

APPENDIX 18 2023 WATER MONITORING STATIONS RESULTS

MEL-03-01	Sample date	Annual Average						7/15/2023	8/22/2023	9/25/2023
Parameter	Units	2018	2019	2020	2021	2022	2023	C3L7630	C3Q1075	C3U0805
Field Measured										
Temperature	°C	-	10.74	12.80	8.47	12.94	10.70	10.02	13.98	8.11
pH	pH units	-	7.38	7.61	7.20	7.42	7.54	7.61	7.49	7.51
Conductivity	uS/cm	-	71.62	73.25	87.70	83.50	88.43	93.3	85.4	86.6
Dissolved oxygen	mg/L	-	10.08	10.73	11.85	11.57	10.24	10.69	9.62	10.41
Dissolved oxygen	%	-	99.92	100.60	104.45	109.07	94.63	97.4	95.9	90.6
Conventional Parameters										
pH	pH units	7.48	7.55	7.31	7.43	7.52	7.18	7.41	7.07	7.05
Dissolved Oxygen	mg/L	10.40	10.32	10.02	9.78	-	-	10.3	9.44	9.71
Turbidity	NTU	0.20	0.10	0.20	0.14	0.17	0.27	0.2	0.3	0.3
Conductivity	umhos/cm	-	-	-	-	83	88.00	86	88	90
Hardness, as CaCO3	mg/L	21.40	21.13	22.17	22.40	18.00	24.17	21	25.8	25.7
Total alkalinity, as CaCO3	mg/L	18.00	16.25	16.33	17.75	0.50	17.67	17	18	18
Carbonate, as CaCO3	mg/L	1.00	1.00	1.00	0.50	18.00	0.50	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3	mg/L	18.00	16.25	16.33	17.50	41.67	17.67	17	18	18
TDS	mg/L	25.00	50.00	38.33	32.50	41.00	58.33	65	50	60
TDS, calculated	mg/L	-	-	-	39.33	0.50	40.00	38	40	42
TSS	mg/L	1.00	1.25	1.00	0.63	2.70	0.67	< 1	< 1	1
Total organic carbon	mg/L	2.30	2.38	2.40	2.43	2.43	2.57	2.4	2.8	2.5
Dissolved organic carbon	mg/L	2.40	2.13	2.60	2.25	11.30	2.70	2.6	2.7	2.8
Major Ions										
Chloride	mg/L	8.40	8.50	8.80	9.85	0.00	9.30	8.7	9.2	10
Cyanide	mg/L	0.0050	0.0050	0.0050	0.0025	0.0015	0.0003	< 0.00050	< 0.00050	< 0.00050
Cyanide (free)	mg/L	-	0.0016	0.0010	0.0028	0.0005	0.0038	0.0066	0.0026	0.0023
Cyanide (WAD)	mg/L	0.0010	0.0010	0.0010	0.0007	0.2300	0.0003	< 0.00050	< 0.00050	< 0.00050
Silica	mg/L	0.23	0.18	0.23	0.38	4.43	0.36	0.31	0.38	0.39
Sulfate	mg/L	3.20	3.05	3.37	3.83	0.03	4.40	3.8	4.8	4.6
Nutrients and Chlorophyll a										
Ammonia Nitrogen (as N)	mg/L	0.05	0.07	0.08	0.05	0.05	0.03	< 0.050	< 0.050	< 0.050
Un-Ionized Ammonia, calculated	mg/L	-	-	-	-	-	-	< 0.00061	< 0.00061	< 0.00061
Nitrate (as N)	mg/L	0.10	0.10	0.10	0.05	0.01	0.05	< 0.10	< 0.10	< 0.10
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.01	0.18	0.01	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen	mg/L	0.12	0.17	0.16	0.18	0.00	0.16	0.14	0.17	0.16
Total phosphorus (SW6020B or SM4500-PBF)		-	-	-	0.01	-	0.010	< 0.020	< 0.020	< 0.020
Dissolved phosphorus (SW6020 or SM4500-P-E)	mg/L	-	-	0.01	0.00	-	-	-	0.003	0.004
Dissolved phosphorus (SM4500-P or SW6020B)		-	-	-	-	-	-			
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010
Total Metals										
Aluminum	mg/L	0.00700	0.00693	0.00276	0.00458	0.00347	0.00270	0.0038	0.00234	0.00196
Antimony	mg/L	0.00050	0.00050	0.00002	0.00001	0.00002	0.00009	< 0.00050	< 0.000020	< 0.000020
Arsenic	mg/L	0.00020	0.00019	0.00025	0.00031	0.00031	0.00034	0.00029	0.000406	0.000335

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Parameter	Units	2018	2019	2020	2021	2022	2023	C3L7630	C3Q1075	C3U0805
Barium	mg/L	0.00720	0.00755	0.00761	0.00799	0.01042	0.00772	0.0071	0.0079	0.00817
Beryllium	mg/L	0.00010	0.00010	0.00001	0.00001	0.00001	0.00002	< 0.00010	< 0.000010	< 0.000010
Boron	mg/L	0.05000	0.05000	0.01000	0.00500	0.00500	0.01167	< 0.050	< 0.01	< 0.01
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	< 0.000010	< 0.0000050	< 0.0000050
Chromium	mg/L	0.00100	0.00100	0.00010	0.00005	0.00005	0.00026	< 0.0010	0.00016	0.00012
Cobalt	mg/L	-	0.00020	0.00001	0.00001	0.00001	0.00005	< 0.00020	0.000028	0.000008
Copper	mg/L	0.00067	0.00066	0.00177	0.00065	0.00089	0.00071	0.00066	0.000768	0.000691
Iron	mg/L	0.01400	0.01325	0.01197	0.01210	0.00860	0.01680	0.014	0.0288	0.0076
Lead	mg/L	0.00020	0.00020	0.00001	0.00001	0.00021	0.00004	< 0.00020	0.000011	< 0.0000050
Lithium	mg/L	0.00200	0.00200	0.00062	0.00074	0.00077	0.00092	< 0.0020	0.0009	0.00086
Manganese	mg/L	0.00220	0.00243	0.00241	0.00208	0.00169	0.00347	0.0034	0.00468	0.00232
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00100	0.00100	0.00012	0.00008	0.00009	0.00022	< 0.0010	0.000085	0.000089
Nickel	mg/L	0.00100	0.00100	0.00038	0.00041	0.00041	0.00047	< 0.0010	0.000482	0.000413
Selenium	mg/L	0.00010	0.00010	0.00004	0.00003	0.00006	0.00003	< 0.00010	< 0.000040	< 0.000040
Silver	mg/L	0.00002	0.00002	0.00001	0.00000	0.00000	0.00001	< 0.000020	< 0.0000050	< 0.0000050
Strontium	mg/L	0.03330	0.03123	0.03373	0.03600	0.03620	0.03877	0.0341	0.0398	0.0424
Thallium	mg/L	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	< 0.000010	0.000002	0.000002
Tin	mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Titanium	mg/L	0.00500	0.00500	0.00050	0.00025	0.00025	0.00100	< 0.0050	< 0.00050	< 0.00050
Uranium	mg/L	0.00010	0.00010	0.00002	0.00002	0.00002	0.00002	< 0.00010	0.000012	0.000008
Zinc	mg/L	0.00500	0.00500	0.00026	0.00114	0.00097	0.00108	< 0.0050	0.00044	0.00029
Dissolved Metals										
Aluminum	mg/L	0.00430	0.00325	0.00164	0.00372	0.00284	0.00160	< 0.0030	0.00231	0.00099
Antimony	mg/L	0.00050	0.00050	0.00002	0.00001	0.00001	0.00010	< 0.00050	0.000025	< 0.000020
Arsenic	mg/L	0.00019	0.00020	0.00026	0.00031	0.00032	0.00036	0.00033	0.000429	0.000334
Barium	mg/L	0.00720	0.00728	0.00768	0.00761	0.00747	0.00806	0.0082	0.008	0.00797
Beryllium	mg/L	0.00010	0.00010	0.00001	0.00001	0.00001	0.00002	< 0.00010	< 0.000010	< 0.000010
Bismuth	mg/L	-	0.00100	0.00001	0.00000	-	-	< 0.0010	< 0.0000050	< 0.0000050
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	< 0.000010	< 0.0000050	< 0.0000050
Calcium (Dissolved)	mg/L	6.95	6.69	6.93	6.93	7.40	8.05	8.04	7.85	8.27
Chromium	mg/L	0.00100	0.00100	0.00010	0.00005	0.00005	0.00025	< 0.0010	0.0001	0.00014
Cobalt	mg/L	-	0.00020	0.00001	0.00001	0.00000	0.00004	< 0.00020	0.0000108	0.0000061
Copper	mg/L	0.00060	0.00061	0.00173	0.00068	0.00074	0.00071	0.00068	0.000787	0.00067
Iron	mg/L	0.00500	0.00523	0.00413	0.00588	0.00370	0.00680	0.0124	0.0056	0.0024
Lead	mg/L	0.00020	0.00020	0.00001	0.00001	0.00000	0.00004	< 0.00020	< 0.0000050	< 0.0000050
Lithium	mg/L	0.00200	0.00200	0.00068	0.00065	0.00073	0.00095	< 0.0020	0.00091	0.00093
Magnesium (Dissolved)	mg/L	1.11	1.10	1.18	1.17	1.27	1.33	1.32	1.29	1.38
Manganese	mg/L	0.00100	0.00113	0.00045	0.00039	0.00036	0.00041	< 0.0010	0.000475	0.000249
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00100	0.00100	0.00015	0.00009	0.00009	0.00023	< 0.0010	0.000086	0.000099
Nickel	mg/L	0.00100	0.00100	0.00041	0.00039	0.00040	0.00048	< 0.0010	0.000526	0.000423
Potassium (Dissolved)	mg/L	0.87	0.85	0.89	0.89	0.94	0.99	1.01	0.945	1.02

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Parameter	Units	2018	2019	2020	2021	2022	2023	C3L7630	C3Q1075	C3U0805
Selenium	mg/L	0.00010	0.00010	0.00004	0.00003	0.00002	0.00003	< 0.00010	< 0.000040	< 0.000040
Silver	mg/L	0.00002	0.00002	0.00001	0.00000	0.00000	0.00001	< 0.000020	< 0.0000050	< 0.0000050
Sodium (Dissolved)	mg/L	4.36	4.30	4.50	4.68	5.02	5.41	5.32	5.22	5.69
Strontium	mg/L	0.03350	0.03085	0.03437	0.03490	0.03740	0.03933	0.0383	0.0411	0.0386
Thallium	mg/L	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	< 0.000010	0.0000038	0.0000025
Tin	mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Titanium	mg/L	0.00500	0.00500	0.00059	0.00025	0.00025	0.00100	< 0.0050	< 0.00050	< 0.00050
Uranium	mg/L	0.00010	0.00010	0.00002	0.00002	0.00001	0.00002	< 0.00010	0.0000164	< 0.0000020
Vanadium	mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Zinc	mg/L	0.00500	0.00500	0.00050	0.00122	0.00067	0.00141	< 0.0050	0.00046	0.00128
Radionuclides										
Radium-226	Bq/l	0.00500	0.00500	0.00500	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050
Volatile Organics										
F1 (C6-C10)-BTEX	mg/L	0.02500	0.02500	0.02500	0.01250	-	-	< 0.025	< 0.025	< 0.025
F1 (C6-C10)	mg/L	0.02500	0.02500	0.02500	0.01250	0.01250	0.01250	< 0.025	< 0.025	< 0.025
F2 (C10-C16)	mg/L	0.10000	0.10000	0.10000	0.05000	0.05000	0.05000	< 0.1	< 0.1	< 0.1
F3 (C16-C34)	mg/L	0.20000	0.20000	0.20000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2
F4 (C34-C50)	mg/L	0.20000	0.20000	0.20000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2

Parameter	Sample date		7/15/2023						
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	
Potassium (Dissolved)	mg/L	0.05	0.05	-	0.974	1.01	3.63	-	
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	
Sodium (Dissolved)	mg/L	0.05	0.05	-	5.23	5.32	1.71	-	
Strontium	mg/L	0.001	0.001	0.001	0.0372	0.0383	2.91	0.00	
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Radionuclides									
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Volatile Organics									
F1 (C6-C10)-BTEX	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	
F1 (C6-C10)	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	
F2 (C10-C16)	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.2	0.2	0.00	0.00	
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.00	0.00	
Reached baseline at C50	ug/L		YES	-	YES	YES	-	-	
% Exceedance*							0%	0%	

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

Parameter	Sample date		1/8/2023			5/2/2023						12/4/2023					
	Unit	MDL	Duplicate	Original	RPD (FD/N)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Nickel	mg/L	0.001	0.001	0.001	0.00	0.001	0.001	0.0011	0.0011	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	1.35	1.32	2.25	0.05	-	1.6	1.57	1.89	-	2.4	0.001	3.18	1.18	91.74	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	8.63	8.6	0.35	0.05	-	10.4	10.6	1.90	-	0.612	-	8.75	7.35	17.39	-
Strontium	mg/L	0.001	0.0656	0.0657	0.15	0.001	0.001	0.0764	0.082	7.07	0.00	0.001	0.001	0.0554	0.0541	2.37	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Volatile Organics																	
Benzene	mg/L	0.0002	0.0002	0.0002	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00
m,p-Xylenes	mg/L	0.0004	0.0004	0.0004	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00
o-Xylene	mg/L	0.0002	0.0002	0.0002	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
F1 (C6-C10)-BTEX	mg/L	0.025	0.025	0.025	0.00	0.025	0.025	0.025	0.025	0.00	0.00	0.025	0.025	0.025	0.025	0.00	0.00
F1 (C6-C10)	mg/L	0.025	0.025	0.025	0.00	0.025	0.025	0.025	0.025	0.00	0.00	0.025	0.025	0.025	0.025	0.00	0.00
F2 (C10-C16)	mg/L	0.1	0.1	0.1	0.00	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.00	0.25	0.2	0.2	0.2	0.00	22.22	0.2	0.2	0.2	0.2	0.00	0.00
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.00	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	0.2	0.2	0.00	0.00
% Exceedance*					0%					0%	0%					1%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-12	Sample date	Annual Average						6/27/2023	7/17/2023	8/21/2023	9/11/2023
Parameter	Units	2018	2019	2020	2021	2022	2023	C3J4211	C3M4558	C3P7758	C3S4188
Field Measured											
Temperature	°C	-	10.85	7.59	7.79	15.20	14.20	13.3	18.6	11.2	10.1
pH	pH units	-	7.95	7.27	7.68	7.62	7.82	7.35	8.34	7.41	7.91
Conductivity	uS/cm	-	3256.86	4507.29	2612.00	2407.00	2,348.80	1564	2000	2564	3255
Dissolved oxygen	mg/L	-	9.05	11.23	10.72	8.14	21.12	9.43	-	9.7	9.13
Dissolved oxygen	%	-	84.41	87.30	91.80	87.10	72.15	90.3	94.1	89.1	81.9
Conventional Parameters											
pH	pH units	7.49	7.59	7.63	7.70	7.88	7.71	7.71	7.83	7.54	7.92
Turbidity	NTU	7.13	6.67	2.27	1.95	0.40	0.54	0.9	0.4	0.5	0.4
Hardness, as CaCO3	mg/L	481.00	740.43	1066.86	583.17	480.00	428.20	335	405	424	580
Total alkalinity, as CaCO3	mg/L	-	50.83	102.43	75.50	75.00	73.80	70	77	66	89
TDS	mg/L	1152.50	2131.43	2868.57	1540.00	1320.00	1,422.00	1020	1290	1440	1960
TDS, calculated	mg/L	-	-	-	1700	1233	1,266	830	1100	1300	1900
TSS	mg/L	49.00	15.57	6.57	6.33	4.00	5.80	7	8	3	7
Major Ions											
Chloride	mg/L	480.00	920.00	1250.00	618.33	527.00	548.00	310	460	570	870
Cyanide	mg/L	0.01	0.01	0.01	0.00	0.01	0.00	0.00093	0.00096	0.00119	0.00142
Fluoride	mg/L	-	0.10	0.10	0.09	0.10	0.07	0.13	< 0.10	< 0.10	< 0.10
Silica	mg/L	-	-	-	0.58	0.31	0.26	0.44	< 0.050	0.22	0.28
Sulfate	mg/L	53.00	141.00	237.14	220.00	213.00	212.00	160	190	210	300
Nutrients and Chlorophyll a											
Ammonia Nitrogen (as N)	mg/L	1.16	7.11	6.69	1.25	0.36	0.29	0.12	0.17	0.17	0.68
Nitrate (as N)	mg/L	3.99	23.61	24.56	15.06	7.11	5.44	6.14	5.86	-	7.66
Nitrite (as N)	mg/L	0.18	0.98	0.20	0.37	0.20	0.17	0.141	0.2	0.1	0.247
Total phosphorus	mg/L	0.15	0.10	0.10	0.08	0.05	0.09	0.11	0.11	0.046	0.1
Orthophosphate (P)	mg/L	0.01	0.01	0.05	0.03	0.03	0.04	0.057	0.047	< 0.010	0.062
Total Metals											
Aluminum	mg/L	1.86425	0.44739	0.33157	0.15543	0.21180	0.14560	0.187	0.207	0.11	0.115
Arsenic	mg/L	0.00430	0.00548	0.01364	0.01752	0.01660	0.02094	0.0231	0.0261	0.0181	0.0117
Barium	mg/L	0.12425	0.11467	0.15166	0.06772	0.05690	0.04744	0.0378	0.0459	0.0502	0.0568
Cadmium	mg/L	0.00003	0.00005	0.00006	0.00003	0.00002	0.00002	0.000025	0.000018	< 0.000010	0.000016
Chromium	mg/L	0.00143	0.00146	0.00229	0.00067	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	mg/L	0.00334	0.00289	0.00288	0.00284	0.00325	0.00324	0.00387	0.00429	0.00263	0.00259
Iron	mg/L	1.16650	0.42786	0.25829	0.21650	0.14000	0.16700	0.258	0.251	0.13	0.124
Lead	mg/L	0.00063	0.00051	0.00118	0.00127	0.00058	0.00043	0.00078	0.00075	0.00022	0.0003
Manganese	mg/L	0.44000	0.21596	0.97300	0.23283	0.06517	0.06212	0.0752	0.0719	0.0416	0.0728
Mercury	mg/L	0.00001	0.00001	0.00004	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00188	0.00277	0.00404	0.00493	0.00620	0.00546	0.0047	0.0054	0.006	0.0054
Nickel	mg/L	0.00448	0.00719	0.00934	0.00715	0.00470	0.00472	0.0045	0.0048	0.0043	0.0062
Selenium	mg/L	0.00011	0.00022	0.00044	0.00101	0.00043	0.00064	0.00079	0.00076	0.00052	0.00063
Silver	mg/L	0.00002	0.00003	0.00005	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Thallium	mg/L	0.00003	0.00005	0.00005	0.00003	0.00003	0.00002	0.00002	0.000027	0.000017	0.00002
Zinc	mg/L	0.02275	0.08231	0.02503	0.00767	0.00380	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals											
Calcium (Dissolved)	mg/L	-	201.85714	296.71429	155.33333	125.00000	123.06000	96.3	111	122	167
Magnesium (Dissolved)	mg/L	-	51.45714	74.10000	44.10000	35.90000	37.96000	26.1	33.7	38.5	52.3
Potassium (Dissolved)	mg/L	-	24.14286	33.00000	20.93333	19.90000	21.66000	14.8	19	23.6	28.1
Sodium (Dissolved)	mg/L	-	343.28571	470.71429	273.16667	242.00000	255.00000	159	212	276	364

