



Aeris
TRITTON OPERATIONS

Tritton and Girilambone Operations

Monthly Environmental Monitoring Report

May 2016

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YARRANDALE ROAD, HERMIDALE, NSW, 2831

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BOORAMUGGA ROAD, GIRILAMBONE, NSW, 2831

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MAY 2016 – 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: 5/5/2016	Arsenic	0.002	mg/L
			Barium	0.132	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 24/5/2016	Cadmium	0.0004	mg/L
			Chloride	2270	mg/L
			Chromium	<0.001	mg/L
		Published: 7/06/2016	Cobalt	0.023	mg/L
			Conductivity (EC)	10100	µS/cm
			Copper	0.092	mg/L
			Iron	0.12	mg/L
			Lead	0.005	mg/L
			Manganese	0.662	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.035	mg/L
			pH	8.41	pH Unit
			Sulfate	1120	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.087	mg/L			
SWL	37.41	m			
EPA ID No. 19 - PZH008	Quarterly	Sampled: 5/5/2016	Arsenic	0.01	mg/L
			Barium	0.018	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0001	mg/L
			Chloride	3940	mg/L
			Chromium	<0.001	mg/L
		Published: 7/06/2016	Cobalt	<0.001	mg/L
			Conductivity (EC)	15700	µS/cm
			Copper	0.008	mg/L
			Iron	0.44	mg/L
			Lead	<0.001	mg/L
			Manganese	0.06	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.002	mg/L
			pH	8.46	pH Unit
			Sulfate	1620	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.02	mg/L			
SWL	22.75	m			

EPA ID No. 20 - PZH009	Quarterly	Sampled: 5/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.001 0.037 <0.001 <0.0001 5010 <0.001 0.003 19400 0.006 0.45 <0.001 0.184 0.0002 0.002 6.58 2070 <0.01 0.023 18.03	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: 5/5/2016 Obtained: D/M/Y Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	DRY	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. 23 - PZH014	Quarterly	Sampled: 5/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	0.002 0.01 <0.001 0.0002 4430 <0.001 <0.001 17000	mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm

			Copper	0.01	mg/L
			Iron	0.14	mg/L
			Lead	<0.001	mg/L
			Manganese	0.01	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.003	mg/L
			pH	7.27	pH Unit
			Sulfate	1560	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.022	mg/L
			SWL	50.93	m
EPA ID No. 24 - PZH015	Quarterly	Sampled: 12/5/2016	Arsenic	0.001	mg/L
			Barium	0.019	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0001	mg/L
			Chloride	4770	mg/L
			Chromium	0.002	mg/L
		Published: 7/06/2016	Cobalt	0.002	mg/L
			Conductivity (EC)	18300	µS/cm
			Copper	0.006	mg/L
			Iron	0.28	mg/L
			Lead	0.007	mg/L
			Manganese	0.073	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.013	mg/L
			pH	6.49	pH Unit
			Sulfate	1980	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.053	mg/L
			SWL	52.05	m

MAY 2016 – 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: 12/5/2016	Arsenic	0.053	mg/L
			Barium	0.027	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0010	mg/L
			Chloride	8730	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	<0.010	mg/L
			Conductivity (EC)	32500	µS/cm
			Copper	0.057	mg/L
			Iron	<0.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.12	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	6.99	pH Unit
			Sulfate	3640	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.086	mg/L			
SWL	5.51	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 13/5/2016	Arsenic	0.025	mg/L
			Barium	0.054	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0010	mg/L
			Chloride	6050	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	0.03	mg/L
			Conductivity (EC)	34700	µS/cm
			Copper	0.018	mg/L
			Iron	0.75	mg/L
			Lead	<0.010	mg/L
			Manganese	1.27	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.026	mg/L
			pH	6.84	pH Unit
			Sulfate	11800	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.052	mg/L			
SWL	11.35	m			

EPA ID No. 7 - GIP274	Monthly	Sampled: 10/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.016 0.042 <0.010 <0.0010 10000 <0.010 <0.010 33700 <0.010 <0.10 0.023 0.078 <0.0001 <0.010 6.25 2860 <0.10 <0.050 17.89	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. 12 - GIP290	Monthly	Sampled: 12/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.005 0.018 <0.001 0.0258 3390 <0.001 0.115 18000 0.165 <0.05 <0.010 11.9 <0.0001 0.025 6.56 4300 <0.01 0.445 15.48	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. 13 - GIP291	Monthly	Sampled: 13/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	0.002 0.023 <0.001 0.0011 7950 0.004 0.005 27800	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	0.047 0.11 0.004 0.113 <0.0001 0.005 7.22 2670 <0.01 0.081 9.72	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: 12/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.025 <0.010 0.075 3 2560 0.063 41.9 34700 201 113 <0.010 524 <0.0001 14.6 5.04 29600 <0.10 188 6.39	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: 12/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate	0.19 0.01 0.573 9 1570 0.23 100 37400 989 1410 0.041 610 0.0002 34.2 4.67 55400	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

