly																									
Quarterly																									
Lowest Value				450.0	0.0000	0.0000	0.0010	654	13100	0.0250	0.0000	1.8200	0.0000	1550	0.1250	0.0065	0.4760	38	0.0100	8750	3150	38900	8020	0.0000	
Mean of Sample				450.0	0.0000	0.0000	0.0010	654	13100	0.0250	0.0000	1.8200	0.0000	1550	0.1250	0.0065	0.4760	38	0.0100	8750	3150	38900	8020	0.0000	
Highest Sample Valu	e			450.0	0.0000	0.0000	0.0010	654	13100	0.0250	0.0000	1.8200	0.0000	1550	0.1250	0.0065	0.4760	38	0.0100	8750	3150	38900	8020	0.0000	





## 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	43786	10.970	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	s Collected			1	1	1	
Lowest Value				6.7	43786	10.970	
Mean of Sample				6.7	43786	10.970	
Highest Sample Vali	ue			6.7	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																								,	1
Quarterly																								,	1
Quarterly																								,	1
Lowest Value				233.0	0.0000	0.0000	0.0000	524	12500	0.0030	0.0000	0.0060	0.0006	1430	0.0019	0.0004	0.0020	20	0.0090	8010	2800	35500	7200	0.0200	
Mean of Sample				233.0	0.0000	0.0000	0.0000	524	12500	0.0030	0.0000	0.0060	0.0006	1430	0.0019	0.0004	0.0020	20	0.0090	8010	2800	35500	7200	0.0200	
Highest Sample Valu	je			233.0	0.0000	0.0000	0.0000	524	12500	0.0030	0.0000	0.0060	0.0006	1430	0.0019	0.0004	0.0020	20	0.0090	8010	2800	35500	7200	0.0200	

## 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	s Collected			1	1	1	
Lowest Value				6.6	49358	6.250	
Mean of Sample				6.6	49358	6.250	
Highest Sample Vali	ue			6.6	49358	6.250	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium Cl (mg/L) (	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 Solid: (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																									
Quarterly																									
Quarterly																									
Lowest Value				508.0	0.0000	0.0000	0.0000	528	17600	0.010	0.000	0.223	0.0000	1550	0.4050	0.0040	0.0172	23	0.0000	10600	4570	39400	7700	0.0070	
Mean of Sample				508.0	0.0000	0.0000	0.0000	528	17600	0.010	0.000	0.223	0.0000	1550	0.4050	0.0040	0.0172	23	0.0000	10600	4570	39400	7700	0.0070	
Highest Sample Value				508.0	0.0000	0.0000	0.0000	528	17600	0.010	0.000	0.223	0.0000	1550	0.4050	0.0040	0.0172	23	0.0000	10600	4570	39400	7700	0.0070	

## Monitoring Point: 33 < P418B>

roundwater 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	s Collected			1	1	1	
Lowest Value				6.5	47073	6.300	
Mean of Sample				6.5	47073	6.300	
Highest Sample Vali	ue			6.5	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																									
Quarterly																									
Quarterly																									
Lowest Value				616.0	0.0000	0.0000	0.0000	382	13000	0.1600	0.0000	0.0530	0.0010	1290	0.0240	0.0062	0.1700	14	0.0060	9710	4540	36000	6270	0.0780	
Mean of Sample				616.0	0.0000	0.0000	0.0000	382	13000	0.1600	0.0000	0.0530	0.0010	1290	0.0240	0.0062	0.1700	14	0.0060	9710	4540	36000	6270	0.0780	
Highest Sample Val	ue			616.0	0.0000	0.0000	0.0000	382	13000	0.1600	0.0000	0.0530	0.0010	1290	0.0240	0.0062	0.1700	14	0.0060	9710	4540	36000	6270	0.0780	





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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			1	1	1	
Lowest Value				6.5	54830	16.700	
Mean of Sample				6.5	54830	16.700	
Highest Sample Val	lue			6.5	54830	16.700	