MEL-13	CCME	Sample date	Annual Average						7/16/2023	8/22/2023	9/25/2023
Parameter	Guideline	Units	2018	2019	2020	2021	2022	2023	C3L7556	C3Q1034	C3U0783
Field Measured											
Temperature		°C	-	10.08	10.26	7.06	13.85	11.46	11.88	14.66	7.83
pH	6.5 to 9.0	pH units	-	7.59	7.69	7.44	7.43	7.64	7.53	7.56	7.82
Conductivity		uS/cm	-	82.20	114.05	105.78	115.20	113.43	108.6	111.2	120.5
Dissolved oxygen		mg/L	-	11.01	123.60	10.31	11.07	10.25	10.35	9.92	10.49
Dissolved oxygen		%	-	102.68	101.52	101.60	107.50	96.53	98.5	100.4	90.7
Conventional Parameters											
pH	6.5 to 9.0	pH units	7.34	7.47	7.32	7.26	7.49	7.16	7.33	7.16	6.98
Dissolved Oxygen		mg/L	10.45	10.35	10.33	10.42	-	-	10.5	9.37	11
Turbidity		NTU	0.28	0.20	0.36	0.41	0.30	0.33	0.3	0.4	0.3
Conductivity		umhos/cm	87.50	84.75	115.71	116.00	115.00	113.33	110	110	120
Hardness, as CaCO3		mg/L	140.00	23.40	29.81	30.92	30.00	29.97	25.4	31	33.5
Total alkalinity, as CaCO3		mg/L	16.00	15.50	16.86	18.20	21.00	22.00	22	22	22
Carbonate, as CaCO3		mg/L	1.00	1.00	1.00	0.50	0.50	0.50	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	16.00	15.50	16.86	18.00	21.00	22.00	22	22	22
TDS		mg/L	147.50	58.75	80.00	75.00	82.50	71.67	85	60	70
TDS, calculated		mg/L	-	-	-	59.50	57.00	56.33	51	58	60
TSS		mg/L	1.00	1.00	1.36	1.30	0.80	0.67	1	< 1	< 1
Total organic carbon		mg/L	3.00	3.10	3.37	3.50	3.80	3.70	3.6	3.9	3.6
Dissolved organic carbon		mg/L	2.90	2.80	3.36	3.18	3.70	3.53	3.4	3.6	3.6
Major Ions											
Chloride	120	mg/L	-	-	18.21	18.80	18.00	14.33	13	14	16
Cyanide		mg/L	0.0050	0.0050	0.0050	0.0025	0.0008	0.0003	< 0.00050	< 0.00050	< 0.00050
Cyanide (free)	0.005	mg/L	-	0.0015	0.0010	0.0033	0.0015	0.0029	0.005	0.0028	< 0.0020
Cyanide (WAD)		mg/L	0.0010	0.0010	0.0011	0.0007	0.0005	0.0003	< 0.00050	< 0.00050	< 0.00050
Silica		mg/L	0.32	0.45	0.33	0.29	0.34	0.60	0.48	0.66	0.67
Sulfate	128	mg/L	4.33	3.63	5.78	6.86	6.90	7.80	6.2	9.8	7.4
Nutrients and Chlorophyll a											
Ammonia Nitrogen (as N)		mg/L	0.09	0.11	0.12	0.03	0.03	0.03	< 0.050	< 0.050	< 0.050
Nitrate (as N)	13	mg/L	0.10	0.10	0.11	0.06	0.05	0.05	< 0.10	< 0.10	< 0.10
Nitrite (as N)	0.06	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen		mg/L	0.16	0.22	0.22	0.22	0.21	0.23	0.24	0.24	0.22
Total phosphorus		mg/L	0.020	0.021	0.020	0.014	0.018	0.017	0.021	< 0.020	0.021
Total phosphorus		mg/L	-	-	0.011	0.009	0.0047	0.012	0.021	0.0073	0.0068
Orthophosphate (P)		mg/L	0.010	0.010	0.010	0.005	0.005	0.005	< 0.010	< 0.010	< 0.010
Total Metals											
Aluminum		mg/L	1.66748	0.00695	0.00680	0.00644	0.00399	0.00348	0.0052	0.00281	0.00244
Antimony		mg/L	0.00050	0.00050	0.00002	0.00001	0.00002	0.00009	< 0.00050	< 0.000020	< 0.000020
Arsenic	0.005	mg/L	0.00104	0.00036	0.00051	0.00048	0.00053	0.00056	0.00042	0.00066	0.000599
Barium		mg/L	0.03745	0.00755	0.00862	0.00914	0.00855	0.00829	0.0077	0.00844	0.00873
Beryllium		mg/L	0.00010	0.00010	0.00001	0.00001	0.00001	0.00002	< 0.00010	< 0.000010	< 0.000010
Boron		mg/L	0.07650	0.05000	0.01000	0.00620	0.00500	0.01167	< 0.050	< 0.01	< 0.01
Cadmium	0.00006	mg/L	0.000010	0.000010	0.000010	0.000004	0.000003	0.000003	< 0.000010	< 0.0000050	< 0.0000050
Chromium		mg/L	0.00100	0.00100	0.00010	0.00005	0.00005	0.00035	< 0.0010	0.00039	0.00016
Cobalt		mg/L	-	0.00020	0.00003	0.00003	0.00002	0.00005	< 0.00020	0.00029	0.000021
Copper	0.002	mg/L	0.00128	0.00072	0.00085	0.00085	0.00094	0.00088	0.00077	0.000981	0.000878
Iron	0.3	mg/L	0.11925	0.02825	0.03201	0.02414	0.02090	0.02143	0.023	0.029	0.0123
Lead	0.001	mg/L	0.00020	0.00020	0.00002	0.00002	0.00001	0.00004	< 0.00020	0.000012	< 0.0000050
Lithium		mg/L	0.03775	0.00200	0.00143	0.00138	0.00110	0.00110	< 0.0020	0.00111	0.0012
Manganese		mg/L	0.07118	0.00773	0.00777	0.00707	0.00584	0.00786	0.0044	0.0142	0.00499
Mercury	0.000026	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	0.073	mg/L	0.00100	0.00100	0.00012	0.00016	0.00013	0.00027	< 0.0010	0.000144	0.000162
Nickel	0.025	mg/L	0.00158	0.00100	0.00075	0.00074	0.00077	0.00071	< 0.0010	0.000911	0.000707
Selenium	0.001	mg/L	0.00010	0.00010	0.00004	0.00003	0.00005	0.00005	< 0.00010	0.000049	0.000043

MEL-13	CCME	Sample date	Annual Average						7/16/2023	8/22/2023	9/25/2023
Parameter	Guideline	Units	2018	2019	2020	2021	2022	2023	C3L7556	C3Q1034	C3U0783
Silver	0.0025	mg/L	0.000020	0.000020	0.000010	0.000003	0.000003	0.000005	< 0.000020	< 0.000050	< 0.000050
Strontium		mg/L	0.98660	0.04050	0.06401	0.06360	0.05720	0.05323	0.0445	0.0537	0.0615
Thallium	0.0008	mg/L	0.000020	0.000010	0.000002	0.000002	0.000001	0.000003	< 0.000010	0.000003	0.000002
Tin		mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Titanium		mg/L	0.00500	0.00500	0.00053	0.00039	0.00025	0.00100	< 0.0050	< 0.00050	< 0.00050
Uranium	0.015	mg/L	0.00032	0.00010	0.00002	0.00003	0.00003	0.00003	< 0.00010	0.00002	0.000024
Vanadium		mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Zinc	0.03	mg/L	0.00643	0.00500	0.00045	0.00077	0.00076	0.00114	< 0.0050	0.00074	0.00018
Dissolved Metals											
Aluminum		mg/L	0.00785	0.00300	0.00452	0.00262	0.00241	0.00139	< 0.0030	0.00134	0.00134
Antimony		mg/L	0.00050	0.00050	0.00002	0.00001	0.00001	0.00009	< 0.00050	< 0.000020	< 0.000020
Arsenic	0.005	mg/L	0.00036	0.00034	0.00048	0.00045	0.00051	0.00055	0.00044	0.000646	0.000553
Barium		mg/L	0.00763	0.00728	0.00853	0.00885	0.00850	0.00869	0.0085	0.0089	0.00867
Beryllium		mg/L	0.00010	0.00010	0.00001	0.00001	0.00001	0.00002	< 0.00010	< 0.000010	< 0.000010
Boron		mg/L	0.05000	0.05000	0.01000	0.00780	0.00800	0.01633	< 0.050	0.012	0.012
Cadmium	0.00006	mg/L	0.000010	0.000010	0.000010	0.000003	0.000003	0.000006	< 0.000010	0.0000111	< 0.0000050
Calcium (Dissolved)		mg/L	7.47500	7.06500	9.10714	9.13800	9.46000	10.01000	8.93	10.3	10.8
Chromium		mg/L	0.00100	0.00100	0.00010	0.00006	0.00005	0.00022	< 0.0010	0.0001	< 0.00010
Cobalt		mg/L	-	0.00020	0.00002	0.00002	0.00002	0.00004	< 0.00020	0.0000148	0.0000132
Copper	0.002	mg/L	0.00072	0.00087	0.00080	0.00081	0.00092	0.00081	0.00073	0.000925	0.000784
Iron	0.3	mg/L	0.00833	0.00798	0.01026	0.00612	0.01050	0.00577	0.0081	0.0054	0.0038
Lead	0.001	mg/L	0.000200	0.000200	0.000010	0.000004	0.000004	0.000035	< 0.00020	< 0.000050	< 0.000050
Lithium		mg/L	0.00200	0.00200	0.00147	0.00128	0.00109	0.00119	< 0.0020	0.00125	0.00133
Magnesium (Dissolved)		mg/L	1.30750	1.27250	1.76929	1.81000	1.79000	1.78667	1.6	1.77	1.99
Manganese		mg/L	0.00105	0.00480	0.00127	0.00078	0.00242	0.00055	< 0.0010	0.000794	0.00037
Mercury	0.000026	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	0.073	mg/L	0.00100	0.00385	0.00013	0.00015	0.00013	0.00026	< 0.0010	0.000157	0.000135
Nickel	0.025	mg/L	0.00100	0.00100	0.00072	0.00070	0.00074	0.00068	< 0.0010	0.000805	0.000733
Potassium (Dissolved)		mg/L	0.93750	0.92750	1.13714	1.12080	1.13000	1.15667	1.06	1.13	1.28
Selenium	0.001	mg/L	0.00010	0.00010	0.00004	0.00004	0.00003	0.00006	< 0.00010	0.000121	< 0.000040
Silver	0.0025	mg/L	0.000020	0.000020	0.000010	0.000003	0.000003	0.000005	< 0.000020	< 0.000050	< 0.000050
Sodium (Dissolved)		mg/L	5.41000	5.09000	7.86714	8.14000	7.69000	7.94000	6.87	7.68	9.27
Strontium		mg/L	0.04910	0.04045	0.06476	0.06206	0.05710	0.05870	0.0537	0.0584	0.064
Thallium	0.0008	mg/L	0.000010	0.000010	0.000002	0.000001	0.000001	0.000004	< 0.000010	0.0000034	0.0000029
Tin		mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Titanium		mg/L	0.00500	0.00500	0.00053	0.00025	0.00025	0.00100	< 0.0050	< 0.00050	< 0.00050
Uranium	0.015	mg/L	0.00010	0.00010	0.00002	0.00003	0.00002	0.00003	< 0.00010	0.0000226	0.0000278
Vanadium		mg/L	0.00500	0.00500	0.00020	0.00010	0.00010	0.00090	< 0.0050	< 0.00020	< 0.00020
Zinc	0.03	mg/L	0.00500	0.00500	0.00052	0.00088	0.00132	0.00114	< 0.0050	0.0005	0.00041
Radionuclides											
Radium-226		Bq/l	0.0050	0.0050	0.0059	0.0025	0.0025	0.0025	< 0.0050	< 0.0050	< 0.0050
Volatile Organics											
Benzene	0.37	mg/L	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Ethylbenzene	0.09	mg/L	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Toluene	0.002	mg/L	0.0002	0.0002	0.0002	0.0033	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Xylenes		mg/L	0.0004	0.0004	0.0004	0.0002	0.0002	0.0002	< 0.00040	< 0.00040	< 0.00040
m,p-Xylenes		mg/L	0.0004	0.0004	0.0004	0.0002	0.0002	0.0002	< 0.00040	< 0.00040	< 0.00040
o-Xylene		mg/L	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
F1 (C6-C10)-BTEX		mg/L	0.0250	0.0250	0.0250	0.0125	0.0125	0.0125	< 0.025	< 0.025	< 0.025
F1 (C6-C10)		mg/L	0.0250	0.0250	0.0250	0.0125	0.0125	0.0125	< 0.025	< 0.025	< 0.025
F2 (C10-C16)		mg/L	0.1000	0.1000	0.1000	0.0500	0.0500	0.0500	< 0.1	< 0.1	< 0.1
F3 (C16-C34)		mg/L	0.2000	0.2000	0.2000	0.1000	0.1000	0.1000	< 0.2	< 0.2	< 0.2
F4 (C34-C50)		mg/L	0.2000	0.2000	0.2000	0.1000	0.1000	0.1000	< 0.2	< 0.2	< 0.2

