

# **Mt Piper Power Station Monthly Environment Monitoring Data**

Prepared by:  
Mt Piper Environment Team

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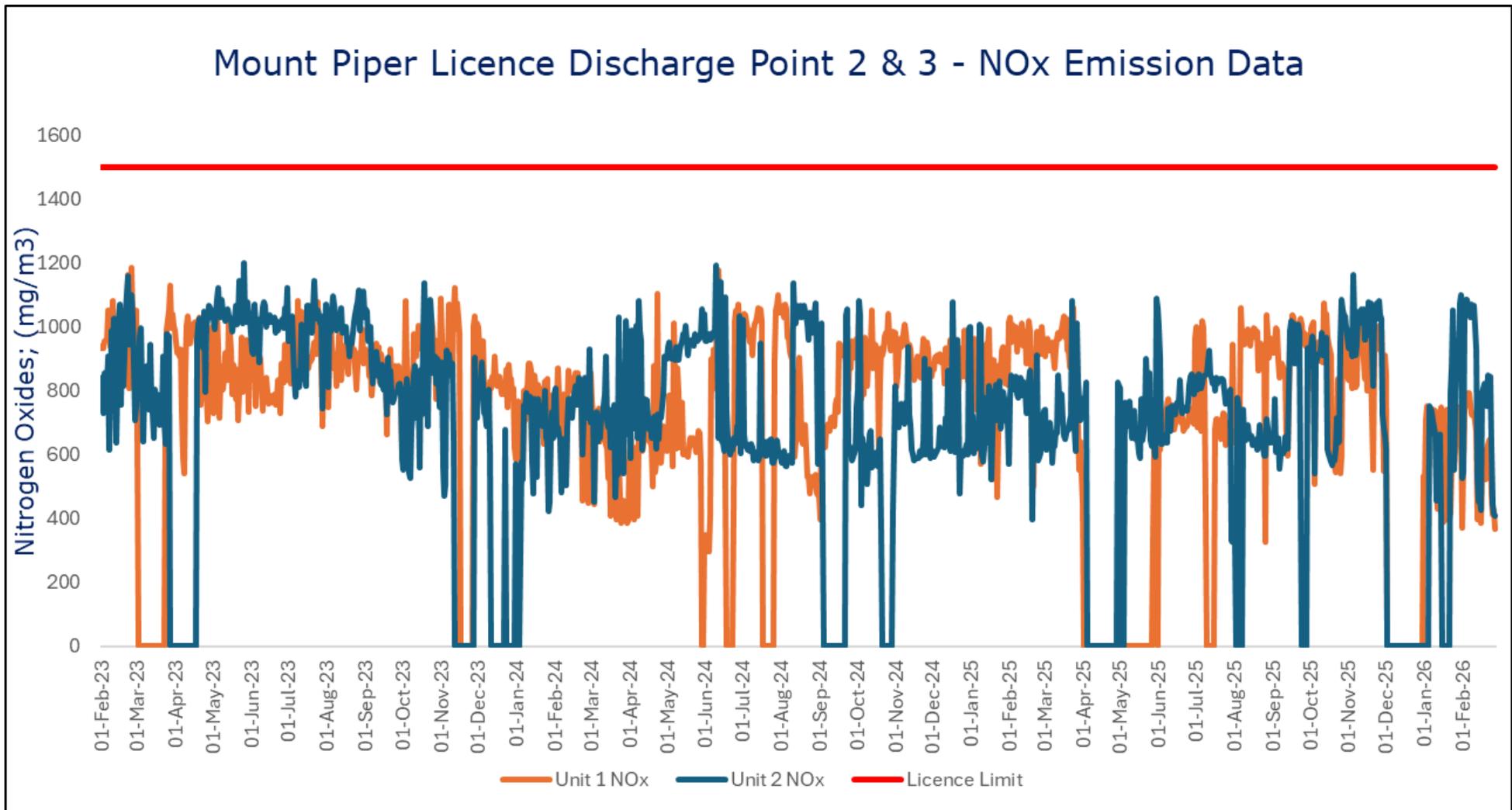
EPL Number: 13007  
 EPL Holder: EnergyAustralia NSW  
 EPL Name of Facility: MOUNT PIPER POWER STATION  
 EPL Address of Facility: 350 BOULDER RD PORTLAND, NSW 2847  
 EPL Website link: [Environment & Heritage | POEO Licences, Application and Notice Detail \(nsw.gov.au\)](https://www.environment.gov.au/heritage/poec/licences/application-and-notice-detail)  
 EPL Monitoring Locations: <https://www.energyaustralia.com.au/about-us/energy-generation/mt-piper-power-station/mt-piper-epa-reports>  
 EPL Unit of measure abbreviations: <https://www.energyaustralia.com.au/about-us/energy-generation/mt-piper-power-station/mt-piper-epa-reports>  
 EPL Period monitored: 1 – 28 February 2026  
 Monthly Summary Status: Complete: monitoring data obtained.

**Table 1: Compliance Summary:**

Were all licence monitoring limits met:	YES
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**Table 2: Details of any Licence Monitoring Limit not met:**

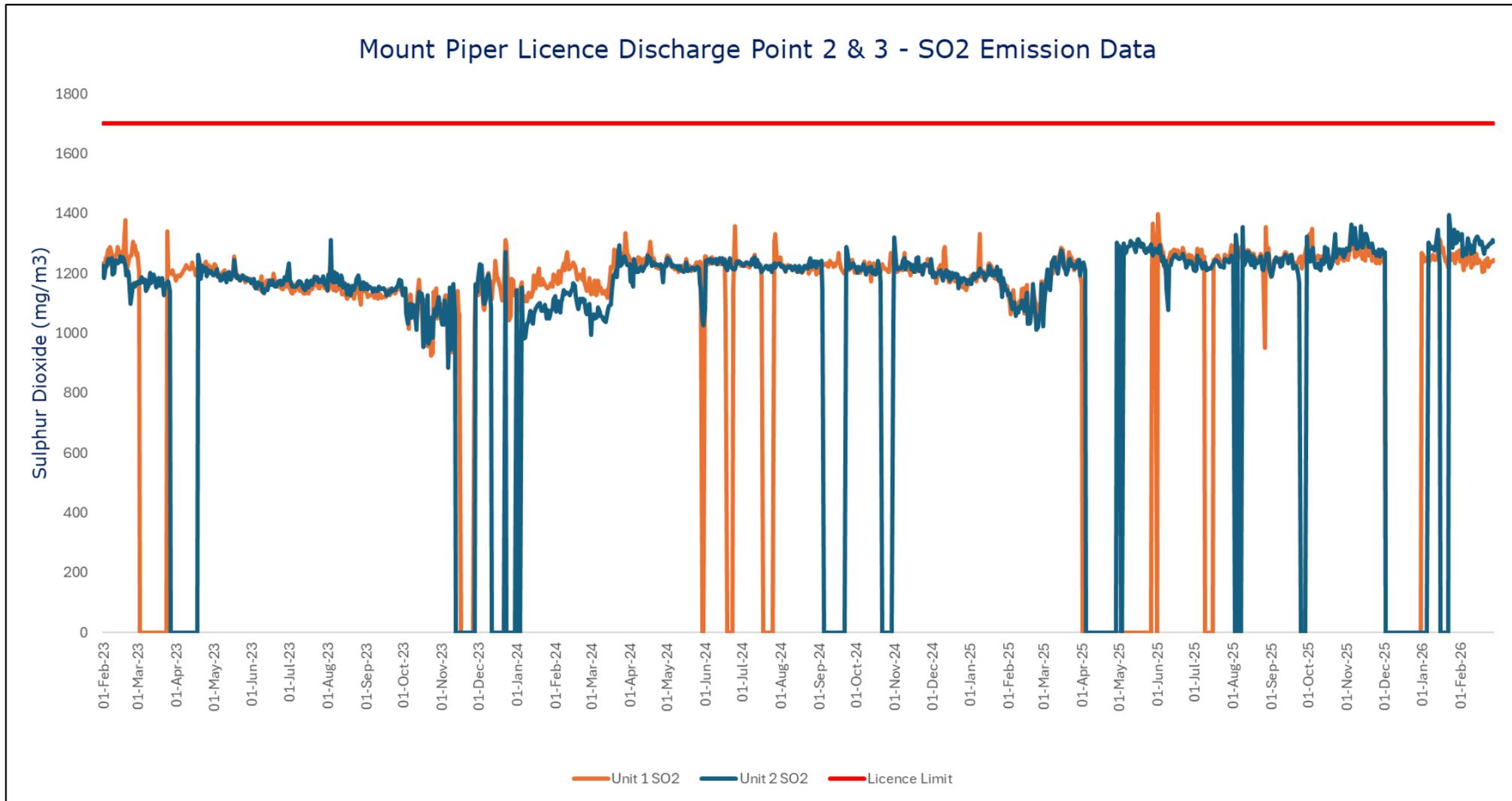
License Point #	Air/Water/Noise	Pollutant	Value measured	Licence limit	Comments
NIL	-	-	-	-	-



Note: Gap in data is due to periods when the unit was shut down, or the monitoring equipment was offline.

Source: Data is obtained from the Continuous Emission Monitoring System.

