



Aeris
TRITTON OPERATIONS

Tritton and Girilambone Operations

Monthly Environmental Monitoring Report

March 2017

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TRITTON COPPER MINE

YARRANDALE ROAD, HERMIDALE, NSW, 2831

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BOORAMUGGA ROAD, GIRILAMBONE, NSW, 2831

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MARCH 2017 – GROUNDWATER MONITORING REPORT

TRITTON OPERATIONS LICENCE NO.11254

EPA ID No. 18 - PZH007	Quarterly	Sampled: 3/3/17	Arsenic	0.002	mg/L
			Barium	0.166	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 20/3/17	Cadmium	0.0005	mg/L
			Chloride	1680	mg/L
			Chromium	0.007	mg/L
		Published: 7/04/2017	Cobalt	0.025	mg/L
			Conductivity (EC)	8550	µS/cm
			Copper	0.105	mg/L
			Iron	1.14	mg/L
			Lead	0.067	mg/L
			Manganese	0.518	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.062	mg/L
			pH	7.26	pH Unit
			Sulfate	1070	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.137	mg/L			
SWL	34.89	m			
EPA ID No. 19 - PZH008	Quarterly	Sampled: 3/3/17	Arsenic	0.041	mg/L
			Barium	0.021	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 20/3/17	Cadmium	<0.0001	mg/L
			Chloride	3870	mg/L
			Chromium	0.003	mg/L
		Published: 7/04/2017	Cobalt	<0.001	mg/L
			Conductivity (EC)	14400	µS/cm
			Copper	0.02	mg/L
			Iron	1.71	mg/L
			Lead	0.001	mg/L
			Manganese	0.062	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.001	mg/L
			pH	7.06	pH Unit
			Sulfate	1740	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.016	mg/L			
SWL	20.62	m			
EPA ID No. 20 - PZH009	Quarterly	Sampled: 3/3/17	Arsenic	<0.001	mg/L
			Barium	0.042	mg/L
			Beryllium	<0.001	mg/L
		Obtained:	Cadmium	0.0004	mg/L

		20/3/17 Published: 7/04/2017	Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	4960 <0.001 0.002 19100 0.033 <0.05 <0.001 0.148 <0.0001 0.004 7.17 2250 <0.01 0.051 15.09	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. 22 - PZH013	Quarterly	Sampled: 3/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.412 0.085 <0.001 0.0013 4820 0.009 0.012 17400 0.598 5.2 0.098 0.93 0.0012 0.025 6.76 1740 <0.01 0.226 39.51	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. 23 - PZH014	Quarterly	Sampled: 3/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese	0.002 0.008 <0.001 0.0002 4320 <0.001 <0.001 16200 0.006 <0.05 <0.001 0.004	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	0.003	mg/L
			pH	7.14	pH Unit
			Sulfate	1620	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.016	mg/L
			SWL	50.03	m
EPA ID No. 24 - PZH015	Quarterly	Sampled: 3/3/17	Arsenic	<0.001	mg/L
			Barium	0.015	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 20/3/17	Cadmium	0.0001	mg/L
			Chloride	4750	mg/L
			Chromium	0.106	mg/L
		Published: 7/04/2017	Cobalt	<0.001	mg/L
			Conductivity (EC)	18500	µS/cm
			Copper	0.013	mg/L
			Iron	0.21	mg/L
			Lead	0.003	mg/L
			Manganese	0.022	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.016	mg/L
			pH	7.07	pH Unit
			Sulfate	2250	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.023	mg/L
			SWL	51.41	m