Parameter	Sample date		6/12/2023						6/21/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters														
pH	pH units		5.73	-	7.22	7.31	1.24	-	5.71	-	7.57	7.6	0.40	-
Dissolved Oxygen	mg/L		10.1	-	10	9.83	1.71	-	9.66	-	9.12	9.14	0.22	-
Turbidity	NTU	0.1	0.1	0.1	0.5	0.5	0.00	0.00	0.1	0.1	0.4	0.4	0.00	0.00
Conductivity	umhos/cm	1	6.5	1	1400	1400	0.00	146.67	1.1	1	1600	1600	0.00	9.52
Hardness, as CaCO3	mg/L	0.5	0.5	-	291	285	2.08	-	0.5	-	305	331	8.18	-
Total alkalinity, as CaCO3	mg/L	1	1	1	32	34	6.06	0.00	1	1	47	47	0.00	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	32	34	6.06	-	1	-	47	47	0.00	-
TDS	mg/L	10	10	10	765	790	3.22	0.00	10	10	970	945	2.61	0.00
TDS, calculated	mg/L	1	1	-	720	730	1.38	-	1	-	800	790	1.26	-
TSS	mg/L	1	1	1	3	2	40.00	0.00	1	1	3	3	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	5.3	5.3	0.00	0.00	0.4	0.4	5.6	5.6	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	4.9	4.8	2.06	0.00	0.4	0.4	6.3	6.4	1.57	0.00
Major Ions														
Chloride	mg/L	1	1	1	280	280	0.00	0.00	1	1	310	310	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00309	0.00332	7.18	0.00	0.0005	0.0005	0.00188	0.00175	7.16	0.00
Cyanide (free)	mg/L	0.002	0.002	0.002	0.0054	0.0056	3.64	0.00	0.0022	0.002	0.0079	0.0081	2.50	9.52
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0016	0.0019	17.14	0.00	0.0005	0.0005	0.001	0.001	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.076	0.077	1.31	0.00	0.25	0.05	0.12	0.099	19.18	133.33
Sulfate	mg/L	0.5	0.62	0.5	140	150	6.90	21.43	0.9	0.91	160	150	6.45	1.10
Nutrients and Chlorophyll a														
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.34	0.33	2.99	0.00	0.05	0.05	0.13	0.16	20.69	0.00
Un-ionized Ammonia, calculated	mg/L	-	-	-	0.0017	0.0017	0.00	-	-	-	0.00061	0.00063	3.23	-
Nitrate (as N)	mg/L	0.1	0.1	0.1	5.3	8.02	40.84	0.00	0.1	0.1	5.84	5.73	1.90	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.187	0.267	35.24	0.00	0.01	0.01	0.188	0.187	0.53	0.00
Total Kjeldahl nitrogen	mg/L	0.1	0.11	0.1	0.81	0.75	7.69	9.52	0.1	0.1	1.4	0.57	84.26	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.051	87.32	0.00	0.02	0.02	0.022	0.027	20.41	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals														
Aluminum	mg/L	0.003	0.003	0.003	0.333	0.335	0.60	0.00	0.003	0.003	0.385	0.423	9.41	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00083	0.00085	2.38	0.00	0.0005	0.0005	0.00082	0.00085	3.59	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00507	0.00515	1.57	0.00	0.0001	0.0001	0.00461	0.00498	7.72	0.00
Barium	mg/L	0.001	0.001	0.001	0.028	0.0273	2.53	0.00	0.001	0.001	0.0319	0.0343	7.25	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.151	0.151	0.00	0.00	0.05	0.05	0.151	0.166	9.46	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000013	0.000013	0.00	0.00	0.00001	0.00001	0.00002	0.000016	22.22	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00112	0.00111	0.90	0.00	0.0002	0.0002	0.00113	0.00115	1.75	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00222	0.00217	2.28	0.00	0.0005	0.0005	0.00232	0.00231	0.43	0.00
Iron	mg/L	0.01	0.01	0.01	0.024	0.027	11.76	0.00	0.01	0.01	0.021	0.024	13.33	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0177	0.017	4.03	0.00	0.002	0.002	0.0164	0.0187	13.11	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0281	0.0279	0.71	0.00	0.001	0.001	0.0274	0.0287	4.63	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0044	0.0044	0.00	0.00	0.001	0.001	0.0043	0.0047	8.89	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0038	0.0037	2.67	0.00	0.001	0.001	0.0035	0.0037	5.56	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00069	0.00064	7.52	0.00	0.0001	0.0001	0.00073	0.00076	4.03	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.957	0.963	0.63	0.00	0.001	0.001	0.956	1.06	10.32	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000016	0.000016	0.00	0.00	0.00001	0.00001	0.000018	0.00002	10.53	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00032	0.00033	3.08	0.00	0.0001	0.0001	0.00042	0.00044	4.65	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Dissolved Metals														
Aluminum	mg/L	0.003	0.003	0.003	0.0662	0.0749	12.33	0.00	0.003	0.003	0.0913	0.0916	0.33	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00083	0.00082	1.21	0.00	0.0005	0.0005	0.00086	0.00089	3.43	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00369	0.00379	2.67	0.00	0.0001	0.0001	0.0035	0.00355	1.42	0.00

Parameter	Sample date		6/12/2023						6/21/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Barium	mg/L	0.001	0.001	0.001	0.0271	0.0273	0.74	0.00	0.001	0.001	0.0348	0.0347	0.29	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.143	0.143	0.00	0.00	0.05	0.05	0.172	0.164	4.76	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.000013	0.000016	20.69	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	78.7	78.4	0.38	-	0.05	-	88.1	87	1.26	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0011	0.0011	0.00	0.00	0.0002	0.0002	0.00117	0.00119	1.69	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00201	0.00199	1.00	0.00	0.0002	0.0002	0.00218	0.00222	1.82	0.00
Iron	mg/L	0.005	0.005	0.005	0.0087	0.0113	26.00	0.00	0.005	0.005	0.005	0.0054	7.69	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0163	0.017	4.20	0.00	0.002	0.002	0.0188	0.0184	2.15	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	23	22.9	0.44	-	0.05	-	23.8	23.6	0.84	-
Manganese	mg/L	0.001	0.001	0.001	0.0225	0.0226	0.44	0.00	0.001	0.001	0.0245	0.0253	3.21	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0043	0.0043	0.00	0.00	0.001	0.001	0.0046	0.0047	2.15	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0034	0.0033	2.99	0.00	0.001	0.001	0.0035	0.0034	2.90	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	12.8	12.6	1.57	-	0.05	-	14.4	14.3	0.70	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00068	0.00073	7.09	0.00	0.0001	0.0001	0.00077	0.00076	1.31	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	140	139	0.72	-	0.05	-	148	147	0.68	-
Strontium	mg/L	0.001	0.001	0.001	0.952	0.96	0.84	0.00	0.001	0.001	1.08	1.07	0.93	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000015	0.000015	0.00	0.00	0.00001	0.00001	0.000018	0.000018	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00023	0.00023	0.00	0.00	0.0001	0.0001	0.00035	0.00035	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Radionuclides														
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Volatile Organics														
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.00042	0.00041	2.41	0.00	0.0002	0.0002	0.00039	0.00041	5.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00
m,p-Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.00	0.00
o-Xylene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
F1 (C6-C10)-BTEX	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	0.025	0.025	0.025	0.025	0.00	0.00
F1 (C6-C10)	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	0.025	0.025	0.025	0.025	0.00	0.00
F2 (C10-C16)	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	0.2	0.2	0.00	0.00
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	0.2	0.2	0.00	0.00
% Exceedance*							3%	0%					0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

Parameter	Sample date		5/28/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Copper	mg/L	0.0005	0.0005	0.0005	0.00059	0.00061	3.33	0.00
Iron	mg/L	0.01	0.01	0.01	0.081	0.082	1.23	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0143	0.0142	0.70	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.0357	0.0376	5.18	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.0111	0.003	0.003	0.003	0.00	114.89
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00212	0.00207	2.39	0.00
Barium	mg/L	0.001	0.001	0.001	0.0077	0.0077	0.00	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	7.39	7.39	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00056	0.0006	6.90	0.00
Iron	mg/L	0.005	0.005	0.005	0.0413	0.0407	1.46	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	0.794	0.788	0.76	-
Manganese	mg/L	0.001	0.001	0.001	0.0116	0.0116	0.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	0.604	0.606	0.33	-

Parameter	Sample date		5/28/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	2.01	1.97	2.01	-
Strontium	mg/L	0.001	0.001	0.001	0.0363	0.0361	0.55	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

Parameter	Sample date		6/18/2023						6/25/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters														
pH	pH units		5.83	-	7.59	7.61	0.26	-	5.86	-	7.87	7.53	4.42	-
Turbidity	NTU	0.1	0.1	0.1	0.4	0.4	0.00	0.00	0.1	0.1	0.4	0.5	22.22	0.00
Conductivity	umhos/cm	1	1.2	1	110	110	0.00	18.18	1.2	1	120	120	0.00	18.18
Hardness, as CaCO3	mg/L	0.5	0.5	-	37.3	35.4	5.23	-	0.5	-	38.7	37.9	2.09	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	41	40.5	1.23	-	0.5	-	41.7	41.8	0.24	-
Total alkalinity, as CaCO3	mg/L	1	1	1	28	29	3.51	0.00	1	1	32	29	9.84	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	28	29	3.51	-	1	-	32	29	9.84	-
TDS	mg/L	10	10	10	75	80	6.45	0.00	10	10	55	45	20.00	0.00
TDS, calculated	mg/L	1	1	-	53	52	1.90	-	1	-	53	53	0.00	-
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	3.7	3.6	2.74	0.00	0.4	0.4	3.5	3.5	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	3.4	3.5	2.90	0.00	0.4	0.4	3.5	3.5	0.00	0.00
Major Ions														
Chloride	mg/L	1	1	1	11	11	0.00	0.00	1	1	9.6	12	22.22	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00062	0.00126	68.09	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.002	0.0022	0.002	0.0027	0.0027	0.00	9.52	0.0022	0.002	0.0034	0.0034	0.00	9.52
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0011	75.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.23	0.22	4.44	0.00	0.05	0.05	0.21	0.21	0.00	0.00
Sulfate	mg/L	0.5	0.9	0.91	4.1	4.3	4.76	1.10	0.5	0.5	3.7	3.6	2.74	0.00
Nutrients and Chlorophyll a														
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.055	0.05	9.52	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	0.1	0.1	0.00	-	0.1	-	0.1	0.1	0.00	-
Total Kjeldahl nitrogen	mg/L	0.1	0.1	0.1	0.3	0.17	55.32	0.00	0.1	0.1	0.25	0.23	8.33	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.02	0.02	0.02	0.02	0.00	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	1	0.01	0.01	0.00	196.04
Total Metals														
Aluminum	mg/L	0.003	0.003	0.003	0.0084	0.0091	8.00	0.00	0.003	0.003	0.0079	0.0075	5.19	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00074	0.000731	1.22	0.00	0.0001	0.0001	0.00697	0.00676	3.06	0.00
Barium	mg/L	0.001	0.001	0.001	0.0179	0.0174	2.83	0.00	0.001	0.001	0.0188	0.0184	2.15	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	12.3	11.6	5.86	-	0.05	-	12.7	12.4	2.39	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00072	0.00073	1.38	0.00	0.0005	0.0005	0.00077	0.00077	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.126	0.126	0.00	0.00	0.01	0.01	0.094	0.091	3.24	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00037	0.00038	2.67	0.00	0.0002	0.0002	0.00028	0.00026	7.41	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (total)	mg/L	0.05	0.05	-	1.57	1.57	0.00	-	0.05	-	1.72	1.66	3.55	-
Manganese	mg/L	0.001	0.001	0.001	0.0063	0.0063	0.00	0.00	0.001	0.001	0.0074	0.0069	6.99	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	0.952	0.931	2.23	-	0.05	-	1.05	1.01	3.88	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	0.11	0.12	8.70	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	3.35	3.41	1.78	-	0.05	-	3.52	3.47	1.43	-
Strontium	mg/L	0.001	0.001	0.001	0.0616	0.0628	1.93	0.00	0.001	0.001	0.0636	0.0617	3.03	0.00
Sulphur	mg/L	3	3	-	3	3	0.00	-	3	-	3	3	0.00	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00

Parameter	Sample date		6/18/2023						6/25/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Dissolved Metals														
Aluminum	mg/L	0.003	0.003	0.003	0.0035	0.0037	5.56	0.00	0.003	0.003	0.0049	0.0046	6.32	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0059	0.00591	0.17	0.00	0.0001	0.0001	0.00583	0.00577	1.03	0.00
Barium	mg/L	0.001	0.001	0.001	0.0198	0.02	1.01	0.00	0.001	0.001	0.0201	0.0203	0.99	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	13.7	13.5	1.47	-	0.05	-	13.8	13.7	0.73	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00072	0.0007	2.82	0.00	0.0002	0.0002	0.00081	0.00078	3.77	0.00
Iron	mg/L	0.005	0.005	0.005	0.0555	0.0567	2.14	0.00	0.005	0.005	0.0453	0.0403	11.68	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	1.68	1.66	1.20	-	0.05	-	1.79	1.82	1.66	-
Manganese	mg/L	0.001	0.001	0.001	0.0023	0.0023	0.00	0.00	0.001	0.001	0.0014	0.0013	7.41	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	-	-	-	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	1.08	1.07	0.93	-	0.05	-	1.12	1.13	0.89	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	0.11	0.11	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	3.65	3.63	0.55	-	0.05	-	3.75	3.73	0.53	-
Strontium	mg/L	0.001	0.001	0.001	0.0675	0.0671	0.59	0.00	0.001	0.001	0.0694	0.07	0.86	0.00
Sulphur	mg/L	3	3	-	3	3	0.00	-	3	-	3	3	0.00	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00
% Exceedance*							0%	0%					0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

Parameter	Sample date		7/9/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.63	-	7.61	7.73	1.56	-
Turbidity	NTU	0.1	0.1	0.1	1.3	1.2	8.00	0.00
Conductivity	umhos/cm	1	1.2	1	350	340	2.90	18.18
Hardness, as CaCO3	mg/L	0.5	0.5	-	117	111	5.26	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	128	126	1.57	-
Total alkalinity, as CaCO3	mg/L	1	1	1	59	60	1.68	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	59	60	1.68	-
TDS	mg/L	10	10	10	250	240	4.08	0.00
TDS, calculated	mg/L	1	1	-	180	180	0.00	-
TSS	mg/L	1	1	1	10	10	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	13	12	8.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	11	11	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	43	42	2.35	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.002	0.0033	0.002	0.0031	0.0028	10.17	49.06
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.00059	0.00064	8.13	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.81	0.73	10.39	0.00
Sulfate	mg/L	0.5	0.59	0.5	38	38	0.00	16.51
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	0.1	0.1	0.00	-
Total Kjeldahl nitrogen	mg/L	0.1	0.1	0.1	0.64	0.72	11.76	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.02	0.00	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
General Organics								
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	0.5	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0079	0.0072	9.27	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00134	0.00128	4.58	0.00
Barium	mg/L	0.001	0.001	0.001	0.0347	0.0332	4.42	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00

Parameter	Sample date		7/9/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	39	36.5	6.62	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00021	0.0002	4.88	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00124	0.00118	4.96	0.00
Iron	mg/L	0.01	0.01	0.01	0.368	0.361	1.92	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0048	0.0046	4.26	0.00
Magnesium (total)	mg/L	0.05	0.05	-	4.77	4.69	1.69	-
Manganese	mg/L	0.001	0.001	0.001	0.109	0.111	1.82	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0024	0.0023	4.26	0.00
Potassium (total)	mg/L	0.05	0.05	-	2.56	2.42	5.62	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	0.39	0.36	8.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	13.1	12.5	4.69	-
Strontium	mg/L	0.001	0.001	0.001	0.28	0.264	5.88	0.00
Sulphur	mg/L	3	3	-	10.4	9.5	9.05	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00011	0.0001	9.52	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.003	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00126	0.00125	0.80	0.00
Barium	mg/L	0.001	0.001	0.001	0.0355	0.0363	2.23	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	43	42.1	2.12	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00126	0.00126	0.00	0.00

