



Eraring Power Station - EPA Licence 1429

Rocky Point Rd, Dora Creek NSW 2264

Environmental Monitoring Data January 2019



Unit 1 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 January	174	222	133	11.1	13.5	9.4	189	202	168
2 January	158	210	136	11.6	14.0	9.9	193	212	175
3 January	158	191	136	11.8	14.2	9.4	190	204	169
4 January	162	192	144	12.6	15.6	9.9	186	211	177
5 January	159	178	143	12.5	13.9	10.9	183	200	165
6 January	155	179	142	13.9	16.9	11.4	186	206	165
7 January	170	248	129	21.0	31.0	11.2	213	226	204
8 January	155	197	128	11.5	16.3	8.7	212	238	202
9 January	179	210	129	10.3	13.4	8.2	210	226	192
10 January	170	196	137	11.0	14.4	9.7	200	222	187
11 January	168	181	134	11.9	18.0	8.7	209	217	184
12 January	178	205	147	12.3	18.1	9.8	237	282	179
13 January	158	180	143	13.0	16.6	9.8	268	295	235
14 January	174	202	135	11.7	15.5	8.8	250	278	217
15 January	166	218	143	11.8	14.0	9.9	242	297	221
16 January	156	186	134	10.5	12.5	8.4	262	273	234
17 January	170	202	141	11.4	14.6	9.0	262	281	249
18 January	164	186	113	10.7	13.2	8.6	240	282	230
19 January	168	194	131	10.4	14.2	9.1	237	261	206
20 January	183	204	129	12.9	17.3	10.5	231	279	203
21 January	176	206	156	12.1	17.7	10.3	246	278	185
22 January	177	193	141	11.5	16.6	9.5	270	301	234
23 January	168	187	130	11.1	14.2	9.1	259	278	228
24 January	179	203	146	11.1	13.6	9.5	233	249	210
25 January	174	188	153	10.7	13.0	9.4	243	262	230
26 January	177	215	127	10.8	13.6	9.4	241	252	223
27 January	177	208	146	10.8	12.7	9.0	221	255	130
28 January	155	199	122	11.5	14.1	10.0	224	245	194
29 January	151	172	127	11.5	13.7	9.1	227	256	209
30 January	156	172	120	10.4	13.8	9.2	243	268	230
31 January	193	222	141	10.9	13.4	9.2	241	270	221

Unit 2 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 January	153	178	128	14.4	15.8	11.7	189	223	149
2 January	154	222	132	14.7	17.2	11.7	187	226	119
3 January	161	216	135	15.1	17.9	13.0	176	210	111
4 January	160	190	128	15.1	18.6	10.5	180	222	109
5 January	164	178	152	14.6	16.4	12.2	177	222	125
6 January	164	189	141	17.9	21.2	15.9	179	187	175
7 January	162	189	133	19.2	27.5	13.9	196	212	181
8 January	189	209	163	18.1	23.8	14.1	226	260	149
9 January	180	212	143	17.7	21.8	14.7	208	247	144
10 January	162	215	148	18.5	24.4	16.1	173	206	109
11 January	160	200	148	18.7	21.7	16.6	192	223	122
12 January	156	197	139	19.2	28.4	16.2	223	280	127
13 January	144	188	129	19.9	23.8	17.3	231	261	175
14 January	151	208	127	20.0	25.7	17.5	242	276	173
15 January	144	193	125	20.7	26.5	17.1	264	308	210
16 January	152	202	122	19.8	23.3	15.4	246	280	194
17 January	160	212	131	19.4	27.5	14.4	270	310	211
18 January	170	203	135	19.0	21.9	15.6	245	263	200
19 January	150	202	126	21.9	27.8	19.5	220	244	200
20 January	151	178	126	21.6	27.1	19.1	218	249	149
21 January	138	181	114	21.4	28.9	17.3	235	268	194
22 January	167	197	133	20.9	28.8	16.7	233	271	182
23 January	175	209	134	21.2	31.2	17.9	231	279	184
24 January	167	215	132	24.6	31.4	20.1	210	242	150
25 January	173	210	144	24.6	30.4	20.3	227	280	194
26 January	180	222	136	23.7	29.6	12.4	270	311	211
27 January	161	212	139	12.6	15.1	11.3	211	255	177
28 January	156	207	133	12.3	13.9	11.3	192	213	149
29 January	172	204	141	12.6	15.1	11.0	206	230	152
30 January	178	211	139	12.0	14.0	10.4	233	256	181
31 January	181	210	146	12.7	15.6	11.0	245	266	210

