

APPENDIX 19 2024 WATER MONITORING STATIONS RESULTS

Sample date		1/22/2024	1/22/2024	1/22/2024	5/5/2024
Sample name		A8-BEFORE DRILLING-1	A8-BEFORE DRILLING-2	A8-BEFORE DRILLING-3	A8-AFTER DRILLING
Parameter	Unit				
WQ02- Conventional Parameters					
pH	pH units	7.75	7.72	7.77	8.06
Conductivity	umhos/cm	840	620	620	928
TSS	mg/L	20	1	1	3
WQ06- Total Metals					
Aluminum	mg/L	0.0643	0.0060	0.0034	0.0484
Antimony	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	mg/L	0.0150	0.00810	0.00677	0.0123
Barium	mg/L	0.0841	0.0595	0.0534	0.0892
Beryllium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Cadmium	mg/L	0.000020	0.000050	< 0.000010	< 0.000010
Chromium	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cobalt	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Copper	mg/L	0.00163	0.00126	0.00104	0.00157
Iron	mg/L	0.391	0.074	0.063	0.226
Lead	mg/L	0.00074	0.00025	< 0.00020	0.00070
Lithium	mg/L	0.0225	0.0189	0.0172	0.0290
Manganese	mg/L	0.0490	0.0600	0.0708	0.0503
Mercury	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	mg/L	0.0018	0.0015	0.0013	0.0017
Selenium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Strontium	mg/L	0.671	0.552	0.480	0.752
Thallium	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	mg/L	0.00026	0.00022	0.00016	0.00026
Vanadium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	mg/L	0.0100	< 0.0050	< 0.0050	0.0056
WQ07- Dissolved Metals					
Aluminum	mg/L	< 0.0030	< 0.0030	< 0.0030	0.0036
Antimony	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	mg/L	0.00760	0.00656	0.00631	0.00670
Barium	mg/L	0.0900	0.0584	0.0604	0.0971
Beryllium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Cadmium	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cobalt	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Copper	mg/L	0.00162	0.00108	0.00105	0.00163
Iron	mg/L	0.0145	0.0134	0.0153	0.0124
Lead	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium	mg/L	0.0243	0.0177	0.0182	0.0315
Manganese	mg/L	0.0111	0.0172	0.0377	0.0398
Mercury	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	mg/L	0.0018	0.0014	0.0015	0.0019
Selenium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Strontium	mg/L	0.733	0.534	0.549	0.817
Thallium	mg/L	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	mg/L	0.00027	0.00017	0.00018	0.00030
Vanadium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	mg/L	0.0137	< 0.0050	< 0.0050	0.0052

MEL-03-01	Unit	Annual Average					7/13/2024	9/16/2024	10/6/2024
Parameter		2020	2021	2022	2023	2024	C4L9972	C4T6000	C4V9055
Type									
Field Measured									
Temperature	°C	12.80	8.47	12.94	10.70	8.23	10.80	8.60	5.30
pH	pH units	7.61	7.20	7.42	7.54	7.40	7.65	7.70	6.85
Conductivity	uS/cm	73.25	87.70	83.50	88.43	93.17	86.50	100.40	92.60
Dissolved oxygen	mg/L	10.73	11.85	11.57	10.24	11.68	10.78	10.85	13.42
Dissolved oxygen	%	100.60	104.45	109.07	94.63	99.27	98.00	93.00	106.80
Turbidity	NTU	-	1.08	-	-	1.21	1.65	1.11	0.88
Conventional Parameters									
pH	pH units	7.31	7.43	7.52	7.18	7.52	7.49	7.55	7.51
Dissolved Oxygen	mg/L	10.02	9.78	-	-	10.26	10.20	9.87	10.70
Turbidity	NTU	0.20	0.14	0.17	0.27	0.33	0.30	0.30	0.40
Conductivity	umhos/cm	76.00	80.00	22.93	-	92.13	87.9	92.90	95.60
Hardness, as CaCO3	mg/L	22.17	22.40	18.00	24.17	25.87	25.10	25.50	27.00
Hardness, as CaCO3-Dissolved	mg/L	22.17	22.13	-	-	25.97	24.60	25.90	27.40
Carbonate, as CaCO3	mg/L	1.00	0.50	18.00	0.50	0.50	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3	mg/L	16.33	17.50	41.67	17.67	21.33	22.00	20.00	22.00
TDS	mg/L	38.33	32.50	41.00	58.33	58.33	60.00	50.00	65.00
TDS, calculated	mg/L	-	39.33	0.50	40.00	44.67	44.00	44.00	46.00
TSS	mg/L	1.00	0.63	2.70	0.67	1.17	1.00	< 1	2.00
Total organic carbon	mg/L	2.40	2.43	2.43	2.57	2.87	2.90	2.70	3.00
Dissolved organic carbon	mg/L	2.60	2.25	11.30	2.70	2.70	2.70	2.60	2.80
Major Ions									
Chloride	mg/L	8.80	9.85	0.00	9.30	10.67	10.00	11.00	11.00
Cyanide	mg/L	0.0050	0.0025	0.0015	0.0003	0.0003	< 0.00050	< 0.00050	< 0.00050
Cyanide (free)	mg/L	0.0010	0.0028	0.0005	0.0038	0.0016	0.00	< 0.0020	< 0.0020
Cyanide (WAD)	mg/L	0.0010	0.0007	0.2300	0.0003	0.0005	0.00	< 0.00050	< 0.00050
Fluoride	mg/L	-	0.05	-	-	0.05	< 0.10	< 0.10	< 0.10
Silica	mg/L	0.23	0.38	4.43	0.36	0.38	0.33	0.37	0.44
Sulfate	mg/L	3.37	3.83	0.03	4.40	5.57	5.70	5.70	5.30
Nutrients and Chlorophyll a									
Ammonia Nitrogen (as N)	mg/L	0.08	0.05	0.05	0.03	0.14	< 0.050	< 0.050	0.36
Un-Ionized Ammonia, calculated	mg/L	-	-	-	-	-	< 0.00044	< 0.00041	< 0.0004
Nitrate (as N)	mg/L	0.10	0.05	0.01	0.05	0.05	< 0.10	< 0.10	< 0.10
Nitrite (as N)	mg/L	0.01	0.01	0.18	0.01	0.01	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen	mg/L	0.16	0.18	0.00	0.16	0.22	0.11	0.24	0.32
Total phosphorus (SW6020B or SM4500-PBF)	mg/L	-	0.01	-	-	0.01	< 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
Total Metals									
Aluminum	mg/L	0.00276	0.00458	0.00347	0.00270	0.00493	0.00	0.00	0.01
Antimony	mg/L	0.00002	0.00001	0.00002	0.00009	0.00001	< 0.000020	< 0.000020	< 0.000020
Arsenic	mg/L	0.00025	0.00031	0.00031	0.00034	0.00042	0.00	0.00	0.00
	mg/L	0.00761	0.00799	0.01042	0.00772	0.00851	0.01	0.01	0.01
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00001	< 0.000010	< 0.000010	< 0.000010
Boron	mg/L	0.01000	0.00500	0.00500	0.01167	0.00500	< 0.01	< 0.01	< 0.01
Cadmium	mg/L	0.00001	0.00000	0.00000	0.00000	0.00000	< 0.0000050	< 0.0000050	< 0.0000050
Chromium	mg/L	0.00010	0.00005	0.00005	0.00026	0.00011	0.00	0.00	0.00
Cobalt	mg/L	0.00001	0.00001	0.00001	0.00005	0.00002	0.00	0.00	0.00
Copper	mg/L	0.00177	0.00065	0.00089	0.00071	0.00080	0.00	0.00	0.00
Iron	mg/L	0.01197	0.01210	0.00860	0.01680	0.01553	0.02	0.01	0.01
Lead	mg/L	0.00001	0.00001	0.00021	0.00004	0.00001	0.00	0.00	0.00
Lithium	mg/L	0.00062	0.00074	0.00077	0.00092	0.00071	0.00	0.00	0.00
Manganese	mg/L	0.00241	0.00208	0.00169	0.00347	0.00342	0.00	0.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00012	0.00008	0.00009	0.00022	0.00010	0.00	0.00	0.00
Nickel	mg/L	0.00038	0.00041	0.00041	0.00047	0.00044	0.00	0.00	0.00
Selenium	mg/L	0.00004	0.00003	0.00006	0.00003	0.00003	< 0.000040	0.00	< 0.000040
Silver	mg/L	0.00001	0.00000	0.00000	0.00001	0.00000	< 0.0000050	< 0.0000050	< 0.0000050
Strontium	mg/L	0.03373	0.03600	0.03620	0.03877	0.04147	0.04	0.04	0.04
Thallium	mg/L	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00
Tin	mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Titanium	mg/L	0.00050	0.00025	0.00025	0.00100	0.00025	< 0.00050	< 0.00050	< 0.00050
Uranium	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00
Vanadium	mg/L	0.00020	0.00010	0.00010	0.00015	0.00010	< 0.00020	< 0.00020	< 0.00020
Zinc	mg/L	0.00026	0.00114	0.00097	0.00108	0.00043	0.00	0.00	0.00
Dissolved Metals									
Aluminum	mg/L	0.00164	0.00372	0.00284	0.00160	0.00429	0.00	0.00	0.01
Antimony	mg/L	0.00002	0.00001	0.00001	0.00010	0.00001	< 0.000020	< 0.000020	< 0.000020
Arsenic	mg/L	0.00026	0.00031	0.00032	0.00036	0.00041	0.00	0.00	0.00
Barium	mg/L	0.00768	0.00761	0.00747	0.00806	0.00842	0.01	0.01	0.01
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00001	< 0.000010	< 0.000010	< 0.000010
Cadmium	mg/L	0.00001	0.00000	0.00000	0.00000	0.00000	< 0.0000050	< 0.0000050	< 0.0000050
Calcium (Dissolved)	mg/L	6.93	6.93	7.40	8.05	8.18	7.69	8.17	8.68
Chromium	mg/L	0.00010	0.00005	0.00005	0.00025	0.00012	0.00	0.00	< 0.00010
Cobalt	mg/L	0.00001	0.00001	0.00000	0.00004	0.00001	0.00	0.00	0.00
Copper	mg/L	0.00173	0.00068	0.00074	0.00071	0.00088	0.00	0.00	0.00
Iron	mg/L	0.00413	0.00588	0.00370	0.00680	0.00470	0.01	0.00	0.01
Lead	mg/L	0.00001	0.00001	0.00000	0.00004	0.00001	0.00	0.00	0.00
Lithium	mg/L	0.00068	0.00065	0.00073	0.00095	0.00081	0.00	0.00	0.00