Parameter	Sample date		7/9/2023						
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	
Iron	mg/L	0.005	0.005	0.005	0.175	0.175	0.00	0.00	
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
Lithium	mg/L	0.002	0.002	0.002	0.0051	0.0051	0.00	0.00	
Magnesium (Dissolved)	mg/L	0.05	0.05	-	5.03	5.05	0.40	-	
Manganese	mg/L	0.001	0.001	0.001	0.0576	0.0589	2.23	0.00	
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	
Nickel	mg/L	0.001	0.001	0.001	0.0021	0.0021	0.00	0.00	
Potassium (Dissolved)	mg/L	0.05	0.05	-	2.62	2.68	2.26	-	
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	
Silicon	mg/L	0.1	0.1	0.1	0.39	0.39	0.00	0.00	
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	
Sodium (Dissolved)	mg/L	0.05	0.05	-	13.4	13.7	2.21	-	
Strontium	mg/L	0.001	0.001	0.001	0.293	0.297	1.36	0.00	
Sulphur	mg/L	3	3	-	12.1	11.8	2.51	-	
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00011	9.52	0.00	
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	
Volatile Organics									
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	
m,p-Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	
o-Xylene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
F1 (C6-C10)-BTEX	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	
F1 (C6-C10)	mg/L	0.025	0.025	0.025	0.025	0.025	0.00	0.00	
% Exceedance*							0%	0%	

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

Parameter	Sample date		8/6/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.81	-	7.46	7.72	3.43	-
Turbidity	NTU	0.1	0.1	0.1	0.5	0.5	0.00	0.00
Conductivity	umhos/cm	1	1.1	1	200	200	0.00	9.52
Hardness, as CaCO3	mg/L	0.5	0.5	-	68.5	71.1	3.72	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	74.2	73.1	1.49	-
Total alkalinity, as CaCO3	mg/L	1	1	1	47	48	2.11	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	47	48	2.11	-
TDS	mg/L	10	10	10	155	140	10.17	0.00
TDS, calculated	mg/L	1	1	-	96	96	0.00	-
TSS	mg/L	1	1	1	3	3	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	4.7	4.8	2.11	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	4.9	4.7	4.17	0.00
Major Ions								
Chloride	mg/L	1	1	1	24	23	4.26	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.002	0.0023	0.002	0.0037	0.0026	34.92	13.95
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.00067	0.0007	4.38	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	1.1	0.95	14.63	0.00
Sulfate	mg/L	0.5	0.5	0.5	7.8	7.8	0.00	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	0.1	0.1	0.00	-
Total Kjeldahl nitrogen	mg/L	0.1	0.1	0.1	0.32	0.36	11.76	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.036	57.14	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.018	57.14	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0082	0.005	48.48	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00488	0.00496	1.63	0.00
Barium	mg/L	0.001	0.001	0.001	0.0182	0.0185	1.63	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00

Parameter	Sample date		8/6/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00083	0.00088	5.85	0.00
Iron	mg/L	0.005	0.005	0.005	0.0408	0.0422	3.37	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0094	0.0094	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	3.28	3.18	3.10	-
Manganese	mg/L	0.001	0.001	0.001	0.0051	0.0049	4.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	1.58	1.56	1.27	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	0.48	0.49	2.06	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	7.26	7.07	2.65	-
Strontium	mg/L	0.001	0.001	0.001	0.178	0.179	0.56	0.00
Sulphur	mg/L	3	3	-	3	3	0.00	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
% Exceedance*							0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-19	Sample date	Annual Average		5/28/2023	6/18/2023	6/25/2023	7/9/2023	8/6/2023	9/10/2023	10/1/2023
Parameter	Units	2022	2023	C3F7037	C3J0150	C3J4223	C3K8977	C3O1119	C3S4264	C3V0907
Field Measured										
Temperature	°C	10.8	8.4	0.9	6	10.2	11.8	19.1	7.5	3.6
pH	pH units	7.88	8.21	8.48	8.01	7.94	8.06	8.45	8.33	8.2
Conductivity	uS/cm	4061	3,399	775	2344	2775	4163	4030	5013	4696
Dissolved oxygen	mg/L	9.90	9.84	15.15	11.7	11.15	0	5.7	10.9	14.29
Dissolved oxygen	%	86.7	92.7	106.7	94.7	100.1	83.8	62	92.7	109.2
Conventional Parameters										
pH	pH units	7.98	7.88	7.66	7.86	7.85	7.9	7.82	8.01	8.06
Turbidity	NTU	14.8	2.5	10	3	2.3	0.8	0.4	0.4	0.5
Hardness, as CaCO3	mg/L	594	673	145	478	511	653	876	1010	1040
Total alkalinity, as CaCO3	mg/L	111	94	41	66	71	87	100	140	150
TDS	mg/L	1710	2,144	395	1430	1730	2440	2980	3090	2940
TDS, calculated	mg/L	1588	1,974	320	1100	1400	2300	2800	3000	2900
TSS	mg/L	11	10	35	12	8	3	3	3	3
Major Ions										
Chloride	mg/L	618	801	86	390	540	990	1200	1300	1100
Cyanide	mg/L	0.00426	0.00196	0.00378	0.0027	0.00186	0.00126	-	0.00121	0.00094
Fluoride	mg/L	0.19	0.13	< 0.10	< 0.10	0.1	0.14	0.17	0.17	0.23
Silica	mg/L	5.10	2.12	0.4	2	1.4	0.77	2	3.9	4.4
Sulfate	mg/L	328.0	387.3	71	240	280	400	500	580	640
Nutrients and Chlorophyll a										
Ammonia Nitrogen (as N)	mg/L	2.8	1.2	1.1	2.1	2.2	1.9	0.53	0.53	0.38
Nitrate (as N)	mg/L	5.62	6.37	1.72	4.71	5.87	7.93	10.4	7.71	6.23
Nitrite (as N)	mg/L	0.236	0.141	0.018	0.068	0.099	0.331	0.225	0.133	0.116
Total phosphorus	mg/L	0.030	0.012	0.025	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Orthophosphate (P)	mg/L	0.008	0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals										
Aluminum	mg/L	0.4209	0.2084	0.781	0.411	0.157	0.0384	0.0317	0.0256	0.0141
Arsenic	mg/L	0.0228	0.0128	0.0118	0.0125	0.0118	0.0108	0.0123	0.0146	0.0155
Barium	mg/L	0.0782	0.0628	0.0226	0.0574	0.0581	0.0684	0.0854	0.0728	0.0748
Cadmium	mg/L	0.000053	0.000069	0.000021	0.00006	0.000063	0.000068	0.000092	0.0001	0.000082
Chromium	mg/L	0.0014	0.0012	0.0023	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Copper	mg/L	0.00776	0.00455	0.00406	0.0043	0.0037	0.0036	0.0041	0.0057	0.0064
Iron	mg/L	0.656	0.347	1.35	0.693	0.253	0.045	0.026	0.038	0.021
Lead	mg/L	0.00080	0.00053	0.00166	0.00078	0.00044	< 0.00040	< 0.00040	< 0.00040	< 0.00040
Manganese	mg/L	0.1158	0.1229	0.0632	0.131	0.116	0.065	0.0509	0.216	0.218
Mercury	mg/L	0.000005	0.000005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.0050	0.0035	0.0016	0.0032	0.0026	0.004	0.0048	0.0048	0.0037
Nickel	mg/L	0.0370	0.0410	0.0136	0.0345	0.0347	0.036	0.0407	0.0651	0.0623
Selenium	mg/L	0.00082	0.00084	0.00025	0.0007	0.00077	0.00104	0.00118	0.0011	0.00085
Silver	mg/L	0.000014	0.000019	< 0.000020	< 0.000040	< 0.000040	< 0.000040	< 0.000040	< 0.000040	< 0.000040
Thallium	mg/L	0.000032	0.000020	0.000015	< 0.000020	< 0.000020	0.000021	0.000028	0.000028	0.000025
Zinc	mg/L	0.0035	0.0050	0.0052	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Dissolved Metals										
Calcium (Dissolved)	mg/L	156.3	186.7	39.9	110	124	186	237	282	328
Magnesium (Dissolved)	mg/L	48.2	63.4	10.8	37.5	44.6	72.5	90.1	90.2	98.1
Potassium (Dissolved)	mg/L	24.4	26.4	6.39	18	20.5	31.8	37.8	34.6	35.8
Sodium (Dissolved)	mg/L	314	420	74.3	251	305	511	652	569	575

Parameter	Sample date		5/28/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		6.2	-	7.73	7.66	0.91	-
Turbidity	NTU	0.1	0.1	0.1	11	10	9.52	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	129	145	11.68	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	144	144	0.00	-
Total alkalinity, as CaCO3	mg/L	1	1	1	42	41	2.41	0.00
TDS	mg/L	10	10	10	400	395	1.26	0.00
TDS, calculated	mg/L	1	1	-	310	320	3.17	-
TSS	mg/L	1	1	1	33	35	5.88	0.00
Major Ions								
Chloride	mg/L	1	1	1	81	86	5.99	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00374	0.00378	1.06	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	70	0.05	0.4	0.4	0.00	199.71
Sulfate	mg/L	0.5	0.5	0.5	69	71	2.86	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	1.2	1.1	8.70	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	1.66	1.72	3.55	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.02	0.018	10.53	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	1.68	1.74	3.51	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.027	0.025	7.69	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.715	0.781	8.82	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00106	0.00115	8.14	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0107	0.0118	9.78	0.00
Barium	mg/L	0.001	0.001	0.001	0.0209	0.0226	7.82	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000022	0.000021	4.65	0.00
Calcium (total)	mg/L	0.05	0.05	-	35.1	39.5	11.80	-
Chromium	mg/L	0.001	0.001	0.001	0.0021	0.0023	9.09	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00251	0.00278	10.21	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00372	0.00406	8.74	0.00
Iron	mg/L	0.01	0.01	0.01	1.26	1.35	6.90	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0015	0.00166	10.13	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0025	0.0028	11.32	0.00

Parameter	Sample date		5/28/2023						
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	
Magnesium (total)	mg/L	0.05	0.05	-	10	11.2	11.32	-	
Manganese	mg/L	0.001	0.001	0.001	0.0567	0.0632	10.84	0.00	
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	
Molybdenum	mg/L	0.001	0.001	0.001	0.0014	0.0016	13.33	0.00	
Nickel	mg/L	0.001	0.001	0.001	0.0125	0.0136	8.43	0.00	
Potassium (total)	mg/L	0.05	0.05	-	5.89	6.55	10.61	-	
Selenium	mg/L	0.0001	0.0001	0.0001	0.00023	0.00025	8.33	0.00	
Silicon	mg/L	0.1	0.1	0.1	1.51	1.67	10.06	0.00	
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	
Sodium (total)	mg/L	0.05	0.05	-	66.2	73.4	10.32	-	
Strontium	mg/L	0.001	0.001	0.001	0.228	0.25	9.21	0.00	
Sulphur	mg/L	3	3	-	21.3	23.8	11.09	-	
Thallium	mg/L	0.00001	0.00001	0.00001	0.000015	0.000015	0.00	0.00	
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Titanium	mg/L	0.005	0.005	0.005	0.0328	0.036	9.30	0.00	
Uranium	mg/L	0.0001	0.0001	0.0001	0.00208	0.00229	9.61	0.00	
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0052	3.92	0.00	
Zirconium	mg/L	0.0001	0.0001	0.0001	0.00068	0.00089	26.75	0.00	
Dissolved Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.0089	0.0094	5.46	0.00	
Antimony	mg/L	0.0005	0.0005	0.0005	0.00111	0.00117	5.26	0.00	
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00692	0.00706	2.00	0.00	
Barium	mg/L	0.001	0.001	0.001	0.0159	0.0162	1.87	0.00	
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000015	0.000017	12.50	0.00	
Calcium (Dissolved)	mg/L	0.05	0.05	-	39.8	39.9	0.25	-	
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00151	0.0015	0.66	0.00	
Copper	mg/L	0.0002	0.0002	0.0002	0.00165	0.00168	1.80	0.00	
Iron	mg/L	0.005	0.005	0.005	0.0054	0.005	7.69	0.00	
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	
Magnesium (Dissolved)	mg/L	0.05	0.05	-	10.7	10.8	0.93	-	
Manganese	mg/L	0.001	0.001	0.001	0.0484	0.0482	0.41	0.00	
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	
Molybdenum	mg/L	0.001	0.001	0.001	0.0015	0.0015	0.00	0.00	

Parameter	Sample date		5/28/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Nickel	mg/L	0.001	0.001	0.001	0.01	0.01	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	6.42	6.39	0.47	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00023	0.00024	4.26	0.00
Silicon	mg/L	0.1	0.1	0.1	0.46	0.47	2.15	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	74.1	74.3	0.27	-
Strontium	mg/L	0.001	0.001	0.001	0.244	0.246	0.82	0.00
Sulphur	mg/L	3	3	-	23.7	24.6	3.73	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00202	0.00202	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
% Exceedance*							0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-20	Sample date	Annual Average					5/28/2023	6/18/2023	6/25/2023	7/9/2023	8/6/2023	9/10/2023	10/1/2023
Parameter	Units	2019	2020	2021	2022	2023	C3F6969	C3J0042	C3J4165	C3K8937	C3O1088	C3S4327	C3V0917
Field Measured													
Temperature	°C	6.49	6.24	5.58	8.00	8.90	0.4	7.9	11.3	11.9	19.2	7.6	4
pH	pH units	7.72	7.75	7.87	7.38	7.89	8.25	7.76	7.63	7.9	7.81	7.89	8.02
Conductivity	uS/cm	1607.59	2112.41	2619.00	5503.00	7,118.71	2315	4669	5330	6363	5737	12539	12878
Dissolved oxygen	mg/L	9.47	10.64	10.68	10.84	8.82	13.33	9.66	8.01	0	4.8	14.09	11.85
Dissolved oxygen	%	78.88	84.77	88.20	83.40	85.79	92.9	82.7	74.6	78.6	53	123.5	95.2
Conventional Parameters													
pH	pH units	7.73	7.74	7.77	7.76	7.75	7.7	7.83	7.82	7.88	7.58	7.69	7.74
Turbidity	NTU	125.00	9.76	12.62	7.00	1.83	2.6	0.8	1.1	1.9	3	1.7	1.7
Conductivity	umhos/cm	-	-	-	-	-	2300	4700	5400	6500	7600	12000	13000
Hardness, as CaCO3	mg/L	259.75	395.70	382.50	766.00	1,298.57	392	855	983	1080	1410	2030	2340
Total alkalinity, as CaCO3	mg/L	72.88	72.14	85.17	88.00	116.14	73	110	110	120	120	130	150
TDS	mg/L	839.38	1183.57	1037.50	2258.00	4,664.29	1420	2920	3340	4060	4630	7940	8340
TDS, calculated	mg/L	-	-	1253.33	2355.00	4,471.43	1200	2700	3100	3800	4700	7500	8300
TSS	mg/L	92.75	16.86	20.00	15.00	10.71	10	7	11	17	8	11	11
Major Ions													
Chloride	mg/L	273.75	419.14	391.67	982.00	1,800.00	410	990	1100	1500	1800	3300	3500
Cyanide	mg/L	0.02	0.02	0.01	0.02	0.02	0.0812	0.0219	0.0152	0.00883	0.00452	0.00769	0.00503
Fluoride	mg/L	140.38	0.11	0.09	0.15	0.17	< 0.10	0.14	0.14	0.19	0.22	0.23	0.25
Silica	mg/L	-	-	2.7	3.7	5.3	2.2	4.9	6.2	6.1	5.6	5.9	6.2
Sulfate	mg/L	0.14	227.14	243.33	418.00	762.86	260	510	580	710	880	1200	1200
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)	mg/L	4.84	7.54	7.98	11.80	24.83	9.8	19	21	21	18	40	45
Nitrate (as N)	mg/L	8.04	11.77	11.95	35.37	75.17	18.8	46.6	52.5	65	75.3	123	145
Nitrite (as N)	mg/L	0.19	0.28	0.23	0.86	1.25	0.175	0.49	0.685	1.55	2.9	1.54	1.4
Total phosphorus	mg/L	0.22	0.08	0.07	0.04	0.05	0.041	0.086	0.056	0.039	0.024	0.045	0.039
Orthophosphate (P)	mg/L	0.06	0.06	0.07	0.02	0.03	0.033	0.045	0.033	0.027	0.028	0.02	0.02
Total Metals													
Aluminum	mg/L	2.00863	0.31857	0.25593	0.23910	0.15857	0.168	0.202	0.143	0.097	0.198	0.187	0.115
Arsenic	mg/L	0.09328	0.20380	0.23905	0.10050	0.18214	0.328	0.231	0.197	0.152	0.144	0.121	0.102
Barium	mg/L	0.05994	0.05099	0.05925	0.07300	0.09874	0.0506	0.0964	0.102	0.0992	0.117	0.115	0.111
Cadmium	mg/L	0.00005	0.00004	0.00007	0.00016	0.00037	0.00005	0.000198	0.000256	0.000277	0.000424	0.000695	0.000698
Chromium	mg/L	0.00618	0.00096	0.00072	0.00120	0.00200	< 0.0010	< 0.0020	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Copper	mg/L	0.01182	0.01014	0.00844	0.00980	0.01479	0.0275	0.0156	0.0135	0.0117	0.0111	0.0124	0.0117
Iron	mg/L	3.20175	0.60300	0.64867	0.52900	0.49157	0.596	0.609	0.375	0.314	0.648	0.564	0.335
Lead	mg/L	0.00613	0.00559	0.00700	0.00549	0.00673	0.00819	0.00701	0.0047	0.0067	0.0069	0.0076	0.006
Manganese	mg/L	0.22208	0.36114	0.30133	0.46800	0.91286	0.267	0.668	0.778	0.846	0.931	1.37	1.53
Mercury	mg/L	0.00001	0.00002	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00670	0.00601	0.00693	0.00680	0.01044	0.0066	0.0086	0.0093	0.0101	0.012	0.014	0.0125
Nickel	mg/L	0.02458	0.02150	0.01995	0.03840	0.07457	0.0204	0.0532	0.0652	0.0749	0.0893	0.107	0.112
Selenium	mg/L	0.00040	0.00181	0.00481	0.00243	0.00697	0.004	0.00561	0.00623	0.00663	0.00802	0.00903	0.00929
Silver	mg/L	0.00006	0.00002	0.00002	0.00003	0.00005	0.000057	< 0.000040	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Thallium	mg/L	0.00006	0.00002	0.00002	0.00003	0.00005	0.000015	0.000036	< 0.000050	< 0.000050	0.000055	0.000087	0.000083
Zinc	mg/L	0.01595	0.00330	0.00292	0.00580	0.01000	< 0.0050	< 0.010	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Dissolved Metals													
Calcium (Dissolved)	mg/L	74.60	104.14	105.40	187.60	340.29	117	237	269	330	382	483	564
Magnesium (Dissolved)	mg/L	25.88	33.19	28.35	66.90	135.97	34.3	86.8	94.7	113	143	216	264
Potassium (Dissolved)	mg/L	14.52	16.15	15.70	29.52	58.44	17.6	39.5	44	52.8	61.8	87.4	106
Sodium (Dissolved)	mg/L	175.80	228.99	214.33	489.00	950.14	253	560	652	776	1020	1510	1880