Unit 3 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 January	155	196	126	9.4	11.8	7.7	175	212	140
2 January	149	198	120	10.4	11.9	9.3	169	204	141
3 January	147	206	109	10.4	13.5	9.2	169	193	136
4 January	150	203	109	10.7	13.6	8.8	166	203	141
5 January	157	169	125	9.7	11.3	8.3	171	185	147
6 January	144	168	125	9.3	13.0	7.9	181	188	149
7 January	155	188	112	12.4	19.4	8.4	182	208	128
8 January	160	186	119	8.9	12.0	7.8	187	211	141
9 January	165	191	124	8.2	13.3	7.4	193	217	143
10 January	179	212	112	8.6	9.4	8.4	200	221	162
11 January	173	199	138	8.6	9.9	7.9	194	218	147
12 January	154	184	115	9.0	11.0	7.9	203	265	148
13 January	156	180	127	8.3	9.9	7.0	214	267	176
14 January	141	156	126	8.8	10.0	8.0	241	295	179
15 January	142	156	125	8.8	11.6	8.0	227	263	180
16 January	139	166	112	9.0	11.1	8.2	222	267	179
17 January	147	169	124	9.0	10.6	7.8	239	270	200
18 January	135	152	123	7.4	8.3	6.7	224	234	202
19 January	150	173	120	7.7	9.4	7.3	230	263	181
20 January	137	154	112	8.7	10.5	7.9	205	221	182
21 January	143	169	124	8.5	10.0	7.9	220	241	174
22 January	147	172	131	7.9	10.0	6.9	223	270	174
23 January	158	189	119	7.1	8.9	6.4	218	245	187
24 January	152	170	121	7.7	8.4	7.4	227	272	179
25 January	136	156	124	8.0	9.4	6.9	226	256	191
26 January	134	158	120	7.1	8.4	5.9	255	294	221
27 January	129	159	105	7.5	8.0	7.0	201	239	166
28 January	133	149	121	7.7	8.5	7.5	197	234	152
29 January	131	146	118	9.0	17.7	7.5	187	211	147
30 January	137	169	127	14.9	25.6	7.5	230	248	214
31 January	150	167	123	7.3	14.9	3.9	247	279	193

Unit 4 Boiler Continuous Emission Monitoring Summary

EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air.

	NOX			Particulates			SOX		
	ppm (7% O ₂)			mg/m ³			ppm (7% O ₂)		
	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly	Daily Ave	Max Hourly	Min Hourly
1 January	182	213	161	7.0	11.6	2.9	196	211	186
2 January	179	202	166	3.5	5.0	2.0	212	221	200
3 January	179	214	158	3.0	5.3	2.0	192	198	186
4 January	188	219	168	2.6	3.2	2.2	193	199	189
5 January	156	166	141	2.4	3.2	2.2	187	191	176
6 January	167	200	152	3.0	5.2	2.2	185	193	144
7 January	165	201	154	7.3	14.4	2.5	204	229	158
8 January	164	182	153	11.7	25.2	4.1	221	229	212
9 January	160	174	150	11.4	14.2	9.5	220	229	209
10 January	175	207	158	12.5	17.5	9.6	207	219	195
11 January	181	196	166	16.7	21.0	15.2	207	218	195
12 January	204	223	168	17.3	21.7	14.7	235	274	190
13 January	198	232	156	11.5	12.4	9.9	250	295	198
14 January	192	212	174	11.3	13.3	9.6	246	271	226
15 January	184	215	157	11.3	12.9	9.1	231	260	210
16 January	184	210	166	10.8	13.8	9.2	228	250	216
17 January	188	216	162	11.3	13.7	9.0	247	263	231
18 January	197	219	164	10.9	12.1	9.0	226	259	203
19 January	203	225	170	10.9	12.1	9.6	211	225	205
20 January	187	213	170	11.6	13.2	11.1	210	234	188
21 January	182	202	148	11.3	12.1	10.4	227	272	187
22 January	185	201	155	11.2	13.0	9.9	271	302	243
23 January	168	192	135	11.2	13.0	10.4	235	282	179
24 January	196	218	159	10.8	11.8	9.5	245	282	211
25 January	182	195	170	11.5	16.6	9.8	254	280	231
26 January	182	202	154	11.3	13.7	10.1	258	296	233
27 January	175	196	145	11.2	12.6	10.1	233	266	208
28 January	182	227	154	11.5	13.2	10.1	220	237	207
29 January	189	211	158	12.1	13.7	9.5	229	240	221
30 January	172	206	148	12.4	14.1	9.9	229	244	202
31 January	166	205	149	12.1	13.9	10.3	225	245	202