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																							
Quarterly																							
Quarterly																							
Lowest Value				0.0036	0.0000	0.0041	978	15500	0.002	0.0000	0.0000	1780	3.0200	0.0007	0.004	37	0.002	10000	4200	45800	9770	0.006	
Mean of Sample				0.0036	0.0000	0.0041	978	15500	0.002	0.0000	0.0000	1780	3.0200	0.0007	0.004	37	0.002	10000	4200	45800	9770	0.006	
Minhaet Sample Val	lue			0.0036	0.0000	0.0041	070	15500	0.000	0.0000	0.0000	1790	2.0200	0.0007	0.004	27	0.000	10000	4200	45900	0770	0.006	

# 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	Collected			1	1	1	
Lowest Value				7.0	49808	81.100	
Mean of Sample				7.0	40909	91 100	

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																							
Quarterly																							
Quarterly																							
Lowest Value				0.0067	0.0013	0.0054	1010	13800	0.010	0.0070	0.0010	1720	0.0864	0.0068	0.015	44	0.006	8500	3610	43000	9600	0.395	
Mean of Sample				0.0067	0.0013	0.0054	1010	13800	0.010	0.0070	0.0010	1720	0.0864	0.0068	0.015	44	0.006	8500	3610	43000	9600	0.395	
Highest Sample Value	ie.			0.0067	0.0013	0.0054	1010	12900	0.010	0.0070	0.0010	1720	0.0964	0.0068	0.015	AA	0.006	esnn	2610	42000	9600	205.0	

# Monitoring Point: 40 < PDBSA > 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			1	1	1	
Lowest Value				6.4	54140	33.380	
Mean of Sample				6.4	54140	33.380	
Highest Sample Val	ue			6.4	54140	33.380	

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																							
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0046	0.0036	763	15500	0.002	0.1790	0.0000	1940	0.0415	0.0024	0.109	39	0.003	9610	3250	46100	9890	0.035	
Mean of Sample				0.0000	0.0046	0.0036	763	15500	0.002	0.1790	0.0000	1940	0.0415	0.0024	0.109	39	0.003	9610	3250	46100	9890	0.035	
Highest Sample Vali	ue			0.0000	0.0046	0.0036	763	15500	0.002	0.1790	0.0000	1940	0.0415	0.0024	0.109	39	0.003	9610	3250	46100	9890	0.035	

# 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			1	1	1	
Lowest Value				7.1	7157	4.780	
Mean of Sample				7.1	7157	4.780	
Highest Sample Val	ue			7.1	7157	4.780	

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																							
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0010	0.0000	77	2320	0.012	0.1120	0.0000	152	0.0368	0.0013	0.019	8	0.000	1420	434	5130	818	0.000	
Mean of Sample				0.0000	0.0010	0.0000	77	2320	0.012	0.1120	0.0000	152	0.0368	0.0013	0.019	8	0.000	1420	434	5130	818	0.000	
Highest Sample Valu	ie			0.0000	0.0010	0.0000	77	2320	0.012	0.1120	0.0000	152	0.0368	0.0013	0.019	8	0.000	1420	434	5130	818	0.000	





Monitoring Point: 53 < 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			1	1	1	
Lowest Value				6.1	52108	17.760	
Mean of Sample				6.1	52108	17.760	
Highest Sample Val	lue			6.1	52108	17.760	