Parameter	Sample date		6/18/2023						6/25/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters														
pH	pH units		5.79	-	7.79	7.83	0.51	-	5.79	-	7.85	7.82	0.38	-
Turbidity	NTU	0.1	0.1	0.1	1	0.8	22.22	0.00	0.2	0.1	1	1.1	9.52	66.67
Conductivity	umhos/cm	1	1.2	1	4700	4700	0.00	18.18	1.2	1	5400	5400	0.00	18.18
Hardness, as CaCO3	mg/L	0.5	0.5	-	822	855	3.94	-	0.5	-	934	983	5.11	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	935	949	1.49	-	0.5	-	1070	1060	0.94	-
Total alkalinity, as CaCO3	mg/L	1	1	1	110	110	0.00	0.00	1	1	120	110	8.70	0.00
TDS	mg/L	10	10	10	2900	2920	0.69	0.00	10	10	3290	3340	1.51	0.00
TDS, calculated	mg/L	1	1	-	2700	2700	0.00	-	1	-	3100	3100	0.00	-
TSS	mg/L	1	1	1	6	7	15.38	0.00	1	1	14	11	24.00	0.00
Major Ions														
Chloride	mg/L	1	1	1	980	990	1.02	0.00	1	1	1100	1100	0.00	0.00
Cyanide	mg/L	0.0005	0.00323	0.0005	0.0201	0.0219	8.57	146.38	0.0005	0.0005	0.0163	0.0152	6.98	0.00
Cyanide (free)	mg/L	0.002	0.002	0.002	0.016	0.016	0.00	0.00	0.002	0.002	0.0081	0.0076	6.37	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.014	0.015	6.90	0.00	0.0005	0.0005	0.0072	0.0071	1.40	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.13	0.14	7.41	0.00	0.1	0.1	0.15	0.14	6.90	0.00
Silica	mg/L	0.05	0.05	0.05	5.1	4.9	4.00	0.00	0.05	0.05	5.2	6.2	17.54	0.00
Sulfate	mg/L	0.5	0.87	0.91	510	510	0.00	4.49	0.5	0.5	580	580	0.00	0.00
Nutrients and Chlorophyll a														
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	19	19	0.00	0.00	0.05	0.05	20	21	4.88	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	46.1	46.6	1.08	0.00	0.1	0.1	51.7	52.5	1.54	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.483	0.49	1.44	0.00	0.01	0.01	0.692	0.685	1.02	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	46.6	47.1	1.07	-	0.1	-	52.4	53.2	1.52	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.051	0.086	51.09	0.00	0.02	0.02	0.041	0.056	30.93	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.036	0.045	22.22	0.00	0.01	1	0.035	0.033	5.88	196.04
Total Metals														
Aluminum	mg/L	0.003	0.003	0.003	0.189	0.202	6.65	0.00	0.003	0.003	0.182	0.143	24.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0016	0.0016	0.00	0.00	0.0005	0.0005	0.0016	0.0025	43.90	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.224	0.231	3.08	0.00	0.0001	0.0001	0.195	0.197	1.02	0.00
Barium	mg/L	0.001	0.001	0.001	0.091	0.0964	5.76	0.00	0.001	0.001	0.0963	0.102	5.75	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00	0.0001	0.0001	0.0002	0.0005	85.71	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.002	0.005	85.71	0.00
Boron	mg/L	0.05	0.05	0.05	0.47	0.5	6.19	0.00	0.05	0.05	0.55	0.58	5.31	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000184	0.000198	7.33	0.00	0.00001	0.00001	0.000228	0.000256	11.57	0.00
Calcium (total)	mg/L	0.05	0.05	-	212	220	3.70	-	0.05	-	229	245	6.75	-
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.002	0.005	85.71	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0123	0.0128	3.98	0.00	0.0002	0.0002	0.0134	0.0145	7.89	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0148	0.0156	5.26	0.00	0.0005	0.0005	0.0123	0.0135	9.30	0.00
Iron	mg/L	0.01	0.01	0.01	0.533	0.609	13.31	0.00	0.01	0.01	0.516	0.375	31.65	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00695	0.00701	0.86	0.00	0.0002	0.0002	0.0056	0.0047	17.48	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0092	0.0098	6.32	0.00	0.002	0.002	0.0114	0.013	13.11	0.00
Magnesium (total)	mg/L	0.05	0.05	-	70.8	74.4	4.96	-	0.05	-	88	89.8	2.02	-
Manganese	mg/L	0.001	0.001	0.001	0.634	0.668	5.22	0.00	0.001	0.001	0.71	0.778	9.14	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0085	0.0086	1.17	0.00	0.001	0.001	0.0095	0.0093	2.13	0.00
Nickel	mg/L	0.001	0.001	0.001	0.05	0.0532	6.20	0.00	0.001	0.001	0.0587	0.0652	10.49	0.00
Potassium (total)	mg/L	0.05	0.05	-	33.4	34.7	3.82	-	0.05	-	37.5	39.6	5.45	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00531	0.00561	5.49	0.00	0.0001	0.0001	0.00586	0.00623	6.12	0.00
Silicon	mg/L	0.1	0.1	0.1	2.28	2.36	3.45	0.00	0.1	0.1	2.34	2.14	8.93	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00	0.00002	0.00002	0.00004	0.0001	85.71	0.00
Sodium (total)	mg/L	0.05	0.05	-	496	523	5.30	-	0.05	-	564	606	7.18	-
Strontium	mg/L	0.001	0.001	0.001	1.73	1.77	2.29	0.00	0.001	0.001	2.01	2.08	3.42	0.00
Sulphur	mg/L	3	3	-	157	160	1.89	-	3	-	180	188	4.35	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000032	0.000036	11.76	0.00	0.00001	0.00001	0.000039	0.00005	24.72	0.00
Tin	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.01	0.025	85.71	0.00
Titanium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.01	0.025	85.71	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00929	0.00955	2.76	0.00	0.0001	0.0001	0.011	0.0111	0.90	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.01	0.025	85.71	0.00
Zinc	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.01	0.025	85.71	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.00055	0.00058	5.31	0.00	0.0001	0.0001	0.00069	0.00062	10.69	0.00
Dissolved Metals														

Parameter	Sample date		6/18/2023						6/25/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Aluminum	mg/L	0.003	0.003	0.003	0.0149	0.0134	10.60	0.00	0.003	0.003	0.015	0.015	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0018	0.0018	0.00	0.00	0.0005	0.0005	0.0025	0.0025	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.211	0.212	0.47	0.00	0.0001	0.0001	0.177	0.178	0.56	0.00
Barium	mg/L	0.001	0.001	0.001	0.107	0.11	2.76	0.00	0.001	0.001	0.11	0.108	1.83	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.005	0.005	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.57	0.56	1.77	0.00	0.05	0.05	0.58	0.57	1.74	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000196	0.000208	5.94	0.00	0.00001	0.00001	0.000267	0.000279	4.40	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	234	237	1.27	-	0.05	-	271	269	0.74	-
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.005	0.005	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0135	0.0134	0.74	0.00	0.0002	0.0002	0.0155	0.0158	1.92	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.0143	0.0142	0.70	0.00	0.0002	0.0002	0.0138	0.014	1.44	0.00
Iron	mg/L	0.005	0.005	0.005	0.012	0.01	18.18	0.00	0.005	0.005	0.025	0.025	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00041	0.0004	2.47	0.00	0.0002	0.0002	0.001	0.001	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0111	0.0109	1.82	0.00	0.002	0.002	0.013	0.014	7.41	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	85	86.8	2.10	-	0.05	-	96.3	94.7	1.68	-
Manganese	mg/L	0.001	0.001	0.001	0.697	0.704	1.00	0.00	0.001	0.001	0.845	0.835	1.19	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0098	0.0097	1.03	0.00	0.001	0.001	0.0097	0.0096	1.04	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0553	0.0553	0.00	0.00	0.001	0.001	0.0707	0.0717	1.40	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	39.7	39.5	0.51	-	0.05	-	43.9	44	0.23	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00612	0.00635	3.69	0.00	0.0001	0.0001	0.00712	0.00698	1.99	0.00
Silicon	mg/L	0.1	0.1	0.1	2.34	2.34	0.00	0.00	0.1	0.1	2.18	2.16	0.92	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00	0.00002	0.00002	0.0001	0.0001	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	556	560	0.72	-	0.05	-	648	652	0.62	-
Strontium	mg/L	0.001	0.001	0.001	2.12	2.1	0.95	0.00	0.001	0.001	2.24	2.2	1.80	0.00
Sulphur	mg/L	3	3	-	188	185	1.61	-	3	-	203	201	0.99	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000034	0.000036	5.71	0.00	0.00001	0.00001	0.00005	0.00005	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.025	0.025	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.025	0.025	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.011	0.0109	0.91	0.00	0.0001	0.0001	0.0123	0.0122	0.82	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.025	0.025	0.00	0.00
Zinc	mg/L	0.005	0.0061	0.005	0.01	0.01	0.00	19.82	0.005	0.005	0.025	0.025	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.00049	0.00053	7.84	0.00	0.0001	0.0001	0.0005	0.00057	13.08	0.00
% Exceedance*							0%	0%					3%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-21	Sample date	Annual Average					5/28/2023	6/18/2023	6/25/2023	7/9/2023	8/6/2023	9/10/2023	10/1/2023
Parameter	Units	2019	2020	2021	2022	2023	C3F6952	C3J0083	C3J4214	C3K9082	C3O1110	C3S4302	C3V0911
Field Measured													
Temperature	°C	7.61	6.67	5.94	7.50	8.88	0.5	7.04	11	12.7	19.2	7.5	4.2
pH	pH units	8.05	7.68	7.89	7.71	8.35	8.5	8.01	7.98	8.2	8.31	9.05	8.39
Conductivity	uS/cm	1701.19	2431.81	1961.45	2741.98	3,021.43	2021	2108	3142	3285	2845	3813	3936
Dissolved oxygen	mg/L	9.88	10.94	38.94	33.23	9.69	14.21	11.5	9.76	0	6	12.63	13.71
Dissolved oxygen	%	91.46	89.30	63.81	171.40	92.90	99.5	96.6	89.5	87.6	65	106.3	105.8
Conventional Parameters													
pH	pH units	7.85	7.75	7.87	7.85	8.04	7.85	8	8.09	8.06	8.16	8.06	8.09
Turbidity	NTU	58.17	6.60	15.92	7.00	1.80	2.6	2	3.5	1.6	1	1.2	0.7
Hardness, as CaCO3	mg/L	297.00	606.29	488.33	577.00	724.57	354	667	768	660	755	858	1010
Total alkalinity, as CaCO3	mg/L	83.29	83.86	81.50	110.00	114.00	88	120	120	110	120	120	120
TDS	mg/L	957.14	1281.43	1159.17	1389.00	2,008.57	1120	2050	1970	1970	2220	2270	2460
TDS, calculated	mg/L	-	-	1366.67	1320.00	1,900.00	1100	1700	1900	1900	2000	2300	2400
TSS	mg/L	42.71	15.43	28.50	18.00	11.00	29	10	17	6	5	4	6
Major Ions													
Chloride	mg/L	334.29	468.57	415.00	507.00	671.43	390	570	640	650	710	860	880
Cyanide	mg/L	0.01	0.01	0.01	0.03	0.01	0.0223	0.00368	0.00222	0.00171	0.00193	0.00244	0.00097
Fluoride	mg/L	0.14	0.12	0.11	0.13	0.16	< 0.10	0.15	0.16	0.18	0.19	0.17	0.19
Silica	mg/L	-	-	4.37	4.50	3.36	2.7	4.8	4.3	3.1	2.3	3.5	2.8
Sulfate	mg/L	132.14	188.43	215.83	284.00	432.86	210	410	410	430	460	520	590
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)	mg/L	1.99	0.52	0.64	2.75	1.52	3.1	3	2.7	1.4	0.26	0.14	< 0.050
Nitrate (as N)	mg/L	2.71	1.51	3.96	8.70	14.40	7.01	13.8	14.9	14.9	16.9	17.4	15.9
Nitrite (as N)	mg/L	0.09	0.02	0.04	0.14	0.20	0.155	0.194	0.295	0.43	0.266	0.054	0.02
Total phosphorus	mg/L	0.09	0.02	0.04	0.03	0.03	0.042	0.027	0.089	< 0.020	< 0.020	0.021	0.023
Orthophosphate (P)	mg/L	0.02	0.02	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals													
Aluminum	mg/L	0.86486	0.24541	0.47067	0.31300	0.16724	0.458	0.231	0.268	0.0761	0.0436	0.0659	0.0281
Arsenic	mg/L	0.02993	0.11237	0.06500	0.07620	0.06010	0.117	0.0671	0.0728	0.0454	0.0441	0.0375	0.0368
Barium	mg/L	0.04710	0.08844	0.06827	0.07790	0.06447	0.0473	0.0663	0.0765	0.0624	0.0679	0.063	0.0679
Cadmium	mg/L	0.00004	0.00007	0.00006	0.00004	0.00008	0.000047	0.000104	0.000114	0.000081	0.00005	0.000073	0.00007
Chromium	mg/L	0.00247	0.00086	0.00123	0.00110	0.00083	0.0013	< 0.0010	< 0.0020	< 0.0010	< 0.0020	< 0.0010	< 0.0020
Copper	mg/L	0.00744	0.00697	0.00555	0.00970	0.00531	0.00593	0.0059	0.0061	0.00474	0.0048	0.00489	0.0048
Iron	mg/L	1.38200	0.47529	1.01917	0.86800	0.37086	1.12	0.466	0.585	0.136	0.081	0.146	0.062
Lead	mg/L	0.00195	0.00566	0.00752	0.00470	0.00319	0.00875	0.0046	0.00441	0.00156	0.00078	0.00148	0.00075
Manganese	mg/L	0.12273	0.33914	0.20467	0.33770	0.28071	0.182	0.408	0.447	0.321	0.142	0.241	0.224
Mercury	mg/L	0.00001	0.00002	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.01834	0.00954	0.00577	0.00820	0.01116	0.0071	0.0095	0.0119	0.0112	0.0124	0.0124	0.0136
Nickel	mg/L	0.01971	0.02683	0.02010	0.02400	0.03141	0.0179	0.0311	0.0347	0.0295	0.031	0.0354	0.0403
Selenium	mg/L	0.00032	0.00039	0.00048	0.00068	0.00100	0.00072	0.00099	0.00108	0.001	0.00106	0.00104	0.00108
Silver	mg/L	0.00003	0.00001	0.00002	0.00003	0.00001	< 0.000020	< 0.000020	< 0.000040	< 0.000020	< 0.000040	< 0.000020	< 0.000040
Thallium	mg/L	0.00003	0.00001	0.00002	0.00002	0.00002	0.000014	0.000019	0.000024	0.000019	0.00002	0.000018	< 0.000020
Zinc	mg/L	0.00639	0.00321	0.00325	0.00510	0.00421	< 0.0050	< 0.0050	< 0.010	< 0.0050	< 0.010	0.007	< 0.010
Dissolved Metals													
Calcium (Dissolved)	mg/L	79.82000	188.43000	136.68333	152.50000	205.71429	106	200	210	203	199	246	276
Magnesium (Dissolved)	mg/L	26.55000	34.51000	34.93333	42.60000	68.02857	33.9	66.2	71.6	65.5	69.1	80.2	89.7
Potassium (Dissolved)	mg/L	16.27000	13.73000	12.87167	19.60000	27.60000	18.3	28.6	30.2	29.9	29.2	27.5	29.5
Sodium (Dissolved)	mg/L	185.67000	140.97000	169.78333	233.00000	342.71429	219	328	352	342	365	375	418