**Figure 1: Nitrogen Dioxide (NOx) Emission Data**

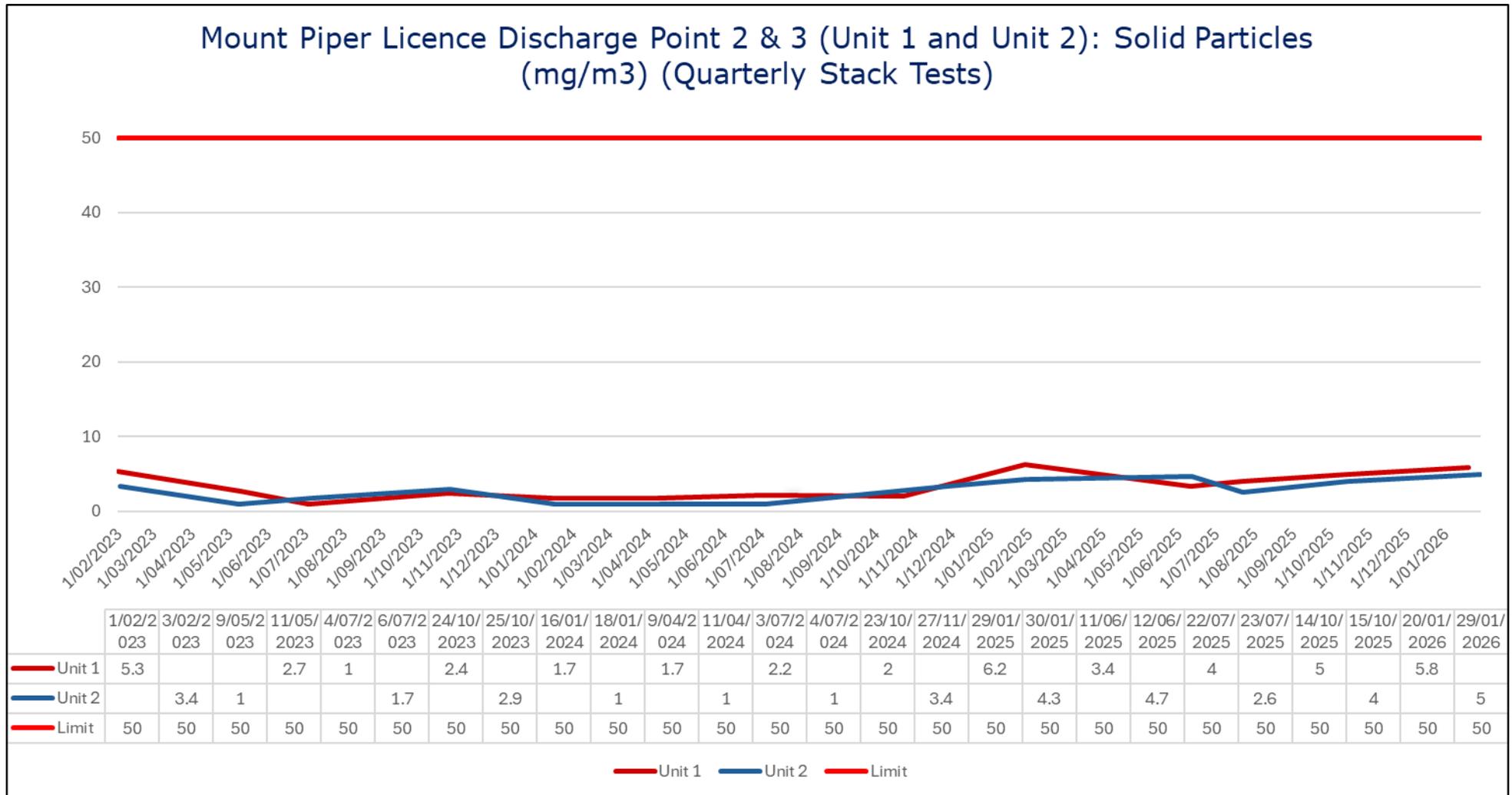


Note: Gap in data is due to periods when the unit was shut down, or the monitoring equipment was offline.

Source: Data is obtained from the Continuous Emission Monitoring System.

**Figure 2: Sulphur Dioxide (SO2) Emission Data**

### Mount Piper Licence Discharge Point 2 & 3 (Unit 1 and Unit 2): Solid Particles (mg/m<sup>3</sup>) (Quarterly Stack Tests)



Note: Gap in data is due to periods when the unit was shut down, or the monitoring equipment was offline.

Source: Data is obtained from the Quarterly Stack Testing conducted by Ektimo.

**Figure 3: Solid particles Emission Data**

## Discharge to Water

**Table 3: Water Quality at EPL Point 12**

2026	Samples required by EPL (1/mth during discharge)	No. of samples during month	Conductivity (µS/cm)		Oil & Grease (mg/L)		pH		Total Suspended Solids (mg/L)		Turbidity (NTU)		Compliant	Comment
			Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit		
January	1	2	343	500	<5	10	7.66	6.5-8.5	9.67	50	2.2	25	Yes	Flow / Discharge recorded week of 7/01/2026
			369		<5		7.46		10.33		9.7		Yes	
February	0	0	NR	500	NR	10	NR	6.5-8.5	NR	50	NR	25	Yes	Not sampled due to no flow / no discharge
March														
April														
May														
June														
July														
August														
September														
October														
November														
December														

## Air Emissions

**Table 4: Nitrogen Oxides (NOx) Monitoring at EPL Points 2 and 3**

2026	No. of samples required by licence	EPL Point	Lowest sample value (mg/m <sup>3</sup> , hourly average)	Mean of sample (mg/m <sup>3</sup> )	Highest sample value (mg/m <sup>3</sup> , hourly average)	Limit (mg/m <sup>3</sup> , hourly average)	99 <sup>th</sup> percentile			Compliant
							Limit (mg/m <sup>3</sup> )	87 1-hr averaging periods/yr	1hr averaging periods > limit	
January	Continuous	2	225	418	754	1500	1,100	87	0	Yes
		3	221	498	1100			86	1	Yes
February	Continuous	2	222	432	794	1500	1,100	87	0	Yes
		3	263	549	1086			86	0	Yes
March	Continuous	2				1500	1,100			
		3								
April	Continuous	2				1500	1,100			
		3								
May	Continuous	2				1500	1,100			
		3								
June	Continuous	2				1500	1,100			
		3								
July	Continuous	2				1500	1,100			
		3								
August	Continuous	2				1500	1,100			
		3								
September	Continuous	2				1500	1,100			
		3								
October	Continuous	2				1500	1,100			
		3								
November	Continuous	2				1500	1,100			
		3								
December	Continuous	2				1500	1,100			
		3								

Source: Data is obtained from Continuous Emission Monitoring System

**Table 5: Sulphur Dioxides (SO<sub>2</sub>) Monitoring at EPL Points 2 and 3**

2026	No. of samples required by licence	EPL Point	Lowest sample value (mg/m <sup>3</sup> , hourly average)	Mean of sample (mg/m <sup>3</sup> )	Highest sample value (mg/m <sup>3</sup> , hourly average)	Limit (mg/m <sup>3</sup> , hourly average)	99 <sup>th</sup> percentile			Compliant
							Limit (mg/m <sup>3</sup> )	87 1-hr averaging periods/yr	1hr averaging periods > limit	
January	Continuous	2	1034	1213	1313	1700	1,400	87	0	Yes
		3	1104	1270	1396			87	0	Yes
February	Continuous	2	949	1194	1269	1700	1,400	87	0	Yes
		3	1139	1264	1332			87	0	Yes
March	Continuous	2				1700	1,400			
		3								
April	Continuous	2				1700	1,400			
		3								
May	Continuous	2				1700	1,400			
		3								
June	Continuous	2				1700	1,400			
		3								
July	Continuous	2				1700	1,400			
		3								
August	Continuous	2				1700	1,400			
		3								
September	Continuous	2				1700	1,400			
		3								
October	Continuous	2				1700	1,400			
		3								
November	Continuous	2				1700	1,400			
		3								
December	Continuous	2				1700	1,400			
		3								

Source: Data is obtained from the Continuous Emission Monitoring System

**Table 6: Oxygen (O<sub>2</sub>), Temperature & Moisture Monitoring at EPL Points 2 and 3**

2026	No. of samples required by licence	EPL Point	Oxygen			Temperature			Moisture		
			Lowest sample value (% , hourly average)	Mean of sample (%)	Highest sample value (% , hourly average)	Lowest sample value (°C, hourly average)	Mean of sample (°C)	Highest sample value (°C, hourly average)	Lowest sample value (H <sub>2</sub> O, hourly average)	Mean of sample (H <sub>2</sub> O)	Highest sample value (H <sub>2</sub> O, hourly average)
January	Continuous	2	7.6	9.5	13.6	99	115	131	4.1	6.7	8.9
		3	8.0	10.3	14.4	88	112	133	4.2	6.5	9.4
February	Continuous	2	7.5	9.6	13.7	101	116	130	4.2	6.9	8.9
		3	8.5	10.3	14.5	101	113	135	4.2	6.8	8.7
March	Continuous	2									
		3									
April	Continuous	2									
		3									
May	Continuous	2									
		3									
June	Continuous	2									
		3									
July	Continuous	2									
		3									
August	Continuous	2									
		3									
September	Continuous	2									
		3									
October	Continuous	2									
		3									
November	Continuous	2									
		3									
December	Continuous	2									
		3									

Source: Data is obtained from the Continuous Emission Monitoring System

**Table 7: Quarterly Stack Emissions Monitoring at EPL Points 2 and 3**

2026	No. of samples required by EPL per year	EPL Point	Samples taken (year to date)	Result				Limit	Compliant
				Q1	Q2	Q3	Q4		
Solid Particles (mg/m <sup>3</sup> )	4	2	1	5.8				50	Yes
		3	1	5.0					Yes

**Table 8: Six Monthly Stack Emissions Monitoring at EPL Points 2 and 3**

2026	No. of samples required by EPL per year	EPL Point	Samples taken (year to date)	Result		Limit	Compliant
				Jan - Jun	Jul - Dec		
Carbon Dioxide (%)	2	2	0			-	
		3	0			-	
Cadmium (mg/m <sup>3</sup> )	2	2	1	0.0028		0.03	Yes
		3	1	0.00012			Yes
Mercury (mg/m <sup>3</sup> )	2	2	1	0.00058		0.03	Yes
		3	1	≤0.00025			Yes
Type 1 and Type 2 substances in aggregate (mg/m <sup>3</sup> )	2	2	1	≤0.024		0.60	Yes
		3	1	≤0.037			Yes
Hydrogen Chloride (mg/m <sup>3</sup> )	2	2	0			50	
		3	0				
Fluorine (mg/m <sup>3</sup> )	2	2	0			30	
		3	0				
Chlorine (mg/m <sup>3</sup> )	2	2	0			4	
		3	0				
Sulfuric Acid Mist and Sulfur Trioxide as SO <sub>3</sub> (mg/m <sup>3</sup> )	2	2	0			100	
		3	0				
Volatile Organic Compounds as n-propane equivalent (mg/m <sup>3</sup> )	2	2	0			8	
		3	0				

# Mt Piper Power Station

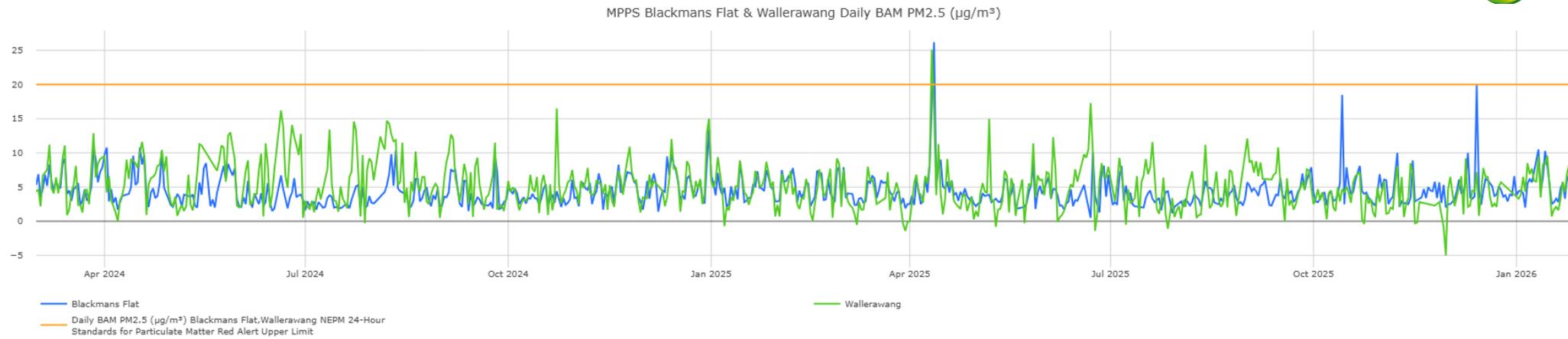
## Ambient Monitoring Data

- **Air Quality**
- **Thompsons Creek Reservoir Water Quality**

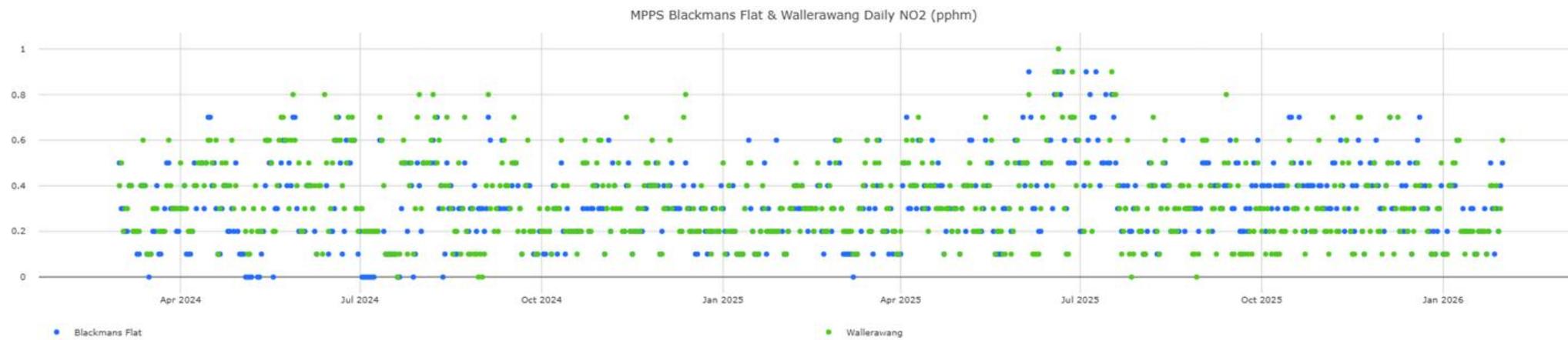
**Table 9: Ambient Air Quality at Blackmans Flat, Wallerawang & Newnes Plateau**