requency	Date Sampled	Date Obtained	Date Published	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (me/1)	Calcium (me/1)	Chloride	Copper Iro	n lea	d (me/L)	Magnesium (mg/L)	Manganese (mg/L)	Molyhdenum (me/l)	Nickel (mg/L)	Potassium (me/l)	Selenium (me/l)	Sodium (mg/L)	Sulphate (mg/L)	Total Dissolved Solids	Total Hardness (mg/L)	Zinc (mg/L)	Comments
,,				(				(mg/L)	(mg/L) (mg	(L)	- (									(mg/L)		( gr -y	
Quarterly	22/01/2024	05/02/2024	21/02/2024	<0.0005	<0.0005	0.0008	1100	15000	0.002 0.0	1 <	0.0002	2130	0.0226	0.0021	0.0087	45	0.016	9100	5080	47000	11500	<0.005	
Quarterly																							
Quarterly																							
tuarterly																							
owest Value		·		0.0000	0.0000	0.0008	1100	15000	0.002 0.0	00 (	0.0000	2130	0.0226	0.0021	0.009	45	0.016	9100	5080	47000	11500	0.000	
Mean of Sample				0.0000	0.0000	0.0008	1100	15000	0.002 0.0	00 (	0.0000	2130	0.0226	0.0021	0.009	45	0.016	9100	5080	47000	11500	0.000	
ighest Sample Value				0.0000	0.0000	0.0008	1100	15000	0.002 0.0	00 (	0.0000	2130	0.0226	0.0021	0.009	45	0.016	9100	5080	47000	11500	0.000	

# Monitoring Point: 54 < 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples Co	ollected			1	1	1	
Lowest Value				5.9	49965	13.985	
Mean of Sample				5.9	49965	13.985	
Highest Sample Value				5.9	49965	13.985	

Frequency	Date Sampled	Date Obtained	Date Published	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	(mg/L)	(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																							
Quarterly																							
Quarterly																							
Lowest Value				0.0000	0.0010	0.0015	793	14100	0.007	0.1310	0.0000	1770	0.0199	0.0780	0.065	41	0.000	8840	3320	42900	9270	0.006	
Mean of Sample				0.0000	0.0010	0.0015	793	14100	0.007	0.1310	0.0000	1770	0.0199	0.0780	0.065	41	0.000	8840	3320	42900	9270	0.006	1
Highest Sample Va	lue			0.0000	0.0010	0.0015	793	14100	0.007	0.1310	0.0000	1770	0.0199	0.0780	0.065	41	0.000	8840	3320	42900	9270	0.006	1

# Monitoring Point: 57 < 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 (uS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.7	44692	3.510	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	Collected			1	1	1	
Lowest Value				6.7	44692	3.510	
Mean of Sample				6.7	44692	3.510	
Highest Sample Valu	ue			6.7	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)	(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																									
Quarterly																									
Quarterly																									
Lowest Value				371.0	0.0000	0.0000	0.0000	786	12400	0.0000	0.0000	0.0230	0.0000	1400	0.0607	0.0017	0.0170	42	0.0060	8080	3100	37000	7730	0.0110	
Mean of Sample				371.0	0.0000	0.0000	0.0000	786	12400	0.0000	0.0000	0.0230	0.0000	1400	0.0607	0.0017	0.0170	42	0.0060	8080	3100	37000	7730	0.0110	
Highest Sample Valu	lue			371.0	0.0000	0.0000	0.0000	786	12400	0.0000	0.0000	0.0230	0.0000	1400	0.0607	0.0017	0.0170	42	0.0060	8080	3100	37000	7730	0.0110	

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																									
Quarterly																									
Quarterly																									
Lowest Value				548.0	0.0000	0.0000	0.0003	645	12600	0.0040	0.0000	0.0520	0.0000	1480	0.0832	0.0032	0.4530	39	0.0060	7970	3120	36200	7700	0.0000	
Mean of Sample				548.0	0.0000	0.0000	0.0003	645	12600	0.0040	0.0000	0.0520	0.0000	1480	0.0832	0.0032	0.4530	39	0.0060	7970	3120	36200	7700	0.0000	
Highest Sample Valu	ue			548.0	0.0000	0.0000	0.0003	645	12600	0.0040	0.0000	0.0520	0.0000	1480	0.0832	0.0032	0.4530	39	0.0060	7970	3120	36200	7700	0.0000	





