



Tritton and Girilambone Operations

Monthly Environmental Monitoring
Report

August 2015

AUGUST 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. 27 - PZH019	Quarterly	05/08/2015	Arsenic	0.003	mg/L
			Barium	0.024	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0009	mg/L
			Chloride	2440	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.009	mg/L
			Conductivity (EC)	11000	µS/cm
			Copper	0.046	mg/L
			Iron	0.27	mg/L
			Lead	<0.001	mg/L
			Manganese	0.120	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.007	mg/L
			pH	7.72	pH Unit
			Sulfate	784	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.092	mg/L
SWL	104.74	m			
EPA ID No. 28 - PZH020	Quarterly	05/08/2015	Arsenic	<0.001	mg/L
			Barium	0.025	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0007	mg/L
			Chloride	2670	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.002	mg/L
			Conductivity (EC)	13400	µS/cm
			Copper	0.031	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.027	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.003	mg/L
			pH	8.09	pH Unit
			Sulfate	1210	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.104	mg/L

			SWL	72.4	m
EPA ID No. 29 - PZH021	Quarterly	05/08/2015	Arsenic	0.001	mg/L
			Barium	0.087	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0004	mg/L
			Chloride	3740	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.004	mg/L
			Conductivity (EC)	16000	µS/cm
			Copper	0.023	mg/L
			Iron	7.65	mg/L
			Lead	<0.001	mg/L
			Manganese	2.56	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.002	mg/L
			pH	7.83	pH Unit
			Sulfate	1470	mg/L
			Vandium	<0.01	mg/L
Zinc	0.072	mg/L			
SWL	68.57	m			

**AUGUST 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	17/08/2015	Arsenic	<0.010	mg/L
			Barium	0.024	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0055	mg/L
			Chloride	7170	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.117	mg/L
			Conductivity (EC)	30100	µS/cm
			Copper	0.085	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	0.159	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.048	mg/L
pH	7.39	pH Unit			

			Sulfate	4040	mg/L
			Vandium	<0.10	mg/L
			Zinc	0.096	mg/L
			SWL	4.87	m
EPA ID No. 3 - GIP225	Monthly	03/08/2015	Arsenic	<0.010	mg/L
			Barium	0.014	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0017	mg/L
			Chloride	3960	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.012	mg/L
			Conductivity (EC)	30000	µS/cm
			Copper	0.026	mg/L
			Iron	0.27	mg/L
			Lead	0.012	mg/L
			Manganese	0.367	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	7.77	pH Unit
			Sulfate	11900	mg/L
			Vandium	<0.10	mg/L
			Zinc	0.191	mg/L
			SWL	11.05	m
EPA ID No. 7 - GIP274	Monthly	03/08/2015	Arsenic	<0.010	mg/L
			Barium	0.014	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	<0.0010	mg/L
			Chloride	6960	mg/L
			Chromium	<0.010	mg/L
			Cobalt	<0.010	mg/L
			Conductivity (EC)	33300	µS/cm
			Copper	<0.010	mg/L
			Iron	<0.10	mg/L
			Lead	<0.010	mg/L
			Manganese	0.057	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	7.78	pH Unit
			Sulfate	3130	mg/L
			Vandium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	17.59	m
EPA ID No. 12 - GIP290	Monthly	06/08/2015	Arsenic	<0.001	mg/L
			Barium	0.015	mg/L
			Beryllium	<0.001	mg/L

			Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	0.0191 2960 <0.001 0.066 16300 0.083 0.06 0.003 6.31 <0.0001 0.011 7.33 3560 <0.01 0.340 15.15	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. 13 - GIP291	Monthly	12/08/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.010 0.022 <0.010 0.0016 6840 <0.010 0.019 26200 0.068 <0.50 <0.010 0.155 <0.0001 0.013 7.16 2880 <0.10 0.122 9.68	mg/L 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. 14 - GIP292A	Monthly	03/08/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron	0.040 <0.010 0.070 2.58 1440 0.045 35.4 33900 173 109	mg/L mg/L mg/L mg/L mg/L mg/L mg/L µS/cm mg/L mg/L

			Lead	<0.010	mg/L
			Manganese	389	mg/L
			Mercury	<0.0001	mg/L
			Nickel	12.4	mg/L
			pH	3.95	pH Unit
			Sulfate	33800	mg/L
			Vandium	<0.10	mg/L
			Zinc	167	mg/L
			SWL	5.22	m
EPA ID No. 16 - GIP292AS	Monthly	03/08/2015	Arsenic	0.178	mg/L
			Barium	<0.010	mg/L
			Beryllium	0.491	mg/L
			Cadmium	6.18	mg/L
			Chloride	1000	mg/L
			Chromium	0.122	mg/L
			Cobalt	70.6	mg/L
			Conductivity (EC)	33000	µS/cm
			Copper	673	mg/L
			Iron	925	mg/L
			Lead	<0.010	mg/L
			Manganese	524	mg/L
			Mercury	0.0001	mg/L
			Nickel	23.0	mg/L
			pH	3.29	pH Unit
			Sulfate	45000	mg/L
			Vandium	1.11	mg/L
			Zinc	372	mg/L
			SWL	5.53	m
EPA ID No. 17 - GIP293	Monthly	12/08/2015	Arsenic	0.022	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	1.81	mg/L
			Chloride	3530	mg/L
			Chromium	<0.010	mg/L
			Cobalt	20.8	mg/L
			Conductivity (EC)	40400	µS/cm
			Copper	27.1	mg/L
			Iron	1.06	mg/L
			Lead	0.014	mg/L
			Manganese	468	mg/L
			Mercury	0.0004	mg/L
			Nickel	7.1	mg/L
			pH	4.66	pH Unit
			Sulfate	37200	mg/L
			Vandium	<0.10	mg/L