Magnesium (Dissolved)	mg/L	1.18	1.17	1.27	1.33	1.35	1.32	1.33	1.39
Manganese	mg/L	0.00045	0.00039	0.00036	0.00041	0.00052	0.00	0.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00015	0.00009	0.00009	0.00023	0.00010	0.00	0.00	0.00
Nickel	mg/L	0.00041	0.00039	0.00040	0.00048	0.00042	0.00	0.00	0.00
Potassium (Dissolved)	mg/L	0.89	0.89	0.94	0.99	0.99	0.93	1.01	1.03
Selenium	mg/L	0.00004	0.00003	0.00002	0.00003	0.00002	< 0.000040	< 0.000040	< 0.000040
Silver	mg/L	0.00001	0.00000	0.00000	0.00001	0.00000	< 0.0000050	< 0.0000050	< 0.0000050
Sodium (Dissolved)	mg/L	4.50	4.68	5.02	5.41	5.55	5.41	5.47	5.77
Strontium	mg/L	0.03437	0.03490	0.03740	0.03933	0.04180	0.04	0.04	0.04
Thallium	mg/L	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00
Tin	mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Titanium	mg/L	0.00059	0.00025	0.00025	0.00100	0.00025	< 0.00050	< 0.00050	< 0.00050
Uranium	mg/L	0.00002	0.00002	0.00001	0.00002	0.00001	0.00	0.00	0.00
Vanadium	mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Zinc	mg/L	0.00050	0.00122	0.00067	0.00141	0.00059	0.00	0.00	0.00
Radionuclides									
Radium-226	Bq/l	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050
Volatile Organics									
Benzene	mg/L	0.00020	0.00010	-	-	0.00010	< 0.00020	< 0.00020	< 0.00020
Ethylbenzene	mg/L	0.00020	0.00010	-	-	0.00010	< 0.00020	< 0.00020	< 0.00020
Toluene	mg/L	0.00024	0.00010	-	-	0.00010	< 0.00020	< 0.00020	< 0.00020
Xylenes	mg/L	0.00040	0.00020	-	-	0.00020	< 0.00040	< 0.00040	< 0.00040
m,p-Xylenes	mg/L	0.00040	0.00020	-	-	0.00020	< 0.00040	< 0.00040	< 0.00040
o-Xylene	mg/L	0.00020	0.00010	-	-	0.00010	< 0.00020	< 0.00020	< 0.00020
F1 (C6-C10)-BTEX	mg/L	0.02500	0.01250	-	-	0.01250	< 0.025	< 0.025	< 0.025
F1 (C6-C10)	mg/L	0.02500	0.01250	0.01250	0.01250	0.01250	< 0.025	< 0.025	< 0.025
F2 (C10-C16)	mg/L	0.10000	0.05000	0.05000	0.05000	0.04667	< 0.1	< 0.09	< 0.09
F3 (C16-C34)	mg/L	0.20000	0.10000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2
F4 (C34-C50)	mg/L	0.20000	0.10000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2

Parameter	Sample date		9/16/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.78	-	7.48	7.55	0.93	-
Dissolved Oxygen	mg/L	2	9.85	-	10	9.87	1.31	-
Turbidity	NTU	0.1	0.1	0.1	0.5	0.3	50.00	0.00
Conductivity	ms/cm	0.001	0.0011	0.0007	0.0926	0.0929	0.32	44.44
Hardness, as CaCO3	mg/L	0.5	0.5	-	25.6	25.5	0.39	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	25.9	25.9	0.00	-
Total alkalinity, as CaCO3	mg/L	1	1	1	18	20	10.53	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	18	20	10.53	-
TDS	mg/L	10	10	10	50	50	0.00	0.00
TDS, calculated	mg/L	1	1	-	43	44	2.30	-
TSS	mg/L	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	2.8	2.7	3.64	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	2.6	2.6	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	11	11	0.00	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	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	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
Silica	mg/L	0.05	0.05	0.05	0.35	0.37	5.56	0.00
Sulfate	mg/L	0.5	0.84	0.5	5.5	5.7	3.57	50.75
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.089	0.05	56.12	0.00
Un-Ionized Ammonia, calculated	mg/L	0.0001	-	-	0.00074	0.00041	57.39	-
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	0.22	0.24	8.70	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
Total Metals								
Aluminum	mg/L	0.0005	0.00051	0.0005	0.00372	0.00438	16.30	1.98
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000416	0.000395	5.18	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.00827	0.00825	0.24	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Calcium (total)	mg/L	0.01	0.05	-	8.06	8.03	0.37	-
Chromium	mg/L	0.0001	0.00012	0.0001	0.00015	0.00012	22.22	18.18
Cobalt	mg/L	0.000005	0.000005	0.000005	0.000012	0.000013	8.00	0.00
Copper	mg/L	0.00005	0.00005	0.00005	0.000714	0.000673	5.91	0.00
Iron	mg/L	0.001	0.001	0.001	0.0102	0.0108	5.71	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.000026	0.000011	81.08	0.00
Lithium	mg/L	0.0005	0.0005	0.0005	0.00068	0.00068	0.00	0.00
Magnesium (total)	mg/L	0.01	0.05	-	1.33	1.33	0.00	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.00352	0.00351	0.28	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00014	0.00005	0.000095	0.000099	4.12	94.74
Nickel	mg/L	0.00002	0.00002	0.00002	0.000454	0.000441	2.91	0.00
Potassium (total)	mg/L	0.01	0.05	-	0.994	1	0.60	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.000044	9.52	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Sodium (total)	mg/L	0.01	0.05	-	5.52	5.62	1.80	-
Strontium	mg/L	0.00005	0.00005	0.00005	0.0425	0.0421	0.95	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.000018	0.000018	0.00	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.00025	0.0001	0.00039	0.00031	22.86	85.71
Dissolved Metals								
Aluminum	mg/L	0.0005	0.00106	0.0005	0.00279	0.00216	25.45	71.79
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000417	0.000407	2.43	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.00855	0.00837	2.13	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Calcium (Dissolved)	mg/L	0.01	0.05	-	8.1	8.17	0.86	-
Chromium	mg/L	0.0001	0.00012	0.0001	0.00013	0.00018	32.26	18.18
Cobalt	mg/L	0.000005	0.000005	0.000005	0.0000076	0.000006	23.53	0.00

Copper	mg/L	0.00005	0.00005	0.00005	0.000768	0.000702	8.98	0.00
Iron	mg/L	0.001	0.001	0.001	0.0057	0.0028	68.24	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.0000205	0.0000059	110.61	0.00
Lithium	mg/L	0.0005	0.0005	0.0005	0.00074	0.00075	1.34	0.00
Magnesium (Dissolved)	mg/L	0.01	0.05	-	1.38	1.33	3.69	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.000444	0.000349	23.96	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.000109	0.000095	13.73	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.000445	0.000408	8.68	0.00
Potassium (Dissolved)	mg/L	0.01	0.05	-	1.04	1.01	2.93	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Sodium (Dissolved)	mg/L	0.01	0.05	-	5.63	5.47	2.88	-
Strontium	mg/L	0.00005	0.00005	0.00005	0.0404	0.0393	2.76	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000023	0.0000021	9.09	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.0000136	0.0000137	0.73	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.0002	0.0001	0.00063	0.00032	65.26	66.67
Radionuclides								
Radium-226	Bq/l	0.005	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
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
F2 (C10-C16)	mg/L	0.09	0.09	0.09	0.09	0.09	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.