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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			0	1	1	
Lowest Value				0.0	41718	3.340	
Mean of Sample				0.0	41718	3.340	
Highest Sample Val	ue			0.0	41718	3.340	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium Chloride (mg/L) (mg/L)	Copper (mg/c)	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																								
Quarterly																								
Quarterly																								
Lowest Value				672.0	0.0000	0.0000	0.0000	302 11400	0.0040	0.0000	0.0190	0.0000	1310	0.0726	0.0504	0.4280	49	0.0110	8180	3130	33400	6150	0.0000	
Mean of Sample				672.0	0.0000	0.0000	0.0000	302 11400	0.0040	0.0000	0.0190	0.0000	1310	0.0726	0.0504	0.4280	49	0.0110	8180	3130	33400	6150	0.0000	
Highard Cample Value				672.0	0.0000	0.0000	0.0000	202 44400	0.0040	0.0000	0.0400	0.0000	4240	0.0336	0.0004	0.4300	40	0.0440	0400	2420	22,400	6450	0.0000	

Monitoring Point: 60 < IWLOSB>
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 (uS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.61	42980	2.940	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			1	1	1	
Lowest Value				6.6	42980	2.940	
Mean of Sample				6.6	42980	2.940	
Highest Sample Val	lue			6.6	42980	2.940	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium (mg/L)	(ma/1)	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 (me/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																									
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	35200	6020	0.0000	
Mean of Sample				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	35200	6020	0.0000	
Highest Sample Valu	ie			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	35200	6020	0.0000	

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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples O	ollected			1	1	1	
Lowest Value				6.8	35398	29.430	
Mean of Sample				6.8	35398	29.430	
Highest Sample Value				6.8	35398	29.430	

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																									
Quarterly																									
Quarterly																									
Lowest Value				737.0	0.0008	0.0000	0.0000	340	9370	0.0030	0.0000	0.0160	0.0000	930	0.0228	0.0033	0.0743	46	0.0040	7010	2930	27500	4680	0.0150	
Mean of Sample				737.0	0.0008	0.0000	0.0000	340	9370	0.0030	0.0000	0.0160	0.0000	930	0.0228	0.0033	0.0743	46	0.0040	7010	2930	27500	4680	0.0150	
Highest Sample Vali	ue			737.0	0.0008	0.0000	0.0000	340	9370	0.0030	0.0000	0.0160	0.0000	930	0.0228	0.0033	0.0743	46	0.0040	7010	2930	27500	4680	0.0150	





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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	es Collected			0	0	0	
Lowest Value				0.0	0	0.000	
Mean of Sample				0.0	0	0.000	
Highest Sample Va	lue			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 Chlorid (mg/L) (mg/L)	e 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				-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-		-	Dry
Quarterly				-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-		-	Dry
Quarterly				-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-		-	Dry
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	
Hishart Sample Value				0.0	0.0000	0.0000	0.0000	0 0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		0	0 0	0.0000	7

Monitoring Point: 63 < IWI03A>
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 (uS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.84	38736	23.385	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			1	1	1	
Lowest Value				6.8	38736	23.385	
Mean of Sample				6.8	38736	23.385	
Highest Sample Val	ue			6.8	38736	23.385	

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)	lron (me/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																									
Quarterly																									
Quarterly																									
Lowest Value				694.0	0.0000	0.0000	0.0000	371	10700	0.0010	0.0000	0.0180	0.0000	803	0.0054	0.0007	0.0214	21	0.0060	7770	3410	29600	4230	0.0000	
Mean of Sample				694.0	0.0000	0.0000	0.0000	371	10700	0.0010	0.0000	0.0180	0.0000	803	0.0054	0.0007	0.0214	21	0.0060	7770	3410	29600	4230	0.0000	
Highest Sample Valu	ue			694.0	0.0000	0.0000	0.0000	371	10700	0.0010	0.0000	0.0180	0.0000	803	0.0054	0.0007	0.0214	21	0.0060	7770	3410	29600	4230	0.0000	

requency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (µS/cm)	SWL (m)	Comments
Aonthly	23/01/2024	23/01/2024	21/02/2024	-	-	-	Dry
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
Aonthly							
lumber of Samples	Collected			0	0	0	
owest Value				0.0	0	0.000	
Mean of Sample				0.0	0	0.000	
lighest Sample Vali	ue			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)		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				-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
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	