Parameter	Sample date		7/9/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.76	-	8.04	8.06	0.25	-
Turbidity	NTU	0.1	0.1	0.1	1.8	1.6	11.76	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	657	660	0.46	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	769	777	1.03	-
Total alkalinity, as CaCO3	mg/L	1	1	1	120	110	8.70	0.00
TDS	mg/L	10	10	10	1950	1970	1.02	0.00
TDS, calculated	mg/L	1	1	-	1900	1900	0.00	-
TSS	mg/L	1	1	1	6	6	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	660	650	1.53	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00186	0.00171	8.40	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.18	0.18	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	3	3.1	3.28	0.00
Sulfate	mg/L	0.5	0.5	0.5	430	430	0.00	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	1.4	1.4	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	14.6	14.9	2.03	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.406	0.43	5.74	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	15	15.3	1.98	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.02	0.00	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.072	0.0761	5.54	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00221	0.00228	3.12	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0456	0.0454	0.44	0.00
Barium	mg/L	0.001	0.001	0.001	0.0619	0.0624	0.80	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.2	0.194	3.05	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000077	0.000081	5.06	0.00
Calcium (total)	mg/L	0.05	0.05	-	171	171	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00385	0.00389	1.03	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0047	0.00474	0.85	0.00
Iron	mg/L	0.01	0.01	0.01	0.136	0.136	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00153	0.00156	1.94	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0211	0.0207	1.91	0.00

Parameter	Sample date		7/9/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Magnesium (total)	mg/L	0.05	0.05	-	56.1	56.6	0.89	-
Manganese	mg/L	0.001	0.001	0.001	0.311	0.321	3.16	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0112	0.0112	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0295	0.0295	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	25.3	25.4	0.39	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.001	0.001	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	1.33	1.31	1.52	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	300	303	1.00	-
Strontium	mg/L	0.001	0.001	0.001	1.28	1.25	2.37	0.00
Sulphur	mg/L	3	3	-	131	130	0.77	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000018	0.000019	5.41	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00899	0.00906	0.78	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.00025	0.00023	8.33	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0137	0.0138	0.73	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0027	0.0027	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0471	0.0475	0.85	0.00
Barium	mg/L	0.001	0.001	0.001	0.0716	0.0732	2.21	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.24	0.24	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000079	0.000101	24.44	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	201	203	0.99	-
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00369	0.00374	1.35	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00501	0.00499	0.40	0.00
Iron	mg/L	0.005	0.0068	0.005	0.01	0.01	0.00	30.51
Lead	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0271	0.0267	1.49	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	65.1	65.5	0.61	-
Manganese	mg/L	0.001	0.001	0.001	0.272	0.275	1.10	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0125	0.0126	0.80	0.00

Parameter	Sample date		7/9/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Nickel	mg/L	0.001	0.001	0.001	0.0337	0.0342	1.47	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	29.3	29.9	2.03	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00114	0.00119	4.29	0.00
Silicon	mg/L	0.1	0.1	0.1	1.44	1.46	1.38	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	344	342	0.58	-
Strontium	mg/L	0.001	0.001	0.001	1.45	1.47	1.37	0.00
Sulphur	mg/L	3	3	-	145	149	2.72	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000022	0.000024	8.70	0.00
Tin	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0105	0.0105	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00
% Exceedance*							0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-22	Sample date	Annual Average						5/28/2023	6/18/2023	6/25/2023	7/9/2023	8/6/2023	9/10/2023	10/1/2023
Parameter	Units	2018	2019	2020	2021	2022	2023	C3F6933	C3J0093	C3I4126	C3K8721	C3O1109	C3S4348	C3V0890
Field Measured														
Temperature	°C	-	7.13	11.54	7.76	9.00	7.81	1.9	8	9.5	9	16	7.1	3.2
pH	pH units	-	7.56	7.78	8.14	7.48	7.67	7.9	8.04	8	7.88	6.3	7.85	7.74
Conductivity	uS/cm	-	5591.57	5327.00	2896.08	6472.00	6,209.86	2742	3393	3650	5711	12540	8883	6550
Dissolved oxygen	mg/L	-	11.58	9.91	11.60	34.57	11.30	14.08	10.6	11.83	-	6.3	12.01	12.96
Dissolved oxygen	%	-	102.40	89.48	96.22	431.10	896.90	102.4	90.6	104.8	5711	67	102.5	100
Conventional Parameters														
pH	pH units	7.51	7.65	7.70	7.91	7.72	7.78	7.77	7.93	7.9	7.74	7.58	7.81	7.74
Turbidity	NTU	4.19	3.83	2.94	2.22	1.10	3.30	1.2	1	1	0.4	13	3.8	2.7
Hardness, as CaCO3	mg/L	2172.43	1285.57	1087.88	852.50	1418.00	1,350.71	627	795	843	1330	2410	1790	1660
Total alkalinity, as CaCO3	mg/L	65.43	60.00	73.88	94.67	74.00	90.14	74	77	78	83	89	110	120
TDS	mg/L	5335.36	3468.57	2889.38	2223.33	3213.00	3,477.14	1740	2240	2410	3610	6240	4080	4020
TDS, calculated	mg/L	-	-	-	2166.67	2917.00	3,085.71	1400	1700	1900	3200	5400	4100	3900
TSS	mg/L	12.64	6.43	8.13	5.00	4.00	8.43	9	3	1	6	16	10	14
Major Ions														
Chloride	mg/L	2895.71	1590.00	1327.50	1023.33	1455.00	1,480.00	610	710	840	1600	2700	2000	1900
Cyanide	mg/L	0.01	0.01	0.01	0.01	0.00	0.00	0.00143	0.00282	0.0008	0.00091	0.00156	0.00139	0.00119
Fluoride	mg/L	0.10	0.10	0.11	0.12	0.08	0.10	< 0.10	0.12	0.11	0.12	0.15	< 0.10	0.11
Silica	mg/L	-	-	-	1.71	1.69	3.26	1.3	1.3	2.3	9.6	3.1	3.6	1.6
Sulfate	mg/L	297.43	240.00	213.88	285.00	398.00	455.71	200	290	290	430	690	700	590
Nutrients and Chlorophyll a														
Ammonia Nitrogen (as N)	mg/L	18.18	10.73	7.61	3.88	1.04	2.47	1.6	2.1	0.99	1.2	4.4	3.7	3.3
Nitrate (as N)	mg/L	28.58	15.66	19.08	12.13	4.64	5.57	3.37	7.29	7.8	6.21	1.85	5.58	6.88
Nitrite (as N)	mg/L	0.40	0.22	0.47	0.28	0.08	0.09	0.044	0.086	0.081	0.069	0.14	0.07	0.119
Total phosphorus	mg/L	0.04	0.04	0.03	0.02	0.02	0.03	0.042	0.023	0.023	0.059	0.042	0.021	0.029
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals														
Aluminum	mg/L	0.11182	0.08091	0.15640	0.03765	0.02380	0.05563	0.0758	0.0166	0.0094	0.0326	0.069	0.11	0.076
Arsenic	mg/L	0.00483	0.00406	0.01172	0.00692	0.00498	0.00506	0.00425	0.00486	0.00404	0.00355	0.00849	0.0053	0.00493
Barium	mg/L	0.20231	0.09297	0.08998	0.06870	0.10190	0.08896	0.0435	0.0573	0.0626	0.0946	0.172	0.1	0.0927
Cadmium	mg/L	0.00031	0.00014	0.00010	0.00005	0.00004	0.00003	0.000029	0.000022	0.00002	0.000028	< 0.000050	0.000057	0.00006
Chromium	mg/L	0.00642	0.00314	0.00288	0.00092	0.00130	0.00157	< 0.0010	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050
Copper	mg/L	0.01398	0.00413	0.00369	0.00315	0.00386	0.00329	0.00221	0.0023	0.0023	0.0031	0.0046	0.0044	0.0041
Iron	mg/L	0.31382	0.23971	0.32888	0.15883	0.22100	0.64114	0.382	0.232	0.13	0.184	2.33	0.632	0.598
Lead	mg/L	0.00158	0.00079	0.00132	0.00030	0.00029	0.00035	0.00035	< 0.00040	< 0.00040	< 0.00040	< 0.0010	< 0.0010	< 0.0010
Manganese	mg/L	0.25662	0.16094	0.29361	0.17250	0.39600	0.52276	0.385	0.0877	0.0366	0.129	1.22	1.1	0.701
Mercury	mg/L	0.00004	0.00001	0.00004	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00718	0.00363	0.00445	0.00557	0.00520	0.00490	0.0037	0.0049	0.0042	0.0052	0.0082	0.0056	< 0.0050
Nickel	mg/L	0.02365	0.01876	0.01898	0.01640	0.02360	0.02640	0.0156	0.0146	0.0129	0.0191	0.0367	0.0428	0.0431
Selenium	mg/L	0.00072	0.00033	0.00036	0.00055	0.00028	0.00036	0.00017	0.00069	0.00063	0.00031	< 0.00050	< 0.00050	< 0.00050
Silver	mg/L	0.00020	0.00007	0.00006	0.00002	0.00003	0.00003	< 0.000020	< 0.000040	< 0.000040	< 0.000040	< 0.00010	< 0.00010	< 0.00010
Thallium	mg/L	0.00017	0.00007	0.00006	0.00004	0.00005	0.00003	0.000022	0.000034	0.00004	0.000035	< 0.000050	< 0.000050	< 0.000050
Zinc	mg/L	0.03629	0.01579	0.01403	0.00625	0.00670	0.01250	< 0.0050	< 0.010	< 0.010	< 0.010	0.045	< 0.025	< 0.025
Dissolved Metals														
Calcium (Dissolved)	mg/L	613.16000	364.43000	308.65000	224.33333	379.00000	416.14286	207	226	263	424	715	537	541
Magnesium (Dissolved)	mg/L	130.24000	84.07000	75.43000	63.03333	87.60000	104.90000	43.4	55.2	68.7	104	185	136	142
Potassium (Dissolved)	mg/L	55.16000	33.39000	32.96000	34.35000	36.50000	41.91429	18.8	30.4	34.8	42.2	66.8	48.9	51.5
Sodium (Dissolved)	mg/L	791.58000	540.29000	472.75000	414.00000	470.00000	522.28571	237	312	362	533	961	611	640

Parameter	Sample date		8/6/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		6.45	-	7.6	7.58	0.26	-
Turbidity	NTU	0.1	0.1	0.1	13	13	0.00	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	2370	2410	1.67	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	2490	2550	2.38	-
Total alkalinity, as CaCO3	mg/L	1	1.4	1	93	89	4.40	33.33
TDS	mg/L	10	10	10	6000	6240	3.92	0.00
TDS, calculated	mg/L	1	1	-	5400	5400	0.00	-
TSS	mg/L	1	1	1	18	16	11.76	0.00
Major Ions								
Chloride	mg/L	1	1	1	2700	2700	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0015	0.00156	3.92	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.14	0.15	6.90	0.00
Silica	mg/L	0.05	0.05	0.05	2.9	3.1	6.67	0.00
Sulfate	mg/L	0.5	0.5	0.5	700	690	1.44	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	4.5	4.4	2.25	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	1.83	1.85	1.09	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.147	0.14	4.88	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	1.98	1.99	0.50	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.042	70.97	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.075	0.069	8.33	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0025	0.0025	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00834	0.00849	1.78	0.00
Barium	mg/L	0.001	0.001	0.001	0.171	0.172	0.58	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.005	0.005	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.51	0.53	3.85	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000052	0.00005	3.92	0.00
Calcium (total)	mg/L	0.05	0.05	-	666	673	1.05	-
Chromium	mg/L	0.001	0.001	0.001	0.005	0.005	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0039	0.0041	5.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0047	0.0046	2.15	0.00
Iron	mg/L	0.01	0.01	0.01	2.33	2.33	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.379	0.384	1.31	0.00

Parameter	Sample date		8/6/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Magnesium (total)	mg/L	0.05	0.05	-	171	176	2.88	-
Manganese	mg/L	0.001	0.001	0.001	1.19	1.22	2.49	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0084	0.0082	2.41	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0356	0.0367	3.04	0.00
Potassium (total)	mg/L	0.05	0.05	-	64.3	64.3	0.00	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	1.72	1.67	2.95	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.0001	0.0001	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	894	906	1.33	-
Strontium	mg/L	0.001	0.001	0.001	11.1	11.2	0.90	0.00
Sulphur	mg/L	3	3	-	217	212	2.33	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00005	0.00005	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00907	0.00922	1.64	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.045	0.045	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.015	0.015	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0025	0.0025	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.005	0.00495	1.01	0.00
Barium	mg/L	0.001	0.001	0.001	0.174	0.18	3.39	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.005	0.005	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.52	0.55	5.61	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000052	0.00005	3.92	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	694	715	2.98	-
Chromium	mg/L	0.001	0.001	0.001	0.005	0.005	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.004	0.004	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.004	0.0039	2.53	0.00
Iron	mg/L	0.005	0.005	0.005	0.495	0.531	7.02	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.395	0.4	1.26	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	183	185	1.09	-
Manganese	mg/L	0.001	0.001	0.001	1.22	1.26	3.23	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0083	0.0084	1.20	0.00

Parameter	Sample date		8/6/2023					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Nickel	mg/L	0.001	0.001	0.001	0.0345	0.037	6.99	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	66.3	66.8	0.75	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
Silicon	mg/L	0.1	0.1	0.1	1.55	1.52	1.95	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.0001	0.0001	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	936	961	2.64	-
Strontium	mg/L	0.001	0.001	0.001	11.8	11.8	0.00	0.00
Sulphur	mg/L	3	3	-	240	223	7.34	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00005	0.00005	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00927	0.00963	3.81	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.025	0.025	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.039	0.039	0.00	0.00
Zirconium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00
% Exceedance*							0%	0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