MEL-11	CCME	Canada	Sample date	Annual Average					1/8/2024	2/12/2024	3/12/2024	4/9/2024	5/7/2024	6/4/2024	7/2/2024	8/4/2024	9/2/2024	10/7/2024	11/4/2024	12/2/2024
Parameter	Guideline	Drinking	Units	2020	2021	2022	2023	2024												
Field Measured																				
Temperature			°C	6.84	7.60	7.34	6.44	7.17	4.70	2.30	6.00	3.10	5.00	9.50	8.70	15.50	15.30	7.20	4.70	4.00
pH			pH units	68.94	7.20	7.37	7.40	7.22	6.71	7.51	6.93	6.13	6.85	6.51	7.38	8.61	7.71	7.73	7.47	7.13
Conductivity			uS/cm	118.31	122.53	133.70	130.92	133.30	116.20	114.00	124.40	131.20	131.20	0.50	102.30	120.10	110.50	144.50	240.50	264.20
Dissolved oxygen			mg/L	19.72	12.18	19.05	13.06	11.90	12.24	11.94	11.03	12.43	15.30	12.50	11.70	9.49	8.41	13.57	12.54	11.67
Dissolved oxygen			%	95.41	98.96	100.62	105.19	98.88	101.40	89.40	89.20	94.80	120.30	109.30	100.50	95.20	-	101.10	97.50	89.00
Conventional Parameters																				
pH	6-9.5	6-9.5	pH units	7.22	7.43	7.58	7.28	7.35	7.14	7.24	7.45	7.20	7.28	7.26	7.36	7.54	7.38	7.52	7.47	7.39
Turbidity		0.1	NTU	0.24	0.23	0.30	0.23	0.28	0.2	0.3	0.2	0.3	0.1	0.3	0.4	0.2	0.3	0.4	0.4	0.3
Conductivity			umhos/cm	110.33	120.58	128.00	128.08	125.83	120.00	120.00	130.00	130.00	132.00	126.00	101.00	107.00	108.00	142.00	144.00	150.00
Hardness, as CaCO3			mg/L	30.96	32.22	33.90	34.52	31.99	32.40	32.70	29.40	31.00	33.90	34.9	27.00	27.10	25.40	37.4	35.00	37.70
Total alkalinity, as CaCO3			mg/L	22.42	22.08	25.00	24.42	25.33	23.00	25.00	26.00	30.00	27.00	33.00	23.00	23.00	21.00	24.00	24.00	25.00
Carbonate, as CaCO3			mg/L	1.00	0.50	1.50	0.50	0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3			mg/L	22.33	21.92	24.00	24.33	25.25	23.00	25.00	26.00	30.00	27.00	32.00	23.00	23.00	21.00	24.00	24.00	25.00
TDS		500	mg/L	63.33	55.83	79.29	67.92	68.75	55.00	70.00	70.00	70.00	85.00	65.00	60.00	55.00	60.00	85.00	50.00	100.00
TDS, calculated			mg/L	-	55.00	62.00	61.33	61.00	54.00	58.00	60.00	66.00	65.00	65.00	50.00	52.00	50.00	67.00	70.00	75.00
TSS			mg/L	1.08	0.63	0.70	0.67	0.79	< 1	< 1	< 1	< 1	< 1	2.00	1.00	1.00	< 1	1.00	< 1	1.00
Total organic carbon			mg/L	3.53	3.59	3.80	3.76	3.46	3.30	3.20	3.40	3.30	3.50	3.50	3.30	3.20	3.30	3.80	3.90	3.80
Dissolved organic carbon			mg/L	3.53	3.55	3.80	3.74	3.36	3.10	3.20	3.20	3.30	3.30	3.20	3.10	3.20	3.00	3.80	4.00	3.90
Major Ions																				
Chloride	120		mg/L	15.75	17.92	18.00	16.67	15.73	14.00	15.00	15.00	18.00	17.00	17.00	13.00	13.00	13.00	18.00	20.00	18
Cyanide		0.2	mg/L	0.010	0.002	0.001	0.000	0.000	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Cyanide (free)	0.005		mg/L	0.0020	0.0086	0.0015	0.0029	0.0011	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.0020	0.00	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)			mg/L	0.0010	0.0005	0.0004	0.0003	0.0003	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	0.00	< 0.00050	0.00	< 0.00050	< 0.00050	< 0.00050
Fluoride	0.12	1.5	mg/L	-	-	-	-	-	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Silica			mg/L	1.66	0.33	0.38	0.63	0.76	0.61	0.74	0.84	0.82	0.71	1.10	0.58	0.41	1.20	0.63	0.66	0.77
Sulfate	128	500	mg/L	5.73	6.73	7.10	7.25	7.89	6.20	6.80	6.20	8.00	8.10	5.90	5.70	6.70	6.10	11.00	11.00	13.00
Nutrients and Chlorophyll a																				
Ammonia Nitrogen (as N)			mg/L	0.12	0.05	0.04	0.03	0.04	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.05	< 0.050	< 0.050	0.20	< 0.050	< 0.050
Nitrate (as N)	13	10	mg/L	0.10	0.07	0.08	0.06	0.05	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite (as N)	0.06	1	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate + nitrite (as N)			mg/L	0.10	0.07	-	-	0.05	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Kjeldahl nitrogen			mg/L	0.22	0.21	0.22	0.22	0.22	0.20	0.19	0.13	0.20	0.21	0.21	0.21	0.19	0.18	0.35	0.27	0.31
Total phosphorus			mg/L	0.02	0.02	0.02	0.01	0.01	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.02	< 0.020	< 0.020	0.02	< 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	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals																				
Aluminum		0.1	mg/L	0.00496	0.00539	0.00470	0.00310	0.00331	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	0.00	0.00	0.00	0.01	0.01	0.00
Antimony		0.006	mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	0.01	mg/L	0.00044	0.00052	0.00061	0.00064	0.00066	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium		2	mg/L	0.01048	0.01047	0.01080	0.01086	0.01003	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Beryllium			mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Cadmium	0.00006	0.007	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.	