			Vanadium	1.52	mg/L
			Zinc	595	mg/L
			SWL	6.48	m
EPA ID No. 17 - GIP293	Monthly	Sampled: 10/5/2016	Arsenic	0.011	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	1.82	mg/L
			Chloride	4530	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	20.9	mg/L
			Conductivity (EC)	43000	µS/cm
			Copper	25.9	mg/L
			Iron	0.19	mg/L
			Lead	0.016	mg/L
			Manganese	456	mg/L
			Mercury	0.0005	mg/L
			Nickel	7.79	mg/L
			pH	5.26	pH Unit
			Sulfate	30700	mg/L
			Vanadium	<0.10	mg/L
Zinc	80.2	mg/L			
SWL	13.31	m			
EPA ID No. 18 - GIP294	Monthly	Sampled: 10/5/2016	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	3.19	mg/L
			Chloride	1980	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	33.9	mg/L
			Conductivity (EC)	51300	µS/cm
			Copper	148	mg/L
			Iron	0.31	mg/L
			Lead	<0.010	mg/L
			Manganese	279	mg/L
			Mercury	0.0005	mg/L
			Nickel	11.6	mg/L
			pH	6.21	pH Unit
			Sulfate	43600	mg/L
			Vanadium	<0.10	mg/L
Zinc	201	mg/L			
SWL	13.64	m			
EPA ID No. 19 - GIP295	Monthly	Sampled: 12/5/2016	Arsenic	<0.010	mg/L
			Barium	0.041	mg/L
		Obtained: 24/5/2016	Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	9200	mg/L

		Published: 7/06/2016	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 <0.010 31600 0.016 0.26 <0.010 0.668 <0.0001 <0.010 6.91 2570 <0.10 <0.050 18.51	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. 20 - GIP296	Monthly	Sampled: 12/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.003 0.012 <0.001 0.0006 2670 0.001 0.006 19200 0.021 0.08 <0.001 0.07 0.0033 0.007 6.64 6110 <0.01 0.057 9.21	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 pH Unit mg/L mg/L mg/L m
EPA ID No. 21 - GIP297	Monthly	Sampled: 12/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury	0.006 <0.001 <0.001 <0.0001 78 <0.001 <0.001 1070 0.007 <0.05 <0.001 0.004 <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	0.002	mg/L
			pH	7.32	pH Unit
			Sulfate	180	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.01	mg/L
			SWL	25.69	m
EPA ID No. 22 - GIP298	Monthly	Sampled: 12/5/2016	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0010	mg/L
			Chloride	9740	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	<0.010	mg/L
			Conductivity (EC)	32900	µS/cm
			Copper	0.022	mg/L
			Iron	0.15	mg/L
			Lead	<0.010	mg/L
			Manganese	0.071	mg/L
			Mercury	0.0002	mg/L
			Nickel	<0.010	mg/L
			pH	6.25	pH Unit
			Sulfate	2620	mg/L
			Vanadium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	21.31	m
EPA ID No. 23 - GIP299	Monthly	Sampled: 10/5/2016	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 24/5/2016	Cadmium	<0.0010	mg/L
			Chloride	7550	mg/L
			Chromium	<0.010	mg/L
		Published: 7/06/2016	Cobalt	<0.010	mg/L
			Conductivity (EC)	33200	µS/cm
			Copper	0.032	mg/L
			Iron	<0.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.013	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	5.98	pH Unit
			Sulfate	8450	mg/L
			Vanadium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	27.46	m
EPA ID No. 24 -	Monthly	Sampled: 10/5/2016	Arsenic	<0.010	mg/L
			Barium	0.014	mg/L

GIP300		Obtained: 24/5/2016 Published: 7/06/2016	Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.0025 5800 <0.010 <0.010 36900 0.02 <0.10 <0.010 <0.010 0.0009 <0.010 5.91 17500 <0.10 <0.050 19.67	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. 25 - GIP301	Monthly	Sampled: 10/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	0.004 0.027 <0.001 0.0012 4660 <0.001 <0.001 18600 0.029 <0.05 <0.001 0.018 <0.0001 0.004 6.89 1840 <0.01 0.074 15.29	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: 10/5/2016 Obtained: 24/5/2016 Published: 7/06/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron	0.002 0.015 <0.001 0.0016 6280 <0.001 0.076 31500 0.014 0.32	mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L mg/L

			Lead	0.009	mg/L
			Manganese	15.6	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.086	mg/L
			pH	6.15	pH Unit
			Sulfate	11400	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.043	mg/L
			SWL	15.82	m