



Tritton and Girilambone Operations

Monthly Environmental Monitoring
Report

April 2015

APRIL 2015 – GROUNDWATER MONITORING REPORT
TRITTON OPERATIONS LICENCE NO.11254

Licensee: TRITTON RESOURCES LIMITED					
EPL No. 11254					
Sample Point	Monitoring Frequency	Sampled	Parameter	Measurement	Unit
EPA ID No. 19 - PZH008	Quarterly	01/04/2015	Arsenic	0.009	mg/L
			Barium	0.022	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	3670	mg/L
			Chromium	0.001	mg/L
			Cobalt	<0.001	mg/L
			Conductivity (EC)	15000	µS/cm
			Copper	0.008	mg/L
			Iron	0.32	mg/L
			Lead	<0.001	mg/L
			Manganese	0.054	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.002	mg/L
			pH	7.48	pH Unit
			Sulfate	1600	mg/L
			Vandium	<0.01	mg/L
Zinc	0.038	mg/L			
SWL	26.37	m			
EPA ID No. 20 - PZH009	Quarterly	01/04/2015	Arsenic	<0.001	mg/L
			Barium	0.048	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0001	mg/L
			Chloride	4820	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.002	mg/L
			Conductivity (EC)	19000	µS/cm
			Copper	0.093	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.320	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.002	mg/L
			pH	7.57	pH Unit
			Sulfate	2180	mg/L
			Vandium	<0.01	mg/L
Zinc	0.049	mg/L			

			SWL	21.69	m
EPA ID No. 23 - PZH014	Quarterly	01/04/2015	Arsenic	0.001	mg/L
			Barium	0.015	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0002	mg/L
			Chloride	4110	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.001	mg/L
			Conductivity (EC)	16100	µS/cm
			Copper	0.012	mg/L
			Iron	0.44	mg/L
			Lead	<0.001	mg/L
			Manganese	0.024	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.004	mg/L
			pH	7.37	pH Unit
			Sulfate	1660	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.027	mg/L
			SWL	54.51	m
EPA ID No. 24 - PZH015	Quarterly	01/04/2015	Arsenic	0.004	mg/L
			Barium	0.045	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	4540	mg/L
			Chromium	0.001	mg/L
			Cobalt	0.012	mg/L
			Conductivity (EC)	18000	µS/cm
			Copper	0.026	mg/L
			Iron	2.43	mg/L
			Lead	0.023	mg/L
			Manganese	0.363	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.010	mg/L
			pH	7.22	pH Unit
			Sulfate	2060	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.026	mg/L
			SWL	56.52	m
EPA ID No. 25 - PZH017	Quarterly	01/04/2015	Arsenic	<0.001	mg/L
			Barium	0.041	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	2930	mg/L
			Chromium	<0.001	mg/L

			Cobalt	<0.001	mg/L
			Conductivity (EC)	12000	µS/cm
			Copper	0.005	mg/L
			Iron	1.45	mg/L
			Lead	<0.001	mg/L
			Manganese	0.145	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.001	mg/L
			pH	7.82	pH Unit
			Sulfate	869	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.017	mg/L
			SWL	56.19	m

**APRIL 2015 – GROUNDWATER MONITORING REPORT
GIRILAMBONE OPERATIONS LICENCE NO.4501**

Licensee: TRITTON RESOURCES LIMITED EPL No. 4501					
Sample Point	Monitoring Frequency	Sampled	Parameter	Measurement	Unit
EPA ID No. 2 - GIP224	Monthly	13/04/2015	Arsenic	<0.010	mg/L
			Barium	0.025	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	7580	mg/L
			Chromium	<0.010	mg/L
			Cobalt	<0.010	mg/L
			Conductivity (EC)	31400	µS/cm
			Copper	0.026	mg/L
			Iron	<0.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.053	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
			pH	7.59	pH Unit
			Sulfate	3890	mg/L
			Vandium	<0.10	mg/L
Zinc	0.055	mg/L			
SWL	4.96	m			
EPA ID No. 3 - GIP225	Monthly	13/04/2015	Arsenic	<0.010	mg/L
			Barium	0.014	mg/L
			Beryllium	<0.010	mg/L

			Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	0.0013 5400 <0.010 0.012 33400 0.096 0.13 0.011 0.370 <0.0001 0.018 7.38 12700 <0.10 0.154 10.91	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. 7 - GIP274	Monthly	16/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.010 0.015 <0.010 <0.0010 8600 <0.010 <0.010 <0.010 32700 <0.010 <0.10 <0.010 0.065 <0.0001 <0.010 7.52 3080 <0.10 <0.050 17.72	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. 12 - GIP290	Monthly	14/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron	<0.001 0.016 <0.001 0.0191 3240 <0.001 0.070 16000 0.048 <0.05	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L