Copper	0.002	1	mg/L	0.00096	0.00092	0.00102	0.00092	0.00092	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	0.3	mg/L	0.01113	0.00913	0.00911	0.00660	0.00768	< 0.0050	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	< 0.0050	0.01	0.01
Lead	0.001	0.005	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium			mg/L	0.00200	0.00100	0.00100	0.00100	0.00100	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Magnesium (Dissolved)			mg/L	1.68917	1.83917	1.87000	1.97750	1.87083	1.73	1.80	1.86	1.94	2.03	2.01	1.49	1.49	1.58	1.99	2.17	2.36
Manganese		0.02	mg/L	0.00118	0.00103	0.00070	0.00057	0.00062	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00
Mercury	0.000026	0.001	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025		mg/L	0.00100	0.00063	0.00070	0.00064	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Potassium (Dissolved)			mg/L	1.17408	1.20000	1.20000	1.28433	1.25417	1.21	1.28	1.30	1.32	1.41	1.39	1.03	1.03	1.11	1.30	1.30	1.37
Selenium	0.001	0.05	mg/L	0.00010	0.00005	0.00005	0.00005	0.00006	< 0.00010	0.00	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025		mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Dissolved)		200	mg/L	6.83333	7.88417	7.99000	8.36917	7.91667	7.18	7.63	7.93	7.95	8.62	8.27	6.39	6.51	6.90	8.88	9.17	9.57
Strontium		7	mg/L	0.05514	0.06104	0.06100	0.06166	0.05666	0.05	0.05	0.06	0.06	0.06	0.06	0.05	0.05	0.04	0.06	0.07	0.07
Thallium	0.0008		mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	0.00	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin			mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium			mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	5	mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Volatile Organics																				
Benzene	0.37	0.005	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Ethylbenzene	0.09	0.14	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Toluene	0.002	0.06	mg/L	0.00020	0.00010	0.00011	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Xylenes		0.09	mg/L	0.00040	0.00020	0.00022	0.00020	0.00020	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.0004	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040
m,p-Xylenes			mg/L	0.00040	0.00020	0.00022	0.00020	0.00020	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.0004	< 0.00040	< 0.00040	< 0.00040	< 0.00040	< 0.00040
o-Xylene			mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
F1 (C6-C10)-BTEx			mg/L	0.02500	0.01250	0.01250	0.01250	0.01250	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
F1 (C6-C10)			mg/L	0.02500	0.01250	0.01250	0.01250	0.01250	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
F2 (C10-C16)			mg/L	0.10000	0.05000	0.05000	0.05000	0.05442	< 0.1	< 0.1	< 0.1	0.13	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.09	< 0.09	< 0.09
F3 (C16-C34)			mg/L	0.20000	0.10000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
F4 (C34-C50)			mg/L	0.20000	0.10000	0.10000	0.10000	0.10000	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Parameter	Sample date		1/8/2024						2/12/2024						4/9/2024						6/4/2024						7/2/2024					
	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)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	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	0.1	5.83	-	7.11	7.14	0.42	-	6.14	-	7.25	7.24	0.14	-	6.08	-	7.12	7.2	1.12	-	5.87	-	7.27	7.26	0.14	-	5.85	-	7.34	7.36	0.27	-
Turbidity	NTU	0.001	0.1	0.1	0.2	0.2	0.00	0.00	0.2	0.1	0.3	0.3	0.00	66.67	0.3	0.1	0.3	0.3	0.00	100.00	0.1	-	0.5	0.3	50.00	-	0.1	0.1	0.4	0.4	0.00	0.00
Conductivity	ms/cm	0.001	-	-	-	-	-	-	-	-	-	-	-	-	0.001	0.001	0.131	0.13	0.77	0.00	0.001	0.001	0.126	0.126	0.00	0.00	0.001	0.0008	0.101	0.101	0.00	22.22
Conductivity	umhos/cm	1	1.4	1	120	120	0.00	33.33	1.6	1	120	120	0.00	46.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardness, as CaCO3	mg/L	0.5	0.5	-	31.8	32.4	1.87	-	0.5	-	34.9	32.7	6.51	-	0.5	-	31.3	31	0.96	-	-	-	-	-	-	-	0.5	-	27.6	27	2.20	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	32.3	32.1	0.62	-	0.5	-	33.9	33.3	1.79	-	0.5	-	35.7	35.5	0.56	-	0.5	-	37.3	37.1	0.54	-	-	-	27.3	-	-	-
Total alkalinity, as CaCO3	mg/L	1	1	1	23	23	0.00	0.00	1.3	1	25	25	0.00	26.09	1.3	1	30	30	0.00	26.09	1	1	27	33	20.00	0.00	1	1	22	23	4.44	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	23	23	0.00	-	1.3	-	25	25	0.00	-	1.3	-	30	30	0.00	-	1	-	27	32	16.95	-	1	-	22	23	4.44	-
TDS	mg/L	10	10	10	45	55	20.00	0.00	10	10	80	70	13.33	0.00	10	10	70	70	0.00	0.00	10	10	65	65	0.00	0.00	-	10	-	60	-	-
TDS, calculated	mg/L	1	1	-	54	54	0.00	-	1	-	58	58	0.00	-	2	-	65	66	1.53	-	1	-	64	65	1.55	-	-	-	50	-	-	-
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00	1	1	1	2	66.67	0.00	-	1	-	1	-	-
Total organic carbon	mg/L	0.4	0.4	0.4	3.2	3.3	3.08	0.00	0.4	0.4	3.1	3.2	3.17	0.00	0.4	0.4	3.2	3.3	3.08	0.00	0.4	0.4	3.3	3.5	5.88	0.00	0.4	0.4	3.1	3.3	6.25	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	3.1	3.1	0.00	0.00	0.4	0.4	3.3	3.2	3.08	0.00	0.4	0.4	3.3	3.3	0.00	0.00	0.4	0.4	3.5	3.2	8.96	0.00	0.4	0.4	3.1	3.1	0.00	0.00
Major Ions																																
Chloride	mg/L	1	1	1	14	14	0.00	0.00	1	1	15	15	0.00	0.00	1.3	1	17	18	5.71	26.09	1	1	16	17	6.06	0.00	1	1	13	13	0.00	0.00
Cyanide	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	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	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	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002	0.002	0.002	0.00	0.00	-	0.002	-	0.002	-	-
Cyanide (WAD)	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	0.0005	0.0005	0.00058	0.0005	14.81	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.00056	11.32	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	0.1	0.1	0.1	0.1	0.00	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
Silica	mg/L	0.05	0.05	0.05	0.64	0.61	4.80	0.00	0.05	0.05	0.73	0.74	1.36	0.00	0.05	0.05	0.84	0.82	2.41	0.00	0.05	0.05	1	1.1	9.52	0.00	0.05	0.05	-	0.58	-	0.00
Sulfate	mg/L	0.5	0.5	0.5	6.4	6.2	3.17	0.00	0.5	0.5	6.7	6.8	1.48	0.00	0.5	0.5	8.3	8	3.68	0.00	0.5	0.5	7.8	5.9	27.74	0.00	-	0.5	5.9	5.7	3.45	-
Nutrients and Chlorophyll a																																
Ammonia Nitrogen (as N)	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	0.05	0.05	0.085	0.05	51.85	0.00	0.05	0.05	0.05	0.05	0.00	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	0.1	0.1	0.1	0.1	0.00	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
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	0.01	0.01	0.01	0.01	0.00	0.00	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	-	0.1	-	0.1	0.1	0.00	-	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	0.17	0.2	16.22	0.00	0.1	0.1	0.22	0.2	14.63	0.00	0.1	0.1	0.23	0.2	13.95	0.00	0.1	0.1	0.17	0.21	21.05	0.00	0.1	0.1	0.25	0.21	17.39	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	0.02	0.02	0.02	0.02	0.00	0.00	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	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
General Organics																																
Total Metals																																
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.036	0.003	169.23	0.00	0.003	0.003	0.0034	0.0043	23.38	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	0.0005	0.0005	0.0005	0.0005	0.00	0.00	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	0.00061	0.0006	1.65	0.00	0.0001	0.0001	0.00069	0.00063	9.09	0.00	0.0001	0.0001	0.00059	0.00057	3.45	0.00	0.0001	0.0001	0.0005	0.00056	11.18	0.00	0.0001	0.0001	0.0007	0.00069	1.44	0.00
Barium	mg/L	0.001	0.001	0.001	0.0102	0.0104	1.94	0.00	0																							

MEL-12	Sample date	Annual Average					6/17/2024	7/8/2024	9/2/2024	10/1/2024
Parameter	Units	2020	2021	2022	2023	2024				
Field Measured										
Temperature	°C	7.59	7.79	15.20	14.20	8.93	10.10	11.70	8.10	5.80
pH	pH units	7.27	7.68	7.62	7.82	8.30	9.16	7.89	8.06	8.08
Conductivity	uS/cm	4507.29	2612.00	2407.00	2348.80	2,209.25	1309.00	1739.00	2529.00	3260.00
Dissolved oxygen	mg/L	11.23	10.72	8.14	21.12	458.69	9.59	1739.00	11.85	74.30
Dissolved oxygen	%	87.30	91.80	87.10	72.15	56.19	84.30	75.10	-	9.16
Turbidity	NTU	-	2.82	-	-	4.97	6.28	8.23	1.39	3.98
Conventional Parameters										
pH	pH units	7.63	7.70	7.88	7.71	7.76	7.86	7.44	7.91	7.82
Turbidity	NTU	2.27	1.95	0.40	0.54	2.38	3.30	4.10	0.40	1.70
Conductivity	umhos/cm	4514.29	2566.67	-	-	2,222.50	1310.00	1740.00	2460.00	3380.00
Hardness, as CaCO3	mg/L	1066.86	583.17	480.00	428.20	430.25	276.00	297.00	425.00	723.00
Total alkalinity, as CaCO3	mg/L	102.43	75.50	75.00	73.80	71.50	50.00	51.00	85.00	100.00
TDS	mg/L	2868.57	1540.00	1320.00	1422.00	1,436.25	875.00	1260.00	1530.00	2080.00
TDS, calculated	mg/L	-	1700	1233	1266	1,203	700.00	910.00	1300.00	1900.00
TSS	mg/L	6.57	6.33	4.00	5.80	6.50	6.00	11.00	2.00	7.00
Major Ions										
Chloride	mg/L	1250.00	618.33	527.00	548.00	475.00	260.00	370.00	550.00	720.00
Cyanide	mg/L	0.01	0.00	0.01	0.00	0.002	0.005	0.001	0.001	0.002
Fluoride	mg/L	0.10	0.09	0.10	0.07	0.08	< 0.10	< 0.10	0.10	0.11
Silica	mg/L	-	0.58	0.31	0.26	0.96	0.20	0.49	0.33	2.80
Sulfate	mg/L	237.14	220.00	213.00	212.00	237.50	130.00	180.00	230.00	410.00
Nutrients and Chlorophyll a										
Ammonia Nitrogen (as N)	mg/L	6.69	1.25	0.36	0.29	0.79	0.19	0.15	0.12	2.70
Nitrate (as N)	mg/L	24.56	15.06	7.11	5.44	7.09	4.35	4.99	3.82	15.20
Nitrite (as N)	mg/L	0.20	0.37	0.20	0.17	0.21	0.21	0.18	0.07	0.39
Total phosphorus	mg/L	0.10	0.08	0.05	0.09	0.05	0.04	0.06	0.06	0.04
Orthophosphate (P)	mg/L	0.05	0.03	0.03	0.04	0.02	< 0.010	0.01	0.04	0.02
Total Metals										
Aluminum	mg/L	0.33157	0.15543	0.21180	0.14560	0.15320	0.21	0.21	0.07	0.12
Arsenic	mg/L	0.01364	0.01752	0.01660	0.02094	0.01970	0.02	0.02	0.02	0.02
Barium	mg/L	0.15166	0.06772	0.05690	0.04744	0.04095	0.03	0.03	0.05	0.06
Cadmium	mg/L	0.00006	0.00003	0.00002	0.00002	0.00002	0.00	0.00	0.00	0.00
Chromium	mg/L	0.00229	0.00067	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	mg/L	0.00288	0.00284	0.00325	0.00324	0.00305	0.00	0.00	0.00	0.00
Iron	mg/L	0.25829	0.21650	0.14000	0.16700	0.19725	0.22	0.26	0.07	0.24
Lead	mg/L	0.00118	0.00127	0.00058	0.00043	0.00057	0.00	0.00	0.00	0.00
Manganese	mg/L	0.97300	0.23283	0.06517	0.06212	0.11063	0.10	0.09	0.04	0.21
Mercury	mg/L	0.00004	0.00001	0.00001	0.00001	0.00001	< 0.00001	0.00	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00404	0.00493	0.00620	0.00546	0.00538	0.00	0.01	0.01	0.01
Nickel	mg/L	0.00934	0.00715	0.00470	0.00472	0.00720	0.00	0.00	0.00	0.01
Selenium	mg/L	0.00044	0.00101	0.00043	0.00064	0.00078	0.00	0.00	0.00	0.00
Silver	mg/L	0.00005	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Thallium	mg/L	0.00005	0.00003	0.00003	0.00002	0.00002	0.00	0.00	0.00	0.00
Zinc	mg/L	0.02503	0.00767	0.00380	0.00250	0.00400	< 0.0050	0.01	< 0.0050	0.01
Dissolved Metals										
Calcium (Dissolved)	mg/L	296.71	155.33	125.00	123.06	119.88	80.60	82.90	122.00	194.00
Magnesium (Dissolved)	mg/L	74.10	44.10	35.90	37.96	38.48	22.30	29.80	39.80	62.00
Potassium (Dissolved)	mg/L	33.00	20.93	19.90	21.66	19.95	13.10	16.00	22.70	28.00
Sodium (Dissolved)	mg/L	470.71	273.17	242.00	255.00	235.25	139.00	181.00	276.00	345.00