			Zinc SWL	90.9 12.59	mg/L m
EPA ID No. 18 - GIP294	Monthly	26/08/2015	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 3.03 1520 <0.010 34.1 48300 153 <0.50 0.014 276 0.0007 10.6 5.38 46600 <0.10 222 12.69	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. 19 - GIP295	Monthly	06/08/2015	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vandium Zinc SWL	<0.010 0.056 <0.010 <0.0010 7540 <0.010 <0.010 31000 0.020 <0.50 <0.010 0.674 <0.0001 <0.010 7.79 2760 <0.10 <0.050 18.38	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. 20 - GIP296	Monthly	26/08/2015	Arsenic Barium Beryllium Cadmium Chloride	<0.010 0.015 <0.010 0.0019 4950	mg/L mg/L mg/L mg/L mg/L

			Chromium	<0.010	mg/L
			Cobalt	0.027	mg/L
			Conductivity (EC)	25800	µS/cm
			Copper	0.057	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	0.057	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
			pH	6.97	pH Unit
			Sulfate	7760	mg/L
			Vandium	<0.10	mg/L
			Zinc	0.064	mg/L
			SWL	7.53	m
EPA ID No. 21 - GIP297	Monthly	03/08/2015	Arsenic	0.006	mg/L
			Barium	<0.001	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	47	mg/L
			Chromium	<0.001	mg/L
			Cobalt	<0.001	mg/L
			Conductivity (EC)	966	µS/cm
			Copper	0.006	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.004	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.001	mg/L
			pH	8.23	pH Unit
			Sulfate	179	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.021	mg/L
			SWL	25.6	m
EPA ID No. 22 - GIP298	Monthly	26/08/2015	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0011	mg/L
			Chloride	7870	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.02	mg/L
			Conductivity (EC)	30800	µS/cm
			Copper	<0.010	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	0.097	mg/L

			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	7.33	pH Unit
			Sulfate	2660	mg/L
			Vandium	<0.10	mg/L
			Zinc	<0.050	mg/L
			SWL	21.15	m
EPA ID No. 23 - GIP299	Monthly	06/08/2015	Arsenic	0.002	mg/L
			Barium	0.010	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0026	mg/L
			Chloride	4600	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.005	mg/L
			Conductivity (EC)	23500	µS/cm
			Copper	0.044	mg/L
			Iron	0.06	mg/L
			Lead	<0.001	mg/L
			Manganese	0.059	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.003	mg/L
			pH	7.67	pH Unit
			Sulfate	5340	mg/L
			Vandium	<0.01	mg/L
			Zinc	0.082	mg/L
			SWL	27.22	m
EPA ID No. 24 - GIP300	Monthly	17/08/2015	Arsenic	<0.010	mg/L
			Barium	0.019	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0026	mg/L
			Chloride	4650	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.028	mg/L
			Conductivity (EC)	34500	µS/cm
			Copper	0.079	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	0.118	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.014	mg/L
			pH	7.13	pH Unit
			Sulfate	15900	mg/L
			Vandium	<0.10	mg/L
			Zinc	0.057	mg/L
			SWL	19.24	m

EPA ID No. 25 - GIP301	Monthly	06/08/2015	Arsenic	<0.001	mg/L
			Barium	0.030	mg/L
			Beryllium	<0.001	mg/L
			Cadmium	0.0010	mg/L
			Chloride	3500	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.017	mg/L
			Conductivity (EC)	16100	µS/cm
			Copper	0.067	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.625	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.010	mg/L
			pH	7.89	pH Unit
			Sulfate	1680	mg/L
			Vandium	<0.01	mg/L
Zinc	0.109	mg/L			
SWL	14.91	m			
EPA ID No. 26 - GIP302	Monthly	12/08/2015	Arsenic	<0.010	mg/L
			Barium	0.019	mg/L
			Beryllium	<0.010	mg/L
			Cadmium	0.0053	mg/L
			Chloride	5440	mg/L
			Chromium	<0.010	mg/L
			Cobalt	0.086	mg/L
			Conductivity (EC)	29300	µS/cm
			Copper	0.112	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	10.4	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.07	mg/L
			pH	6.79	pH Unit
			Sulfate	10800	mg/L
			Vandium	<0.10	mg/L
Zinc	0.138	mg/L			
SWL	15.1	m			