2026	No. of samples required by licence	Parameter	Blackmans Flat			Wallerawang			Newnes		
			Min Daily Reading	Monthly Average	Max Daily Reading	Min Daily Reading	Monthly Average	Max Daily Reading	Blank	Newnes1	Newnes2
January	Continuous	SO <sub>2</sub> (pphm)	0.0	0.1	0.6	-0.2	0.1	0.4	<0.9	<0.9	<0.9
		NO <sub>2</sub> (pphm)	0.1	0.3	0.6	0.1	0.3	0.6	<0.6	<0.6	<0.6
		PM2.5 (µg/mg <sup>3</sup> )	2.0	5.4	10.5	0.7	5.8	9.6	NR	NR	NR
February	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
March	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
April	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
May	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
June	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
July	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
August	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
September	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
October	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
November	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									
December	Continuous	SO <sub>2</sub> (pphm)									
		NO <sub>2</sub> (pphm)									
		PM2.5 (µg/mg <sup>3</sup> )									

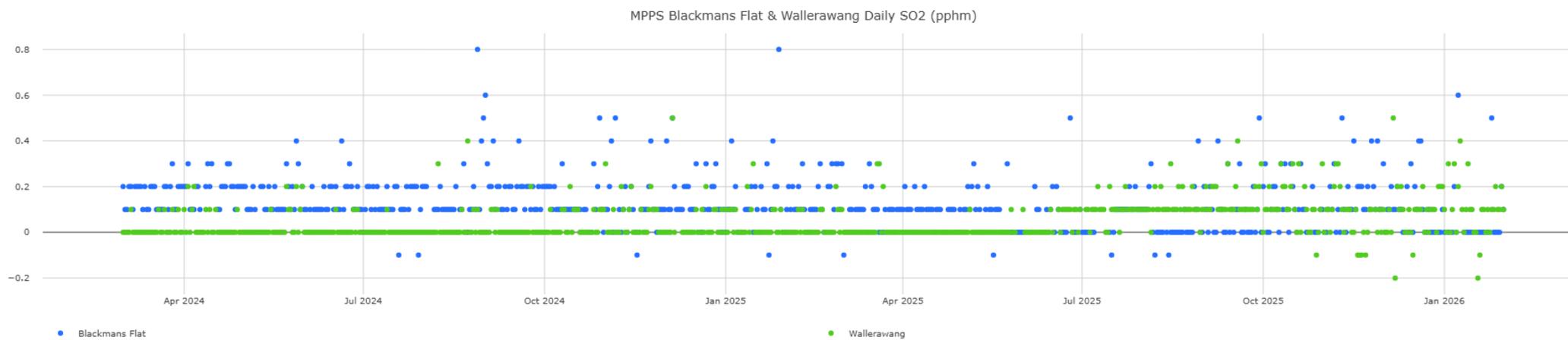
Source: Data is obtained from the Ambient Air Monthly Report.



**Figure 4: MPPS PM2.5 ( $\mu\text{g}/\text{m}^3$ ) Daily Average**



**Figure 5: MPPS NO2 pphm Daily Average**



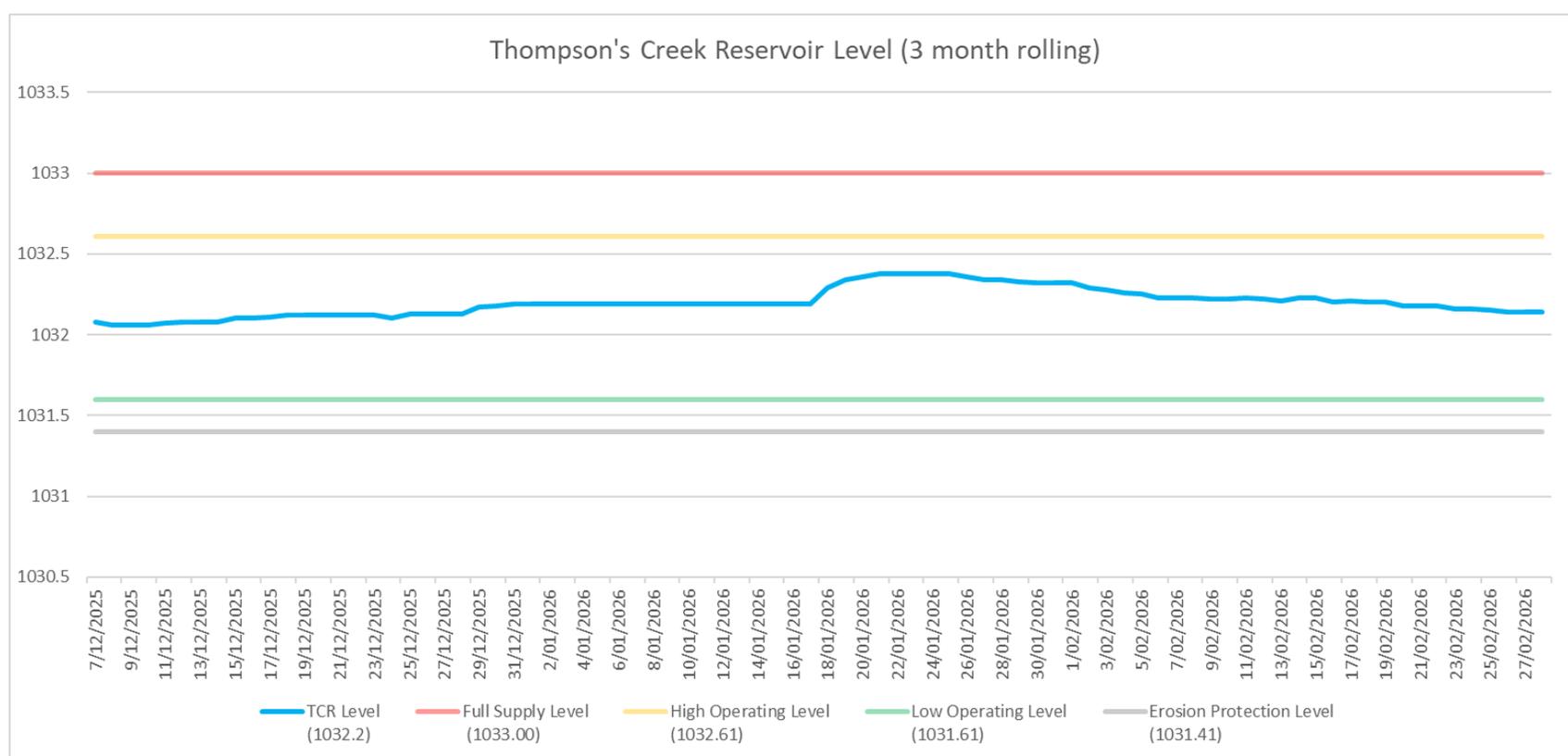
**Figure 6: MPPS SO2 pphm Daily Average**

**Table 10: TCR Water Quality and TCR Riparian Release**

2026	Electrical Conductivity (µS/cm)						TCR Riparian Release (ML/month)
	Thompsons Creek Reservoir*			TCR Riparian Release**			
	Lowest Sample Value	Mean Sample Value	Highest Sample Value	Lowest Sample Value	Mean Sample Value	Highest Sample Value	
January	472	477	496	481	487	498	190
February	467	482	500	469	484	499	529
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							

Sampling Frequency: \*\*Thompsons Creek Reservoir: Continuous Monitoring and \*\* TCR Riparian Release: Weekly Sampling  
 \*\*TCR Riparian Release = TCD 100 mm Riparian Release