Parameter	Sample date		7/8/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.8	-	7.49	7.44	0.67	-
Turbidity	NTU	0.1	0.1	0.1	4.9	4.1	17.78	0.00
Conductivity	ms/cm	0.001	0.0009	0.0005	1.75	1.74	0.57	57.14
Hardness, as CaCO3	mg/L	0.5	0.5	-	312	297	4.93	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	332	330	0.60	-
Total alkalinity, as CaCO3	mg/L	1	1	1	53	51	3.85	0.00
TDS	mg/L	10	10	10	1260	1260	0.00	0.00
TDS, calculated	mg/L	1	1	-	920	910	1.09	-
TSS	mg/L	1	1	1	10	11	9.52	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	9.8	9	8.51	0.00
Major Ions								
Chloride	mg/L	1	1	1	370	370	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00158	0.00142	10.67	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	0.46	0.49	6.32	0.00
Sulfate	mg/L	0.5	0.5	0.5	180	180	0.00	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.15	0.15	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	4.94	4.99	1.01	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.19	0.184	3.21	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	5.13	5.18	0.97	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.055	0.063	13.56	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.01	0.013	26.09	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.229	0.208	9.61	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0222	0.021	5.56	0.00
Barium	mg/L	0.001	0.001	0.001	0.0323	0.0304	6.06	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.000019	5.13	0.00
Calcium (total)	mg/L	0.05	0.05	-	77.6	74.3	4.34	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00354	0.00335	5.52	0.00
Iron	mg/L	0.01	0.01	0.01	0.276	0.257	7.13	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00066	0.00064	3.08	0.00
Magnesium (total)	mg/L	0.05	0.05	-	28.8	27.2	5.71	-
Manganese	mg/L	0.001	0.001	0.001	0.0984	0.0941	4.47	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00005	0.00003	50.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0056	0.0053	5.50	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0048	0.0045	6.45	0.00

Potassium (total)	mg/L	0.05	0.05	-	15.4	14.4	6.71	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00073	0.00072	1.38	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	-	174	164	5.92	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000018	0.000017	5.71	0.00
Titanium	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	0.0055	0.0052	5.61	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.109	0.107	1.85	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0194	0.0191	1.56	0.00
Barium	mg/L	0.001	0.001	0.001	0.0335	0.0333	0.60	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.000018	10.53	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	82.4	82.9	0.60	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00324	0.00324	0.00	0.00
Iron	mg/L	0.005	0.005	0.005	0.0393	0.0381	3.10	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00042	0.0002	70.97	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	30.6	29.8	2.65	-
Manganese	mg/L	0.001	0.001	0.001	0.0692	0.0693	0.14	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00002	0.00001	66.67	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0059	0.0058	1.71	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0042	0.0042	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	16.1	16	0.62	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00074	0.00077	3.97	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	-	184	181	1.64	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000017	0.000017	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.

MEL-13	CCME	Sample date	Annual Average					7/13/2024	9/7/2024	10/6/2024
Parameter	Guideline	Units	2020	2021	2022	2023	2024			
Field Measured										
Temperature		°C	10.26	7.06	13.85	11.46	8.72	11.80	9.36	5.00
pH	6.5 to 9.0	pH units	7.69	7.44	7.43	7.64	7.85	7.70	7.59	8.27
Conductivity		uS/cm	114.05	105.78	115.20	113.43	110.63	117.00	116.00	98.90
Dissolved oxygen		mg/L	123.60	10.31	11.07	10.25	11.26	10.26	11.46	12.07
Dissolved oxygen		%	101.52	101.60	107.50	96.53	97.47	95.00	102.80	94.60
Conventional Parameters										
pH	6.5 to 9.0	pH units	7.32	7.26	7.49	7.16	7.45	7.59	7.28	7.49
Dissolved Oxygen		mg/L	10.33	10.42	-	-	10.97	10.50	11.40	11.00
Turbidity		NTU	0.36	0.41	0.30	0.33	0.47	0.50	0.40	0.50
Conductivity		umhos/cm	115.71	116.00	115.00	113.33	141.33	148.00	126.00	150.00
Hardness, as CaCO3		mg/L	29.81	30.92	30.00	29.97	34.97	31.40	33.80	39.70
Total alkalinity, as CaCO3		mg/L	16.86	18.20	21.00	22.00	23.33	25.00	22.00	23.00
Carbonate, as CaCO3		mg/L	1.00	0.50	0.50	0.50	0.50	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	16.86	18.00	21.00	22.00	23.33	25.00	22.00	23.00
TDS		mg/L	80.00	75.00	82.50	71.67	70.00	70.00	85.00	55.00
TDS, calculated		mg/L	-	59.50	57.00	56.33	64.00	58.00	61.00	73.00
TSS		mg/L	1.36	1.30	0.80	0.67	1.50	2.00	< 1	2.00
Total organic carbon		mg/L	3.37	3.50	3.80	3.70	3.70	3.60	3.60	3.90
Dissolved organic carbon		mg/L	3.36	3.18	3.70	3.53	3.80	3.50	4.00	3.90
Major Ions										
Chloride	120	mg/L	18.21	18.80	18.00	14.33	18.00	15.00	18.00	21.00
Cyanide		mg/L	0.0050	0.0025	0.0008	0.0003	0.0003	< 0.00050	< 0.00050	< 0.00050
Cyanide (free)	0.005	mg/L	0.0010	0.0033	0.0015	0.0029	0.0014	0.00	< 0.0020	< 0.0020
Cyanide (WAD)		mg/L	0.0011	0.0007	0.0005	0.0003	0.0004	0.00	< 0.00050	< 0.00050
Silica		mg/L	0.33	0.29	0.34	0.60	0.62	0.58	0.64	0.65
Sulfate	128	mg/L	5.78	6.86	6.90	7.80	9.27	7.20	8.60	12.00
Nutrients and Chlorophyll a										
Ammonia Nitrogen (as N)		mg/L	0.12	0.03	0.03	0.03	0.07	< 0.050	< 0.050	0.17
Nitrate (as N)	13	mg/L	0.11	0.06	0.05	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	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen		mg/L	0.22	0.22	0.21	0.23	0.27	0.21	0.21	0.38
Total phosphorus		mg/L	0.020	0.014	0.018	0.017	0.010	< 0.020	< 0.020	< 0.020
Orthophosphate (P)		mg/L	0.010	0.005	0.005	0.005	0.005	< 0.010	< 0.010	< 0.010
Total Metals										
Aluminum		mg/L	0.00680	0.00644	0.00399	0.00348	0.00650	0.01	0.00	0.01
Antimony		mg/L	0.00002	0.00001	0.00002	0.00009	0.00002	< 0.000020	< 0.000020	0.00
Arsenic	0.005	mg/L	0.00051	0.00048	0.00053	0.00056	0.00063	0.00	0.00	0.00
Barium		mg/L	0.00862	0.00914	0.00855	0.00829	0.00917	0.01	0.01	0.01
Beryllium		mg/L	0.00001	0.00001	0.00001	0.00002	0.00001	< 0.000010	< 0.000010	< 0.000010
Boron		mg/L	0.01000	0.00620	0.00500	0.01167	0.00700	< 0.01	0.01	< 0.01
Cadmium	0.00006	mg/L	0.000010	0.000004	0.000003	0.000003	0.000003	< 0.0000050	< 0.0000050	< 0.0000050

