



**Aeris**  
TRITTON OPERATIONS

# Tritton and Girilambone Operations

## Monthly Environmental Monitoring Report

April 2016

### **Environmental Protection License 11254**

TRITTON COPPER MINE

YARRANDALE ROAD, HERMIDALE, NSW, 2831

<http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=11254&id=11254&option=licence&searchrange=licence&range=POEO licence&prp=no&status=Issued>

### **Environmental Protection License 4501**

TRITTON COPPER MINE

BOORAMUGGA ROAD, GIRILAMBONE, NSW, 2831

<http://www.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=4501&id=4501&option=licence&searchrange=licence&range=POEO licence&prp=no&status=Issued>

**APRIL 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. 12 - PZH001	Quarterly	Sampled: 4/04/2016	Arsenic	0.002	mg/L <sup>1</sup>
			Barium	0.031	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 19/04/2016	Cadmium	<0.0001	mg/L
			Chloride	4250	mg/L
			Chromium	0.001	mg/L
		Published: 11/05/2016	Cobalt	0.007	mg/L
			Conductivity (EC)	14900	µS/cm <sup>2</sup>
			Copper	0.013	mg/L
			Iron	0.33	mg/L
			Lead	0.001	mg/L
			Manganese	0.182	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
			pH	7.33	pH Unit
			Sulfate	1730	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.033	mg/L			
SWL	14.21	m <sup>3</sup>			
EPA ID No. 13 - PZH002	Quarterly	Sampled: 4/04/2016	Arsenic	0.003	mg/L
			Barium	0.018	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 19/04/2016	Cadmium	<0.0001	mg/L
			Chloride	3530	mg/L
			Chromium	<0.001	mg/L
		Published: 11/05/2016	Cobalt	<0.001	mg/L
			Conductivity (EC)	12800	µS/cm
			Copper	0.002	mg/L
			Iron	6.58	mg/L
			Lead	<0.001	mg/L
			Manganese	0.191	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.001	mg/L
pH	7.36	pH Unit			

<sup>1</sup> Milligrams per litre

<sup>2</sup> Microsiemens per centimetre

<sup>3</sup> Metres

			Sulfate	1580	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.013	mg/L
			SWL	30.06	m
EPA ID No. 14 - PZH003	Quarterly	Sampled: 4/04/2016	Arsenic	<0.001	mg/L
		Obtained: 19/04/2016	Barium	0.012	mg/L
		Published: 11/05/2016	Beryllium	<0.001	mg/L
			Cadmium	0.0001	mg/L
			Chloride	5130	mg/L
			Chromium	<0.001	mg/L
			Cobalt	<0.001	mg/L
			Conductivity (EC)	17500	µS/cm
			Copper	0.006	mg/L
			Iron	0.08	mg/L
			Lead	<0.001	mg/L
			Manganese	0.004	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.007	mg/L
			pH	6.65	pH Unit
			Sulfate	2010	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.022	mg/L
			SWL	68.07	m
EPA ID No. 15 - PZH004	Quarterly			DRY	
EPA ID No. 16 - PZH005	Quarterly	Sampled: 4/04/2016	Arsenic	0.004	mg/L
		Obtained: 19/04/2016	Barium	0.021	mg/L
		Published: 11/05/2016	Beryllium	<0.001	mg/L
			Cadmium	0.0005	mg/L
			Chloride	5130	mg/L
			Chromium	0.002	mg/L
			Cobalt	0.028	mg/L
			Conductivity (EC)	16400	µS/cm
			Copper	0.029	mg/L
			Iron	0.63	mg/L
			Lead	0.036	mg/L
			Manganese	0.498	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.042	mg/L
			pH	6.95	pH Unit
			Sulfate	1280	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.068	mg/L
			SWL	11.27	m
EPA ID	Quarterly	Sampled:	Arsenic	<0.001	mg/L

No. 17 - PZH006		4/04/2016	Barium	0.035	mg/L
		Obtained: 19/04/2016	Beryllium	<0.001	mg/L
			Cadmium	0.0004	mg/L
		Published: 11/05/2016	Chloride	3530	mg/L
			Chromium	<0.001	mg/L
			Cobalt	0.003	mg/L
			Conductivity (EC)	12200	µS/cm
			Copper	0.017	mg/L
			Iron	0.16	mg/L
			Lead	0.013	mg/L
			Manganese	0.078	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.007	mg/L
		pH	7.47	pH Unit	
		Sulfate	1620	mg/L	
		Vanadium	<0.01	mg/L	
Zinc	0.028	mg/L			
SWL	32.45	m			