Unit 1 Boiler Emission Test Results

EPA Identification no. 11 - Air emissions monitoring, Boiler 1 stack discharge to air

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	0.019	mg/m ³	0.2	15/08/2017
Carbon Dioxide (Wet)	12.6	%	-	15/08/2017
Carbon Monoxide	14	ppm	-	15/08/2017
Chlorine	0.083	mg/m3	200	15/08/2017
Copper	0.0014	mg/m3	-	15/08/2017
Dry Gas Density	1.35	kg/m3	-	15/08/2017
Fluoride As HF - Total	8.7	mg/m3	50	15/08/2017
Hazardous Substances (Metals) - Total	0.030	mg/m3	1	15/08/2017
Hydrogen Chloride	2.6	mg/m3	100	15/08/2017
Mercury	<0.000096	mg/m3	0.2	15/08/2017
Moisture	5.3	%	-	15/08/2017
Particulates - Total	1.9	mg/m3	50	15/08/2017
Stack Gas Molecular Weight	30.3	kg/k-mole	-	15/08/2017
Temperature	107	degC	-	15/08/2017
Velocity	15	m/sec	-	15/08/2017
Volatile Organic Compounds (VOC) - Total	<0.08	ppm	-	15/08/2017
Volumetric Flow Rate (Dry At STP)	343	m3/sec	-	15/08/2017

Unit 2 Boiler Emission Test Results

EPA Identification no. 12 - Air emissions monitoring, Boiler 2 stack discharge to air

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	27-28/02/2018
Carbon Dioxide (Wet)	12.9	%	-	27-28/02/2018
Carbon Monoxide	14	ppm	-	27-28/02/2018
Chlorine	0.033	mg/m ³	200	27-28/02/2018
Copper	0.0009	mg/m ³	-	27-28/02/2018
Dry Gas Density	1.4	kg/m ³	-	27-28/02/2018
Fluoride As HF - Total	10.4	mg/m ³	50	27-28/02/2018
Hazardous Substances (Metals) - Total	≤0.0097	mg/m ³	1	27-28/02/2018
Hydrogen Chloride	9.6	mg/m ³	100	27-28/02/2018
Mercury	0.00051	mg/m ³	0.2	27-28/02/2018
Moisture	7.2	%	-	27-28/02/2018
Particulates - Total	3.4	mg/m ³	50	27-28/02/2018
Stack Gas Molecular Weight	30.5	Kg/k-mole	-	27-28/02/2018
Temperature	122	degC	-	27-28/02/2018
Velocity	14	m/sec	-	27-28/02/2018
Volatile Organic Compounds (VOC) - Total	<0.06	ppm	-	27-28/02/2018
Volumetric Flow Rate (Dry At STP)	336	m ³ /sec	-	27-28/02/2018

Unit 3 Boiler Emission Test Results

EPA Identification no. 13 - Air emissions monitoring, Boiler 3 stack discharge to air

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	<0.0002	mg/m ³	0.2	29-30/05/2018
Carbon Dioxide (Wet)	13.2	%	-	29-30/05/2018
Carbon Monoxide	5.4	ppm	-	29-30/05/2018
Chlorine	<0.014	mg/m ³	200	29-30/05/2018
Copper	<0.00046	mg/m ³	-	29-30/05/2018
Dry Gas Density	1.36	kg/m ³	-	29-30/05/2018
Fluoride As HF - Total	9.5	mg/m ³	50	29-30/05/2018
Hazardous Substances (Metals) - Total	<0.011	mg/m ³	1	29-30/05/2018
Hydrogen Chloride	11.5	mg/m ³	100	29-30/05/2018
Mercury	<0.00033	mg/m ³	0.2	29-30/05/2018
Moisture	7.2	%	-	29-30/05/2018
Particulates - Total	5.3	mg/m ³	50	29-30/05/2018
Stack Gas Molecular Weight	30.5	kg/k-mole	-	29-30/05/2018
Temperature	117	degC	-	29-30/05/2018
Velocity	15.0	m/sec	-	29-30/05/2018
Volatile Organic Compounds (VOC) - Total	<0.006	ppm	-	29-30/05/2018
Volumetric Flow Rate (Dry At STP)	361	m ³ /sec	-	29-30/05/2018