Chromium		mg/L	0.00010	0.00005	0.00005	0.00035	0.00014	0.00	0.00	0.00
Cobalt		mg/L	0.00003	0.00003	0.00002	0.00005	0.00003	0.00	0.00	0.00
Copper	0.002	mg/L	0.00085	0.00085	0.00094	0.00088	0.00106	0.00	0.00	0.00
Iron	0.3	mg/L	0.03201	0.02414	0.02090	0.02143	0.02240	0.03	0.02	0.02
Lead	0.001	mg/L	0.00002	0.00002	0.00001	0.00004	0.00002	0.00	0.00	0.00
Lithium		mg/L	0.00143	0.00138	0.00110	0.00110	0.00104	0.00	0.00	0.00
Manganese		mg/L	0.00777	0.00707	0.00584	0.00786	0.00521	0.01	0.01	0.00
Mercury	0.000026	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	0.073	mg/L	0.00012	0.00016	0.00013	0.00027	0.00023	0.00	0.00	0.00
Nickel	0.025	mg/L	0.00075	0.00074	0.00077	0.00071	0.00073	0.00	0.00	0.00
Selenium	0.001	mg/L	0.00004	0.00003	0.00005	0.00005	0.00004	0.00	0.00	0.00
Silver	0.0025	mg/L	0.000010	0.000003	0.000003	0.000005	0.000003	< 0.0000050	< 0.0000050	< 0.0000050
Strontium		mg/L	0.06401	0.06360	0.05720	0.05323	0.05957	0.06	0.06	0.07
Thallium	0.0008	mg/L	0.000002	0.000002	0.000001	0.000003	0.000002	0.00	< 0.0000020	< 0.0000020
Tin		mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Titanium		mg/L	0.00053	0.00039	0.00025	0.00100	0.00025	< 0.00050	< 0.00050	< 0.00050
Uranium	0.015	mg/L	0.00002	0.00003	0.00003	0.00003	0.00004	0.00	0.00	0.00
Vanadium		mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Zinc	0.03	mg/L	0.00045	0.00077	0.00076	0.00114	0.00057	0.00	0.00	0.00
Dissolved Metals										
Aluminum		mg/L	0.00452	0.00262	0.00241	0.00139	0.00413	0.00	0.00	0.01
Antimony		mg/L	0.00002	0.00001	0.00001	0.00009	0.00001	< 0.000020	< 0.000020	0.00
Arsenic	0.005	mg/L	0.00048	0.00045	0.00051	0.00055	0.00059	0.00	0.00	0.00
Barium		mg/L	0.00853	0.00885	0.00850	0.00869	0.00904	0.01	0.01	0.01
Beryllium		mg/L	0.00001	0.00001	0.00001	0.00002	0.00001	< 0.000010	< 0.000010	< 0.000010
Boron		mg/L	0.01000	0.00780	0.00800	0.01633	0.00500	< 0.01	< 0.01	< 0.01
Cadmium	0.00006	mg/L	0.000010	0.000003	0.000003	0.000006	0.000003	< 0.0000050	< 0.0000050	< 0.0000050
Calcium (Dissolved)		mg/L	9.10714	9.13800	9.46000	10.01000	10.61000	9.64	9.89	12.30
Chromium		mg/L	0.00010	0.00006	0.00005	0.00022	0.00012	0.00	0.00	< 0.00010
Cobalt		mg/L	0.00002	0.00002	0.00002	0.00004	0.00002	0.00	0.00	0.00
Copper	0.002	mg/L	0.00080	0.00081	0.00092	0.00081	0.00092	0.00	0.00	0.00
Iron	0.3	mg/L	0.01026	0.00612	0.01050	0.00577	0.00580	0.01	0.00	0.00
Lead	0.001	mg/L	0.000010	0.000004	0.000004	0.000035	0.000007	0.00	< 0.0000050	0.00
Lithium		mg/L	0.00147	0.00128	0.00109	0.00119	0.00113	0.00	0.00	0.00
Magnesium (Dissolved)		mg/L	1.76929	1.81000	1.79000	1.78667	2.08000	1.89	1.92	2.43
Manganese		mg/L	0.00127	0.00078	0.00242	0.00055	0.00081	0.00	0.00	0.00
Mercury	0.000026	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	0.073	mg/L	0.00013	0.00015	0.00013	0.00026	0.00016	0.00	0.00	0.00
Nickel	0.025	mg/L	0.00072	0.00070	0.00074	0.00068	0.00074	0.00	0.00	0.00
Potassium (Dissolved)		mg/L	1.13714	1.12080	1.13000	1.15667	1.24000	1.16	1.16	1.40
Selenium	0.001	mg/L	0.00004	0.00004	0.00003	0.00006	0.00003	< 0.000040	0.00	0.00
Silver	0.0025	mg/L	0.000010	0.000003	0.000003	0.000005	0.000003	< 0.0000050	< 0.0000050	< 0.0000050
Sodium (Dissolved)		mg/L	7.86714	8.14000	7.69000	7.94000	9.06333	8.01	8.48	10.70
Strontium		mg/L	0.06476	0.06206	0.05710	0.05870	0.06187	0.06	0.06	0.07

Thallium	0.0008	mg/L	0.000002	0.000001	0.000001	0.000004	0.000002	0.00	< 0.0000020	0.00
Tin		mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Titanium		mg/L	0.00053	0.00025	0.00025	0.00100	0.00025	< 0.00050	< 0.00050	< 0.00050
Uranium	0.015	mg/L	0.00002	0.00003	0.00002	0.00003	0.00003	0.00	0.00	0.00
Vanadium		mg/L	0.00020	0.00010	0.00010	0.00090	0.00010	< 0.00020	< 0.00020	< 0.00020
Zinc	0.03	mg/L	0.00052	0.00088	0.00132	0.00114	0.00064	0.00	0.00	0.00
Radionuclides										
Radium-226		Bq/l	0.0059	0.0025	0.0025	0.0025	0.0025	< 0.0050	< 0.0050	< 0.0050
Volatile Organics										
Benzene	0.37	mg/L	0.0002	0.0001	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Ethylbenzene	0.09	mg/L	0.0002	0.0001	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Toluene	0.002	mg/L	0.0002	0.0033	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
Xylenes		mg/L	0.0004	0.0002	0.0002	0.0002	0.0002	< 0.00040	< 0.00040	< 0.00040
m,p-Xylenes		mg/L	0.0004	0.0002	0.0002	0.0002	0.0002	< 0.00040	< 0.00040	< 0.00040
o-Xylene		mg/L	0.0002	0.0001	0.0001	0.0001	0.0001	< 0.00020	< 0.00020	< 0.00020
F1 (C6-C10)-BTEX		mg/L	0.0250	0.0125	0.0125	0.0125	0.0125	< 0.025	< 0.025	< 0.025
F1 (C6-C10)		mg/L	0.0250	0.0125	0.0125	0.0125	0.0125	< 0.025	< 0.025	< 0.025
F2 (C10-C16)		mg/L	0.1000	0.0500	0.0500	0.0500	0.0467	< 0.1	< 0.09	< 0.09
F3 (C16-C34)		mg/L	0.20	0.10	0.10	0.10	0.10	< 0.2	< 0.2	< 0.2
F4 (C34-C50)		mg/L	0.20	0.10	0.10	0.10	0.10	< 0.2	< 0.2	< 0.2

