RESULTS OF WATER ANALYSIS

5 samples supplied by Gilbert and Sutherland Pty Ltd on 6/03/2020 . Lab Job No. J1548.

Samples submitted by Scott Porter. Your Job: Water Analysis

5/232 Robina Town Centre Drive ROBINA QLD 4226

Parameter	Methods reference	Sample 1 LFP 1Ba	Sample 2 LFP 1Bb	Sample 3 LFP 3B	Sample 4 LFP 4B	Sample 5 LFP 5B
	Job No.	*J1548/1*	*J1548/2*	*J1548/3*	*J1548/4*	*J1548/5*
pH	APHA 4500-H^+-B	7.69	7.03	7.02	7.04	6.93
Conductivity (EC) (dS/m)	APHA 2510-B	1.30	2.22	2.32	2.99	2.15
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	887	1,511	1,580	2,036	1,461
Total Dissolved Solids (mg/L)	** APHA 2540C - Evaporation of filtrate	728	1,760	1,640	1,960	1,360
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	<1	5	217	22	1
Bicarbonate (Alkalinity) (mg/L $CaCO_3$ equivalent)	** Total Alkalinity - APHA 2320	490	450	520	570	640
Water Hardness (mg/L $CaCO_3$ equivalent)	** Using Ca and Mg calculation	176	878	833	864	830
Biochemical Oxygen Demand$_5$ (mg/L O_2)	APHA 5210-B	6	<1	<1	5	<1
Total Oils and Grease (mg/L)	APHA 5520-D (hexane extractable)	<2	<2	3	3	<2
Total Phosphorus (mg/L P)	In house method W4	0.48	0.45	0.72	0.20	0.09
Phosphate (mg/L P)	APHA 4500 P-G	0.476	0.066	0.419	0.140	0.074
Total Nitrogen (mg/L N)	In house method W4	0.11	0.42	0.20	0.27	0.09
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN – NOx	0.10	0.42	0.20	0.26	0.09
Nitrate (mg/L N)	APHA 4500 NO_3^--F	<0.005	<0.005	<0.005	0.008	<0.005
Nitrite (mg/L N)	APHA 4500 NO_2^--I	0.011	0.006	0.006	0.005	<0.005
Ammonia (mg/L N)	APHA 4500 NH_3-H	0.098	0.109	0.105	0.117	0.084
Sodium (mg/L)	APHA 3125 ICPMS[note 1&2]	224	114	156	350	158
Potassium (mg/L)	APHA 3125 ICPMS[note 1&2]	0.86	1.54	1.80	0.76	1.01
Calcium (mg/L)	APHA 3125 ICPMS[note 1&2]	23.0	160	144	142	160
Magnesium (mg/L)	APHA 3125 ICPMS[note 1&2]	28.9	117	115	124	104
Sodium Absorption Ratio (SAR)	** By calculation	7.3	1.7	2.4	5.2	2.4
Chloride (mg/L)	APHA 3125 ICPMS[note 1&2]	134	471	341	561	352
Sulfate (mg/L SO_4^{2-})	APHA 3125 ICPMS[note 1&2]	37.2	34.1	31.3	80.9	111.9
Chloride/Sulfate Ratio	** Calculation	3.6	13.8	10.9	6.9	3.1
Faecal Coliforms (cfu/100 ml)	** APHA 9222-D	<2	<2	<2	20	<2
Silver (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.077	0.011	0.430	0.094	0.014
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	0.003	0.006	<0.001
Cadmium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.002	<0.001	0.028	0.018	0.006
Iron (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.026	0.863	0.376	0.159	0.010
Manganese (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.002	1.63	0.179	0.381	1.46
Nickel (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.008	0.006	0.007	0.012	0.006
Lead (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	0.003	0.008	<0.001
Selenium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.016	0.003	0.033	0.077	0.030
Mercury (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Silver (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.008	<0.005	<0.005	0.006	<0.005
Arsenic (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	0.002	0.005	<0.001
Cadmium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.001	<0.001	<0.001	0.006	0.005
Iron (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	1.63	0.176	0.380	1.45
Nickel (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.006	0.008	0.008	0.013	0.007
Lead (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.015	0.002	0.011	0.058	0.030
Mercury (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001

Notes:

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2;
   Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
4. For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
5. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
6. Analysis conducted between sample arrival date and reporting date.
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12. This report was issued on 23/03/2020.