Unit 4 Boiler Emission Test Results

EPA Identification no. 14 - Air emissions monitoring, Boiler 4 stack discharge to air

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Cadmium	<0.00014	mg/m ³	0.2	20-21/08/2018
Carbon Dioxide (Wet)	13.2	%	-	20-21/08/2018
Carbon Monoxide	54	ppm	-	20-21/08/2018
Chlorine	<0.006	mg/m ³	200	20-21/08/2018
Copper	0.00054	mg/m ³	-	20-21/08/2018
Dry Gas Density	1.36	kg/m ³	-	20-21/08/2018
Fluoride As HF - Total	10.5	mg/m ³	50	20-21/08/2018
Hazardous Substances (Metals) - Total	≤0.0093	mg/m ³	1	20-21/08/2018
Hydrogen Chloride	6.7	mg/m ³	100	20-21/08/2018
Mercury	0.0013	mg/m ³	0.2	20-21/08/2018
Moisture	6.4	%	-	20-21/08/2018
Particulates - Total	2.6	mg/m ³	50	20-21/08/2018
Stack Gas Molecular Weight	29.7	kg/k-mole	-	20-21/08/2018
Temperature	121	degC	-	20-21/08/2018
Velocity	15.5	m/sec	-	20-21/08/2018
Volatile Organic Compounds (VOC) - Total	0.025	ppm	-	20-21/08/2018
Volumetric Flow Rate (Dry At STP)	370	m ³ /sec	-	20-21/08/2018

Eraring Depositional Dust Gauges

*EPA Identification no. 18, 25, 26 & 27 - Depositional dust monitoring within 1km
of the coal handling operations*

	Deposited Matter		
	g/m ² /month		
	Ash	Combustible	Insolubles
E2	1.0	0.2	1.2
E4	0.9	0.1	1.0
E6	0.9	0.5	1.4
U6	0.8	0.2	1.0

Water Quality - Lake Monitoring LM10

EPA Identification no. 4 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
Depth/Air	28.66					
010cm	29.91	8.18	35.9	59.8	3.40	2.25
050cm	30.00	8.18	35.8	61.9	3.79	
100cm	29.83	8.15	35.8	64.6	3.93	
150cm	29.70	8.13	35.8	63.9	3.86	
200cm	29.53	8.12	35.8	63.5	3.85	
250cm	29.50	8.12	35.8	61.4	3.73	
Bottom	29.40	8.10	36.1	58.7	3.60	

Water Quality - Lake Monitoring LM12

EPA Identification no. 6 - The waters of Lake Macquarie located at the Eraring/Vales Point mixing zone off Fishery Point

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
Depth/Air	27.55					
010cm	28.01	8.22	36.2	79.4	4.24	2.25
050cm	30.50	8.15	35.9	71.5	4.27	
100cm	30.48	8.15	36.0	70.9	4.27	
150cm	30.11	8.15	35.9	74.0	4.52	
200cm	29.60	8.15	35.9	77.7	4.77	
250cm	29.10	8.15	35.8	74.6	4.57	
300cm	28.85	8.15	35.8	75.1	4.62	
350cm	28.68	8.15	35.8	75.1	4.65	
400cm	28.57	8.15	35.8	75.9	4.67	
450cm	28.22	8.14	35.8	72.4	4.46	
500cm	28.25	8.14	35.8	70.4	4.39	
550cm	28.12	8.14	35.8	72.2	4.50	
600cm	28.04	8.14	35.8	72.3	4.49	
650cm	27.95	8.14	35.8	69.0	4.26	
700cm	27.84	8.12	35.8	65.3	4.11	
750cm	27.68	8.11	35.8	66.5	4.20	
Bottom	27.62	8.08	35.8	56.2	3.49	

Water Quality - Lake Monitoring LM4

EPA Identification no. 7 - The northern waters of Lake Macquarie east off Lake Macquarie Yacht Club