**Figure 7: TCR Water Level**



# Mt Piper Power Station

## Water Monitoring Data

- Ground Water
- Surface Water

2025 Groundwater Pollution Monitoring Data (PED)			Bore MPGM4_D10   EPA ID No.: 13				Bore D102   EPA ID No.: 14				Bore D103   EPA ID No.: 15				Bore D104   EPA ID No.: 16				Bore D105   EPA ID No.: 17				Bore D106   EPA ID No.: 18				Bore D107   EPA ID No.: 19				Bore D113   EPA ID No.: 20				Bore MPGM4_D3   EPA ID No.: 21			
Variable	Unit	Frequency	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Alkalinity (as calciumcarbonate)	mg/L	Quarterly	246	154	174	128	81	93	120	65	183	179	200	166	33	69	85	70	146	118	144	168	168	164	109	145	227	204	196	235	161	151	164	160	323	245	30	120
Aluminium	mg/L	Quarterly	0.715	0.342	0.117	0.073	0.268	0.053	0.054	0.128	0.032	0.058	0.085	0.121	0.031	0.266	0.21	2.52	<0.005	0.136	0.251	0.005	0.034	2.18	3.03	0.105	0.028	0.18	0.059	0.123	<0.005	<0.005	0.47	0.202	0.011	0.022	0.125	0.057
Ammonia	mg/L	Quarterly	30.3	4.73	9.62	1.04	0.35	0.28	0.35	0.36	0.21	0.26	0.24	0.23	0.12	0.11	0.1	0.21	0.12	0.5	0.33	0.13	0.51	0.47	0.38	0.31	0.31	0.39	0.12	0.41	0.21	0.21	0.2	0.23	0.01	0.09	0.01	0.08
Antimony	mg/L	Quarterly	0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.002	<0.001	0.002	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Quarterly	0.007	0.005	0.002	0.005	0.002	0.002	0.001	0.002	0.005	0.01	0.008	0.004	0.002	0.012	0.038	0.001	<0.001	0.003	0.025	0.004	0.003	0.007	0.014	0.007	0.014	0.007	0.015	0.001	<0.001	0.003	0.001	<0.001	0.002	<0.001	<0.001	<0.001
Barium	mg/L	Quarterly	0.031	0.022	0.023	0.015	0.028	0.02	0.02	0.023	0.018	0.018	0.02	0.021	0.074	0.066	0.076	0.179	0.015	0.018	0.02	0.018	0.022	0.043	0.025	0.023	0.021	0.021	0.016	0.022	0.013	0.012	0.018	0.012	0.199	0.135	0.058	0.085
Beryllium	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Quarterly	246	154	174	128	81	93	120	65	183	179	200	166	33	69	85	70	146	118	144	168	168	164	109	145	227	204	196	235	161	151	164	160	323	245	30	120
Boron	mg/L	Quarterly	1.72	3.04	1.56	2.29	1.32	1.26	1.21	1.29	2.01	1.93	1.92	1.93	0.24	0.12	0.11	0.08	0.55	0.84	0.81	0.34	3.05	3.37	2.08	2.14	5.44	4.12	3.52	4.54	2.19	2.03	1.69	2.02	<0.05	0.08	0.16	0.09
Cadmium	mg/L	Quarterly	0.0002	0.0012	<0.0001	0.0008	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0004	0.0003	0.0009	0.0004	0.0003	0.001	0.0002	0.0003	0.0008	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Quarterly	147	215	130	236	514	484	495	508	190	194	200	216	124	62.9	65	76.1	151	179	206	146	378	412	354	348	328	337	351	357	170	169	171	163	60.9	52.1	10.2	79.6
Carbonate	mg/L	Quarterly	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L	Quarterly	320	471	293	446	1530	1110	1360	1260	302	274	355	279	122	85.2	82.1	87.8	245	273	319	184	1180	1050	1210	1150	1060	839	998	857	360	314	331	306	184	170	29.9	37.7
Chromium	mg/L	Quarterly	0.002	0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (hexavalent)	mg/L	Quarterly	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (trivalent)	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	Quarterly	0.12	0.213	0.09	0.205	0.197	0.199	0.172	0.186	0.217	0.224	0.213	0.22	0.01	0.012	0.01	0.014	0.136	0.168	0.159	0.113	0.258	0.314	0.179	0.204	0.23	0.196	0.151	0.247	0.164	0.162	0.116	0.143	<0.001	<0.001	<0.001	0.001
Copper	mg/L	Quarterly	0.011	0.012	0.003	0.002	0.004	<0.001	<0.001	0.005	<0.001	0.002	<0.001	0.005	0.003	0.004	0.004	0.007	0.002	0.002	0.003	0.018	0.009	0.002	0.003	0.022	0.002	0.004	0.001	0.002	0.001	0.002	0.018	0.005	0.002	0.005	<0.001	<0.001
Dissolved Oxygen	µs/cm	Quarterly	2.2	2.2	2.8	2.8	3.3	3	1.9	2.5	2.4	3.8	2.5	2.5	3.8	2.9	2.6	3.8	3.4	4.2	3	4.3	1.9	3.3	3.8	2.2	5.4	3	3.7	3.2	2.5	2.9	3.2	4.4	5.6	3.3	6.4	2.4
Electrical Conductivity	mg/L	Quarterly	5253	7302	4771	7925	8959	8685	8985	8852	4321	4256	4431	4412	1686	1035	1068	1166	2996	3455	3566	2790	10392	10602	9531	9104	10480	9353	9147	10765	5086	4974	4693	4513	1213	971	258	954
Iron	mg/L	Quarterly	10.5	12.2	10.9	11	62.5	71.9	69.1	70.2	18.5	24.2	21.9	22.2	12.6	7.81	11	34.8	23.1	57.5	32.6	18.9	25	82.8	25.9	20	23.8	28.4	10.9	27.4	14.1	12.5	8.59	16.2	0.07	0.71	0.35	5.57
Lead	mg/L	Quarterly	0.014	0.022	0.009	0.01	0.004	<0.001	<0.001	0.002	<0.001	<0.001	0.001	0.002	<0.001	0.015	<0.001	0.015	0.005	<0.001	0.002	0.023	0.014	0.003	0.012	0.016	0.01	0.026	0.004	0.002	0.01	0.006	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Quarterly	140	219	127	227	493	429	436	438	197	181	181	197	82.8	41.5	42.3	52.5	153	156	168	140	468	427	390	388	411	339	337	395	162	144	140	137	52.7	42.9	8.63	44.4
Manganese	mg/L	Quarterly	3.39	5.98	3.28	6.76	13.7	13.2	13.1	14.4	10.8	10.7	11.7	12.7	3.55	2.02	1.94	2.55	9.56	11.1	12.2	8.7	14.3	13.4	11.3	12.5	10	8.84	7.99	10.2	6.21	5.74	4.45	5.61	0.026	0.203	0.044	1.39
Mercury	mg/L	Quarterly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Quarterly	0.034	0.017	0.005	0.007	0.002	<0.001	0.001	<0.001	<0.001	0.002	0.003	<0.001	<0.001	0.001	0.003	<0.001	<0.001	0.002	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.003	0.002	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	Quarterly	0.465	0.831	0.398	0.794	1.55	1.56	1.38	1.5	0.872	0.915	0.875	0.917	0.056	0.058	0.048	0.071	0.534	0.645	0.618	0.475	1.76	2.01	1.32	1.41	1.42	1.3	1.06	1.5	0.653	0.66	0.518	0.545	0.011	0.02	0.006	0.025
Nitrate	mg/L	Quarterly	0.02	<0.01	<0.01	<0.01	0.01	<0.01	<0.10	<0.10	<0.01	0.02	<0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	<0.01	<0.01	<0.01	0.01	0.05	0.01	<0.01	0.26	0.01	0.01	0.11	0.36	<0.01	0.08	0.14	<0.01	<0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Quarterly	0.02	<0.01	0.22	0.02	0.01	<0.01	<0.10	<0.10	<0.01	0.02	<0.01	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.02	<0.01	<0.01	<0.01	0.01	0.07	0.01	<0.01	0.29	0.01	0.01	0.11	0.36	<0.01	0.08	0.16	<0.01	0.01
Nitrite	pH	Quarterly	<0.01	<0.01	0.22	0.02	<0.01	<0.01	<0.10	<0.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	&lt																	

2024 Groundwater Pollution Monitoring Data (PED)			Bore MPGM4_D10   EPA ID No.: 13				Bore_D102   EPA ID No.: 14				Bore_D103   EPA ID No.: 15				Bore_D104   EPA ID No.: 16				Bore_D105   EPA ID No.: 17				Bore_D106   EPA ID No.: 18				Bore_D107   EPA ID No.: 19				Bore_D113   EPA ID No.: 20				Bore MPGM4_D3   EPA ID No.: 21			
Variable	Unit	Frequency	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Alkalinity (as calciumcarbonate)	mg/L	Quarterly	131	144	148	157	63	58	79	117	215	205	214	207	74	47	71	71	122	146	135	166	180	175	176	182	233	238	248	254	169	167	171	175	179	58	89	162
Aluminium	mg/L	Quarterly	0.11	0.079	0.091	0.07	0.01	0.06	0.114	0.063	0.05	0.12	0.049	0.093	0.15	0.13	0.197	0.119	0.04	0.03	0.024	0.037	0.07	0.42	0.581	0.151	0.02	0.03	0.021	0.025	0.05	0.06	1.1	0.019	0.01	<0.01	0.008	0.013
Ammonia	mg/L	Quarterly	0.42	0.42	0.4	0.41	0.26	0.56	0.27	0.38	0.16	0.19	0.17	0.2	0.11	0.1	0.09	0.01	0.12	0.13	0.1	0.12	0.37	0.41	0.41	0.48	0.38	0.46	0.41	0.38	0.21	0.19	0.24	0.21	0.07	0.03	<0.01	0.07
Antimony	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Quarterly	0.003	0.003	0.002	0.003	0.001	<0.001	0.001	0.001	0.003	0.007	0.005	0.005	0.008	0.004	0.005	0.002	0.003	0.002	0.001	0.002	0.002	0.002	0.005	0.002	0.003	0.005	0.006	<0.001	0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	Quarterly	0.017	0.016	0.017	0.016	0.024	0.026	0.026	0.022	0.016	0.018	0.017	0.018	0.099	0.099	0.094	0.069	0.017	0.015	0.016	0.017	0.019	0.024	0.019	0.019	0.019	0.016	0.018	0.018	0.011	0.012	0.019	0.011	0.081	0.056	0.071	0.053
Beryllium	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Quarterly	131	144	148	157	63	58	79	117	215	205	214	207	74	47	71	71	122	146	135	166	180	175	176	182	233	238	248	254	169	167	171	175	179	58	89	162
Boron	mg/L	Quarterly	3.12	3.63	2.95	4.45	1.14	1.29	1.25	1.2	1.54	1.8	1.66	1.71	0.06	0.07	0.12	0.06	0.71	0.55	0.49	0.49	2.3	2.96	2.4	2.35	5.05	5.05	5.39	5.48	1.48	2.08	1.99	1.95	0.08	<0.05	0.21	0.22
Cadmium	mg/L	Quarterly	0.0004	0.0009	0.001	0.0017	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0002	<0.0001	<0.0001	0.0014	0.0012	0.0012	0.0011	0.0001	0.0002	0.0003	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Quarterly	264	291	283	308	523	488	561	526	175	181	175	191	82.7	84.8	65.4	67.6	181	163	150	161	481	478	464	420	403	381	372	359	159	179	198	218	79.8	28.6	25.5	75.9
Carbonate	mg/L	Quarterly	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L	Quarterly	602	635	675	673	1160	1140	1030	1130	219	240	216	251	75.5	81.2	84.4	83.2	250	221	192	219	1300	1150	1130	1040	1250	1090	814	930	254	307	289	352	84.4	37.2	72.1	65.5
Chromium	mg/L	Quarterly	0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.003	<0.001	<0.001	0.002	0.003	0.003	0.001	<0.001	<0.001	<0.001	<0.001
Chromium (hexavalent)	mg/L	Quarterly	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01
Chromium (trivalent)	mg/L	Quarterly	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.01
Cobalt	mg/L	Quarterly	0.231	0.25	0.253	0.276	0.212	0.178	0.208	0.2	0.183	0.178	0.192	0.205	0.016	0.011	0.016	0.014	0.167	0.119	0.13	0.136	0.346	0.294	0.302	0.277	0.353	0.226	0.268	0.257	0.128	0.134	0.161	0.171	0.001	<0.001	<0.001	<0.001
Copper	mg/L	Quarterly	<0.001	0.001	0.007	0.002	<0.001	0.004	0.006	0.002	<0.001	0.001	0.003	0.002	0.002	0.002	0.007	0.002	<0.001	0.001	0.002	<0.001	0.005	0.003	0.004	0.001	<0.001	0.004	0.002	0.004	<0.001	0.011	0.002	0.002	<0.001	<0.001	0.001	<0.001
Dissolved Oxygen	µS/cm	Quarterly	1.4	1	1.7	1	2.5	4.5	2.9	2	1.1	1.7	1.4	1.8	1.3	1.3	2.4	2.5	1.3	2.2	1.3	1.5	1.5	2.3	1.7	2.2	1.1	2	1.4	3.1	1.2	1.3	3.8	1.4	1.7	3.2	5.8	1.5
Electrical Conductivity	mg/L	Quarterly	8260	9333	9562	11405	8550	9490	9018	8965	3660	4370	3860	4103	1210	1320	992	1094	3210	3380	2862	3020	11640	13320	11469	10625	13290	13630	11733	11091	4320	5360	4940	5478	1010	461	527	1081
Iron	mg/L	Quarterly	9.14	6.99	7.68	6.71	50	38.9	53.8	69.8	9.83	20.1	14.7	21.7	13.3	10	4.59	1.11	21	23.8	18.4	25.7	24.6	31.2	21.9	26.8	21.9	21.7	17.5	22.6	8.38	13.1	11.3	16	10.4	1.29	0.3	7.16
Lead	mg/L	Quarterly	0.009	0.011	0.011	0.029	<0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.001	0.007	0.002	0.002	0.015	0.012	0.013	0.013	0.003	0.003	0.006	0.003	0.003	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Quarterly	288	314	303	329	474	452	483	464	171	176	176	184	54.5	57.8	45.7	46.5	168	157	152	156	588	567	542	484	528	472	455	423	138	156	174	190	50.4	20	20.3	44.9
Manganese	mg/L	Quarterly	6.66	6.96	7.18	8.68	14.7	15.2	13.7	16	9.81	10.5	9.44	12.2	2.64	2.82	2.3	2.29	12	10	8.95	11.1	18.2	17.8	15.9	16.6	13.3	11.3	10.5	12.3	5.18	6.63	6.33	8.07	0.678	0.107	0.046	0.678
Mercury	mg/L	Quarterly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Quarterly	0.007	0.008	0.008	0.009	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	Quarterly	0.895	1.02	1.02	1.13	1.6	1.36	1.62	1.57	0.704	0.695	0.762	0.816	0.055	0.043	0.055	0.067	0.607	0.452	0.529	0.546	2.21	1.99	2.04	1.85	2.03	1.37	1.63	1.55	0.485	0.507	0.621	0.667	0.011	0.003	0.006	0.006
Nitrate	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.04	0.06	<0.01	<0.01	0.02	0.01	0.01	0.02	0.03	0.02	<0.01	0.01	<0.01	<0.01	<0.01	0.06	<0.01	0.02	0.03	0.04	0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.02	0.04	0.06	<0.01	0.02	0.01	0.01	0.02	0.03	0.02	<0.01	0.01	<0.01	<0.01	<0.01	0.06	<0.01	0.02	0.03	0.04	0.01
Nitrite	pH	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0																				

