

EPL 10265 Surface Water	Units	Point 4 - Sampling point for water stored in Goodwin Dam					
		100th percentile Concentration Limit	Date				
			22/01/2025	23/04/2025	22/07/2025	28/10/2025	22/01/2026
Fluoride	mg/L	2	0.75	0.53	0.83	0.45	1.0
pH**	No unit	6.5-8.5	7.4	7.2	7.6	7.5	7.1
Conductivity @ 25C <sup>0</sup>	µS/cm	800	500	690	610	470	580
Total Suspended Solids	mg/L	50	<5	88	7	<5	<5
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	30	<5	<5	<5	<5	<5
Total Cyanide	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Oil and Grease	mg/L	10	<5	<5	<5	<5	<5
Total Aluminium	µg/L	5000	19	250	13	49	39
Total Arsenic	µg/L	500	<1	<1	<1	<1	<1
Total Cadmium	µg/L	10	<0.1	0.3	<0.1	<0.1	<0.1
Total Chromium	µg/L	1000	<1	<1	<1	<1	<1
Total Cobalt	µg/L	1000	<1	<1	<1	<1	<1
Total Copper	µg/L	400	<1	<1	1	1	<1
Total Lead	µg/L	100	<1	<1	<1	<1	<1
Total Molybdenum	µg/L	150	1	2	2	2	<1
Total Nickel	µg/L	1000	<1	<1	<1	<1	<1
Total Selenium	µg/L	20	<1	<1	<1	<1	<1
Total Zinc	µg/L	20000	<5	<5	<5	<5	<5
Total Mercury	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sulfate, SO <sub>4</sub>	mg/L	---	110	240	190	130	180
Chemical Oxygen Demand	mg/L	---	43	52	26	32	32
Anionic Surfactants as MBAS	mg/L	---	0.3	<0.1	0.2	0.3	<0.1
Total Manganese	µg/L	1200	8	18	9	10	9

EPL 10265 Surface Water	Units	Point 5 - Sampling of Challenger Dam					
		100th percentile Concentration Limit	Date				
			22/01/2025	23/04/2025	22/07/2025	28/10/2025	22/01/2026
Fluoride	mg/L	2	0.34	0.32	0.30	0.26	0.42
pH**	No unit	6.5-8.5	7.8	7.5	8.0	7.9	7.3
Conductivity @ 25C <sup>0</sup>	µS/cm	800	410	390	440	380	450
Total Suspended Solids	mg/L	50	27	17	5	<5	51
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	30	<5	<5	<5	<5	<5
Total Cyanide	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Oil and Grease	mg/L	10	<5	<5	<5	<5	<5
Total Aluminium	µg/L	5000	51	200	260	16	130
Total Arsenic	µg/L	500	<1	<1	<1	<1	<1
Total Cadmium	µg/L	10	<0.1	<0.1	<0.1	<0.1	<0.1
Total Chromium	µg/L	1000	<1	<1	<1	<1	<1
Total Cobalt	µg/L	1000	<1	<1	<1	<1	<1
Total Copper	µg/L	400	5	<1	1	<1	<1
Total Lead	µg/L	100	1	<1	<1	<1	<1
Total Molybdenum	µg/L	150	<1	1	<1	<1	<1
Total Nickel	µg/L	1000	10	<1	1	<1	<1
Total Selenium	µg/L	20	<1	<1	<1	<1	<1
Total Zinc	µg/L	20000	9	<5	<5	<5	<5
Total Mercury	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sulfate, SO <sub>4</sub>	mg/L	---	51	61	110	76	87
Chemical Oxygen Demand	mg/L	---	41	52	32	32	25
Anionic Surfactants as MBAS	mg/L	---	<0.1	0.2	0.3	0.2	<0.1
Total Manganese	µg/L	1200	8	34	23	9	34

EPL 10265 Surface Water	Units	Point 6 - RW monitoring D/S of discharge point (Caledonia Creek)					
		100th percentile Concentration Limit	Date				
			22/01/2025	23/04/2025	22/07/2025	28/10/2025	22/01/2026
Fluoride	mg/L	2	0.34	0.15	0.24	0.27	0.55
pH**	No unit	6.5-8.5	7.3	7.0	7.5	7.5	7.1
Conductivity @ 25C <sup>0</sup>	µS/cm	800	510	560	410	470	570
Total Suspended Solids	mg/L	50	7	9	19	<5	29
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	30	<5	<5	<5	<5	<5
Total Cyanide	mg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Oil and Grease	mg/L	10	<5	<5	<5	<5	<5
Total Aluminium	µg/L	5000	<5	16	18	82	<b>230</b>
Total Arsenic	µg/L	500	2	2	<1	2	<1
Total Cadmium	µg/L	10	<0.1	<0.1	<0.1	<0.1	<0.1
Total Chromium	µg/L	1000	<1	<1	<1	<1	<1
Total Cobalt	µg/L	1000	<1	<1	<1	<1	<1
Total Copper	µg/L	400	<1	<1	3	2	<1
Total Lead	µg/L	100	<1	<1	<1	<1	<1
Total Molybdenum	µg/L	150	2	2	2	3	<1
Total Nickel	µg/L	1000	<1	<1	<1	1	<1
Total Selenium	µg/L	20	<1	<1	<1	<1	<1
Total Zinc	µg/L	20000	<5	<5	<5	<5	<b>6</b>
Total Mercury	mg/L	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sulfate SO <sub>4</sub>	mg/L	---	<b>8.6</b>	<b>45</b>	<b>55</b>	<b>21</b>	<b>8.3</b>
Chemical Oxygen Demand	mg/L	---	29	<b>21</b>	<b>29</b>	<b>33</b>	<b>15</b>
Anionic Surfactants as MBAS	mg/L	---	<0.1	<0.1	<0.1	<b>0.1</b>	<0.1
Total Manganese	µg/L	1200	<b>180</b>	<b>490</b>	<b>18</b>	<b>110</b>	<b>170</b>