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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			1	1	1	
Lowest Value				6.9	46452	11.570	
Mean of Sample				6.9	46452	11.570	
Highest Sample Val	ue			6.9	46452	11.570	

<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	
0.0000	0.0000 375 12400	0.0020 0.0000	0.0180 0.0000	1000	0.0196 0.0023	0.0985 30	0.0330 9940	4640	36500	5050	0.0000	
0.0000	0.0000 375 12400	0.0020 0.0000	0.0180 0.0000	1000	0.0196 0.0023	0.0985 30	0.0330 9940	4640	36500	5050	0.0000	
0.0000	0.0000 375 12400	0.0020 0.0000	0.0180 0.0000	1000	0.0196 0.0023	0.0985 30	0.0330 9940	4640	36500	5050	0.0000	
	0.0000 0.0000 0.0000	0.0000 0.0000 375 12400 0.0000 0.0000 375 12400 0.0000 0.0000 375 12400	0.0000         0.0000         375         12400         0.0020         0.0000           0.0000         0.0000         375         12400         0.0020         0.0000           0.0000         0.0000         375         12400         0.0020         0.0000           0.0000         0.0000         375         12400         0.0020         0.0000	0.0000         0.0000         3375         12400         0.0020         0.0000         0.0180         0.0000           0.0000         0.0000         375         12400         0.0021         0.0000         0.0180         0.0000           0.0000         0.0000         375         12400         0.0020         0.0000         0.0180         0.0000           0.0000         0.0000         375         12400         0.0020         0.0000         0.0180         0.0000	0.0000         0.0000         375         12400         0.0000         0.0000         0.0180         0.0000         1000           0.0000         0.0000         375         12400         0.0000         0.0000         0.0180         0.0000         1000           0.0000         0.0000         375         12400         0.0020         0.0000         0.0180         0.0000         1000	0.0000         0.0000         375         1.2400         0.0000         0.0180         0.0000         1000         1000         0.0196         0.0023           0.0000         0.0000         375         1.2400         0.0000         0.0180         0.0000         1000         0.0196         0.0023           0.0000         0.0000         375         1.2400         0.0020         0.0000         0.0180         0.0000         1000         0.0196         0.0023           0.0000         0.0000         375         1.2400         0.0020         0.0000         0.0180         0.0000         1000         0.0196         0.0023	0.0000         0.0000         375         12400         0.0000	0.0000 0.0000 3375 12400 0.000	0.0000 0.0000 375 12400 0.0000 0.0100 0.0100 0.0000 0.0160 0.0000 0.0166 0.0023 0.0985 30 0.0330 9940 4640	0.0000 0.0000 375 12400 0.0020 0.0000 0.0180 0.0000 1000 0.0196 0.0023 0.0965 30 0.0330 9940 4440 36500	0.0000 0.0000 375 12400 0.0020 0.0000 0.0000 0.0000 0.0000 10000 0.0000 0.0005 0.000000	0.0000 0.0000 375 12400 0.0020 0.0000 0.0180 0.0000 0.0180 0.0000 0.0185 0.0023 0.0885 30 0.0330 9940 4640 36500 5580 0.0000





Monitoring Point: 66 < IWL02B>

oundwater quality monitoring, Groundwater monitoring bore located to the south of the southern tailings storage facility

							1
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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample	s Collected			0	0	1	
Lowest Value				0.0	0	10.650	
Mean of Sample				0.0	0	10.650	
Highest Sample Val	lue			0.0	0	10.650	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)		Calcium (mg/L)		Copper (mg/L) Cy	yanide 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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dry
Quarterly				-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	Dry
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 Vali	ue			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	