2023 Groundwater Pollution Monitoring Data (PED)			Bore MPGM4_D10   EPA ID No.: 13				Bore_D102   EPA ID No.: 14				Bore_D103   EPA ID No.: 15				Bore_D104   EPA ID No.: 16				Bore_D105   EPA ID No.: 17				Bore_D106   EPA ID No.: 18				Bore_D107   EPA ID No.: 19				Bore_D113   EPA ID No.: 20				Bore MPGM4_D3   EPA ID No.: 21			
Variable	Unit	Frequency	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Alkalinity (as calciumcarbonate)	mg/L	Quarterly	134	199	205	163	104	70	110	98	232	239	252	228	140	65	90	85	158	140	155	151	216	186	192	196	268	238	249	252	183	158	171	180	168	129	178	159
Aluminium	mg/L	Quarterly	0.1	0.04	0.06	0.12	0.04	0.02	0.11	0.04	0.92	0.06	0.26	0.13	0.21	0.18	0.31	0.02	0.03	<0.01	0.02	0.02	0.05	0.02	1.76	0.65	0.03	<0.01	0.1	0.04	0.19	0.05	0.3	0.08	0.01	<0.01	0.02	0.02
Ammonia	mg/L	Quarterly	0.36	0.37	0.41	0.43	0.3	0.34	0.31	0.23	0.24	0.16	0.18	0.27	0.2	0.1	0.12	0.04	0.26	0.28	0.13	0.17	0.36	0.36	0.4	0.31	0.39	0.42	0.48	0.35	0.25	0.3	0.25	0.24	0.08	0.12	0.09	0.07
Antimony	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Quarterly	0.01	0.004	0.007	0.002	<0.001	<0.001	0.001	<0.001	0.009	0.004	0.006	0.004	0.032	0.011	0.008	0.004	0.002	<0.001	0.002	<0.001	0.002	0.001	0.005	0.002	0.007	0.006	0.008	0.004	0.001	0.001	0.001	0.001	0.006	<0.001	0.001	<0.001
Barium	mg/L	Quarterly	0.021	0.022	0.022	0.019	0.024	0.021	0.025	0.021	0.024	0.014	0.017	0.016	0.154	0.178	0.192	0.122	0.018	0.016	0.023	0.015	0.022	0.017	0.041	0.02	0.02	0.016	0.024	0.017	0.014	0.011	0.018	0.013	0.085	0.028	0.068	0.046
Beryllium	mg/L	Quarterly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Quarterly	134	199	205	163	104	70	110	98	232	239	252	228	140	65	90	85	158	140	155	151	216	186	192	196	268	238	249	252	183	158	171	180	168	129	178	159
Boron	mg/L	Quarterly	2.62	2.81	3.05	5.44	1.39	1.36	1.39	1.22	1.67	1.64	1.78	1.62	<0.05	<0.05	0.13	<0.05	0.54	0.52	0.8	0.51	2.61	1.84	1.99	1.9	5.41	5.35	6.14	5.02	1.69	1.69	1.78	1.86	0.07	<0.05	<0.05	<0.05
Cadmium	mg/L	Quarterly	0.0003	<0.0001	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0011	0.0009	0.0011	0.001	0.0001	0.0001	0.0002	0.0001	<0.0001	<0.0001	0.0004	<0.0001
Calcium	mg/L	Quarterly	220	243	261	346	522	512	548	522	158	143	154	168	68.3	104	68.2	65.2	164	164	168	175	568	497	511	492	382	373	389	390	148	180	187	201	170.5	70.2	85.1	79.2
Carbonate Chloride	mg/L	Quarterly	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	mg/L	Quarterly	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	<0.001	0.003	0.008	0.016	0.015	0.234	0.011	<0.001	<0.001	<0.001	<0.001
Chromium (hexavalent)	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (trivalent)	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt	mg/L	Quarterly	0.269	0.206	0.212	0.274	0.229	0.211	0.244	0.199	0.167	0.156	0.169	0.169	0.049	0.055	0.048	0.027	0.143	0.148	0.159	0.144	0.332	0.328	0.342	0.312	0.304	0.304	0.326	0.288	0.114	0.157	0.168	0.167	0.01	<0.001	0.002	<0.001
Copper	mg/L	Quarterly	<0.001	<0.001	0.011	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	0.006	0.004	<0.001	<0.001	<0.001	<0.001	0.001	0.004	0.01	0.003	<0.001	0.005	<0.001	0.001	0.001	0.001	0.006	0.001	0.013	<0.001	0.002	<0.001
Dissolved Oxygen	mg/L	Quarterly	1	0.8	0.7	0.8	1.9	2.2	1.8	1.7	1.4	2	1.4	1.5	1.4	1.9	1.8	1.7	1	1.1	1.3	1	1.7	1.1	1.7	1.2	1	1.3	1.4	1.3	0.7	1	1.3	0.6	1.8	0.7	1.7	1.2
Electrical Conductivity	µS/cm	Quarterly	7120	8210	8250	11330	8610	8500	8750	8520	3560	3360	3440	3580	750	1280	930	970	2960	3070	3120	3120	13100	12670	12260	11850	12720	12680	12520	12240	3600	4570	4620	4830	1010	870	1020	930
Iron	mg/L	Quarterly	9.84	6.19	9.6	5.83	49.9	34.6	58.4	49.6	15.5	11	18.7	14.5	18.7	9.47	9.17	2.42	21.9	17.4	27.3	21.5	31.8	21.8	43.3	28.1	21.4	19.3	28.7	21.4	8.68	10.2	14.9	12.1	10.8	6.59	10.4	8.8
Lead	mg/L	Quarterly	0.007	<0.001	0.005	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	0.007	0.002	0.01	0.009	0.014	0.012	0.003	0.002	0.003	0.003	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Quarterly	228	252	279	395	475	452	483	480	154	133	149	162	27.5	57.4	38.4	40	158	151	162	165	690	616	634	612	544	497	520	510	124	147	159	168	45	38.6	52.1	45.8
Manganese	mg/L	Quarterly	7.31	6.33	6.48	10.4	14.3	14.2	14.4	13.6	8.35	7.99	7.92	8.83	3.89	3.58	4.16	2.43	9.91	10.2	10.5	10.1	20	19.4	18.2	17.6	13.1	12.5	12.5	11.8	4.63	6.26	6.14	6.53	0.665	0.655	0.581	0.686
Mercury	mg/L	Quarterly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	0.00005	<0.00004	<0.00004	<0.00004	0.00007	<0.00004	0.00007	0.00007	0.00011	0.00005	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Quarterly	0.006	0.011	0.015	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	mg/L	Quarterly	0.864	0.81	0.845	1.21	1.5	1.42	1.66	1.43	0.606	0.568	0.647	0.648	0.124	0.194	0.088	0.06	0.524	0.541	0.586	0.542	2.1	2.2	2.14	2.04	1.79	1.77	1.89	1.69	0.361	0.538	0.692	0.601	0.016	0.008	0.008	0.006
Nitrate	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	0.02	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	0.02	0.04	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrite	mg/L	Quarterly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	pH	Quarterly	5.85	6.06	6.07	5.95	8.61	6.06</																														





