



**Aeris**  
TRITTON OPERATIONS

# Tritton and Girilambone Operations

## Monthly Environmental Monitoring Report

[May] [2024]

### **Environmental Protection License 11254**

TRITTON COPPER MINE

YARRANDALE ROAD, HERMIDALE, NSW, 2831

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### **Environmental Protection License 4501**

TRITTON COPPER MINE

BOORAMUGGA ROAD, GIRILAMBONE, NSW, 2831

<http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=4501&id=4501&option=licence&searchrange=licence&range=POEO licence&prp=no&status=Issued>

**[MAY] [2024] – GROUNDWATER MONITORING REPORT**  
**TRITTON OPERATIONS LICENCE NO.11254**

Licensee: TRITTON RESOURCES LIMITED					
EPL No. 11254					
Sample Point	Monitoring Frequency	Date	Parameter	Measurement	Unit
EPA ID No. 12 - PZH001	Quarterly	Sampled: 15/5/24 Obtained:  Published: 24/06/2024	Arsenic	7.96	mg/L <sup>1</sup>
			Barium		mg/L
			Beryllium		mg/L
			Cadmium		mg/L
			Chloride		mg/L
			Chromium		mg/L
			Cobalt		mg/L
			Conductivity (EC)		µS/cm <sup>2</sup>
			Copper		mg/L
			Iron		mg/L
			Lead		mg/L
			Manganese		mg/L
			Mercury		mg/L
			Nickel		mg/L
			pH		pH Unit
			Sulfate		mg/L
			Vanadium		mg/L
Zinc	mg/L				
SWL	m <sup>3</sup>				
EPA ID No. 13 - PZH002	Quarterly	Sampled: 15/5/24 Obtained:  Published: 24/06/2024	Arsenic		mg/L
			Barium		mg/L
			Beryllium		mg/L
			Cadmium		mg/L
			Chloride		mg/L
			Chromium		mg/L
			Cobalt		mg/L
			Conductivity (EC)		µS/cm
			Copper		mg/L
			Iron		mg/L
			Lead		mg/L
			Manganese		mg/L
			Mercury		mg/L
			Nickel		mg/L
			pH		pH Unit

<sup>1</sup> Milligrams per litre

<sup>2</sup> Microsiemens per centimetre

<sup>3</sup> Metres

			Sulfate Vanadium Zinc SWL	26.00	mg/L mg/L mg/L m
EPA ID No. 14 - PZH003	Quarterly	Sampled: 15/5/24 Obtained:  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 15 - PZH004	Quarterly	Sampled: 15/5/24 Obtained: DRY Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 16 - PZH005	Quarterly	Sampled: 15/5/24 Obtained:	Arsenic Barium Beryllium Cadmium		mg/L mg/L mg/L mg/L

		Published: 24/06/2024	Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	8.00	mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 17 - PZH006	Quarterly	Sampled: 15/5/24 Obtained:  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	31.38	mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 18 - PZH007	Quarterly	Sampled:  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese		mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L

			Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 19 - PZH008	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.006 0.013 0.001 0.0001 3590 0.001 0.001 14300 0.003 0.05 0.001 0.002 0.0001 0.001 8.02 1610 0.01 0.026 14.77	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 20 - PZH009	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.01 0.036 0.01 0.001 4980 0.01 0.01 18200 0.059 0.1 0.01 0.01 0.0001 0.011 8.15 2040 0.1 0.096 10.6	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m

EPA ID No. 22 - PZH013	Quarterly	Sampled: 9/5/24  Obtained: DRY  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 23 - PZH014	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.002 0.001 0.0002 4080 0.001 0.001 15300 0.003 0.05 0.001 0.016 0.0001 0.002 7.91 1800 0.01 0.007 42.7	mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 24 - PZH015	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	0.001 0.008 0.001 0.0002 5220 0.002 0.001 17600	mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm

			Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.01 0.05 0.001 0.033 0.0001 0.005 8.01 2780 0.01 0.028 43.95	mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 25 - PZH017	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.021 0.001 0.0001 3390 0.001 0.001 12200 0.002 0.05 0.001 0.043 0.0001 0.001 8.21 929 0.01 0.006 38.32	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 26 - PZH018	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate	0.001 0.02 0.001 0.0001 8090 0.001 0.005 26600 0.006 0.05 0.001 0.352 0.0001 0.006 8.05 2400	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L