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checked: .....
Graham Lancaster
Laboratory Manager

RESULTS OF WATER ANALYSIS

5 samples supplied by Gilbert and Sutherland Pty Ltd on 10/07/2020. Lab Job No. J5867.

Samples submitted by Sarah McGhee. Your Job: Water Analysis

5/232 Robina Town Centre Drive ROBINA QLD 4226

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
		LFPB1	LFPB2	LFPB3	LFPB4	LFPB5
	Job No.	J5867/1	J5867/2	J5867/3	J5867/4	J5867/5
pH	APHA 4500-H+-B	7.65	6.95	7.01	6.95	6.89
Conductivity (EC) (dS/m)	APHA 2510-B	1.27	2.28	1.93	3.47	2.21
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	864	1,549	1,314	2,359	1,502
Total Dissolved Solids (mg/L)	** APHA 2540C - Evaporation of filtrate	706	1,510	1,030	1,860	1,300
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	<1	17	2	8	1
Bicarbonate (Alkalinity) (mg/L $CaCO_3$ equivalent)	** Total Alkalinity - APHA 2320	520	450	720	800	655
Water Hardness (mg/L $CaCO_3$ equivalent)	** Using Ca and Mg calculation	167	894	666	1,034	847
Biochemical Oxygen Demand$_5$ (mg/L O_2)	APHA 5210-B	1	<1	<1	1	<1
Total Oils and Grease (mg/L)	APHA 5520-D (hexane extractable)	<2	3	5	5	2
Total Phosphorus (mg/L P)	In house method W4	0.56	0.61	0.72	0.32	0.11
Phosphate (mg/L P)	APHA 4500 P-G	0.561	0.036	0.721	0.245	0.062
Total Nitrogen (mg/L N)	In house method W4	0.07	0.04	0.20	0.09	0.15
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN – NOx	0.07	0.04	0.19	0.08	0.12
Nitrate (mg/L N)	APHA 4500 NO_3-F	0.005	<0.005	<0.005	0.005	0.029
Nitrite (mg/L N)	APHA 4500 NO_2-I	<0.005	0.016	<0.005	<0.005	<0.005
Ammonia (mg/L N)	APHA 4500 NH_3-H	0.013	0.025	0.173	0.062	0.072
Sodium (mg/L)	APHA 3125 ICPMS[note 1&2]	238	125	185	369	166
Potassium (mg/L)	APHA 3125 ICPMS[note 1&2]	2.18	2.82	4.39	3.07	2.53
Calcium (mg/L)	APHA 3125 ICPMS[note 1&2]	22.8	172	109	161	167
Magnesium (mg/L)	APHA 3125 ICPMS[note 1&2]	26.7	113	95.8	153	105
Sodium Absorption Ratio (SAR)	** By calculation	8.0	1.8	3.1	5.0	2.5
Chloride (mg/L)	APHA 3125 ICPMS[note 1&2]	181	559	327	707	402
Sulfate (mg/L SO_4^{2-})	APHA 3125 ICPMS[note 1&2]	39	43	26	71	116
Chloride/Sulfate Ratio	** Calculation	4.6	13.1	12.8	10.0	3.5
Faecal Coliforms (cfu/100 ml)	** APHA 9222-D	<1	<1	<1	<1	<1
Silver (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.023	0.028	0.019	0.022	0.013
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	0.002	<0.001
Cadmium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.002	0.001	0.003	0.014	0.005
Iron (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.009	1.24	0.111	0.225	0.060
Manganese (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.003	1.49	0.245	0.428	1.37
Nickel (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	0.003	0.003	0.003	0.003
Lead (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.009	0.030	0.008	0.021	0.025
Mercury (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Silver (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.023	0.018	0.011	<0.005	0.012
Arsenic (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	0.001	<0.001
Cadmium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.001	<0.001	0.001	0.002	0.004
Iron (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.009	<0.005	0.005	0.010	0.007
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	1.43	0.244	0.410	1.34
Nickel (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	0.003	0.003	0.003
Lead (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.009	0.027	0.007	0.019	0.025
Mercury (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2;
   Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
4. For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
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12. This report was issued on 17/07/2020.