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
Depth/Air	25.16					
010cm	26.40	8.07	35.5	77.8	5.01	8.75
050cm	26.50	7.99	35.4	84.1	5.40	
100cm	26.52	7.97	35.4	88.0	5.64	
150cm	26.53	7.96	35.4	93.7	6.02	
200cm	26.53	7.96	35.4	94.9	6.07	
250cm	26.54	7.97	35.4	100.0	6.44	
300cm	26.53	7.98	35.5	104.2	6.68	
350cm	26.54	7.99	35.5	106.3	6.81	
400cm	26.56	8.00	35.5	114.2	7.33	
450cm	26.58	8.00	35.5	112.8	7.22	
500cm	26.59	8.01	35.5	116.5	7.47	
550cm	26.57	8.03	35.6	121.4	7.75	
600cm	26.56	8.03	35.6	122.1	7.81	
650cm	26.55	8.03	35.6	122.0	7.84	
700cm	26.22	8.08	35.5	127.6	8.27	
750cm	25.70	8.14	35.5	128.5	8.38	
800cm	25.30	8.16	35.5	131.5	8.64	
850cm	24.73	8.15	35.5	132.3	8.85	
900cm	24.15	8.17	35.5	134.5	9.01	
Bottom	23.32	8.17	35.5	131.6	8.82	

Water Quality - Lake Monitoring LM7

EPA Identification no. 5 - The waters of Lake Macquarie located off old Wangi power station inlet point in Myuna Bay

	Temp	pH	Salinity	Dissolved Oxygen		Secchi
	degC		ppt	%	mg/L	m
Depth/Air	28.50					
010cm	30.64	8.24	32.6	68.8	4.15	2.75
050cm	30.94	8.20	32.5	72.4	4.34	
100cm	30.93	8.19	32.5	73.2	4.38	
150cm	30.97	8.17	35.8	76.7	4.36	
200cm	31.00	8.15	35.9	72.9	4.32	
250cm	30.97	8.15	35.9	78.4	4.64	
300cm	30.93	8.15	35.9	75.7	4.50	
350cm	30.90	8.14	35.9	79.3	4.71	
400cm	29.32	8.13	35.7	71.0	4.31	
450cm	29.45	8.13	35.8	72.1	4.40	
500cm	28.00	8.09	35.6	60.4	3.74	
550cm	27.61	8.06	35.6	55.2	3.41	
600cm	27.50	8.03	35.6	48.2	2.98	
Bottom	27.45	8.06	35.8	43.1	2.71	

Eraring Ash Dam Effluent Quality Monitoring

EPA Identification no. 10 - Discharge point below siphon pond weir at Ash Dam

Name	Reading	Units	Licence Limit	Date
Cadmium	<0.05	ug/L	-	7/01/2019
Copper	1.3	ug/L	-	7/01/2019
Iron	47	ug/L	-	7/01/2019
Lead	0.2	ug/L	-	7/01/2019
Manganese	42.8	ug/L	-	7/01/2019
pH	9.27	pH	-	7/01/2019
Selenium	19.4	ug/L	-	7/01/2019
Total Suspended Solids	11	mg/L	-	7/01/2019
Zinc	2	ug/L	-	7/01/2019
Nitrite and Nitrate as N	2020	ug/L	-	7/01/2019
Phosphorus Reactive as P - Total	285	ug/L	-	7/01/2019
Phosphorus as P - Total	370	ug/L	-	7/01/2019

Eraring Cooling Water Inlet Canal

EPA Identification no. 8 - Inlet canal of the cooling water intake from Lake Macquarie

Name	Reading	Units	Licence Limit	Date
Copper	2.1	ug/L	-	7/01/2019
Iron	159	ug/L	-	7/01/2019
Selenium	1	ug/L	-	7/01/2019
Temperature – Average	29.1	deg C	-	Jan 2019
Temperature – Minimum	26.3	deg C	-	Jan 2019
Temperature - Maximum	31.1	deg C	-	Jan 2019

Eraring Cooling Water Outlet Canal

EPA Identification no. 1 - Cooling water outlet canal to Myuna Bay

Name	Reading	Units	Licence Limit	Date
Iron	217	ug/L	300	7/01/2019
Selenium	1	ug/L	2	7/01/2019
Temperature – Average	35.1	deg C	37.5	Jan 2019
Temperature – Minimum	31.4	deg C	37.5	Jan 2019
Temperature - Maximum	37.4	deg C	37.5	Jan 2019
Maximum Daily Discharge from Ash Dam	38.39	ML	150	Jan 2019
Monthly Discharge from Ash Dam	189.7	ML	-	Jan 2019