**APRIL 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: 28/04/2016	Arsenic	<0.001	mg/L
			Barium	0.026	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 10/05/2016	Cadmium	0.0007	mg/L
			Chloride	8900	mg/L
			Chromium	0.001	mg/L
		Published: 11/05/2016	Cobalt	0.007	mg/L
			Conductivity (EC)	32000	µS/cm
			Copper	0.05	mg/L
			Iron	<0.05	mg/L
			Lead	0.001	mg/L
			Manganese	0.108	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
			pH	7.31	pH Unit
			Sulfate	3510	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.061	mg/L			
SWL	5.39	m			
EPA ID No. 3 - GIP225	Monthly	Sampled: 19/04/2016	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 10/05/2016	Cadmium	0.0011	mg/L
			Chloride	5220	mg/L
			Chromium	<0.010	mg/L
		Published: 11/05/2016	Cobalt	<0.010	mg/L
			Conductivity (EC)	34900	µS/cm
			Copper	0.03	mg/L
			Iron	<0.50	mg/L
			Lead	<0.010	mg/L
			Manganese	0.127	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	6.14	pH Unit
			Sulfate	15600	mg/L
			Vanadium	<0.10	mg/L
Zinc	0.134	mg/L			
SWL	11.26	m			

EPA ID No. 4 - GIP234	Quarterly	Sampled: 5/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	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 0.0064 7460 0.002 0.029 24600 0.156 0.08 0.046 0.332 <0.0001 0.049 6.91 2120 <0.01 0.356 24.72	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 mg/L pH Unit mg/L mg/L mg/L mg/L m
EPA ID No. 5 - GIP273	Quarterly	Sampled: 5/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.029 <0.010 0.0014 10300 <0.010 0.011 33400 0.077 <0.10 <0.010 0.249 <0.0001 0.013 6.71 2910 <0.10 0.441 16.81	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 mg/L m
EPA ID No. 7 - GIP274	Monthly	Sampled: 12/04/2016  Obtained: 10/05/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC)	0.001 0.014 <0.001 0.0005 9890 <0.001 0.009 33200	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	0.015 0.08 <0.001 0.053 <0.0001 0.007 5.97 2550 <0.01 0.02 17.61	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: 5/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.010 0.022 <0.010 0.0019 9480 <0.010 0.013 30600 0.079 0.48 0.055 0.131 <0.0001 0.02 6.94 2430 <0.10 0.22 20.81	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: 5/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate	<0.001 0.009 <0.001 0.0002 993 <0.001 0.003 5300 0.037 0.13 0.004 0.074 <0.0001 0.002 7.29 408	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	<0.01	mg/L
			Zinc	0.059	mg/L
			SWL	17.14	m
EPA ID No. 9 - GIP278	Quarterly	Sampled: 21/04/2016	Arsenic	0.003	mg/L
			Barium	0.017	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 10/05/2016	Cadmium	0.0004	mg/L
			Chloride	8120	mg/L
			Chromium	0.006	mg/L
		Published: 11/05/2016	Cobalt	<0.001	mg/L
			Conductivity (EC)	27800	µS/cm
			Copper	0.007	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.007	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.019	mg/L
			pH	6.52	pH Unit
			Sulfate	2310	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.026	mg/L			
SWL	25.28	m			
EPA ID No. 10 - GIP279A	Quarterly	Sampled: 21/04/2016	Arsenic	<0.001	mg/L
			Barium	0.028	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 10/05/2016	Cadmium	0.0005	mg/L
			Chloride	8700	mg/L
			Chromium	0.002	mg/L
		Published: 11/05/2016	Cobalt	0.001	mg/L
			Conductivity (EC)	29200	µS/cm
			Copper	0.007	mg/L
			Iron	<0.05	mg/L
			Lead	<0.001	mg/L
			Manganese	0.02	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.006	mg/L
			pH	6.52	pH Unit
			Sulfate	2140	mg/L
			Vanadium	<0.01	mg/L
Zinc	0.036	mg/L			
SWL	24.37	m			
EPA ID No. 11 - GIP280A	Quarterly	Sampled: 28/04/2016	Arsenic	<0.001	mg/L
			Barium	0.037	mg/L
		Obtained: 10/05/2016	Beryllium	<0.001	mg/L
			Cadmium	0.0005	mg/L
			Chloride	5330	mg/L