			Vanadium Zinc SWL	0.01 0.02 11.78	mg/L mg/L m
EPA ID No. 27 - PZH019	Quarterly	Sampled: D/M/Y  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 28 - PZH020	Quarterly	Sampled: 15/5/24  Obtained: D/M/Y  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	66.93	mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 29 - PZH021	Quarterly	Sampled: 15/5/24  Obtained: D/M/Y	Arsenic Barium Beryllium Cadmium Chloride		mg/L mg/L mg/L mg/L mg/L



		Published: 24/06/2024	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	44.59	mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 30 - PZH022	Quarterly	Sampled: 15/5/23  Obtained: DRY  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 31 - PZH023	Quarterly	Sampled: 15/5/23  Obtained: DRY  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury		mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L

			Nickel pH Sulfate Vanadium Zinc SWL		mg/L pH Unit mg/L mg/L mg/L m
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**[MAY] [2024] – GROUNDWATER MONITORING REPORT**  
**GIRILAMBONE OPERATIONS LICENCE NO.4501**

Licensee: TRITTON RESOURCES LIMITED					
EPL No. 4501					
Sample Point	Monitoring Frequency	Date	Parameter	Measurement	Unit
EPA ID No. 2 - GIP224	Monthly	Sampled: 8/5/24	Arsenic	0.01	mg/L
			Barium	0.028	mg/L
		Obtained: 4/6/24	Beryllium	0.01	mg/L
			Cadmium	0.0012	mg/L
		Published: 24/06/2024	Chloride	8440	mg/L
			Chromium	0.01	mg/L
			Cobalt	0.01	mg/L
			Conductivity (EC)	30500	µS/cm
			Copper	0.043	mg/L
			Iron	0.3	mg/L
			Lead	0.01	mg/L
			Manganese	0.062	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.118	mg/L
			pH	7.89	pH Unit
			Sulfate	3860	mg/L
			Vanadium	0.1	mg/L
Zinc	0.125	mg/L			
SWL	8.35	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 15/5/24	Arsenic		mg/L
			Barium		mg/L
		Obtained:	Beryllium		mg/L
			Cadmium		mg/L
		Published: 24/06/2024	Chloride		mg/L
			Chromium		mg/L
			Cobalt		mg/L
			Conductivity (EC)		µS/cm
			Copper		mg/L
			Iron		mg/L
			Lead		mg/L
			Manganese		mg/L
			Mercury		mg/L
			Nickel		mg/L
			pH		pH Unit
			Sulfate		mg/L
			Vanadium		mg/L
Zinc		mg/L			
SWL	13.84	m			





			Vanadium Zinc SWL	18.53	mg/L mg/L m
EPA ID No. 9 - GIP278	Quarterly	Sampled: 7/5/24  Obtained:  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 10 - GIP279A	Quarterly	Sampled: 27/10/22  Obtained:  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 11 - GIP280A	Quarterly	Sampled: 8/5/24 Obtained:  Published:	Arsenic Barium Beryllium Cadmium Chloride		mg/L mg/L mg/L mg/L mg/L

		24/06/2024	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	22.74	mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 12 - GIP290	Monthly	Sampled: 7/5/24 Obtained: 4/6/24 Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.02 0.001 0.003 3390 0.001 0.037 17500 0.011 0.05 0.001 26.6 0.0001 0.014 7.26 4880 0.01 0.043 17.07	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 13 - GIP291	Monthly	Sampled: 7/5/24 Obtained: Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury		mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L

			Nickel pH Sulfate Vanadium Zinc SWL	20.87	mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 14 - GIP292A	Monthly	Sampled: 7/5/24  Obtained: 4/6/24 Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.138 0.01 0.221 4.76 1950 0.277 68.9 34500 389 635 0.01 436 0.0001 22.2 3.49 46200 0.42 363 11.67	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 16 - GIP292AS	Monthly	Sampled: 7/5/24  Obtained: DRY Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m