Emergency Discharge – Toe Drain Pond

EPA Identification no. 17 - Emergency discharge to toe drain collection pond

<u>Name</u>	<u>Reading</u>	<u>Units</u>	<u>Licence Limit</u>	<u>Date</u>
Nitrite and Nitrate as N	9	ug/L	-	7/01/2019
Phosphorus as P – Total	121	ug/L	-	7/01/2019
Cadmium	<0.05	ug/L	-	7/01/2019
Copper	<0.5	ug/L	-	7/01/2019
Iron	16800	ug/L	-	7/01/2019
Lead	0.1	ug/L	-	7/01/2019
Manganese	745	ug/L	-	7/01/2019
pH	6.77	ug/L	-	7/01/2019
Selenium	0.2	ug/L	-	7/01/2019
Zinc	11	ug/L	-	7/01/2019

Groundwater Monitoring

Groundwater Well – MW01

EPA Identification no. 21 – Groundwater Monitoring Well 01

Name	Reading	Units	Date
Arsenic	1.5	ug/L	12/12/2018
Cadmium	<0.05	ug/L	12/12/2018
Calcium	1000	ug/L	12/12/2018
Chromium	3.4	ug/L	12/12/2018
Copper	7.7	ug/L	12/12/2018
Electrical Conductivity	0.321	mS/cm	12/12/2018
Iron	2100	ug/L	12/12/2018
Lead	6.9	ug/L	12/12/2018
Magnesium	4000	ug/L	12/12/2018
Manganese	77.1	ug/L	12/12/2018
Nickel	5.0	ug/L	12/12/2018
pH	4.97	pH	12/12/2018
Potassium	4000	ug/L	12/12/2018
Selenium	0.6	ug/L	12/12/2018
Standing Water Level	9.850	metres	12/12/2018
Zinc	29	ug/L	12/12/2018

Groundwater Well – MW02

EPA Identification no. 22 – Groundwater Monitoring Well 02

Name	Reading	Units	Date
Arsenic	9.4	ug/L	12/12/2018
Cadmium	0.06	ug/L	12/12/2018
Calcium	356000	ug/L	12/12/2018
Chromium	1.4	ug/L	12/12/2018
Copper	0.7	ug/L	12/12/2018
Electrical Conductivity	16	mS/cm	12/12/2018
Iron	5270	ug/L	12/12/2018
Lead	1.4	ug/L	12/12/2018
Magnesium	229000	ug/L	12/12/2018
Manganese	1310	ug/L	12/12/2018
Nickel	2.6	ug/L	12/12/2018
pH	6.57	pH	12/12/2018
Potassium	112000	ug/L	12/12/2018
Selenium	0.3	ug/L	12/12/2018
Standing Water Level	4.250	metres	12/12/2018
Zinc	21	ug/L	12/12/2018

Groundwater Well – MW06

EPA Identification no. 23 – Groundwater Monitoring Well 06

Name	Reading	Units	Date
Arsenic	6.0	ug/L	12/12/2018
Cadmium	<0.05	ug/L	12/12/2018
Calcium	479000	ug/L	12/12/2018
Chromium	0.8	ug/L	12/12/2018
Copper	<0.5	ug/L	12/12/2018
Electrical Conductivity	21	mS/cm	12/12/2018
Iron	13700	ug/L	12/12/2018
Lead	<0.1	ug/L	12/12/2018
Magnesium	274000	ug/L	12/12/2018
Manganese	409	ug/L	12/12/2018
Nickel	0.8	ug/L	12/12/2018
pH	6.56	pH	12/12/2018
Potassium	124000	ug/L	12/12/2018
Selenium	0.4	ug/L	12/12/2018
Standing Water Level	1.882	metres	12/12/2018
Zinc	3	ug/L	12/12/2018

Groundwater Well – EGM/D26

EPA Identification no. 24 – Groundwater Monitoring Well D26
Groundwater well was dry during sampling in December 2018

Name	Reading	Units	Date
Arsenic		ug/L	
Cadmium		ug/L	
Calcium		ug/L	
Chromium		ug/L	
Copper		ug/L	
Electrical Conductivity		mS/cm	
Iron		ug/L	
Lead		ug/L	
Magnesium		ug/L	
Manganese		ug/L	
Nickel		ug/L	
pH		pH	
Potassium		ug/L	
Selenium		ug/L	
Standing Water Level		metres	
Zinc		ug/L	