			Lead	0.005	mg/L
			Manganese	5.88	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
			pH	7.21	pH Unit
			Sulfate	3770	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.297	mg/L
			SWL	15.32	m
EPA ID No. 13 - GIP291	Monthly		SWL	9.61	m
EPA ID No. 14 - GIP292A	Monthly	08/04/2015	Arsenic	0.132	mg/L
			Barium	<0.010	mg/L
			Beryllium	0.069	mg/L
			Cadmium	2.92	mg/L
			Chloride	1690	mg/L
			Chromium	0.047	mg/L
			Cobalt	45.3	mg/L
			Conductivity (EC)	33400	µS/cm
			Copper	200	mg/L
			Iron	125	mg/L
			Lead	<0.010	mg/L
			Manganese	444	mg/L
			Mercury	<0.0001	mg/L
			Nickel	15.3	mg/L
			pH	3.99	pH Unit
			Sulfate	31000	mg/L
			Vandium	0.12	mg/L
			Zinc	194	mg/L
			SWL	6.23	m
EPA ID No. 16 - GIP292AS	Monthly	08/04/2015	Arsenic	0.562	mg/L
			Barium	<0.010	mg/L
			Beryllium	0.430	mg/L
			Cadmium	5.45	mg/L
			Chloride	1200	mg/L
			Chromium	0.134	mg/L
			Cobalt	72.1	mg/L
			Conductivity (EC)	30400	µS/cm
			Copper	659	mg/L
			Iron	1020	mg/L
			Lead	<0.010	mg/L
			Manganese	470	mg/L
			Mercury	0.0001	mg/L
			Nickel	21.7	mg/L

			pH	3.44	pH Unit
			Sulfate	36400	mg/L
			Vandium	1.01	mg/L
			Zinc	339	mg/L
			SWL	6.27	m
EPA ID No. 17 - GIP293	Monthly	16/04/2015	Arsenic	0.051	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	1.90	mg/L
			Chloride	3950	mg/L
			Chromium	<0.010	mg/L
			Cobalt	23.8	mg/L
			Conductivity (EC)	41700	µS/cm
			Copper	22.1	mg/L
			Iron	0.11	mg/L
			Lead	<0.010	mg/L
			Manganese	370	mg/L
			Mercury	0.0004	mg/L
			Nickel	8.54	mg/L
			pH	4.76	pH Unit
			Sulfate	30800	mg/L
			Vandium	<0.10	mg/L
			Zinc	84.8	mg/L
			SWL	12.47	m
EPA ID No. 18 - GIP294	Monthly	16/04/2015	Arsenic	0.033	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	3.26	mg/L
			Chloride	1520	mg/L
			Chromium	<0.010	mg/L
			Cobalt	40.9	mg/L
			Conductivity (EC)	50400	µS/cm
			Copper	140	mg/L
			Iron	0.21	mg/L
			Lead	<0.010	mg/L
			Manganese	244	mg/L
			Mercury	0.0005	mg/L
			Nickel	13.4	mg/L
			pH	5.66	pH Unit
			Sulfate	41900	mg/L
			Vandium	<0.10	mg/L
			Zinc	227	mg/L
			SWL	12.79	m
EPA ID No. 19 -	Monthly	13/04/2015	Arsenic	<0.010	mg/L
			Barium	0.050	mg/L

GIP295			Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.010 <0.0010 7800 <0.010 0.010 30600 0.025 <0.10 <0.010 0.670 <0.0001 <0.010 7.56 2740 <0.10 0.053 18.47	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 - GIP296	Monthly	16/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.001 0.015 <0.001 0.0002 2630 0.001 0.002 19200 0.130 0.15 <0.001 0.012 <0.0001 0.007 7.49 6030 <0.01 0.027 8.11	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	27/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper	0.007 <0.001 <0.001 <0.0001 66 <0.001 <0.001 989 0.004	mg/L mg/L mg/L mg/L mg/L mg/L mg/L μS/cm mg/L

			Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.05 <0.001 0.002 <0.0001 <0.001 7.89 181 <0.01 0.006 25.19	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	27/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.010 <0.010 <0.010 <0.0010 9470 <0.010 <0.010 31500 <0.010 <0.50 <0.010 0.061 <0.0001 <0.010 7.38 3000 <0.10 <0.050 21.03	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 - GIP299	Monthly	27/04/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate	<0.010 <0.010 <0.010 0.0013 7240 <0.010 <0.010 29600 <0.010 <0.50 <0.010 <0.010 0.0001 <0.010 7.24 6810	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

			Vandium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	26.95	m
EPA ID No. 24 - GIP300	Monthly	27/04/2015	Arsenic	<0.010	mg/L
			Barium	0.045	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0024	mg/L
			Chloride	9700	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.028	mg/L
			Conductivity (EC)	34300	µS/cm
			Copper	0.120	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	1.59	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.046	mg/L
			pH	7.51	pH Unit
			Sulfate	5410	mg/L
			Vandium	<0.10	mg/L
			Zinc	0.160	mg/L
			SWL	18.75	m
EPA ID No. 25 - GIP301	Monthly	27/04/2015	Arsenic	<0.001	mg/L
			Barium	0.024	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	4070	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.003	mg/L
			Conductivity (EC)	14800	µS/cm
			Copper	0.007	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.395	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.004	mg/L
			pH	7.73	pH Unit
			Sulfate	1640	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.026	mg/L
			SWL	14.31	m
EPA ID No. 26 - GIP302	Monthly	16/04/2015	Arsenic	<0.010	mg/L
			Barium	0.016	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0011	mg/L

			Chloride	5920	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.063	mg/L
			Conductivity (EC)	30600	µS/cm
			Copper	0.025	mg/L
			Iron	0.20	mg/L
			Lead	<0.010	mg/L
			Manganese	8.78	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.072	mg/L
			pH	7.11	pH Unit
			Sulfate	8230	mg/L
			Vandium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	14.89	m