		Published: 11/05/2016	Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.001 0.004 19300 0.023 <0.05 <0.001 0.052 <0.0001 0.006 7.54 1500 <0.01 0.203 22.16	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	Sampled: 28/04/2016  Obtained: 10/05/2016  Published: 11/05/2016	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 0.026 3590 <0.001 0.128 17800 0.199 0.06 0.007 11.3 <0.0001 0.024 7.07 3620 <0.01 0.52 15.32	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. 13 - GIP291	Monthly	Sampled: 6/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury	<0.001 0.025 <0.001 0.0011 7950 0.006 0.006 26400 0.056 0.33 0.006 0.104 <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	0.007	mg/L
			pH	7.61	pH Unit
			Sulfate	2610	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.102	mg/L
			SWL	9.57	m
EPA ID No. 14 - GIP292A	Monthly	Sampled: 6/04/2016	Arsenic	0.055	mg/L
			Barium	0.012	mg/L
		Obtained: 19/04/2016	Beryllium	0.074	mg/L
			Cadmium	2.79	mg/L
		Published: 11/05/2016	Chloride	2690	mg/L
			Chromium	0.06	mg/L
			Cobalt	42.7	mg/L
			Conductivity (EC)	32900	µS/cm
			Copper	191	mg/L
			Iron	106	mg/L
			Lead	0.017	mg/L
			Manganese	435	mg/L
		Mercury	<0.0001	mg/L	
		Nickel	14.4	mg/L	
		pH	4.06	pH Unit	
		Sulfate	31800	mg/L	
Vanadium	<0.10	mg/L			
Zinc	188	mg/L			
SWL	6.27	m			
EPA ID No. 16 - GIP292AS	Monthly	Sampled: 6/04/2016	Arsenic	0.314	mg/L
			Barium	<0.010	mg/L
		Obtained: 19/04/2016	Beryllium	0.596	mg/L
			Cadmium	8.99	mg/L
		Published: 11/05/2016	Chloride	1460	mg/L
			Chromium	0.251	mg/L
			Cobalt	109	mg/L
			Conductivity (EC)	35300	µS/cm
			Copper	903	mg/L
			Iron	1320	mg/L
			Lead	0.018	mg/L
			Manganese	660	mg/L
		Mercury	<0.0001	mg/L	
		Nickel	44.2	mg/L	
		pH	3.39	pH Unit	
		Sulfate	46200	mg/L	
Vanadium	1.56	mg/L			
Zinc	595	mg/L			
SWL	6.31	m			
EPA ID No. 17 -	Monthly	Sampled: 19/04/2016	Arsenic	0.027	mg/L
			Barium	<0.010	mg/L

GIP293		<p>Obtained: 10/05/2016</p> <p>Published: 11/05/2016</p>	<p>Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL</p>	<p>&lt;0.010 2.15 4370 &lt;0.010 29.1 42600 30.9 0.24 &lt;0.010 484 0.0004 9.25 4.32 32800 &lt;0.10 96.8 12.81</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: 12/04/2016</p> <p>Obtained: 10/05/2016</p> <p>Published: 11/05/2016</p>	<p>Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL</p>	<p>0.013 &lt;0.010 &lt;0.010 3.3 1850 &lt;0.010 41.4 50600 168 0.45 &lt;0.010 288 0.0005 12.4 4.36 46000 &lt;0.10 240 13.01</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 mg/L pH Unit mg/L mg/L mg/L m</p>
EPA ID No. 19 - GIP295	Monthly	<p>Sampled: 5/04/2016</p> <p>Obtained: 19/04/2016</p> <p>Published: 11/05/2016</p>	<p>Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron</p>	<p>&lt;0.010 0.052 &lt;0.010 &lt;0.0010 9170 &lt;0.010 &lt;0.010 29800 0.044 &lt;0.10</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	0.62	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.010	mg/L
			pH	6.68	pH Unit
			Sulfate	2270	mg/L
			Vanadium	<0.10	mg/L
			Zinc	0.059	mg/L
			SWL	18.33	m
EPA ID No. 20 - GIP296	Monthly	Sampled: 12/04/2016	Arsenic	<0.001	mg/L
			Barium	0.012	mg/L
		Obtained: 10/05/2016	Beryllium	<0.001	mg/L
			Cadmium	0.0008	mg/L
			Chloride	1940	mg/L
			Chromium	0.001	mg/L
		Published: 11/05/2016	Cobalt	0.006	mg/L
			Conductivity (EC)	19000	µS/cm
			Copper	0.057	mg/L
			Iron	0.28	mg/L
			Lead	<0.001	mg/L
			Manganese	0.051	mg/L
			Mercury	0.0008	mg/L
			Nickel	0.008	mg/L
			pH	6.02	pH Unit
			Sulfate	7390	mg/L
Vanadium	<0.01	mg/L			
Zinc	0.056	mg/L			
SWL	8.03	m			
EPA ID No. 21 - GIP297	Monthly	Sampled: 5/04/2016	Arsenic	0.006	mg/L
			Barium	<0.001	mg/L
		Obtained: 19/04/2016	Beryllium	<0.001	mg/L
			Cadmium	<0.0001	mg/L
			Chloride	67	mg/L
			Chromium	<0.001	mg/L
		Published: 11/05/2016	Cobalt	0.002	mg/L
			Conductivity (EC)	1010	µS/cm
			Copper	0.015	mg/L
			Iron	0.08	mg/L
			Lead	<0.001	mg/L
			Manganese	0.014	mg/L
			Mercury	<0.0001	mg/L
			Nickel	<0.001	mg/L
			pH	8.27	pH Unit
			Sulfate	183	mg/L
Vanadium	<0.01	mg/L			
Zinc	0.016	mg/L			