2025 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol C   EPA ID No.: 22												SW_Wangcol E   EPA ID No.: 23											
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alkalinity (as calciumcarbonate)	mg/L	Monthly	120	81	118	98	78	78	54	71	128	37	120	121	187	136	163	123	104	76	58	64	43	134	141	162
Aluminium	mg/L	Monthly	0.082	0.041	0.093	0.027	0.108	0.035	0.124	0.183	0.197	1.55	0.128	0.441	0.015	<0.005	0.012	<0.005	0.022	<0.005	0.049	<0.005	1.1	0.026	0.013	0.025
Ammonia	mg/L	Monthly	0.03	<0.01	0.02	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	0.01	0.06	0.05	0.07	0.04	0.05	0.03	0.02	0.01	0.02	0.03	0.09	0.08
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Monthly	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	Monthly	0.025	0.022	0.051	0.032	0.028	0.02	0.016	0.019	0.032	0.021	0.025	0.039	0.04	0.038	0.046	0.044	0.044	0.027	0.022	0.016	0.017	0.036	0.043	0.055
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Monthly	120	81	118	98	78	78	54	71	128	37	120	121	187	136	163	123	104	76	58	64	43	134	141	162
Boron	mg/L	Monthly	<0.05	<0.05	0.13	<0.05	0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	0.07	0.97	0.52	1.01	0.36	0.89	0.34	0.12	0.08	<0.05	0.3	0.7	1.94
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Monthly	26.1	22	34.5	29.1	22.8	19.6	15.7	18.6	32.9	11.6	30.3	30.3	128	88.5	137	80.6	136	56.7	30.6	26.2	13.2	62.3	108	254
Chloride	mg/L	Monthly	6.36	12.4	17.3	16.1	17.7	15.2	12.5	16.1	11	6.73	10.8	7.68	273	156	231	136	292	115	49.9	43	10.3	81.8	222	591
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.034	0.02	0.044	0.014	0.045	0.016	0.005	0.003	<0.001	0.011	0.03	0.085
Copper	mg/L	Monthly	<0.001	0.001	0.004	0.004	<0.001	<0.001	<0.001	0.001	0.003	0.004	0.002	0.007	0.001	<0.001	0.004	0.007	<0.001	<0.001	<0.001	<0.001	0.004	0.005	<0.001	0.002
Dissolved Oxygen	µS/cm	Monthly	3.8	4.2	2.6	5.2	6.9	13.2	12.2	10.9	5.8	27.7	2.8	4.6	5.6	7.2	5.1	9	6.4	13.4	15.9	14.1	13.3	8.6	2.2	4.8
Electrical Conductivity	mg/L	Monthly	390	363	588	424	380	350	299	351	515	150	462	468	3784	2270	3325	1874	5334	1611	829	658	155	1562	3051	6929
Iron	mg/L	Monthly	0.35	0.35	0.73	0.54	0.35	0.27	0.26	0.29	0.32	1.15	0.31	0.45	4.51	2.2	4.88	3.14	7.32	3.15	1.23	0.61	1.09	1.15	2.46	10.7
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Monthly	13.4	10.1	18	14.3	11.2	9.48	7.66	10.3	21.6	5.2	19	18.2	136	80	137	68.6	132	49	23.8	20	6.93	52.5	104	257
Manganese	mg/L	Monthly	0.6	0.328	1.08	0.504	0.3	0.19	0.121	0.111	0.23	0.05	0.268	0.528	4.38	2.79	6.3	2.9	5.6	1.76	0.717	0.412	0.083	1.13	3.14	7.75
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Monthly	0.01	0.003	0.008	0.005	0.003	0.006	0.005	0.005	0.01	0.002	0.004	0.008	0.001	<0.001	0.005	<0.001	<0.001	0.004	0.002	0.001	<0.001	0.004	<0.001	0.001
Nickel	mg/L	Monthly	0.003	0.003	0.007	0.005	0.009	0.002	0.002	0.003	0.005	0.004	0.003	0.005	0.416	0.239	0.442	0.148	0.428	0.15	0.055	0.035	0.008	0.139	0.316	0.906
Nitrate	mg/L	Monthly	<0.01	<0.01	0.07	<0.01	<0.01	0.01	0.03	0.04	0.01	0.04	0.01	0.05	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.02	<0.01	0.04	<0.01	0.02
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	<0.01	<0.01	0.08	<0.01	<0.01	0.01	0.03	0.04	0.01	0.04	0.01	0.05	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.02	<0.01	0.04	<0.01	0.02
Nitrite	pH	Monthly	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	mg/L	Monthly	7.47	7.2	7.19	7.28	7.19	8.17	7.48	7.64	7.72	7.64	7.51	7.67	6.94	7.1	6.54	7.13	6.36	7.96	7.14	7.43	7.6	7.46	6.92	6.63
Potassium	mg/L	Monthly	4.54	4.85	8.68	6.82	4.79	4.62	4.05	4.41	6.34	3.58	6.07	5.97	63.5	27.5	42.8	21.5	36.7	17.2	9.04	6.93	4.02	16.6	34.9	96.2
Selenium	mg/L	Monthly	0.0003	0.0004	0.0004	<0.0002	0.0003	0.0008	0.0009	0.0007	0.0004	0.0003	0.0003	0.0003	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0002	0.0002	0.0002	<0.0002	0.0002
Silver	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0008
Sodium	mg/L	Monthly	38.5	39.4	61.8	42.5	33.4	34.4	29.8	35.6	41.7	11.3	36.7	38.6	900	291	530	231	488	180	87.3	68.1	19.7	168	396	1050
Sulfate	mg/L	Monthly	24	25	49	32	25	25	21	25	37	9	30	38	627	315	513	234	503	177	81	63	15	167	393	1200
Sulfur	mg/L	Monthly	61.8	52.6	131	109	92	87.9	71.6	81.9	101	33	99.6	115	1400	756	1220	761	1690	643	272	214	52.9	464	1290	3470
Total Dissolved Solids	mg/L	Monthly	254	229	375	265	253	222	190	212	320	138	276	296	2760	1630	2690	1330	2830	1050	521	369	160	984	2210	5760
Vanadium	mg/L	Monthly	0.0003	0.0002	0.0004	<0.0002	0.0002	<0.0002	0.0002	0.0003	0.0007	0.0022	0.0004	0.0007	0.0005	0.0002	0.0004	<0.0002	0.0004	<0.0002	0.0003	<0.0002	0.0015	0.0003	0.0004	0.0007
Zinc	mg/L	Monthly	<0.005	<0.005	0.014	0.014	0.007	0.007	<0.005	0.018	0.014	0.023	0.007	0.018	0.032	<0.005	0.028	0.023	0.031	0.011	0.025	<0.005	0.015	0.021	0.024	0.066

**Table 16: 2025 EPL 13007 Surface Water Data**

2025 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol F   EPA ID No.: 24												SW_Wangcol G   EPA ID No.: 25											
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alkalinity (as calciumcarbonate)	mg/L	Monthly	148	102	166	129	100	78	51	58	50	121	130	150	147	120	164	123	93	79	56	62	48	120	134	151
Aluminium	mg/L	Monthly	0.032	0.016	0.019	0.008	0.007	0.012	0.054	0.042	1.24	0.047	0.016	0.043	0.027	0.017	0.017	0.008	<0.005	0.007	0.054	0.042	1.28	0.012	0.016	0.073
Ammonia	mg/L	Monthly	0.03	0.06	0.03	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.01	0.02	0.04	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.02	0.01
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	Monthly	0.015	0.014	0.056	0.028	0.037	0.022	0.011	0.011	0.013	0.027	0.017	0.055	0.013	0.013	0.052	0.028	0.034	0.021	0.011	0.01	0.012	0.025	0.016	0.051
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Monthly	148	102	166	129	100	78	51	58	50	121	130	150	147	120	164	123	93	79	56	62	48	120	134	151
Boron	mg/L	Monthly	0.21	0.15	0.61	0.3	0.34	0.25	0.07	0.1	<0.05	0.31	0.21	0.52	0.22	0.18	0.59	0.3	0.4	0.21	0.07	0.09	<0.05	0.25	0.23	0.63
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Monthly	47.8	38.6	120	68.1	71.4	43.9	23.6	24.1	13.4	59.6	54.2	143	46.6	39.4	122	69.8	72	42.7	23.8	24	13.5	59.3	55.3	141
Chloride	mg/L	Monthly	62.3	60.2	183	125	170	88	31.7	38.2	10.9	75.2	74.1	280	66.1	45.9	188	100	156	85.5	31.3	37	10.8	74	72.5	324
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001
Cobalt	mg/L	Monthly	<0.001	<0.001	0.002	0.002	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	0.003	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001
Copper	mg/L	Monthly	<0.001	<0.001	0.004	0.007	<0.001	<0.001	<0.001	<0.001	0.004	0.005	<0.001	0.006	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	0.001
Dissolved Oxygen	µS/cm	Monthly	7.6	11	7.6	10.4	9.8	15.6	13.5	12.8	10.3	7.7	8.3	7.5	9.3	7.4	9.6	10.1	14.3	14.2	15.7	11.8	8.3	4.3	7.2	
Electrical Conductivity	mg/L	Monthly	1083	874	2770	1591	1826	1231	566	568	250	1384	1283	3197	1082	863	2796	1581	1813	1154	566	570	250	1389	1266	3209
Iron	mg/L	Monthly	0.28	0.21	0.36	0.36	0.27	0.16	0.27	0.28	1.14	0.22	0.11	0.74	0.25	0.23	0.22	0.35	0.11	0.12	0.27	0.28	1.16	0.11	0.11	0.36
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Monthly	37.8	28.8	107	56.5	59.8	35.9	16.9	17.7	7.62	47.3	44.7	124	37.8	29.1	109	57.4	60.3	35.2	17.1	17.6	7.81	47.2	45.2	123
Manganese	mg/L	Monthly	0.378	0.434	2.5	1.54	0.524	0.502	0.166	0.124	0.068	0.244	0.11	0.378	0.259	0.397	2.09	1.16	0.388	0.411	0.163	0.113	0.065	0.139	0.096	0.379
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Monthly	0.004	0.001	0.003	0.002	0.004	0.001	0.001	<0.001	0.001	0.004	0.001	0.002	0.002	0.001	0.004	0.001	<0.001	0.003	0.001	<0.001	<0.001	0.007	<0.001	0.002
Nickel	mg/L	Monthly	0.066	0.048	0.237	0.104	0.137	0.078	0.027	0.027	0.01	0.094	0.071	0.255	0.066	0.05	0.232	0.104	0.152	0.073	0.026	0.026	0.01	0.102	0.072	0.256
Nitrate	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Nitrite	pH	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	mg/L	Monthly	7.81	7.3	7.64	7.7	7.6	8.7	7.51	7.69	7.56	7.73	7.86	7.74	7.79	7.6	7.72	7.71	7.56	8.22	7.5	7.85	7.65	8.01	7.89	7.82
Potassium	mg/L	Monthly	11.4	10.2	27.2	18.4	17.5	12.9	6.8	6.32	4.46	14.4	13.4	27.6	52	10.1	27.2	18.4	17.7	12.5	6.99	6.29	4.41	13.9	13.6	27.5
Selenium	mg/L	Monthly	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	0.0003	0.0002	<0.0002	<0.0002
Silver	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sodium	mg/L	Monthly	133	97	367	194	208	129	55.8	58.3	22.7	149	138	391	807	97.9	369	199	209	123	56.4	58	23	145	141	389
Sulfate	mg/L	Monthly	106	75	352	179	206	119	51	52	19	148	134	483	313	78	357	186	211	117	52	52	22	146	136	478
Sulfur	mg/L	Monthly	296	183	894	563	823	445	172	177	57.6	411	413	1460	310	190	915	487	769	408	166	186	60.5	412	408	1660
Total Dissolved Solids	mg/L	Monthly	819	562	2050	1050	1220	748	346	343	166	893	844	2410	808	538	2080	1030	1230	732	351	336	172	814	868	2440
Vanadium	mg/L	Monthly	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0017	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0018	0.0002	<0.0002	0.0002
Zinc	mg/L	Monthly	0.008	<0.005	0.015	0.018	<0.005	0.006	0.009	<0.005	0.023	0.025	<0.005	0.04	<0.005	<0.005	<0.005	0.015	0.006	<0.005	0.008	<0.005	0.012	<0.005	<0.005	0.007