Parameter	Sample date		9/7/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.63	-	7.21	7.28	0.97	-
Dissolved Oxygen	mg/L	2	11.6	-	11.5	11.4	0.87	-
Turbidity	NTU	0.1	0.1	0.1	0.4	0.4	0.00	0.00
Conductivity	ms/cm	0.001	0.0013	0.0008	0.122	0.126	3.23	47.62
Hardness, as CaCO3	mg/L	0.5	0.5	-	33.7	33.8	0.30	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	32.3	32.6	0.92	-
Total alkalinity, as CaCO3	mg/L	1	1	1	22	22	0.00	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	22	22	0.00	-
TDS	mg/L	10	30	10	95	85	11.11	100.00
TDS, calculated	mg/L	1	1	-	59	61	3.33	-
TSS	mg/L	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	3.5	3.6	2.82	0.00
Dissolved organic carbon	mg/L	0.4	0.46	0.4	3.7	4	7.79	13.95
Major Ions								
Chloride	mg/L	1	1	1	17	18	5.71	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	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	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
Silica	mg/L	0.05	0.05	0.05	0.59	0.64	8.13	0.00
Sulfate	mg/L	0.5	0.5	0.5	7.4	8.6	15.00	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
Un-Ionized Ammonia, calculated	mg/L	0.0001	-	-	0.0004	0.0004	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	0.27	0.21	25.00	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	1	0.01	0.01	0.00	196.04
Total Metals								
Aluminum	mg/L	0.0005	0.00105	0.0005	0.00289	0.00301	4.07	70.97
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000621	0.00064	3.01	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.00834	0.00833	0.12	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.011	0.011	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Calcium (total)	mg/L	0.01	0.05	-	10.2	10.2	0.00	-
Chromium	mg/L	0.0001	0.00012	0.0001	0.00013	0.00014	7.41	18.18
Cobalt	mg/L	0.000005	0.000005	0.000005	0.0000229	0.0000216	5.84	0.00
Copper	mg/L	0.00005	0.00005	0.00005	0.00092	0.000833	9.93	0.00
Iron	mg/L	0.001	0.001	0.001	0.0146	0.0154	5.33	0.00
Lead	mg/L	0.000005	0.0000262	0.000005	0.000009	0.0000157	54.25	135.90
Lithium	mg/L	0.0005	0.0005	0.0005	0.00108	0.00099	8.70	0.00
Magnesium (total)	mg/L	0.01	0.05	-	2	2	0.00	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.00474	0.00502	5.74	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.000137	0.000355	88.62	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.000693	0.000677	2.34	0.00
Potassium (total)	mg/L	0.01	0.05	-	1.22	1.25	2.43	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.000041	0.000045	9.30	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Sodium (total)	mg/L	0.01	0.05	-	8.42	8.6	2.12	-
Strontium	mg/L	0.00005	0.00005	0.00005	0.0557	0.0555	0.36	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.000028	0.0000313	11.13	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.00024	0.0001	0.0003	0.00032	6.45	82.35
Dissolved Metals								
Aluminum	mg/L	0.0005	0.00069	0.0005	0.00244	0.00383	44.34	31.93
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000613	0.000576	6.22	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.00817	0.00825	0.97	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Calcium (Dissolved)	mg/L	0.01	0.05	-	9.73	9.89	1.63	-
Chromium	mg/L	0.0001	0.00023	0.0001	0.00014	0.00016	13.33	78.79
Cobalt	mg/L	0.000005	0.000005	0.000005	0.0000123	0.0000132	7.06	0.00
Copper	mg/L	0.00005	0.00009	0.00005	0.000944	0.000871	8.04	57.14
Iron	mg/L	0.001	0.001	0.001	0.0038	0.0042	10.00	0.00
Lead	mg/L	0.000005	0.0000427	0.000005	0.000005	0.000005	0.00	158.07
Lithium	mg/L	0.0005	0.0005	0.0005	0.00101	0.00105	3.88	0.00
Magnesium (Dissolved)	mg/L	0.01	0.05	-	1.95	1.92	1.55	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.000373	0.000339	9.55	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.000167	0.000143	15.48	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.000638	0.000671	5.04	0.00
Potassium (Dissolved)	mg/L	0.01	0.05	-	1.16	1.16	0.00	-

Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.000044	9.52	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Sodium (Dissolved)	mg/L	0.01	0.05	-	8.39	8.48	1.07	-
Strontium	mg/L	0.00005	0.00005	0.00005	0.0556	0.0556	0.00	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000021	0.000002	4.88	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.00002	0.0000188	6.19	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.0003	0.0001	0.00033	0.00048	37.04	100.00
Radionuclides								
Radium-226	Bq/l	0.005	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
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
F2 (C10-C16)	mg/L	0.09	0.09	0.09	0.09	0.09	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.

MEL-14 Parameter	MDMER MAX GRAB	MDMER MAX MEAN	MEL-14 MAX GRAB	MEL-14 MAX MEAN	Sample date Units	Annual Average					6/17/2024	6/24/2024	7/1/2024	7/8/2024	7/15/2024	9/1/2024	9/2/2024	9/5/2024	9/9/2024	9/16/2024	9/18/2024	9/23/2024	9/30/2024	10/1/2024	10/7/2024	10/14/2024
Field Measured						2020	2021	2022	2023	2024																
Temperature					°C	10.79	9.59	12.70	11.93	9.36	10.60	13.20	15.90	12.70	14.40	9.10	9.50	8.30	7.80	8.10	7.30	9.10	7.50	7.10	6.30	2.80
pH	6.0 - 9.5	6.0 - 9.5			pH units	7.10	7.24	7.29	7.26	7.44	7.21	7.24	7.74	6.98	7.17	7.56	7.56	7.13	7.49	7.61	7.80	7.60	7.60	7.52	7.55	7.33
Conductivity					uS/cm	3506.00	2644.62	2451.00	2370.17	2,361.33	1333.00	1575.00	1569.00	1750.00	1882.00	-	2534.00	2484.00	2518.00	2493.00	2512.00	2571.00	3248.00	2137.00	3434.00	3380.00
Dissolved oxygen					mg/L	11.91	11.13	10.64	10.26	15.96	10.99	9.83	10.49	7.51	6.15	11.90	8.86	11.92	9.60	12.90	11.39	12.09	11.50	92.80	14.13	13.24
Dissolved oxygen					%	93.87	92.08	96.50	97.17	88.47	99.20	95.30	106.50	72.40	60.90	-	-	-	82.20	110.00	95.30	105.60	97.40	11.08	115.80	98.40
Conventional Parameters																										
pH	6.0 - 9.5	6.0 - 9.5	6.0 - 9.5	6.0 - 9.5	pH units	7.47	7.62	7.61	7.55	7.58	7.34	7.30	7.22	7.27	7.54	7.73	7.76	7.52	7.71	7.76	7.83	7.80	7.69	7.66	7.61	7.57
Dissolved Oxygen					mg/L	10.13	10.21	-	-	10.21	10.90	10.90	9.03	9.22	9.32	11.10	10.60	10.80	11.00	9.42	9.10	11.10	9.58	9.96	11.40	9.96
Turbidity					NTU	0.90	0.45	0.60	0.43	0.81	0.50	0.60	1.10	1.20	0.60	0.40	0.60	0.40	0.70	0.90	0.80	0.60	1.00	1.00	0.80	1.80
Conductivity					umhos/cm	3432.00	2605.88	2430.00	2341.67	2,453.75	1330.00	1480.00	1580.00	1770.00	1900.00	2490.00	2510.00	2520.00	2600.00	2540.00	2570.00	2630.00	3220.00	3350.00	3450.00	3320.00
Hardness, as CaCO3					mg/L	782.61	571.65	490.00	448.92	459.19	267.00	304.00	264.00	311.00	331.00	425.00	430.00	445.00	469.00	435.00	449.00	572.00	627.00	713.00	667.00	638.00
Total alkalinity, as CaCO3					mg/L	70.28	67.18	61.00	63.92	71.81	39.00	40.00	27.00	43.00	60.00	74.00	76.00	69.00	83.00	87.00	88.00	88.00	97.00	94.00	93.00	91.00
Carbonate, as CaCO3					mg/L	0.50	0.50	0.50	0.50	0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3					mg/L	70.04	66.88	61.00	63.67	71.63	39.00	40.00	27.00	42.00	60.00	74.00	75.00	69.00	83.00	87.00	88.00	88.00	97.00	93.00	93.00	91.00
TDS					mg/L	2075.60	1607.94	1423.00	1386.67	1,583.44	905.00	890.00	980.00	1140.00	1240.00	1620.00	1630.00	1600.00	1640.00	1520.00	1670.00	1980.00	2040.00	2130.00	2180.00	2170.00
TDS, calculated			4500	3500	mg/L	-	1470.00	1321.00	1228.33	1,379.38	700.00	820.00	830.00	930.00	990.00	1400.00	1400.00	1400.00	1400.00	1400.00	1400.00	1500.00	1900.00	2000.00	2100.00	1900.00
TSS	30	15	30	15	mg/L	4.96	3.29	3.00	3.46	3.81	2.00	3.00	6.00	4.00	2.00	2.00	2.00	3.00	4.00	3.00	5.00	5.00	5.00	5.00	5.00	5.00
Total organic carbon					mg/L	10.10	8.42	8.40	7.89	8.49	4.90	4.40	5.80	7.60	7.90	8.90	9.50	8.40	10.00	10.00	9.90	9.70	10.00	9.60	9.80	9.50
Dissolved organic carbon					mg/L	9.47	7.71	7.80	7.38	7.76	4.30	4.20	4.80	6.30	6.70	8.40	8.60	7.80	9.40	9.10	9.60	8.60	9.60	9.10	9.00	8.70
Major Ions																										
Chloride					mg/L	886.80	635.29	568.00	513.33	537.50	270.00	340.00	350.00	380.00	410.00	570.00	550.00	580.00	590.00	570.00	570.00	570.00	700.00	730.00	740.00	680.00
Cyanide	1	0.5	1	0.5	mg/L	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyanide (free)					mg/L	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	< 0.0020	0.00	< 0.0020	0.00	0.00	< 0.0020	< 0.0020	0.00	< 0.0020	0.00	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)					mg/L	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	< 0.00050	< 0.00050	0.00	0.00	0.00	0.00	0.00	0.00
Silica					mg/L	2.49	0.63	0.38	0.23	1.03	0.19	< 0.050	0.15	0.48	0.40	0.35	0.31	0.42	0.66	0.58	0.66	1.20	2.40	2.60	3.00	3.00
Sulfate					mg/L	192.40	224.12	221.00	215.83	270.00	130.00	160.00	160.00	180.00	190.00	240.00	240.00	240.00	250.00	260.00	260.00	320.00	390.00	420.00	460.00	420.00
Nutrients and Chlorophyll a																										
Ammonia Nitrogen (as N)			18	14	mg/L	3.48	0.86	0.33	0.32	0.91	0.16	0.30	< 0.050	0.17	0.40	0.13	0.13	0.15	0.26	0.24	0.17	0.42	2.30	2.70	3.30	3.70
Un-ionized Ammonia, calculated	1	0.5			mg/L	-	-	-	0.00254	0.00	0.00	0.00	< 0.00079	< 0.0004	0.00	0.00	0.00	< 0.0004	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.01
Nitrate (as N)					mg/L	16.35	13.89	9.03	7.04	8.12	4.38	5.55	5.03	4.94	5.78	3.91	3.95	4.63	5.02	5.55	5.57	7.34	14.60	15.10	19.20	19.40
Nitrite (as N)					mg/L	0.27	0.26	0.22	0.22	0.19	0.20	0.20	0.20	0.18	0.19	0.07	0.07	0.07	0.08	0.07	0.08	0.14	0.34	0.40	0.44	0.36
Nitrate + nitrite (as N)					mg/L	16.61	14.16	-	-	8.32	4.58	5.75	5.24	5.12	5.98	3.98	4.02	4.70	5.10	5.62	5.64	7.48	14.90	15.50	19.70	19.80
Total Kjeldahl nitrogen					mg/L	4.35	1.37	0.98	0.89	1.79	0.81	0.87	0.84	1.10	1.60	1.20	1.70	0.85	0.92	1.30	1.10	1.30	2.60	4.20	3.00	5.20
Total phosphorus					mg/L	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.04	0.05	0.03	< 0.020	0.04	< 0.020	< 0.020	0.06	0.05	0.03	0.04	< 0.020	0.03	< 0.020
Orthophosphate (P)			4	2	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.03	0.02	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals																										
Aluminum			3	2	mg/L	0.56161	0.38812	0.37300	0.36125	0.48438	0.39	0.58	0.50	0.37	0.35	0.31	0.32	0.35	0.47	0.42	0.40	0.62	0.51	0.68	0	