## Nonitoring 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							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Sample:	s Collected			1	1	1	
Lowest Value				6.8	46698	3.810	
Mean of Sample				6.8	46698	3.810	
Highest Sample Val	ue			6.8	46698	3.810	

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																									
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	0.0652	23	0.0300	9500	4800	36000	5900	0.0000	
Mean of Sample				537.0	0.0000	0.0000	0.0004	433	12700	0.0020	0.0000	0.0070	0.0000	1170	0.0315	0.0013	0.0652	23	0.0300	9500	4800	36000	5900	0.0000	
Highest Sample Valu	ue			537.0	0.0000	0.0000	0.0004	433	12700	0.0020	0.0000	0.0070	0.0000	1170	0.0315	0.0013	0.0652	23	0.0300	9500	4800	36000	5900	0.0000	

## Monitoring Point: 68 < IWL018> County water quality monitoring County water manifesing have leasted to the county of the county

Frequency	Date Sampled	Date Obtained	Date Published	Field - pH (units)	Field - Electrical Conductivity (uS/cm)	SWL (m)	Comments
Monthly	23/01/2024	23/01/2024	21/02/2024	6.48	36511	4.150	
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Monthly							
Number of Samples	Collected			1	1	1	
Lowest Value				6.5	36511	4.150	
Mean of Sample				6.5	36511	4.150	
Minhoet Cample Value				6.5	26511	4.150	

Frequency	Date Sampled	Date Obtained	Date Published	Alkalinity (mg/L)	Antimony (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Calcium Chlo (mg/L) (m	de 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 10	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																								
Quarterly																								
Quarterly																								
Lowest Value				330.0	0.0000	0.0000	0.0000	190 10	0.0020	0.0000	0.0080	0.0000	760	0.0328	0.0002	0.0033	2	0.0000	7520	2830	28000	3600	0.0000	
Mean of Sample				330.0	0.0000	0.0000	0.0000	190 10	0.0020	0.0000	0.0080	0.0000	760	0.0328	0.0002	0.0033	2	0.0000	7520	2830	28000	3600	0.0000	
Highest Sample Value				330.0	0.0000	0.0000	0.0000	190 10	0.0020	0.0000	0.0080	0.0000	760	0.0328	0.0002	0.0033	2	0.0000	7520	2830	28000	3600	0.0000	





## **Ambient Noise**

## Q1 Noise Monitoring

New Lake Foreshore Laurel Park Lakeview III (New Westella) Bramboyne The Glen Caloola 2 Lakeview I & II (Lakeview) Foxman Downs 2

New Lake Foreshore Laurel Park Lakeview III (New Westella) Bramboyne The Glen Caloola 2 Lakeview I & II (Lakeview) Foxman Downs 2

<20 - Mine noise emission inaudible or barely audible								
				Mine Contribut	ed LA <sub>eq(15minute)</sub> -			
Night time Mine Operating Intrusive No	oise Levels (dBA re 20	μPa)		di	BA			
Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15 minute)</sub> - dBA	Night dB(A) LAFmax	Comments
N01								
N11								
N09								
N10								
N12								
N15								
N17								
N16								

## Q2 Noise Monitoring

New Lake Foreshore Laurel Park Lakeview (New Westella) Bramboyne The Glen Calcola 2 Lakeview I & II (Lakeview Foxman Downs 2

Daytime Mine Operating Intrusive Noi:	se Levels (dRA re 20 u	Pa)		Mine Contribute	ed LA <sub>eq(15minute)</sub> - BA				
Location	Date Sampled	Date Obtained	Date Published	Survey 1		Noise Criteria LA <sub>eq(15minute)</sub> - dBA	Comments		
N01									
N11									
N09									
N10									
N12									
N15									
N17									
N16									
< 20 - Mine noise emission inaudible or barely audible									
					ed LA <sub>eq(15minute)</sub> -				