**MARCH 2017 – 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: 9/3/17	Arsenic	<0.001	mg/L
			Barium	0.026	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 27/3/17	Cadmium	0.0007	mg/L
			Chloride	8330	mg/L
			Chromium	0.002	mg/L
		Published: 7/04/2017	Cobalt	0.006	mg/L
			Conductivity (EC)	32500	µS/cm
			Copper	0.045	mg/L
			Iron	0.05	mg/L
			Lead	0.002	mg/L
			Manganese	0.083	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.02	mg/L
			pH	7.33	pH Unit
			Sulfate	3830	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.053	mg/L			
SWL	4.29	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 7/3/17	Arsenic	<0.010	mg/L
			Barium	0.063	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 20/3/17	Cadmium	<0.0010	mg/L
			Chloride	5670	mg/L
			Chromium	<0.010	mg/L
		Published: 7/04/2017	Cobalt	0.016	mg/L
			Conductivity (EC)	34300	µS/cm
			Copper	0.011	mg/L
			Iron	0.91	mg/L
			Lead	<0.010	mg/L
			Manganese	1.02	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.023	mg/L
			pH	7.47	pH Unit
			Sulfate	13700	mg/L
			Vanadium	<0.10	mg/L
Zinc	<0.050	mg/L			
SWL	10.51	m			

EPA ID No. 4 - GIP234	Quarterly	Sampled: 29/3/17 Obtained: 29/3/17 Published: 7/04/2017	SWL	24.85	m
EPA ID No. 5 - GIP273	Quarterly	Sampled: 29/3/17 Obtained: 29/3/17 Published: 7/04/2017	SWL	16.8	m
EPA ID No. 7 - GIP274	Monthly	Sampled: 2/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.014 <0.010 <0.0010 9130 <0.010 <0.010 33600 0.013 0.16 <0.010 0.037 <0.0001 <0.010 7.05 3030 <0.10 <0.050 17.16	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. 6 - GIP276	Quarterly	Sampled: 29/3/17 Obtained: 29/3/17 Published: 7/04/2017	SWL	20.79	m
EPA ID No. 8 - GIP277	Quarterly	Sampled: 29/3/17	SWL	16.76	m

		<p>Obtained: 29/3/17</p> <p>Published: 7/04/2017</p>			
EPA ID No. 9 - GIP278	Quarterly	<p>Sampled: 29/3/17</p> <p>Obtained: 29/3/17</p> <p>Published: 7/04/2017</p>	SWL	24.94	m
EPA ID No. 10 - GIP279A	Quarterly	<p>Sampled: 29/3/17</p> <p>Obtained: 29/3/17</p> <p>Published: 7/04/2017</p>	SWL	23.98	m
EPA ID No. 11 - GIP280A	Quarterly	<p>Sampled: 29/3/17</p> <p>Obtained: 29/3/17</p> <p>Published: 7/04/2017</p>	SWL	21.72	m
EPA ID No. 12 - GIP290	Monthly	<p>Sampled: 2/3/17</p> <p>Obtained: 20/3/17</p> <p>Published: 7/04/2017</p>	<p>Arsenic</p> <p>Barium</p> <p>Beryllium</p> <p>Cadmium</p> <p>Chloride</p> <p>Chromium</p> <p>Cobalt</p> <p>Conductivity (EC)</p> <p>Copper</p> <p>Iron</p> <p>Lead</p> <p>Manganese</p> <p>Mercury</p> <p>Nickel</p> <p>pH</p> <p>Sulfate</p> <p>Vanadium</p>	<p><0.001</p> <p>0.015</p> <p><0.001</p> <p>0.0337</p> <p>3400</p> <p><0.001</p> <p>0.174</p> <p>17500</p> <p>0.122</p> <p>0.09</p> <p>0.006</p> <p>11.9</p> <p><0.0001</p> <p>0.028</p> <p>6.77</p> <p>4210</p> <p><0.01</p>	<p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>µS/cm</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>mg/L</p> <p>pH Unit</p> <p>mg/L</p> <p>mg/L</p>

			Zinc SWL	0.489 14.61	mg/L m
EPA ID No. 13 - GIP291	Monthly	Sampled: 15/3/17 Obtained: 27/3/17 Published: 7/04/2017	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 0.0008 7400 0.001 0.004 27300 0.028 <0.05 0.002 0.071 <0.0001 0.004 6.85 2550 <0.01 0.034 9.05	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. 14 - GIP292A	Monthly	Sampled: 8/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.100 <0.100 0.102 2.83 2280 0.244 42.9 35000 208 46.2 <0.100 424 0.0001 14.7 4.03 31400 <1.00 190 5.47	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: 8/3/17 Obtained: 20/3/17	Arsenic Barium Beryllium Cadmium Chloride Chromium	0.294 <0.100 0.563 8.12 1350 0.208	mg/L mg/L mg/L mg/L mg/L mg/L