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Environmental Analysis Laboratory, Southern Cross University,
Tel. 02 6620 3678, website: scu.edu.au/eal

checked: .....
Graham Lancaster
Laboratory Manager

RESULTS OF WATER ANALYSIS

5 samples supplied by Gilbert and Sutherland Pty Ltd on 15/09/2020. Lab Job No. J8385.
Samples submitted by Sarah McGhee. Your Job: 12067
5/232 Robina Town Centre Drive ROBINA QLD 4226

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
		LFPB1	LFPB2	LFPB3	LFPB4	LFPB5
	Job No.	J8385/1	J8385/2	J8385/3	J8385/4	J8385/5
pH	APHA 4500-H^+-B	7.70	7.16	7.11	7.16	7.06
Conductivity (EC) (dS/m)	APHA 2510-B	1.269	2.194	2.190	3.665	2.202
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	863	1,492	1,489	2,492	1,497
Total Dissolved Solids (mg/L)	** APHA 2540C - Evaporation of filtrate	757	1,747	1,361	2,313	1,422
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	<1	3	<1	<1	<1
Bicarbonate (Alkalinity) (mg/L $CaCO_3$ equivalent)	** Total Alkalinity - APHA 2320	460	440	690	870	620
Water Hardness (mg/L $CaCO_3$ equivalent)	** Using Ca and Mg calculation	168	838	783	1,049	808
Biochemical Oxygen Demand$_5$ (mg/L O_2)	APHA 5210-B	0.5	0.5	0.3	0.5	0.6
Total Oils and Grease (mg/L)	APHA 5520-D (hexane extractable)	9	2	<2	<2	3
Total Phosphorus (mg/L P)	In house method W4	0.54	0.35	0.70	0.50	0.10
Phosphate (mg/L P)	APHA 4500 P-G	0.538	0.091	0.605	0.496	0.096
Total Nitrogen (mg/L N)	In house method W4	0.04	0.04	0.12	0.23	0.04
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN – NOx	0.04	0.04	0.12	0.23	0.03
Nitrate (mg/L N)	APHA 4500 NO_3^--F	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrite (mg/L N)	APHA 4500 NO_2^--I	<0.005	0.010	<0.005	<0.005	0.007
Ammonia (mg/L N)	APHA 4500 NH_3-H	0.021	0.035	0.085	0.170	<0.005
Sodium (mg/L)	APHA 3125 ICPMS*note 1&2	240	122	186	410	169
Potassium (mg/L)	APHA 3125 ICPMS*note 1&2	2.15	2.52	3.25	3.52	1.95
Calcium (mg/L)	APHA 3125 ICPMS*note 1&2	24.0	154	135	156	159
Magnesium (mg/L)	APHA 3125 ICPMS*note 1&2	26.2	110	108	160	99.7
Sodium Absorption Ratio (SAR)	** By calculation	8.0	1.8	2.9	5.5	2.6
Chloride (mg/L)	APHA 3125 ICPMS*note 1&2	99	521	420	769	354
Sulfate (mg/L SO_4^{2-})	APHA 3125 ICPMS*note 1&2	49	36	17	57	103
Chloride/Sulfate Ratio	** Calculation	2.0	14.4	25.0	13.4	3.4
Faecal Coliforms (cfu/100 ml)	** APHA 9222-D	<1	<1	<1	<1	<1
Silver (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	0.013	<0.005	<0.005	<0.005	<0.005
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	0.001	<0.001	<0.001
Cadmium (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	0.001	<0.001	0.005	0.010	0.008
Iron (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	0.024	0.370	0.142	0.136	0.018
Manganese (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	0.008	1.64	0.307	0.359	0.971
Nickel (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	0.001	<0.001
Lead (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.001	0.002	<0.001	<0.001	0.008
Mercury (mg/L)	Total Available - APHA 3125 ICPMS*note 1&2	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Silver (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.005	<0.005	<0.005	<0.005	<0.005
Arsenic (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	0.002	<0.001
Cadmium (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	0.008
Iron (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.005	<0.005	0.010	<0.005	<0.005
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	0.008	1.623	0.316	0.355	0.945
Nickel (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	0.006	0.002	<0.001
Lead (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.001	<0.001	<0.001	<0.001	0.006
Mercury (mg/L)	Dissolved - APHA 3125 ICPMS*note 1&2	<0.0005	<0.0005	<0.0005	0.001	<0.0005

Notes:

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2;
   Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
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checked: .....
Graham Lancaster
Laboratory Manager

RESULTS OF WATER ANALYSIS

5 samples supplied by Gilbert and Sutherland Pty Ltd on 10/12/2020. Lab Job No. K1606.
Samples submitted by Sarah McGhee. Your Job: Job Ref: 12067
5/232 Robina Town Centre Drive ROBINA QLD 4226

