



Tritton and Girilambone Operations

Monthly Environmental Monitoring Report

[December] [2022]

Environmental Protection License 11254

TRITTON COPPER MINE

YARRANDALE ROAD, HERMIDALE, NSW, 2831

<http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=11254&id=11254&option=licence&searchrange=licence&range=POEO licence&prp=no&status=Issued>

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>

[DECEMBER] [2022] – 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: Obtained: Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L ¹ mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm ² mg/L mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m ³
EPA ID No. 13 - PZH002	Quarterly	Sampled: Obtained: Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH		mg/L 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 mg/L pH Unit

¹ Milligrams per litre

² Microsiemens per centimetre

³ Metres

			Sulfate Vanadium Zinc SWL		mg/L mg/L mg/L m
EPA ID No. 14 - PZH003	Quarterly	Sampled: Obtained: Published: 24/01/2023	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: D/M/Y Obtained: D/M/Y Published: 24/01/2023	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: Obtained:	Arsenic Barium Beryllium Cadmium		mg/L mg/L mg/L mg/L

		Published: 24/01/2023	Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		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. 17 - PZH006	Quarterly	Sampled: Obtained: Published: 24/01/2023	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. 18 - PZH007	Quarterly	Sampled: 9/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese	0.004 0.13 0.001 0.0028 1600 0.015 0.056 7490 0.046 14.2 0.043 3.3	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L mg/L

			Mercury	0.0001	mg/L
			Nickel	0.041	mg/L
			pH	8.19	pH Unit
			Sulfate	891	mg/L
			Vanadium	0.06	mg/L
			Zinc	0.418	mg/L
			SWL	35.11	m
EPA ID No. 19 - PZH008	Quarterly	Sampled: 9/12/22	Arsenic	0.006	mg/L
			Barium	0.02	mg/L
		Obtained: 29/12/22	Beryllium	0.001	mg/L
			Cadmium	0.0001	mg/L
		Published: 24/01/2023	Chloride	4060	mg/L
			Chromium	0.001	mg/L
			Cobalt	0.002	mg/L
			Conductivity (EC)	14000	µS/cm
			Copper	0.012	mg/L
			Iron	0.56	mg/L
			Lead	0.001	mg/L
			Manganese	0.06	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.002	mg/L
		pH	8.11	pH Unit	
		Sulfate	1830	mg/L	
Vanadium	0.01	mg/L			
Zinc	0.057	mg/L			
SWL	14.97	m			
EPA ID No. 20 - PZH009	Quarterly	Sampled: 9/12/22	Arsenic	0.001	mg/L
			Barium	0.045	mg/L
		Obtained: 29/12/22	Beryllium	0.001	mg/L
			Cadmium	0.0008	mg/L
		Published: 24/01/2023	Chloride	5350	mg/L
			Chromium	0.001	mg/L
			Cobalt	0.001	mg/L
			Conductivity (EC)	18200	µS/cm
			Copper	0.062	mg/L
			Iron	0.05	mg/L
			Lead	0.001	mg/L
			Manganese	0.017	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.014	mg/L
		pH	8.17	pH Unit	
		Sulfate	2300	mg/L	
Vanadium	0.01	mg/L			
Zinc	0.086	mg/L			
SWL	10.74	m			
EPA ID	Quarterly	Sampled:	Arsenic		mg/L

			Zinc SWL		mg/L m
EPA ID No. 27 - PZH019	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 24/01/2023	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 m
EPA ID No. 28 - PZH020	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 24/01/2023	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 m
EPA ID No. 29 - PZH021	Quarterly	Sampled: D/M/Y Obtained: D/M/Y	Arsenic Barium Beryllium Cadmium Chloride Chromium		mg/L mg/L mg/L mg/L mg/L mg/L

		Published: 24/01/2023	Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		mg/L μ S/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. 30 - PZH022	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 24/01/2023	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 μ S/cm mg/L mg/L mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 31 - PZH023	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel		mg/L mg/L mg/L mg/L mg/L mg/L mg/L μ S/cm mg/L mg/L mg/L mg/L mg/L mg/L

			<p>pH</p> <p>Sulfate</p> <p>Vanadium</p> <p>Zinc</p> <p>SWL</p>		<p>pH Unit</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>m</p>
--	--	--	---	--	---