**Table 17: 2025 EPL 13007 Surface Water Data (Continued)**

2024 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol C   EPA ID No.: 22												SW_Wangcol E   EPA ID No.: 23											
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alkalinity (as calciumcarbonate)	mg/L	Monthly	80	90	109	83	85	87	82	65	98	72	63	81	114	127	183	105	98	74	78	77	90	139	142	123
Aluminium	mg/L	Monthly	0.2	0.62	0.28	0.05	0.17	0.179	0.134	0.296	0.028	0.703	0.362	0.16	0.04	0.04	<0.01	<0.01	0.02	0.03	0.019	0.018	<0.005	0.022	<0.005	0.028
Ammonia	mg/L	Monthly	0.02	0.01	0.01	0.01	0.02	<0.01	<0.01	<0.01	0.02	0.03	0.02	<0.01	0.02	0.02	0.05	0.03	0.03	0.02	0.03	0.15	0.04	0.05	0.02	0.02
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	Monthly	0.02	0.023	0.027	0.023	0.024	0.024	0.026	0.025	0.022	0.034	0.031	0.019	0.026	0.028	0.063	0.034	0.03	0.023	0.024	0.022	0.027	0.034	0.04	0.022
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Monthly	80	90	109	83	85	87	82	65	98	72	63	81	114	127	183	105	98	74	78	77	90	139	142	123
Boron	mg/L	Monthly	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	0.11	0.1	<0.05	<0.05	<0.05	0.18	0.08	1.6	0.28	0.11	0.19	0.22	0.2	0.34	0.61	0.67	0.13
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Monthly	16.8	21.4	23.6	20.5	21.9	22.4	22.4	18	30.2	14.1	12.1	20.2	40.3	36.6	302	50	34.8	39.2	44.7	36.5	58.2	89	92.2	33.4
Chloride	mg/L	Monthly	12.4	8.27	11.7	8.62	9.94	11.4	13.2	11.8	14.3	11.3	9.34	8.6	94.6	53.7	735	105	45.8	72.5	86	60.9	119	248	226	30.8
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	0.007	0.116	0.019	0.006	0.009	0.012	0.008	0.016	0.028	0.027	0.004
Copper	mg/L	Monthly	0.002	0.002	<0.001	<0.001	<0.001	0.001	0.001	0.002	0.012	0.003	0.002	0.002	0.001	<0.001	<0.001	<0.001	<0.001	0.007	0.002	<0.001	0.002	<0.001	<0.001	0.004
Dissolved Oxygen	µS/cm	Monthly	5.2	6.2	3.7	7.8	8.1	13.3	12.1	9.7	12.4	6.4	5.8	5.2	7.3	8	3.6	9.99	9.6	14.8	13.5	11	11.4	7.6	6.9	8.9
Electrical Conductivity	mg/L	Monthly	318	302	363	389	320	386	394	328	488	261	227	364	1150	870	7450	1780	820	1133	1303	1082	1825	2798	2997	717
Iron	mg/L	Monthly	0.62	0.86	0.57	0.38	0.44	0.58	0.42	0.4	0.35	0.67	0.78	0.39	2.17	1.86	12.2	3.06	1.36	1.68	1.82	1.32	2.29	3.09	2.12	1.05
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Monthly	8.96	11.5	12.8	12.5	12.7	14.1	13.8	10.8	17.5	8.1	6.32	9.04	37.5	30.3	336	51.4	29.3	37.6	42.8	33.7	56.5	92.4	94.1	23
Manganese	mg/L	Monthly	0.246	0.206	0.56	0.168	0.187	0.222	0.138	0.099	0.181	0.279	0.284	0.206	1.95	1.93	13.8	2.64	1.34	1.16	1.32	0.935	1.66	3.05	3.7	1
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Monthly	0.005	0.004	0.006	0.003	0.003	0.01	0.009	0.007	0.009	0.004	0.003	0.006	0.002	0.002	<0.001	0.001	<0.001	0.002	<0.001	0.002	0.001	<0.001	<0.001	0.004
Nickel	mg/L	Monthly	0.003	0.005	0.002	0.003	0.002	0.003	0.003	0.002	0.006	0.003	0.003	0.004	0.091	0.067	1.08	0.17	0.056	0.098	0.109	0.076	0.163	0.284	0.32	0.043
Nitrate	mg/L	Monthly	0.03	<0.01	0.06	0.01	0.01	0.02	0.16	<0.01	0.02	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.01	<0.01	0.01	<0.01	0.03
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	0.03	<0.01	0.06	0.01	0.01	0.02	0.16	0.01	0.02	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.01	<0.01	0.01	<0.01	0.03
Nitrite	pH	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	mg/L	Monthly	7.46	7.66	7.09	8.07	7.65	7.75	7.14	8.4	7.7	7.03	6.95	7.57	7.26	7.49	6.31	7.15	7.4	7.6	6.91	7.94	7.41	6.66	6.78	7.57
Potassium	mg/L	Monthly	3.92	5.18	6.13	4.76	5.43	4.53	5.72	4.96	6.88	4.66	3.82	4.52	12.2	9.84	98.5	15.5	9.74	10.4	12.8	11.1	18.1	31.7	32.6	8.95
Selenium	mg/L	Monthly	0.0008	0.0003	0.0003	0.0004	<0.0002	<0.0002	0.0002	0.0003	0.0004	0.0002	<0.0002	0.0013	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0003
Silver	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Sodium	mg/L	Monthly	35.1	25.5	21.9	29.3	25.2	33.6	38	28.6	44.4	24.6	16.7	41.5	131	99	1070	175	85.7	116	139	111	200	356	350	82.7
Sulfate	mg/L	Monthly	19	16	32	26	21	29	36	23	39	14	8	24	111	77	1270	178	81	112	139	112	205	326	342	56
Sulfur	mg/L	Monthly	60.6	53.1	66.6	88	58.5	84.3	98.1	68	126	45.5	27.1	72.3	442	247	3760	523	223	366	461	323	675	1170	1200	168
Total Dissolved Solids	mg/L	Monthly	218	174	234	208	185	253	246	201	275	159	116	238	797	630	5980	1020	500	720	819	654	1170	2150	2100	422
Vanadium	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	0.0003	0.0002	0.0004	0.0003	0.0009	0.0005	0.0004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.0002	0.0002	0.0003	0.0002	<0.0002
Zinc	mg/L	Monthly	<0.005	0.011	0.006	0.009	0.008	0.008	0.01	0.009	0.027	0.014	0.015	0.015	0.01	0.013	0.037	0.01	0.007	0.021	0.019	0.007	0.015	0.024	0.026	0.022

**Table 18: 2024 EPL 13007 Surface Water Data**

2024 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol F   EPA ID No.: 24												SW_Wangcol G   EPA ID No.: 25												
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Alkalinity (as calciumcarbonate)	mg/L	Monthly	87	108	149	82	92	65	74	74	86	99	118	102	84	109	149	83	94	79	74	74	88	114	118	98	
Aluminium	mg/L	Monthly	0.18	0.09	0.02	<0.01	0.04	0.014	0.008	0.022	0.007	0.037	0.013	0.045	0.13	0.07	0.04	0.01	0.04	0.009	0.008	0.013	0.027	0.02	<0.01	<0.01	0.046
Ammonia	mg/L	Monthly	0.02	<0.01	0.02	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	mg/L	Monthly	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	
Barium	mg/L	Monthly	0.008	0.011	0.021	0.015	0.015	0.025	0.02	0.015	0.033	0.03	0.015	0.008	0.007	0.012	0.021	0.016	0.015	0.024	0.022	0.014	0.032	0.03	0.017	0.007	
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Bicarbonate alkalinity	mg/L	Monthly	87	108	149	82	92	65	74	74	86	99	118	102	84	109	149	83	94	79	74	74	88	114	118	98	
Boron	mg/L	Monthly	0.11	0.11	0.24	0.13	0.11	0.27	0.22	0.18	0.37	0.35	0.26	0.13	0.07	<0.05	0.22	0.14	0.1	0.24	0.2	0.19	0.34	0.38	0.25	0.12	
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Calcium	mg/L	Monthly	19.9	31.3	57	31.8	32.8	51	46.2	37.5	80	75	48.5	29.5	20	30.6	54.5	31.2	33	50.8	45.9	37.6	77.2	74.1	45.8	29	
Chloride	mg/L	Monthly	22.9	41	95.5	51.3	45.3	103	65.6	68.3	149	161	101	31.9	24.3	41.6	91.7	51.8	41.8	105	71	65.7	133	162	102	28	
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cobalt	mg/L	Monthly	0.001	0.001	0.003	0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.003	0.001	<0.001	0.002	0.001	<0.001	0.001	<0.001	<0.001	<0.001	
Copper	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	0.029	<0.001	0.002	<0.001	0.003	<0.001	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.016	<0.001	<0.001	0.003	
Dissolved Oxygen	µS/cm	Monthly	7.2	8.6	7.3	12.46	9.4	13.2	11.4	11.3	11.1	7.3	7.6	8	7.9	7.6	7.3	8.9	9.9	13.3	12.4	10.7	12.1	9.2	8	8.4	
Electrical Conductivity	mg/L	Monthly	458	700	1300	940	770	1428	1177	1043	2096	2048	1369	628	458	700	1290	930	760	1434	1179	1020	2070	2039	1368	610	
Iron	mg/L	Monthly	0.6	0.5	0.52	0.19	0.38	0.17	0.26	0.29	0.13	0.18	0.22	0.3	0.54	0.48	0.5	0.21	0.37	0.14	0.26	0.24	0.14	0.12	0.19	0.27	
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	
Magnesium	mg/L	Monthly	14.3	23.9	49.6	28.4	26.8	50.7	43.1	33.3	73.4	68.9	41	20.1	14.6	23.6	48.5	27.8	27	50.4	42.9	33.4	71.3	67.2	38.9	20	
Manganese	mg/L	Monthly	0.467	0.874	1.49	0.694	0.426	0.465	0.313	0.121	0.246	0.219	0.27	0.258	0.426	0.813	1.47	0.716	0.417	0.449	0.301	0.094	0.229	0.181	0.201	0.208	
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	0.00008	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	
Molybdenum	mg/L	Monthly	0.004	0.003	0.013	0.002	0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.001	0.005	0.002	0.002	0.002	0.001	<0.001	0.001	<0.001	0.001	0.005	<0.001	0.001	0.003	
Nickel	mg/L	Monthly	0.02	0.043	0.098	0.055	0.04	0.101	0.08	0.059	0.159	0.147	0.086	0.031	0.02	0.043	0.099	0.06	0.039	0.104	0.079	0.058	0.157	0.145	0.087	0.031	
Nitrate	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	0.02	<0.01	<0.01	0.01	
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	0.02	<0.01	<0.01	0.01	
Nitrite	pH	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
pH	mg/L	Monthly	7.69	7.87	7.39	8.18	7.57	7.76	7.29	8.16	7.97	6.86	7.51	7.37	7.62	8.21	7.52	7.78	7.71	7.76	7.36	7.64	7.89	7.52	7.59	8	
Potassium	mg/L	Monthly	5.66	8.79	15.3	9.04	10	13.6	12.7	11.4	20.2	20.6	15	8.25	5.85	8.89	15.3	8.75	9.78	12.8	12.6	11	20.8	20.1	14.2	8.21	
Selenium	mg/L	Monthly	0.0005	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0004	0.0003	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	0.0018	<0.0002	<0.0002	0.0003	
Silver	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Sodium	mg/L	Monthly	48.2	77.8	126	88.3	76.7	153	133	110	246	236	139	64.2	48.6	77.4	123	86.1	76.9	150	132	107	244	229	132	62.8	
Sulfate	mg/L	Monthly	33	56	143	82	73	151	127	110	251	230	125	45	34	56	138	84	72	151	128	116	244	220	120	55	
Sulfur	mg/L	Monthly	104	182	417	251	207	510	327	337	796	765	473	146	107	184	396	252	199	507	344	334	733	763	481	143	
Total Dissolved Solids	mg/L	Monthly	304	501	803	516	450	932	704	662	1360	1450	836	329	328	492	839	520	416	900	730	607	1390	1460	822	381	
Vanadium	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.0002	0.0019	<0.0002	<0.0002	<0.0002	
Zinc	mg/L	Monthly	<0.005	<0.005	0.013	<0.005	0.008	0.01	<0.005	0.01	0.006	0.02	0.007	0.046	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	0.006	<0.005	0.052	<0.005	<0.005	0.032	