			SWL	25.52	m
EPA ID No. 22 - GIP298	Monthly	Sampled: 12/04/2016	Arsenic	<0.001	mg/L
			Barium	0.004	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 10/05/2016	Cadmium	0.0006	mg/L
			Chloride	9360	mg/L
			Chromium	0.001	mg/L
		Published: 11/05/2016	Cobalt	0.003	mg/L
			Conductivity (EC)	31700	µS/cm
			Copper	0.065	mg/L
			Iron	0.17	mg/L
			Lead	<0.001	mg/L
			Manganese	0.077	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.003	mg/L
		pH	5.88	pH Unit	
		Sulfate	2420	mg/L	
		Vanadium	<0.01	mg/L	
Zinc	0.033	mg/L			
SWL	21.17	m			
EPA ID No. 23 - GIP299	Monthly	Sampled: 5/04/2016	Arsenic	<0.010	mg/L
			Barium	<0.010	mg/L
			Beryllium	<0.010	mg/L
		Obtained: 19/04/2016	Cadmium	0.004	mg/L
			Chloride	7500	mg/L
			Chromium	<0.010	mg/L
		Published: 11/05/2016	Cobalt	0.014	mg/L
			Conductivity (EC)	31400	µS/cm
			Copper	0.04	mg/L
			Iron	0.31	mg/L
			Lead	<0.010	mg/L
			Manganese	0.134	mg/L
			Mercury	<0.0001	mg/L
			Nickel	0.012	mg/L
		pH	6.71	pH Unit	
		Sulfate	8990	mg/L	
		Vanadium	<0.10	mg/L	
Zinc	0.098	mg/L			
SWL	27.26	m			
EPA ID No. 24 - GIP300	Monthly	Sampled: 19/04/2016	Arsenic	<0.001	mg/L
			Barium	0.024	mg/L
			Beryllium	<0.001	mg/L
		Obtained: 10/05/2016	Cadmium	0.0023	mg/L
			Chloride	7640	mg/L
		Published:	Chromium	<0.001	mg/L
	Cobalt	0.011	mg/L		

		11/05/2016	Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	29100 0.044 <0.05 <0.001 0.586 <0.0001 0.015 7.46 3120 <0.01 0.027 19.47	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. 25 - GIP301	Monthly	Sampled: 5/04/2016  Obtained: 19/04/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH Sulfate Vanadium Zinc SWL	<0.001 0.03 <0.001 0.0012 4770 <0.001 <0.001 16900 0.032 <0.05 <0.001 0.02 <0.0001 0.005 6.58 1780 <0.01 0.085 14.88	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: 28/04/2016  Obtained: 10/05/2016  Published: 11/05/2016	Arsenic Barium Beryllium Cadmium Chloride Chromium Cobalt Conductivity (EC) Copper Iron Lead Manganese Mercury Nickel pH	<0.001 0.013 <0.001 0.0018 9810 0.001 0.018 34400 0.093 0.08 <0.001 0.444 <0.0001 0.016 7.74	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

			Sulfate	3340	mg/L
			Vanadium	<0.01	mg/L
			Zinc	0.174	mg/L
			SWL	15.25	m