		Published: 7/04/2017	Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	105 36200 839 1680 <0.100 694 0.0002 34 3.62 45800 1.4 555 5.42	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 - GIP293	Monthly	Sampled: 9/3/17 Obtained: 27/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.043 <0.010 0.023 2.73 4020 <0.010 35.9 43400 71.7 2.1 0.01 578 0.0006 12.6 4.31 35300 <0.10 143 12.61	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 - GIP294	Monthly	Sampled: 8/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel	<0.100 <0.100 <0.100 2.57 1710 <0.100 28.8 50700 147 4.5 <0.100 234 0.0002 10	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 Sulfate Vanadium Zinc SWL	5.42 42500 <1.00 169 11.89	pH Unit mg/L mg/L mg/L m
EPA ID No. 19 - GIP295	Monthly	Sampled: 7/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.05 <0.010 <0.0010 8480 <0.010 <0.010 31800 0.024 <0.10 <0.010 0.579 <0.0001 <0.010 6.97 2600 <0.10 <0.050 18.08	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. 20 - GIP296	Monthly	Sampled: 9/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.001 0.012 <0.001 0.0006 1260 0.001 0.007 18000 0.103 0.13 <0.001 0.072 <0.0001 0.008 6.87 7360 <0.01 0.045 7.57	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. 21 - GIP297	Monthly	Sampled: 2/3/17	Arsenic Barium Beryllium	0.005 0.001 <0.001	mg/L mg/L mg/L

		Obtained: 20/3/17 Published: 7/04/2017	Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.0001 105 <0.001 <0.001 1150 0.014 0.1 <0.001 0.018 <0.0001 0.002 8.59 208 <0.01 0.017 25.14	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. 22 - GIP298	Monthly	Sampled: 15/3/17 Obtained: 27/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.003 <0.001 0.0004 9130 0.001 0.001 32400 0.025 0.56 <0.001 0.069 <0.0001 0.004 6.81 2400 <0.01 0.037 20.55	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. 23 - GIP299	Monthly	Sampled: 15/3/17 Obtained: 27/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead	0.002 0.002 <0.001 0.0028 7130 <0.001 <0.001 33200 0.013 <0.05 <0.001	mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L mg/L

			Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.015 <0.0001 0.002 6.76 8950 <0.01 0.032 28.06	mg/L mg/L mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 24 - GIP300	Monthly	Sampled: 9/3/17 Obtained: 20/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.018 <0.010 0.0017 5260 <0.010 <0.010 36600 0.03 <0.10 <0.010 0.029 <0.0001 <0.010 6.44 16500 <0.10 <0.050 19.21	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 mg/L mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 25 - GIP301	Monthly	Sampled: 15/3/17 Obtained: 27/3/17 Published: 7/04/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.001 0.033 <0.001 <0.0001 5540 <0.001 0.022 21100 0.005 <0.05 <0.001 0.858 <0.0001 0.013 6.89 1860 <0.01 0.028 14.17	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 mg/L 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: 15/3/17	Arsenic	<0.001	mg/L
			Barium	0.016	mg/L
			Beryllium	<0.001	mg/L
		Obtained: D27/3/17	Cadmium	0.0089	mg/L
			Chloride	5970	mg/L
			Chromium	0.004	mg/L
		Published: 7/04/2017	Cobalt	0.176	mg/L
			Conductivity (EC)	31200	µS/cm
			Copper	0.024	mg/L
			Iron	0.44	mg/L
			Lead	0.004	mg/L
			Manganese	19.1	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.165	mg/L
			pH	6.44	pH Unit
			Sulfate	9950	mg/L
Vanadium	<0.01	mg/L			
Zinc	0.034	mg/L			
SWL	15.11	m			