New Lake Foreshore Laurel Park Lakeview (New Westella) Bramboyne The Glen Caloola 2 Lakeview I & II (Lakeview) Foxman Downs 2

				wine Contribut	ed LA <sub>eq(15minute)</sub> "		
<b>Evening Mine Operating Intrusive Nois</b>	e Levels (dBA re 20 μβ	Pa)		di	BA		
Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - dBA	Comments
N01							
N11							
N09							
N10							
N12							
N15							
N17							
N16							
c20 Mino poico omission inquelible ox	haraly avdible						

New Lake Foreshore
Laurel Park
Lakeview (New Westella)
Bramboyne
The Glen
Caloola 2
Lakeview I & II (Lakeview)
Forman Downs 2

Night time Mine Operating Intrusive N	oise Levels (dBA re 20	uPa)		Mine Contribute				
Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - dBA	Night dB(A) LAFmax	Comments
N01								
N11								
N09								
N10								
N12								
N15								
N17								
N16								

N16
<20 - Mine noise emission inaudible or barely audible</p>



## **Ambient Noise**

					Mine Contribute	ed LA <sub>eq(15minute)</sub> -		
	Daytime Mine Operating Intrusive Nois	se Levels (dBA re 20 μ	Pa)		di	BA		
	Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - 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 dB(A) LAFmax Date Published Survey 2 Survey 1

					Mine Contribute	ed LA <sub>eq(15minute)</sub> -		
	Daytime Mine Operating Intrusive Nois	se Levels (dBA re 20 µ	Pa)		di	BA		
	Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - 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	0 - Mine noise emission inaudible or barely audible										
					ed LA <sub>eq(15minute)</sub> -						
Evening Mine Operating Intrusive Nois	ie Levels (dBA re 20 με	Pa)		d	BA						
Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - dBA	Comments				
N01											
N11											
N09											
N10											
N12											
N15											
N17											
N16						1					
Mine poise emission inaudible or barely	audible										

					Mine Contribute	ed LA <sub>eq(15minute)</sub> -			
Night time N	fine Operating Intrusive Noise Levels (d	BA re 20 µPa)			di	BA			
	Location	Date Sampled	Date Obtained	Date Published	Survey 1	Survey 2	Noise Criteria LA <sub>eq(15minute)</sub> - 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 - 1	Mine noise emission insudible or barely	audible							

# **Blasting**

Table 1: Compliance percentages for the previous 12 months

	Total	No.	of Exceeder	nces (12 M	onths)
Type of Exceedance	Number of Blasts (12 months)	Daily Operation	Evening Operation	Night, Sunday and Public Holiday	Total % Exceedance
Open Pit					
Vibration	153	0	0	0	0.0%
Overpressure	153	0	0	3	2.0%
Underground					
Vibration	711	0	0	0	0.0%
Overpressure	711	0	0	1	0.1%
Combined					
Vibration	864	0	0	0	0.0%
Overpressure	864	0	0	4	0.5%

Table 2: Exceedances in the past 12 months

	Exceedences in the past 12 months								
Туре	Location	Date	Source						
Overpressure	BM08.1 Cowal North	19th February 2023	Open Pit						
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 Residence	12th November 2023	Open Pit						

Date obtained: 09/02/2024





# 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					
Weekly	March	4					
Weekly	April	5					
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 Cyan	ido (mg/L)	Concentration Limits		1
		No Sampled			00th 100th		
Frequency	Month	during Month	Minimum	Maximum	Percentile	Percentile	Comments
Twice daily	January	62	0	12.17	20.00	30.00	
Twice daily	February						
Twice daily	March						
Twice daily	April						
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**

<b>Monitoring Point</b>	<b>Monitoring Point Type</b>	Date Sampled	Date Obtained	Date Reported	Parameter	Value	EPL Limit	Comments