MEL-23	Sample date	Annual Average					5/28/2023	6/18/2023	6/25/2023	7/9/2023	8/6/2023	9/10/2023	10/1/2023
Parameter	Units	2019	2020	2021	2022	2023	C3F7062	C3J0137	C3J4154	C3K8950	C3O1100	C3S4280	C3U9580
Field Measured													
Temperature	°C	10.97	11.41	5.08	9.50	9.93	2.1	9.3	11.8	12.4	21.8	8	4.1
pH	pH units	7.69	7.88	7.97	7.74	7.97	7.82	8.07	7.96	8.09	7.2	8.27	8.39
Conductivity	uS/cm	276.93	4688.86	5400.00	4561.00	4,692.43	787	986	1247	1714	11444	8145	8524
Dissolved oxygen	mg/L	9.84	8.87	9.86	10.25	8.60	13.53	10.98	9.62	0	2.2	11.16	12.71
Dissolved oxygen	%	87.00	78.80	78.75	80.70	85.10	98.3	93	89.2	90.6	27	97.1	100.5
Conventional Parameters													
pH	pH units	7.83	7.95	7.93	7.87	7.90	7.65	7.83	7.96	7.76	7.92	8.07	8.12
Turbidity	NTU	0.60	30.14	18.77	2.40	2.00	5.8	2.8	1.7	0.8	0.3	1.7	0.9
Hardness, as CaCO3	mg/L	79.50	679.14	681.83	762.00	546.71	140	173	210	303	491	1190	1320
Total alkalinity, as CaCO3	mg/L	41.33	158.57	115.17	116.00	101.00	36	54	61	76	100	180	200
TDS	mg/L	210.00	2521.43	1994.17	2387.00	2,111.43	470	565	745	1020	1670	4770	5540
TDS, calculated	mg/L	-	-	2766.67	2526.00	1,998.57	380	520	640	950	1600	4600	5300
TSS	mg/L	1.33	42.14	21.17	9.00	6.86	14	4	4	16	2	6	2
Major Ions													
Chloride	mg/L	50.00	1107.14	736.67	960.00	818.57	130	170	210	340	580	2000	2300
Cyanide	mg/L	0.01	0.01	0.02	0.00	0.00	0.0005	0.00069	< 0.00050	< 0.00050	0.00062	0.0019	< 0.00050
Fluoride	mg/L	0.10	0.26	0.20	0.21	0.19	< 0.10	0.1	0.12	0.15	0.21	0.32	0.38
Silica	mg/L	-	-	5.27	3.60	1.97	0.68	1.2	1	1.1	1.8	4.1	3.9
Sulfate	mg/L	5.33	351.29	485.00	572.00	398.86	82	130	160	230	360	900	930
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)	mg/L	0.08	5.33	9.38	5.00	0.67	0.65	0.42	0.41	0.37	0.41	1.5	0.91
Nitrate (as N)	mg/L	0.10	8.64	18.91	16.81	6.25	1.65	2.46	3.39	4.53	7.6	12.3	11.8
Nitrite (as N)	mg/L	0.01	0.31	0.22	0.44	0.15	0.022	0.034	0.049	0.067	0.117	0.418	0.375
Total phosphorus	mg/L	0.02	0.14	0.04	0.02	0.02	0.052	< 0.020	< 0.020	0.021	< 0.020	< 0.020	< 0.020
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals													
Aluminum	mg/L	0.00963	1.33829	0.32533	0.18000	0.12653	0.303	0.195	0.084	0.181	0.0197	0.068	0.035
Arsenic	mg/L	0.00191	0.02077	0.01039	0.00949	0.01163	0.012	0.011	0.0106	0.0139	0.0147	0.00925	0.00996
Barium	mg/L	0.02273	0.09450	0.05442	0.05320	0.03250	0.0127	0.0167	0.0178	0.0253	0.0416	0.0567	0.0567
Cadmium	mg/L	0.00004	0.00006	0.00007	0.00010	0.00007	0.000026	0.000021	0.000023	0.000035	0.000057	0.000112	0.000181
Chromium	mg/L	0.00100	0.00540	0.00113	0.00110	0.00121	0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0050	< 0.0050
Copper	mg/L	0.00096	0.00732	0.01048	0.00466	0.00384	0.00221	0.0022	0.00193	0.00252	0.0033	0.0073	0.0074
Iron	mg/L	0.19267	2.28529	0.63717	0.28800	0.20943	0.51	0.295	0.126	0.345	< 0.020	0.121	0.059
Lead	mg/L	0.00020	0.00263	0.00171	0.00076	0.00060	0.00134	0.00071	0.00036	0.00059	< 0.00040	< 0.0010	< 0.0010
Manganese	mg/L	0.00870	0.40727	0.39850	0.41800	0.16887	0.0857	0.0748	0.0741	0.0709	0.0716	0.433	0.372
Mercury	mg/L	0.00001	0.00005	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00010
Molybdenum	mg/L	0.00143	0.01463	0.01030	0.01000	0.00704	0.0021	0.0032	0.0038	0.0051	0.007	0.0139	0.0142
Nickel	mg/L	0.00150	0.06100	0.06252	0.06780	0.04551	0.0151	0.018	0.0207	0.0289	0.044	0.0979	0.094
Selenium	mg/L	0.00010	0.00125	0.00137	0.00142	0.00076	0.00024	0.00035	0.00041	0.00055	0.00086	0.00147	0.00141
Silver	mg/L	0.00002	0.00005	0.00002	0.00002	0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000040	< 0.00010	< 0.00010
Strontium	mg/L	0.13267	1.25386	1.23150	-	-	0.223	0.294	0.352	0.512	0.821	1.84	2.03
Thallium	mg/L	0.00001	0.00005	0.00003	0.00002	0.00002	0.00001	< 0.000010	0.00001	0.000014	0.000022	< 0.000050	< 0.000050
Zinc	mg/L	0.00500	0.01484	0.00417	0.00550	0.00571	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.025	< 0.025
Dissolved Metals													
Calcium (Dissolved)	mg/L	22.87000	119.17000	142.93333	159.60000	107.41429	28.6	43.5	51.2	72.6	107	217	232
Magnesium (Dissolved)	mg/L	5.63000	89.70000	75.30000	90.40000	74.98571	15.5	21	26.4	36.4	58.6	168	199
Potassium (Dissolved)	mg/L	1.92000	40.19000	39.58333	41.90000	29.33286	6.52	9.31	12.1	17	25.7	63.1	71.6
Sodium (Dissolved)	mg/L	19.77000	624.71000	414.83333	536.00000	465.15714	88.1	108	135	193	332	1070	1330

MEL-24	Sample date	Annual Average	7/28/2023	10/1/2023
Parameter	Units	2023	C3N4905	C3U9589
Field Measured				
Temperature	°C	11.85	15	8.7
pH	pH units	8.25	8.54	7.95
Conductivity	uS/cm	5,965.50	5032	6899
Dissolved oxygen	mg/L	9.12	7.15	11.08
Dissolved oxygen	%	84.75	72	97.5
Conventional Parameters				
pH	pH units	7.34	7.27	7.4
Turbidity	NTU	17.45	5.9	29
Hardness, as CaCO3	mg/L	1,440.00	1240	1640
Total alkalinity, as CaCO3	mg/L	140.00	110	170
TDS	mg/L	4,075.00	3320	4830
TDS, calculated	mg/L	4,100.00	3300	4900
TSS	mg/L	41.00	27	55
Major Ions				
Chloride	mg/L	1,230.00	860	1600
Cyanide	mg/L	0.06	0.0975	0.0284
Fluoride	mg/L	0.20	0.16	0.23
Silica	mg/L	15.00	11	19
Sulfate	mg/L	1,400.00	1300	1500
Nutrients and Chlorophyll a				
Ammonia Nitrogen (as N)	mg/L	31.00	36	26
Nitrate (as N)	mg/L	0.62	< 0.10	1.18
Nitrite (as N)	mg/L	0.06	0.022	0.095
Orthophosphate (P)	mg/L	0.02	0.022	0.027
Total Metals				
Aluminum	mg/L	0.21250	0.165	0.26
Arsenic	mg/L	0.23650	0.161	0.312
Barium	mg/L	0.06270	0.0582	0.0672
Cadmium	mg/L	0.00016	0.000167	0.00015
Chromium	mg/L	0.00595	0.0066	0.0053
Copper	mg/L	0.02505	0.0249	0.0252
Iron	mg/L	1.11350	0.267	1.96
Lead	mg/L	0.00877	0.00443	0.0131
Manganese	mg/L	0.24195	0.0389	0.445
Mercury	mg/L	0.00003	< 0.00010	< 0.00001
Molybdenum	mg/L	0.11780	0.145	0.0906
Nickel	mg/L	0.03010	0.0256	0.0346
Selenium	mg/L	0.00554	0.00838	0.0027
Silver	mg/L	0.00006	0.000066	< 0.00010
Thallium	mg/L	0.00002	< 0.000020	< 0.000050
Zinc	mg/L	0.17650	0.078	0.275
Dissolved Metals				
Calcium (Dissolved)	mg/L	576.00000	481	671
Magnesium (Dissolved)	mg/L	34.93000	9.46	60.4
Potassium (Dissolved)	mg/L	166.50000	148	185
Sodium (Dissolved)	mg/L	589.00000	416	762

MEL-25	MEL-25	MEL-25	Sample date	Annual Average						7/14/2023	9/13/2023
Parameter	MAX GRAB	MAX MEAN	Units	2018	2019	2020	2021	2022	2023	C3L7711	C3T0538
Field Measured											
Temperature			°C	-	17.88	4.60	6.68	11.80	6.70	7.8	5.6
pH	6 - 9.5	6 - 9.5	pH units	-	7.89	7.97	8.05	7.37	8.13	8.2	8.06
Conductivity			uS/cm	-	257.95	265.65	186.48	347.30	680.50	755	606
Dissolved oxygen			mg/L	-	11.15	12.77	10.09	9.31	11.39	10.3	12.47
Dissolved oxygen			%	-	94.30	104.20	92.37	86.30	93.05	86.7	99.4
Conventional Parameters											
pH	6 - 9.5	6 - 9.5	pH units	8.13	7.90	7.82	7.93	8.03	8.00	8.15	7.85
TSS	30	15	mg/L	33.57	2.50	4.50	1.25	2.00	0.50	< 1	< 1
Nutrients and Chlorophyll a											
Ammonia Nitrogen (as N)			mg/L	7.02	0.12	0.43	0.04	0.03	0.03	< 0.050	< 0.050
General Organics											
Total oil and grease	5	5	mg/L	0.60	0.85	0.70	0.25	0.25	1.10	1.1	1.1
Total Metals											
Arsenic			mg/L	0.00100	0.00072	0.00195	0.00086	0.00142	0.00140	0.00114	0.00165
Copper			mg/L	0.00969	0.00297	0.00314	0.00183	0.00246	0.00340	0.00228	0.00452
Lead	0.1	0.1	mg/L	0.00084	0.00023	0.00049	0.00010	0.00019	0.00010	< 0.00020	< 0.00020
Nickel			mg/L	0.01137	0.00390	0.00405	0.00273	0.00330	0.00370	0.0021	0.0053
Volatile Organics											
Benzene	0.37	0.37	mg/L	0.00020	0.00020	0.00020	0.00010	0.00010	0.00010	< 0.00020	< 0.00020
Ethylbenzene	0.09	0.09	mg/L	0.00023	0.00020	0.00020	0.00010	0.00010	0.00010	< 0.00020	< 0.00020
Toluene	0.002	0.002	mg/L	0.00035	0.00020	0.00020	0.00013	0.00015	0.00010	< 0.00020	< 0.00020
Xylenes			mg/L	0.00031	0.00040	0.00040	0.00020	0.00020	0.00020	< 0.00040	< 0.00040
F1 (C6-C10)-BTEX			mg/L	0.02500	0.02500	0.02500	0.01250	-	-	< 0.025	< 0.025
F1 (C6-C10)			mg/L	0.02500	0.02500	0.02500	0.01250	0.01300	0.01250	< 0.025	< 0.025
F2 (C10-C16)			mg/L	0.10000	0.10000	0.10000	0.05000	0.05000	0.05000	< 0.1	< 0.1
F3 (C16-C34)			mg/L	0.20000	0.20000	0.20000	0.10000	0.10000	0.10000	< 0.2	< 0.2
F4 (C34-C50)			mg/L	0.20000	0.20000	0.20000	0.10000	0.10000	0.10000	< 0.2	< 0.2

MEL-SR1	MEL-SR	MEL-SR	Sample date	Annual Average	5/7/2023	6/7/2023	6/7/2023	8/12/2023	9/6/2023	10/6/2023	11/5/2023
Parameter	MAX GRAB	MAX MEAN	Unit	2023		AM	PM				
Field Measured											
Temperature			°C	4.4	0.6	2.8	2.8	11.9	10.3	1.4	0.9
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.56	7.84	7.6	7.6	7.37	7.65	7.74	7.14
Conductivity			uS/cm	2,036.8	177.5	586	586	2220	1873	2545	6270
Dissolved oxygen			mg/L	20.62	15.46	18.92	18.92	60.6	9.56	12.03	8.83
Dissolved oxygen			%	91.51	108.2	140.2	140.2	6.49	85.8	86.4	73.3
Turbidity			NTU	90.30	55	283	283	0.49	0.82	0.44	9.38
Conventional Parameters											
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.79	7.39	7.83	7.92	7.81	7.95	8.04	7.62
Turbidity			NTU	3.6	6.9	8.8	2.8	0.9	0.3	0.2	5.1
Hardness, as CaCO3			mg/L	525.7	-	228	183	509	496	648	1090
Total alkalinity, as CaCO3			mg/L	168	22	74	120	250	190	230	290
TDS			mg/L	1,218	50	390	375	1310	1240	1630	3530
TDS, calculated			mg/L	1,287	-	310	310	1200	1000	1500	3400
TSS	100	50	mg/L	341	48	2300	13	8	< 1	2	14
Major Ions											
Chloride			mg/L	417	8	58	56	480	310	510	1500
Cyanide			mg/L	0.00040	-	< 0.00050	< 0.00050	0.00057	< 0.00050	< 0.00050	0.00081
Fluoride			mg/L	0.12	< 0.10	< 0.10	0.11	0.18	0.14	0.14	0.17
Silica			mg/L	4.78	-	1.7	2.1	5.3	5.9	5.7	8
Sulfate			mg/L	226	-	100	73	150	270	300	460
Nutrients and Chlorophyll a											
Ammonia Nitrogen (as N)			mg/L	0.581	0.11	0.055	< 0.050	< 0.050	< 0.050	< 0.050	3.8
Nitrate (as N)			mg/L	0.72	< 0.10	0.18	< 0.10	0.42	0.38	0.46	3.48
Nitrite (as N)			mg/L	0.016	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.081
Total phosphorus			mg/L	0.106	0.12	0.5	0.031	< 0.020	< 0.020	< 0.020	0.059
Orthophosphate (P)			mg/L	0.006	0.011	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
General Organics											
Total oil and grease			mg/L	1.18	2.1	2.3	1.1	1.2	0.5	< 0.50	0.8
Total Metals											
Aluminum			mg/L	2.1496	-	12.4	0.301	0.0175	0.0124	0.0408	0.126
Arsenic			mg/L	0.00610	-	0.0159	0.00268	0.00311	0.00224	0.00329	0.00935
Barium			mg/L	0.0888	-	0.141	0.0326	0.0926	0.068	0.0823	0.116
Cadmium			mg/L	0.000066	-	0.000084	0.000013	0.000038	0.000021	0.000028	0.000212
Chromium			mg/L	0.0114	-	0.0637	0.002	< 0.0010	< 0.0010	< 0.0010	< 0.0020
Copper			mg/L	0.01088	-	0.0451	0.00395	0.00409	0.00332	0.00369	0.0051
Iron			mg/L	3.751	-	19.9	0.663	0.33	0.056	0.308	1.25
Lead			mg/L	0.00142	-	0.00772	0.00031	< 0.00020	< 0.00020	< 0.00020	< 0.00040
Manganese			mg/L	0.2802	-	0.285	0.0205	0.049	0.0128	0.014	1.3
Mercury			mg/L	0.000005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0009	-	< 0.0020	0.002	< 0.0010	< 0.0010	< 0.0010	< 0.0020
Nickel			mg/L	0.0475	-	0.0421	0.0057	0.0221	0.0182	0.0327	0.164
Selenium			mg/L	0.00009	-	< 0.00020	< 0.00010	0.00013	0.00011	< 0.00010	< 0.00020
Silver			mg/L	0.000019	-	0.000053	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000040
Thallium			mg/L	0.000041	-	0.000177	< 0.000010	0.000025	0.000013	0.000014	< 0.000020
Zinc			mg/L	0.1029	-	0.121	0.0089	0.257	0.0705	0.147	0.013
Dissolved Metals											
Calcium (Dissolved)			mg/L	156.2	-	60.8	64.2	157	166	197	292
Magnesium (Dissolved)			mg/L	47.05	-	9.25	9.94	40.6	34.8	52.7	135
Potassium (Dissolved)			mg/L	17.02	-	5.66	6.46	17.1	14.8	18.7	39.4
Sodium (Dissolved)			mg/L	238.9	-	32.4	30	196	140	250	785