**Table 19: 2024 EPL 13007 Surface Water Data (Continued)**

2023 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol C   EPA ID No.: 22												SW_Wangcol E   EPA ID No.: 23											
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alkalinity (as calciumcarbonate)	mg/L	Monthly	39	36	56	43	42	58	56	57	66	85	107	86	77	92	112	87	77	63	54	62	64	119	94	141
Aluminium	mg/L	Monthly	0.25	0.3	0.21	0.44	0.06	0.07	0.14	0.24	0.21	0.32	0.32	0.49	0.02	0.03	0.02	0.02	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.02	0.05
Ammonia	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	0.1	0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.02	<0.01	0.01	<0.01	0.08	0.14	0.05	0.04	0.03	0.09	0.06	0.06
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	Monthly	0.026	0.025	0.029	0.024	0.018	0.025	0.025	0.029	0.024	0.025	0.031	0.027	0.026	0.026	0.036	0.032	0.03	0.037	0.041	0.042	0.035	0.047	0.052	0.046
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bicarbonate alkalinity	mg/L	Monthly	39	36	56	43	42	58	56	57	66	85	107	86	77	92	112	87	77	63	54	62	64	119	94	141
Boron	mg/L	Monthly	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.09	0.11	0.1	0.11	0.09	0.18	0.24	0.27	0.3	0.23	1.16	0.76	0.98
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	mg/L	Monthly	9.69	8.23	15.2	11.7	10.5	20.9	19	18.3	20.1	21.8	25.7	15.7	38.7	38.9	38.6	31.2	43.6	54.3	58	64.5	50	176	131	132
Chloride	mg/L	Monthly	8.52	7.03	10.5	8.4	12.3	12.9	13.6	13.5	13.8	20.7	15.7	14.5	72.6	74.6	67.1	59.4	102	123	104	144	113	382	330	300
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.008	0.007	0.006	0.006	0.012	0.014	0.017	0.02	0.014	0.065	0.039	0.04
Copper	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.005	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.004	0.003
Dissolved Oxygen	µS/cm	Monthly	8	6.9	7.1	6.4	9.8	10.7	13.3	8.8	11.1	7.9	5.1	3.2	6.6	7.2	7.7	7.8	11.4	10.4	12.8	10.6	12	5.7	7.3	4
Electrical Conductivity	mg/L	Monthly	157	127	220	178	195	320	321	277	348	409	448	326	940	950	890	820	1290	1440	1600	1790	1530	4850	3650	4270
Iron	mg/L	Monthly	0.34	0.48	0.44	0.6	0.36	0.35	0.44	0.53	0.46	0.59	0.58	0.7	1.13	1.25	1.31	1.53	2.59	3.05	3.76	3.84	3.13	7.38	3.95	3.33
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Monthly	6.8	5.14	9.91	6.67	6.32	13.4	11.5	10.6	11.6	12.1	13.9	7.85	36.3	34.7	33.8	27.5	42.5	51	55.8	64.7	49.6	201	143	152
Manganese	mg/L	Monthly	0.137	0.168	0.247	0.227	0.128	0.201	0.155	0.205	0.16	0.272	0.48	0.353	1.38	2.15	2.95	2.29	2.57	2.84	2.78	2.99	2.21	6.9	4.92	5.66
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	0.00006	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Monthly	<0.001	<0.001	0.001	0.001	<0.001	0.001	0.009	0.017	0.021	0.009	0.009	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.002
Nickel	mg/L	Monthly	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.002	0.002	0.003	0.005	0.004	0.071	0.079	0.062	0.059	0.102	0.123	0.149	0.177	0.128	0.609	0.432	0.451
Nitrate	mg/L	Monthly	<0.01	<0.01	<0.01	0.01	0.04	0.05	0.03	<0.01	0.02	0.02	<0.01	<0.01	0.02	<0.01	0.04	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	0.02	<0.01	<0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	<0.01	<0.01	<0.01	0.02	0.04	0.05	0.03	<0.01	0.02	0.02	<0.01	0.02	0.02	<0.01	0.04	0.01	<0.01	0.09	<0.01	<0.01	<0.01	0.02	<0.01	<0.01
Nitrite	pH	Monthly	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	mg/L	Monthly	7.6	7.01	7.19	7.21	7.55	7.46	7.96	7.56	8.04	7.29	7.31	7.41	7.07	7.03	7.14	7.12	7	6.96	7.47	7.24	7.65	6.54	6.78	6.72
Potassium	mg/L	Monthly	2.6	2.34	3.74	3.03	2.83	4.2	4.5	4.9	5.18	7.66	7.31	4.68	8.35	8.28	7.87	7.35	10.8	12.8	14.4	18.6	13.9	61.5	44.2	43.6
Selenium	mg/L	Monthly	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0002	0.0003	0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Silver	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	mg/L	Monthly	11.4	9.55	14	10.1	15.1	20.8	25.9	20.9	27	49.2	48.4	37.4	98.6	101	93.3	78.3	138	164	180	212	158	725	513	540
Sulfate	mg/L	Monthly	9	5	13	9	11	25	24	19	25	29	31	19	96	95	81	71	131	161	184	212	163	743	500	535
Sulfur	mg/L	Monthly	27.1	14.3	37.8	28.4	37.1	77.3	73.8	63.5	87.5	87.7	95.7	47.1	308	316	256	234	462	572	455	678	537	1820	1650	1460
Total Dissolved Solids	mg/L	Monthly	101	94	134	114	102	203	188	202	188	236	306	203	596	625	554	464	778	968	1020	1250	953	3690	2930	3020
Vanadium	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	Monthly	<0.005	<0.005	0.007	0.006	<0.005	<0.005	<0.005	0.006	0.012	0.055	0.017	0.01	0.006	0.008	0.008	<0.005	<0.005	0.011	0.012	0.014	0.016	0.044	0.046	0.029

**Table 20: 2023 EPL 13007 Surface Water Data**

2023 Surface Water Pollution Monitoring Data (PED)			SW_Wangcol F   EPA ID No.: 24												SW_Wangcol G   EPA ID No.: 25											
Variable	Unit	Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alkalinity (as calciumcarbonate)	mg/L	Monthly	72	86	113	77	68	64	63	55	57	78	92	107	73	89	113	75	68	63	76	55	53	84	94	108
Aluminium	mg/L	Monthly	0.01	0.02	0.15	0.02	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.02	0.05	0.01	0.03	<0.01	0.03	<0.01	<0.01	0.01	0.02	0.02	0.02	0.05
Ammonia	mg/L	Monthly	0.01	<0.01	0.02	<0.01	0.01	0.08	0.04	<0.01	0.02	0.04	0.05	0.15	0.02	<0.01	0.01	<0.01	0.12	0.22	0.02	<0.01	<0.01	0.04	<0.01	
Antimony	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Barium	mg/L	Monthly	0.021	0.021	0.038	0.014	0.016	0.034	0.034	0.017	0.015	0.025	0.028	0.01	0.021	0.021	0.032	0.014	0.016	0.034	0.033	0.018	0.015	0.023	0.028	0.01
Beryllium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Bicarbonate alkalinity	mg/L	Monthly	72	86	113	77	68	64	63	55	57	78	92	107	73	89	113	75	68	63	76	55	53	84	94	108
Boron	mg/L	Monthly	0.12	0.12	0.24	0.08	0.11	0.32	0.32	0.18	0.19	0.32	0.39	0.23	0.1	0.12	0.22	0.08	0.1	0.32	0.33	0.18	0.18	0.36	0.39	0.26
Cadmium	mg/L	Monthly	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Calcium	mg/L	Monthly	42.7	44.6	66	28.5	33.4	76.9	79.2	47.7	47.8	79	93.8	31.7	42.2	45.7	66	30	33.8	76.3	78	47.1	45.7	78.6	94	35
Chloride	mg/L	Monthly	73.6	84.4	131	57.6	69.5	153	154	91.5	95.8	139	187	44.6	76.1	88.3	136	55.7	67.1	172	150	95.7	99.2	138	185	42.3
Chromium	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cobalt	mg/L	Monthly	<0.001	<0.001	0.002	<0.001	<0.001	0.001	0.002	0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.001
Copper	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001
Dissolved Oxygen	µS/cm	Monthly	6.3	6.6	7.8	7.7	10.5	10.4	12.9	10.7	9.9	8.9	7	6.7	6.7	7.7	7.8	8.1	11.8	11.3	10.9	10.1	10.4	8.2	7.4	6.6
Electrical Conductivity	mg/L	Monthly	980	1060	1590	750	880	1930	1970	1170	1300	1910	2310	840	970	1060	1610	750	880	1930	1970	1770	1290	1910	2300	850
Iron	mg/L	Monthly	0.22	0.21	0.7	0.27	0.21	0.08	0.17	0.16	0.16	0.24	0.32	0.36	0.2	0.2	0.21	0.26	0.19	0.05	0.16	0.13	0.17	0.22	0.23	0.41
Lead	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/L	Monthly	38	38.6	62.7	24.4	29.4	72.3	74.6	42.6	44.1	72.4	85.2	26.8	37.6	39.4	62.2	25.7	29.7	71.4	73.4	41.7	42.4	72.1	85.9	29.7
Manganese	mg/L	Monthly	0.53	0.888	2.15	0.401	0.403	0.334	0.394	0.143	0.157	0.287	0.351	0.298	0.509	0.847	1.77	0.405	0.381	0.305	0.37	0.142	0.159	0.26	0.275	0.278
Mercury	mg/L	Monthly	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004	<0.00004
Molybdenum	mg/L	Monthly	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.002
Nickel	mg/L	Monthly	0.061	0.072	0.119	0.044	0.05	0.136	0.152	0.073	0.074	0.133	0.175	0.047	0.059	0.072	0.117	0.042	0.05	0.134	0.153	0.073	0.073	0.133	0.177	0.047
Nitrate	mg/L	Monthly	0.02	<0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	0.01	0.03	0.04	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate + nitrite(oxidised nitrogen)	mg/L	Monthly	0.02	<0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	0.01	0.03	0.04	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrite	pH	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	mg/L	Monthly	7.56	7.39	7.43	7.48	7.4	7.39	7.46	7.47	7.61	7.44	7.56	7.52	7.54	7.44	7.49	7.52	7.4	7.39	7.98	7.68	8.14	7.5	7.53	7.93
Potassium	mg/L	Monthly	8.31	9.01	14	7.21	7.63	16.7	17.6	13	12.9	20.2	22.9	8.95	8.16	9.28	13.7	7.4	7.72	16.5	17.4	12.8	12.2	19.9	22.9	9.84
Selenium	mg/L	Monthly	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Silver	mg/L	Monthly	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Sodium	mg/L	Monthly	97.6	111	188	62.6	88.8	226	230	127	134	225	280	89.7	97.5	113	185	70.3	89.3	224	228	125	128	223	281	96.9
Sulfate	mg/L	Monthly	101	110	176	63	96	231	241	129	140	250	274	69	100	112	176	65	87	228	239	127	133	240	279	76
Sulfur	mg/L	Monthly	316	358	528	221	290	678	704	414	423	630	858	214	329	378	556	212	279	776	695	436	465	622	854	209
Total Dissolved Solids	mg/L	Monthly	590	692	1080	428	509	1400	1310	750	956	1160	1760	489	614	688	1100	397	486	1320	1330	758	808	1180	1730	526
Vanadium	mg/L	Monthly	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc	mg/L	Monthly	<0.005	<0.005	0.022	<0.005	<0.005	0.006	0.006	0.009	0.018	0.013	0.02	0.009	<0.005	0.009	0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	0.006	0.005	<0.005

**Table 21: 2023 EPL 13007 Surface Water Data (Continued)**