[DECEMBER] [2022] – 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: 13/12/22	Arsenic	0.01	mg/L
			Barium	0.028	mg/L
		Obtained: 29/12/22	Beryllium	0.01	mg/L
			Cadmium	0.001	mg/L
		Published: 24/01/2023	Chloride	9080	mg/L
			Chromium	0.016	mg/L
			Cobalt	0.01	mg/L
			Conductivity (EC)	30300	µS/cm
			Copper	0.023	mg/L
			Iron	0.1	mg/L
			Lead	0.01	mg/L
			Manganese	0.038	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.16	mg/L
		pH	8.11	pH Unit	
		Sulfate	4060	mg/L	
		Vanadium	0.1	mg/L	
Zinc	0.09	mg/L			
SWL	3.01	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 13/12/22	Arsenic	0.01	mg/L
			Barium	0.01	mg/L
		Obtained: 29/12/22	Beryllium	0.01	mg/L
			Cadmium	0.001	mg/L
		Published: 24/01/2023	Chloride	6600	mg/L
			Chromium	0.01	mg/L
			Cobalt	0.01	mg/L
			Conductivity (EC)	29700	µS/cm
			Copper	0.037	mg/L
			Iron	0.32	mg/L
			Lead	0.01	mg/L
			Manganese	0.214	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.01	mg/L
		pH	8.05	pH Unit	
		Sulfate	9030	mg/L	
		Vanadium	0.1	mg/L	
Zinc	0.069	mg/L			
SWL	11.11	m			

		24/01/2023	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	9.55	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. 14 - GIP292A	Monthly	Sampled: 7/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.037 0.01 0.121 4.02 1910 0.175 63.2 33100 274 102 0.01 536 0.0001 22.3 3.62 46900 0.18 306 6.34	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 - GIP292AS	Monthly	Sampled: 7/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury	0.102 0.01 0.333 4.39 1650 0.066 71.5 29700 342 666 0.01 483 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

			Nickel	20.5	mg/L
			pH	3.39	pH Unit
			Sulfate	39700	mg/L
			Vanadium	0.56	mg/L
			Zinc	289	mg/L
			SWL	5.35	m
EPA ID No. 17 - GIP293	Monthly	Sampled: 12/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic	0.031	mg/L
			Barium	0.01	mg/L
			Beryllium	0.032	mg/L
			Cadmium	2.66	mg/L
			Chloride	4360	mg/L
			Chromium	0.01	mg/L
			Cobalt	38.1	mg/L
			Conductivity (EC)	41000	µS/cm
			Copper	79.4	mg/L
			Iron	0.83	mg/L
			Lead	0.02	mg/L
			Manganese	491	mg/L
			Mercury	0.0007	mg/L
			Nickel	14.7	mg/L
			pH	3.94	pH Unit
			Sulfate	38400	mg/L
			Vanadium	0.1	mg/L
			Zinc	153	mg/L
			SWL	12.88	m
EPA ID No. 18 - GIP294	Monthly	Sampled: 20/12/22 Obtained: Published: 24/01/2023	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
			Sulfate		mg/L
			Vanadium		mg/L
			Zinc		mg/L
			SWL	12.85	m
EPA ID No. 19 -	Monthly	Sampled: 20/12/22	Arsenic		mg/L
			Barium		mg/L

GIP295		Obtained: Published: 24/01/2023	Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	 18.51	mg/L mg/L mg/L mg/L mg/L µS/cm mg/L 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 - GIP296	Monthly	Sampled: 12/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.009 0.001 0.0008 762 0.001 0.012 12500 0.051 0.09 0.001 0.104 0.0001 0.008 8.02 5640 0.01 0.079 5.06	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 mg/L m
EPA ID No. 21 - GIP297	Monthly	Sampled: 19/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron	0.005 0.002 0.001 0.0004 121 0.001 0.002 1200 0.036 0.08	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L

			SWL	32.81	m
EPA ID No. 24 - GIP300	Monthly	Sampled: 23/12/22 Obtained: Published: 24/01/2023	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. 25 - GIP301	Monthly	Sampled: 23/12/22 Obtained: Published: 24/01/2023	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. 26 - GIP302	Monthly	Sampled: 12/12/22 Obtained: 29/12/22 Published: 24/01/2023	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt	0.01 0.01 0.01 0.0044 9260 0.029 0.04	mg/L mg/L mg/L mg/L mg/L mg/L mg/L

			Conductivity (EC)	31000	µS/cm
			Copper	0.209	mg/L
			Iron	0.65	mg/L
			Lead	0.01	mg/L
			Manganese	0.96	mg/L
			Mercury	0.0001	mg/L
			Nickel	0.089	mg/L
			pH	7.97	pH Unit
			Sulfate	5160	mg/L
			Vanadium	0.1	mg/L
			Zinc	0.213	mg/L
			SWL	15.21	m