MEL-SR11	MEL-SR	MEL-SR	Sample date	Annual Average	8/12/2023
Parameter	MAX GRAB	MAX MEAN	Unit	2023	C3O9112
Field Measured					
Temperature			°C	19.1	19.1
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.17	8.17
Conductivity			uS/cm	1,791.0	1791
Dissolved oxygen			mg/L	100.00	100
Dissolved oxygen			%	9.21	9.21
Turbidity			NTU	0.50	0.5
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.08	8.08
Turbidity			NTU	0.2	0.2
Hardness, as CaCO3			mg/L	407.0	407
Total alkalinity, as CaCO3			mg/L	160	160
TDS			mg/L	-	1110
TDS, calculated			mg/L	1,000	1000
TSS	100	50	mg/L	3	3
Major Ions					
Chloride			mg/L	260	260
Cyanide			mg/L	-	-
Fluoride			mg/L	0.38	0.38
Silica			mg/L	3.30	3.3
Sulfate			mg/L	330	330
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.025	< 0.050
Nitrate (as N)			mg/L	1.80	1.8
Nitrite (as N)			mg/L	0.005	< 0.010
Total phosphorus			mg/L	0.010	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010
General Organics					
Total oil and grease			mg/L	0.90	0.9
Total Metals					
Aluminum			mg/L	0.0126	0.0126
Arsenic			mg/L	0.00186	0.00186
Barium			mg/L	0.0393	0.0393
Cadmium			mg/L	0.000014	0.000014
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00284	0.00284
Iron			mg/L	0.034	0.034
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0065	0.0065
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0094	0.0094
Nickel			mg/L	0.0054	0.0054
Selenium			mg/L	0.00040	0.0004
Silver			mg/L	0.000010	< 0.000020
Thallium			mg/L	0.000024	0.000024
Zinc			mg/L	0.0025	< 0.0050
Dissolved Metals					
Calcium (Dissolved)			mg/L	106.0	106
Magnesium (Dissolved)			mg/L	44.60	44.6
Potassium (Dissolved)			mg/L	18.40	18.4
Sodium (Dissolved)			mg/L	175.0	175

MEL-SR17	MEL-SR	MEL-SR	Sample date	Annual Average	5/25/2023
Parameter	MAX GRAB	MAX MEAN	Unit	2023	C3F6651
Field Measured					
Temperature			°C	4.7	4.7
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.06	8.06
Conductivity			uS/cm	58.2	58.2
Dissolved oxygen			mg/L	14.64	14.64
Dissolved oxygen			%	113.70	113.7
Turbidity			NTU	17.90	17.9
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.22	7.22
Turbidity			NTU	4.9	4.9
Hardness, as CaCO3			mg/L	13.9	13.9
Total alkalinity, as CaCO3			mg/L	11	11
TDS			mg/L	-	25
TDS, calculated			mg/L	20	20
TSS	100	50	mg/L	11	11
Major Ions					
Chloride			mg/L	1	< 1.0
Cyanide			mg/L	0.00058	0.00058
Fluoride			mg/L	0.05	< 0.10
Silica			mg/L	3.40	3.4
Sulfate			mg/L	6	5.9
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.025	< 0.050
Nitrate (as N)			mg/L	0.05	< 0.10
Nitrite (as N)			mg/L	0.005	< 0.010
Total phosphorus			mg/L	0.025	0.025
Orthophosphate (P)			mg/L	0.005	< 0.010
General Organics					
Total oil and grease			mg/L	2.60	2.6
Total Metals					
Aluminum			mg/L	0.2620	0.262
Arsenic			mg/L	0.01100	0.011
Barium			mg/L	0.0103	0.0103
Cadmium			mg/L	0.000005	< 0.000010
Chromium			mg/L	0.0096	0.0096
Copper			mg/L	0.00303	0.00303
Iron			mg/L	0.523	0.523
Lead			mg/L	0.00185	0.00185
Manganese			mg/L	0.0195	0.0195
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0086	0.0086
Nickel			mg/L	0.0384	0.0384
Selenium			mg/L	0.00005	< 0.00010
Silver			mg/L	0.000010	< 0.000020
Thallium			mg/L	0.000005	< 0.000010
Zinc			mg/L	0.0025	< 0.0050
Dissolved Metals					
Calcium (Dissolved)			mg/L	4.7	4.73
Magnesium (Dissolved)			mg/L	0.60	0.604
Potassium (Dissolved)			mg/L	0.75	0.753
Sodium (Dissolved)			mg/L	1.3	1.28

MEL-SR18	MEL-SR	MEL-SR	Sample date	Annual	5/27/2023
Parameter	MAX GRAB	MAX MEAN	Unit	Average	
Field Measured					
Temperature			°C	3.1	3.1
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.82	7.82
Conductivity			uS/cm	63.8	63.8
Dissolved oxygen			mg/L	17.86	17.86
Dissolved oxygen			%	133.10	133.1
Turbidity			NTU	5.06	5.06
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	6.87	6.87
Turbidity			NTU	3.4	3.4
Hardness, as CaCO3			mg/L	14.4	14.4
Total alkalinity, as CaCO3			mg/L	9	8.9
TDS			mg/L	-	50
TDS, calculated			mg/L	27	27
TSS	100	50	mg/L	3	3
Major Ions					
Chloride			mg/L	1	1.2
Cyanide			mg/L	0.00025	< 0.00050
Fluoride			mg/L	0.05	< 0.10
Silica			mg/L	0.19	0.19
Sulfate			mg/L	10	10
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.025	< 0.050
Nitrate (as N)			mg/L	0.11	0.11
Nitrite (as N)			mg/L	0.005	< 0.010
Total phosphorus			mg/L	0.023	0.023
Orthophosphate (P)			mg/L	0.005	< 0.010
General Organics					
Total oil and grease			mg/L	1.30	1.3
Total Metals					
Aluminum			mg/L	0.1640	0.164
Arsenic			mg/L	0.00249	0.00249
Barium			mg/L	0.0099	0.0099
Cadmium			mg/L	0.000034	0.000034
Chromium			mg/L	0.0011	0.0011
Copper			mg/L	0.00239	0.00239
Iron			mg/L	0.215	0.215
Lead			mg/L	0.00042	0.00042
Lithium			mg/L	-	< 0.0020
Manganese			mg/L	0.0095	0.0095
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0011	0.0011
Nickel			mg/L	0.0040	0.004
Selenium			mg/L	0.00005	< 0.00010
Silver			mg/L	0.000010	< 0.000020
Thallium			mg/L	0.000005	< 0.000010
Zinc			mg/L	0.0025	< 0.0050
Dissolved Metals					
Calcium (Dissolved)			mg/L	5.2	5.16
Magnesium (Dissolved)			mg/L	0.90	0.897
Potassium (Dissolved)			mg/L	1.51	1.51
Sodium (Dissolved)			mg/L	1.7	1.74

Parameter	Sample date		10/6/2023		
	Unit	MDL	Duplicate	Original	RPD (FD/N)
Conventional Parameters					
pH	pH units		8.17	8.04	1.60
Turbidity	NTU	0.1	0.2	0.2	0.00
Hardness, as CaCO3	mg/L	0.5	623	648	3.93
Hardness, as CaCO3-Dissolved	mg/L	0.5	693	708	2.14
Total alkalinity, as CaCO3	mg/L	1	230	230	0.00
Carbonate, as CaCO3	mg/L	1	3.1	2.4	25.45
Bicarbonate, as CaCO3	mg/L	1	230	230	0.00
TDS	mg/L	10	1410	1630	14.47
TDS, calculated	mg/L	1	1400	1500	6.90
TSS	mg/L	1	1	2	66.67
Major Ions					
Chloride	mg/L	1	470	510	8.16
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00
Fluoride	mg/L	0.1	0.14	0.14	0.00
Silica	mg/L	0.05	5.8	5.7	1.74
Sulfate	mg/L	0.5	300	300	0.00
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.00
Nitrate (as N)	mg/L	0.1	0.46	0.46	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.46	0.46	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.00
General Organics					
Total oil and grease	mg/L	0.5	0.5	0.5	0.00
Total Metals					
Aluminum	mg/L	0.003	0.0352	0.0408	14.74
Antimony	mg/L	0.0005	0.0005	0.0005	0.00
Arsenic	mg/L	0.0001	0.00305	0.00329	7.57
Barium	mg/L	0.001	0.0796	0.0823	3.34
Beryllium	mg/L	0.0001	0.0001	0.0001	0.00
Bismuth	mg/L	0.001	0.001	0.001	0.00
Boron	mg/L	0.05	0.146	0.142	2.78
Cadmium	mg/L	0.00001	0.000024	0.000028	15.38
Calcium (total)	mg/L	0.05	175	182	3.92
Chromium	mg/L	0.001	0.001	0.001	0.00
Cobalt	mg/L	0.0002	0.0003	0.00031	3.28
Copper	mg/L	0.0005	0.00338	0.00369	8.77
Iron	mg/L	0.01	0.275	0.308	11.32
Lead	mg/L	0.0002	0.0002	0.0002	0.00
Lithium	mg/L	0.002	0.0197	0.0205	3.98
Magnesium (total)	mg/L	0.05	45.3	47.2	4.11
Manganese	mg/L	0.001	0.0134	0.014	4.38
Mercury	mg/L	0.00001	0.00001	0.00001	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.00
Nickel	mg/L	0.001	0.0312	0.0327	4.69
Potassium (total)	mg/L	0.05	16.4	16.9	3.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00
Silicon	mg/L	0.1	2.58	2.67	3.43
Silver	mg/L	0.00002	0.00002	0.00002	0.00
Sodium (total)	mg/L	0.05	216	227	4.97
Strontium	mg/L	0.001	0.986	1.03	4.37
Sulphur	mg/L	3	93	98.3	5.54
Thallium	mg/L	0.00001	0.000012	0.000014	15.38
Tin	mg/L	0.005	0.005	0.005	0.00
Titanium	mg/L	0.005	0.005	0.005	0.00
Uranium	mg/L	0.0001	0.00313	0.00327	4.38
Vanadium	mg/L	0.005	0.005	0.005	0.00
Zinc	mg/L	0.005	0.141	0.147	4.17
Zirconium	mg/L	0.0001	0.00013	0.00014	7.41
Dissolved Metals					
Aluminum	mg/L	0.003	0.006	0.006	0.00
Antimony	mg/L	0.0005	0.001	0.001	0.00
Arsenic	mg/L	0.0001	0.0022	0.00229	4.01

Barium	mg/L	0.001	0.0891	0.0924	3.64
Beryllium	mg/L	0.0001	0.0002	0.0002	0.00
Bismuth	mg/L	0.001	0.002	0.002	0.00
Boron	mg/L	0.05	0.16	0.16	0.00
Cadmium	mg/L	0.00001	0.00002	0.00002	0.00
Calcium (Dissolved)	mg/L	0.05	192	197	2.57
Chromium	mg/L	0.001	0.002	0.002	0.00
Cobalt	mg/L	0.0002	0.0004	0.0004	0.00
Copper	mg/L	0.0002	0.00265	0.00274	3.34
Iron	mg/L	0.005	0.024	0.024	0.00
Lead	mg/L	0.0002	0.0004	0.0004	0.00
Lithium	mg/L	0.002	0.0235	0.0245	4.17
Magnesium (Dissolved)	mg/L	0.05	52	52.7	1.34
Manganese	mg/L	0.001	0.0127	0.013	2.33
Molybdenum	mg/L	0.001	0.002	0.002	0.00
Nickel	mg/L	0.001	0.0342	0.0351	2.60
Potassium (Dissolved)	mg/L	0.05	18.6	18.7	0.54
Selenium	mg/L	0.0001	0.0002	0.0002	0.00
Silicon	mg/L	0.1	2.96	3.01	1.68
Silver	mg/L	0.00002	0.00004	0.00004	0.00
Sodium (Dissolved)	mg/L	0.05	247	250	1.21
Strontium	mg/L	0.001	1.19	1.2	0.84
Sulphur	mg/L	3	106	108	1.87
Thallium	mg/L	0.00001	0.00002	0.00002	0.00
Tin	mg/L	0.005	0.01	0.01	0.00
Titanium	mg/L	0.005	0.01	0.01	0.00
Uranium	mg/L	0.0001	0.00328	0.00339	3.30
Vanadium	mg/L	0.005	0.01	0.01	0.00
Zinc	mg/L	0.005	0.15	0.152	1.32
Zirconium	mg/L	0.0001	0.0002	0.0002	0.00
% Exceedance*					0%

Footnotes:

RPD = Relative Percent Difference; MDL: Method Detection Limit

All value "<DL" have been replaced by "DL".

* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.

Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.

Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.

Italic values correspond to a RPD higher than 20% and for which one of the result is within 10X the MDL and the other one exceeds 10x the MDL.

		Sample date		
		1/8/2023	5/5/2023	
Parameter		Sample name	A8-BEFORE	A8-AFTER
		Unit		
WQ02- Conventional Parameters				
pH		pH units	7.71	7.76
Conductivity		umhos/cm	660	1000
TSS		mg/L	1	2
WQ06- Total Metals				
Aluminum		mg/L	0.0045	0.0521
Antimony		mg/L	< 0.00050	< 0.00050
Arsenic		mg/L	0.00826	0.0103
Barium		mg/L	0.0724	0.101
Beryllium		mg/L	< 0.00010	< 0.00010
Cadmium		mg/L	< 0.000010	< 0.000010
Chromium		mg/L	< 0.0010	< 0.0010
Cobalt		mg/L	< 0.00020	< 0.00020
Copper		mg/L	0.00166	0.00212
Iron		mg/L	0.032	0.187
Lead		mg/L	< 0.00020	0.00029
Lithium		mg/L	0.0188	0.0330
Manganese		mg/L	0.0152	0.132
Mercury		mg/L	< 0.00001	< 0.00001
Molybdenum		mg/L	< 0.0010	< 0.0010
Nickel		mg/L	0.0021	0.0026
Selenium		mg/L	< 0.00010	< 0.00010
Silver		mg/L	< 0.000020	< 0.000020
Strontium		mg/L	0.569	0.902
Thallium		mg/L	< 0.000010	< 0.000010
Tin		mg/L	< 0.0050	< 0.0050
Titanium		mg/L	< 0.0050	< 0.0050
Uranium		mg/L	0.00025	0.00035
Vanadium		mg/L	< 0.0050	< 0.0050
Zinc		mg/L	< 0.0050	0.0114
WQ07- Dissolved Metals				
Aluminum		mg/L	< 0.0030	< 0.0030
Antimony		mg/L	< 0.00050	< 0.00050
Arsenic		mg/L	0.00704	0.00691
Barium		mg/L	0.0677	0.104
Beryllium		mg/L	< 0.00010	< 0.00010
Cadmium		mg/L	0.000013	< 0.000010
Chromium		mg/L	< 0.0010	< 0.0010
Cobalt		mg/L	< 0.00020	< 0.00020
Copper		mg/L	0.00147	0.00189
Iron		mg/L	0.0088	0.0156
Lead		mg/L	< 0.00020	< 0.00020
Lithium		mg/L	0.0173	0.0333
Manganese		mg/L	0.0043	0.130
Mercury		mg/L	< 0.00001	< 0.00001
Molybdenum		mg/L	< 0.0010	< 0.0010
Nickel		mg/L	0.0016	0.0024
Selenium		mg/L	< 0.00010	0.00011
Silver		mg/L	< 0.000020	< 0.000020
Strontium		mg/L	0.539	0.946
Thallium		mg/L	< 0.000010	< 0.000010
Tin		mg/L	< 0.0050	< 0.0050
Titanium		mg/L	< 0.0050	< 0.0050
Uranium		mg/L	0.00021	0.00036
Vanadium		mg/L	< 0.0050	< 0.0050
Zinc		mg/L	< 0.0050	0.0096