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
		LFPB1	LFPB2	LFPB3	LFPB4	LFPB5
	Job No.	*K1606/1*	*K1606/2*	*K1606/3*	*K1606/4*	*K1606/5*
pH	APHA 4500-H+-B	7.60	7.08	7.10	7.12	7.01
Conductivity (EC) (dS/m)	APHA 2510-B	1.24	2.05	2.12	3.58	2.16
Total Dissolved Salts (mg/L)	** Calculation using EC x 680	844	1,397	1,440	2,434	1,471
Total Dissolved Solids (mg/L)	** APHA 2540C - Evaporation of filtrate	800	1,862	1,257	2,169	1,433
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	1	10	4	13	6
Bicarbonate (Alkalinity) (mg/L $CaCO_3$ equivalent)	** Total Alkalinity - APHA 2320	559	452	674	880	601
Water Hardness (mg/L $CaCO_3$ equivalent)	** Using Ca and Mg calculation	192	856	768	1,070	850
Biochemical Oxygen Demand$_5$ (mg/L O_2)	APHA 5210-B	<1	<1	<1	<1	<1
Total Oils and Grease (mg/L)	APHA 5520-D (hexane extractable)	<2	3	<2	<2	4
Total Phosphorus (mg/L P)	In house method W4	0.50	0.10	0.70	0.55	0.15
Phosphate (mg/L P)	APHA 4500 P-G	0.484	0.100	0.581	0.478	0.088
Total Nitrogen (mg/L N)	In house method W4	0.08	0.02	0.10	0.15	0.04
Total Kjeldahl Nitrogen (mg/L N)	** Calculation: TN – NOx	0.08	0.02	0.10	0.15	0.04
Nitrate (mg/L N)	APHA 4500 NO_3-F	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrite (mg/L N)	APHA 4500 NO_2-I	<0.005	<0.005	<0.005	<0.005	<0.005
Ammonia (mg/L N)	APHA 4500 NH_3-H	<0.005	0.064	0.150	0.233	0.047
Sodium (mg/L)	APHA 3125 ICPMS[note 1&2]	255	121	191	413	165
Potassium (mg/L)	APHA 3125 ICPMS[note 1&2]	1.14	1.74	2.74	3.01	1.33
Calcium (mg/L)	APHA 3125 ICPMS[note 1&2]	27.1	155	132	159	168
Magnesium (mg/L)	APHA 3125 ICPMS[note 1&2]	30.2	114	107	163	105
Sodium Absorption Ratio (SAR)	** By calculation	8.0	1.8	3.0	5.5	2.5
Chloride (mg/L)	APHA 3125 ICPMS[note 1&2]	123	441	339	713	324
Sulfate (mg/L SO_4^{2-})	APHA 3125 ICPMS[note 1&2]	26	14	<1	29	83
Chloride/Sulfate Ratio	** Calculation	4.8	32.7	..	24.3	3.9
Faecal Coliforms (cfu/100 ml)	** APHA 9222-D	<1	<1	1	<1	<1
Silver (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.076	0.034	0.022	0.054	0.028
Arsenic (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	<0.001	0.001	<0.001
Cadmium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.002	0.002	0.002	0.037	0.010
Iron (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.085	2.29	0.080	0.287	0.181
Manganese (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.010	1.47	0.202	0.318	1.68
Nickel (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	0.001	0.002	0.002
Lead (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	0.005	0.003	0.003	0.006	0.006
Mercury (mg/L)	Total Available - APHA 3125 ICPMS[note 1&2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Silver (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Aluminium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.005	<0.005	<0.005	<0.005	<0.005
Arsenic (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	0.001	<0.001
Cadmium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Chromium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Copper (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.002	<0.001	0.001	0.032	0.008
Iron (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.005	<0.005	<0.005	<0.005	<0.005
Manganese (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.007	1.39	0.205	0.314	1.62
Nickel (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	0.002	0.001	0.003	0.002
Lead (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.002	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	0.004	0.002	0.002	0.005	0.006
Mercury (mg/L)	Dissolved - APHA 3125 ICPMS[note 1&2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

Notes:

1. Total metals - samples digested with nitric acid; Total available (acid soluble/ extractable) metals - samples acidified with nitric acid to pH <2;
   Dissolved metals - samples filtered through 0.45µm cellulose acetate and then acidified with nitric acid prior to analysis
2. Metals and salts analysed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS).
3. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
4. For conductivity 1 dS/m = 1 mS/cm = 1000 µS/cm.
5. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
6. Analysis conducted between sample arrival date and reporting date.
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