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TRITTON OPERATIONS

Tritton and Girilambone Operations

Monthly Environmental Monitoring Report

[June] [2017]

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TRITTON COPPER MINE

YARRANDALE ROAD, HERMIDALE, NSW, 2831

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TRITTON COPPER MINE

BOORAMUGGA ROAD, GIRILAMBONE, NSW, 2831

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[JUNE] [2017] – 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. 18 - PZH007	Quarterly	Sampled: 6/6/17	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 20/6/2017	Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.151	mg/L			
SWL	33.95	m			
EPA ID No. 19 - PZH008	Quarterly	Sampled: 6/6/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 20/6/2017	Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.012	mg/L			
SWL	20.49	m			

EPA ID No. 20 - PZH009	Quarterly	Sampled: 6/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.030 15.02	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 pH Unit mg/L mg/L mg/L m
EPA ID No. 22 - PZH013	Quarterly	Sampled: 9/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.040 38.96	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. 23 - PZH014	Quarterly	Sampled: 1/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800	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	<0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.012 50.18	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: 1/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.027 51.55	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 pH Unit mg/L mg/L mg/L m

**[JUNE] [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: 9/6/2017	Arsenic	<0.010	mg/L
			Barium	0.024	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 20/6/2017	Cadmium	<0.0010	mg/L
			Chloride	8410	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	<0.010	mg/L
			Conductivity (EC)	31100	µS/cm
			Copper	0.040	mg/L
			Iron	<0.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.088	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	7.77	pH Unit
			Sulfate	3940	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.083	mg/L			
SWL	3.97	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 7/6/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 20/6/2017	Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
Zinc	<0.050	mg/L			
SWL	10.55	m			

EPA ID No. 4 - GIP234	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 25/07/2017	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 mg/L m
EPA ID No. 5 - GIP273	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 25/07/2017	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 mg/L m
EPA ID No. 7 - GIP274	Monthly	Sampled: 8/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800	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	<0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 <0.050 17.05	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. 6 - GIP276	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 25/07/2017	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 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. 8 - GIP277	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate		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		mg/L mg/L m
EPA ID No. 9 - GIP278	Quarterly	Sampled: D/M/Y Obtained: D/M/Y Published: 25/07/2017	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: D/M/Y Obtained: Published: 25/07/2017	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: D/M/Y Obtained: D/M/Y	Arsenic Barium Beryllium Cadmium Chloride		mg/L mg/L mg/L mg/L mg/L

		Published: 25/07/2017	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL		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: 8/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.489 14.62	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 mg/L mg/L mg/L m
EPA ID No. 13 - GIP291	Monthly	Sampled: 28/6/2017 Obtained: 11/7/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <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 pH Sulfate Vanadium Zinc SWL	0.015 7.71 14400 <0.10 0.027 9.08	mg/L pH Unit mg/L mg/L mg/L m
EPA ID No. 14 - GIP292A	Monthly	Sampled: 8/6/2017 Obtained: 13/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 201 5.38	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: 8/6/2017 Obtained: 13/6/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 432 5.31	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. 17 -	Monthly	Sampled: 29/6/2017	Arsenic Barium	<0.010 0.065	mg/L mg/L

GIP293		<p>Obtained: 11/7/2017</p> <p>Published: 25/07/2017</p>	<p>Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL</p>	<p><0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 34.2 12.95</p>	<p>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</p>
EPA ID No. 18 - GIP294	Monthly	<p>Sampled: 19/6/2017</p> <p>Obtained: 11/7/2017</p> <p>Published: 25/07/2017</p>	<p>Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL</p>	<p><0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 220 11.73</p>	<p>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</p>
EPA ID No. 19 - GIP295	Monthly	<p>Sampled: 7/6/2017</p> <p>Obtained: 20/6/2017</p> <p>Published: 25/07/2017</p>	<p>Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron</p>	<p><0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10</p>	<p>mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L</p>

			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
			Zinc	0.024	mg/L
			SWL	18.02	m
EPA ID No. 20 - GIP296	Monthly	Sampled: 8/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
			Zinc	0.230	mg/L
			SWL	7.55	m
EPA ID No. 21 - GIP297	Monthly	Sampled: 8/6/2017 Obtained: 20/6/2017 Published: 25/07/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
			Zinc	0.009	mg/L

			SWL	25.28	m
EPA ID No. 22 - GIP298	Monthly	Sampled: 29/6/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 11/7/2017	Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
Zinc	<0.0502	mg/L			
SWL	20.69	m			
EPA ID No. 23 - GIP299	Monthly	Sampled: 28/6/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 11/7/2017	Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
			Chromium	<0.010	mg/L
		Published: 25/07/2017	Cobalt	0.010	mg/L
			Conductivity (EC)	31800	µS/cm
			Copper	<0.010	mg/L
			Iron	1.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.862	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.015	mg/L
			pH	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.101	mg/L			
SWL	28.06	m			
EPA ID No. 24 - GIP300	Monthly	Sampled: 28/6/2017	Arsenic	<0.010	mg/L
			Barium	0.065	mg/L
		Obtained: D/M/Y	Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	5560	mg/L
Chromium	<0.010	mg/L			

		Published: 25/07/2017	Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.073 19.14	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. 25 - GIP301	Monthly	Sampled: 29/6/2017 Obtained: 11/7/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015 7.71 14400 <0.10 0.033 14.78	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 - GIP302	Monthly	Sampled: 19/6/2017 Obtained: 11/7/2017 Published: 25/07/2017	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel	<0.010 0.065 <0.010 <0.0010 5560 <0.010 0.010 31800 <0.010 1.10 <0.010 0.862 <0.0001 0.015	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	7.71	pH Unit
			Sulfate	14400	mg/L
			Vanadium	<0.10	mg/L
			Zinc	0.048	mg/L
			SWL	16.17	m