EPA ID No. 17 - GIP293	Monthly	Sampled: 7/5/24  Obtained: 4/6/24  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.03 0.01 0.013 1.75 4770 0.013 22.1 41000 36.1 0.54 0.01 308 0.0001 8.79 3.95 25100 0.1 88.2 16.83	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 18 - GIP294	Monthly	Sampled: 7/5/24  Obtained: 4/6/24  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.01 0.01 0.01 0.4 1840 0.01 5.01 30000 12.5 0.1 0.01 33.3 0.0001 1.8 6.95 18700 0.1 24.9 16.02	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 19 - GIP295	Monthly	Sampled: 7/5/24  Obtained:   Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)		mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm





		24/06/2024	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	22.49	mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 25 - GIP301	Monthly	Sampled: 7/5/24 Obtained:  Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	16.55	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 26 - GIP302	Monthly	Sampled: 8/5/24 Obtained: 4/6/24 Published: 24/06/2024	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury	0.001 0.005 0.001 0.01 7620 0.001 0.029 28400 0.084 0.05 0.001 1.7 0.0001	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L mg/L mg/L

			Nickel	0.065	mg/L
			pH	7.63	pH Unit
			Sulfate	4360	mg/L
			Vanadium	0.01	mg/L
			Zinc	0.207	mg/L
			SWL	19.19	m
EPA ID No. 27 - GIP313	Monthly	Sampled: 20/5/24	Arsenic	0.063	mg/L
			Barium	0.027	mg/L
		Obtained: 4/6/24	Beryllium	0.066	mg/L
			Cadmium	4.04	mg/L
			Chloride	3330	mg/L
		Published: 24/06/2024	Chromium	0.011	mg/L
			Cobalt	67	mg/L
			Conductivity (EC)	41500	µS/cm
			Copper	227	mg/L
			Iron	0.24	mg/L
			Lead	0.01	mg/L
			Manganese	695	mg/L
			Mercury	0.0001	mg/L
			Nickel	22.6	mg/L
			pH	3.58	pH Unit
		Sulfate	58800	mg/L	
		Vanadium	0.1	mg/L	
Zinc	306	mg/L			
SWL		m			
EPA ID No. 28 – AT001	Monthly	Sampled: 3/5/24	Arsenic	0.001	mg/L
			Barium	0.048	mg/L
		Obtained: 4/6/24	Beryllium	0.001	mg/L
			Cadmium	0.0004	mg/L
			Chloride	5860	mg/L
		Published: 24/06/2024	Chromium	0.001	mg/L
			Cobalt	0.003	mg/L
			Conductivity (EC)	19300	µS/cm
			Copper	0.004	mg/L
			Iron	0.05	mg/L
			Lead	0.001	mg/L
			Manganese	0.151	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.004	mg/L
			pH	7.73	pH Unit
		Sulfate	1410	mg/L	
		Vanadium	0.01	mg/L	
Zinc	0.015	mg/L			
SWL	45.15	m			

EPA ID No. 29 – AT002	Monthly	Sampled: 3/5/24	Arsenic	0.001	mg/L
			Barium	0.047	mg/L
		Obtained: 4/6/24	Beryllium	0.001	mg/L
			Cadmium	0.0004	mg/L
			Chloride	8160	mg/L
			Chromium	0.001	mg/L
		Published: 21/06/2024	Cobalt	0.001	mg/L
			Conductivity (EC)	24100	µS/cm
			Copper	0.001	mg/L
			Iron	0.05	mg/L
			Lead	0.001	mg/L
			Manganese	0.032	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.003	mg/L
			pH	7.49	pH Unit
			Sulfate	1510	mg/L
Vanadium	0.01	mg/L			
Zinc	0.01	mg/L			
SWL	35.96	m			
EPA ID No. 30 – AT003	Monthly	Sampled: 3/5/24	Arsenic	0.019	mg/L
			Barium	0.003	mg/L
		Obtained: 4/6/24	Beryllium	0.001	mg/L
			Cadmium	0.0001	mg/L
			Chloride	6530	mg/L
			Chromium	0.001	mg/L
		Published: 24/06/2024	Cobalt	0.001	mg/L
			Conductivity (EC)	20800	µS/cm
			Copper	0.006	mg/L
			Iron	0.05	mg/L
			Lead	0.001	mg/L
			Manganese	0.008	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.005	mg/L
			pH	7.81	pH Unit
			Sulfate	2410	mg/L
Vanadium	0.03	mg/L			
Zinc	0.017	mg/L			
SWL	38.44	m			