EPL 10265 Ground Water	Units	Point 8- GW monitoring				
		100th percentile Concentration Limit	Date			
			22/01/2025	23/04/2025	22/07/2025	28/10/2025
Chloride	mg/L	---	N.S	N.S	13	N.S
Sulphate (SO <sub>4</sub> )	mg/L	---	N.S	N.S	110	N.S
pH**	No unit	6.5–8.5	N.S	N.S	6.3	N.S
Total Suspended Solids	mg/L	50	N.S	N.S	230	N.S
Bicarbonate	mg/L	---	N.S	N.S	37	N.S
Alkalinity (Calcium)	mg/L	---	N.S	N.S	37	N.S
Total Cyanide	mg/L	0.0007	N.S	N.S	<0.004	N.S
Methylene Blue Active Substances	mg/L	---	N.S	N.S	<0.1	N.S
Dissolved Calcium	mg/L	1000	N.S	N.S	<b>24</b>	N.S
Dissolved Magnesium	mg/L	---	N.S	N.S	<b>18</b>	N.S
Dissolved Sodium	mg/L	---	N.S	N.S	<b>23</b>	N.S
Dissolved Potassium	mg/L	---	N.S	N.S	<b>2.1</b>	N.S
Dissolved Copper	mg/L	0.0001	N.S	N.S	<b>3</b>	N.S
Hydrocarbons	mg/L	---	N.S	N.S	<5	N.S
Standing Water Levels	mbgl		N.S	N.S		N.S

<b>I.S -</b>	Insufficient Sample due to ground water level.
<b>N.S -</b>	No sampling because groundwater bore dry.
<b>mbgl -</b>	Metres below ground level

EPL 10265 Ground Water	Units	Point 10- GW monitoring				
		100th percentile Concentration Limit	Date			
			21/01/2025	23/04/2025	22/07/2025	28/10/2025
Chloride	mg/L	---	I.S	N.S	7.9	I.S
Sulphate (SO <sub>4</sub> )	mg/L	---	I.S	N.S	130	76
pH**	No unit	6.5–8.5	I.S	N.S	6.7	6.9
Total Suspended Solids	mg/L	50	I.S	N.S	240	500
Bicarbonate	mg/L	---	X	N.S	43	I.S
Alkalinity (Calcium)	mg/L	---	I.S	N.S	43	I.S
Total Cyanide	mg/L	0.0007	<0.004	N.S	<0.004	<0.004
Methylene Blue Active Substances	mg/L	---		N.S	<0.1	<0.1
Dissolved Calcium	mg/L	1000	I.S	N.S	29	I.S
Dissolved Magnesium	mg/L	---	I.S	N.S	16	I.S
Dissolved Sodium	mg/L	---	I.S	N.S	21	I.S
Dissolved Potassium	mg/L	---	I.S	N.S	2.5	I.S
Dissolved Copper	mg/L	0.0001	I.S	N.S	2	I.S
Hydrocarbons	mg/L	---	4	N.S	16	I.S
Standing Water Levels	mbgl		--	N.S	0.902	0.88

<b>I.S -</b>	Insufficient Sample due to ground water level.
<b>N.S -</b>	No sampling because groundwater bore dry.
<b>mbgl -</b>	Metres below ground level



EPL 10265  
DUST SAMPLING

Date	20/12/2024	21/1/2025	24/2/2025	27/3/2025	23/4/2025	27/5/2025	26/6/2025	22/7/2025	19/8/2025	23/09/2025	28/10/2025	25/11/2025	18/12/2025	21/1/2026	24/2/2025	27/3/2025
EPL11 g/m <sup>3</sup> /30 days	1.6	0.7	1.0	0.5	0.5	0.7	0.7	0.5	0.3	0.7	0.6	1.1	0.7	0.9	1.0	0.5
EPL12 g/m <sup>3</sup> /30 days	5.0	1.8	3.1	7.9	4.8	3.8	19.0	0.7	29.0	2.1	1.1	0.6	3.7	2.8	3.1	7.9
EPL13 g/m <sup>3</sup> /30 days	0.7	1.1	1.0	1.0	0.6	0.3	0.5	0.4	2.1	1.2	3.8	1.8	0.6	1.0	1.0	1.0
EPL14 g/m <sup>3</sup> /30 days	4.7	1.8	1.0	0.8	0.7	0.6	0.6	0.5	1.2	1.3	2.3	2.9	1.0	3.2	1.0	0.8
EPL15 g/m <sup>3</sup> /30 days	0.5	1.0	1.0	0.9	0.8	0.5	0.6	0.2	0.6	0.6	0.7	0.9	0.6	0.8	1.0	0.9