[illegible]

Parameter	Sample date		8/11/2024					9/2/2024						10/7/2024						
	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)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters																				
pH	pH units		6.2	-	7.7	7.64	0.78	-	6.14	-	7.72	7.76	0.52	-	5.74	-	7.6	7.61	0.13	-
Dissolved Oxygen	mg/L	2	10.8	-	10.3	10	2.96	-	11	-	10.5	10.6	0.95	-	11.5	-	11.6	11.4	1.74	-
Turbidity	NTU	0.1	0.1	0.1	0.5	0.5	0.00	0.00	0.1	0.1	0.6	0.6	0.00	0.00	0.1	0.1	0.9	0.8	11.76	0.00
Conductivity	ms/cm	0.001	0.005	0.0006	2.3	2.29	0.44	157.14	0.0068	0.0006	2.49	2.51	0.80	167.57	0.0012	0.0007	3.45	3.45	0.00	52.63
Hardness, as CaCO3	mg/L	0.5	0.5	-	421	408	3.14	-	0.5	-	461	430	6.96	-	0.5	-	702	667	5.11	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	422	427	1.18	-	0.5	-	476	484	1.67	-	0.5	-	823	741	10.49	-
Total alkalinity, as CaCO3	mg/L	1	1.2	1	64	64	0.00	18.18	1	1	75	76	1.32	0.00	1	1	95	93	2.13	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1.2	-	64	63	1.57	-	1	-	74	75	1.34	-	1	-	95	93	2.13	-
TDS	mg/L	10	10	10	1590	1650	3.70	0.00	10	10	1590	1630	2.48	0.00	10	10	2200	2180	0.91	0.00
TDS, calculated	mg/L	1	1	-	1300	1300	0.00	-	1	-	1300	1400	7.41	-	1	-	2000	2100	4.88	-
TSS	mg/L	1	1	1	2	2	0.00	0.00	1	1	2	2	0.00	0.00	1	1	5	5	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	8.3	8.3	0.00	0.00	0.4	0.4	9.4	9.5	1.06	0.00	0.4	0.4	9.8	9.8	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	7.5	7.4	1.34	0.00	0.4	0.4	8.6	8.6	0.00	0.00	0.55	0.4	8.8	9	2.25	31.58
Salinity	-	2	2	-	2	2	0.00	-	2	-	2	2	0.00	-	2	-	2	2	0.00	-
Sodium Adsorption Ratio (salinity in water)	-		0.25	-	5.8	5.8	0.00	-	0.25	-	5.8	5.8	0.00	-	0.27	-	6	6	0.00	-
Major Ions																				
Chloride	mg/L	1	1	1	520	520	0.00	0.00	1	1	550	550	0.00	0.00	1	1	750	740	1.34	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0014	0.00143	2.12	0.00	0.0005	0.0005	0.00256	0.0031	19.08	0.00	0.0005	0.0005	0.00293	0.00354	18.86	0.00
Cyanide (free)	mg/L	0.002	0.002	0.002	0.004	0.0035	13.33	0.00	0.002	0.002	0.002	0.0022	9.52	0.00	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0016	0.0012	28.57	0.00	0.0005	0.0005	0.001	0.0016	46.15	0.00	0.0005	0.0005	0.0019	0.002	5.13	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	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.22	0.21	4.65	0.00	0.05	0.05	0.33	0.31	6.25	0.00	0.05	0.05	2.9	3	3.39	0.00
Sulfate	mg/L	0.5	0.5	0.5	220	220	0.00	0.00	0.5	0.5	240	240	0.00	0.00	0.5	0.86	440	460	4.44	52.94
Nutrients and Chlorophyll a																				
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.12	0.12	0.00	0.00	0.05	0.05	0.13	0.13	0.00	0.00	0.05	0.05	3.4	3.3	2.99	0.00
Un-ionized Ammonia, calculated	mg/L	0.0001	-	-	0.001	0.001	0.00	-	-	-	0.0008	0.0009	11.76	-	-	-	0.017	0.016	6.06	-
Nitrate (as N)	mg/L	0.1	0.1	0.1	4.09	4.33	5.70	0.00	0.1	0.1	3.68	3.95	7.08	0.00	0.1	0.1	19.3	19.2	0.52	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.105	0.095	10.00	0.00	0.01	0.01	0.067	0.069	2.94	0.00	0.01	0.01	0.446	0.441	1.13	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	4.19	4.43	5.57	-	0.1	-	3.75	4.02	6.95	-	0.1	-	19.7	19.7	0.00	-
Total Kjeldahl nitrogen	mg/L	0.1	0.1	0.1	0.94	1.1	15.69	0.00	0.1	0.1	1.5	1.7	12.50	0.00	0.1	0.1	3	3	0.00	0.00
Biochemical Oxygen Demand, 5 Day	mg/L	2	2	2	2	2	0.00	0.00	2	2	2	2	0.00	0.00	2	2	2	2	0.00	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.02	0.02	0.039	0.04	2.53	0.00	0.02	0.02	0.03	0.033	9.52	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	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals																				
Aluminum	mg/L	0.003	0.003	0.003	0.338	0.328	3.00	0.00	0.003	0.003	0.333	0.319	4.29	0.00	0.003	0.003	0.706	0.649	8.41	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00093	0.00092	1.08	0.00	0.0005	0.0005	0.00085	0.00079	7.32	0.00	0.0005	0.0005	0.0011	0.001	9.52	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00595	0.00586	1.52	0.00	0.0001	0.0001	0.0061	0.00574	6.08	0.00	0.0001	0.0001	0.00671	0.00633	5.83	0.00
Barium	mg/L	0.001	0.001	0.001	0.0432	0.0425	1.63	0.00	0.001	0.001	0.0485	0.0456	6.16	0.00	0.001	0.001	0.0553	0.0517	6.73	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	0.0001	0.0001	0.0002	0.0002	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.205	0.19	7.59	0.00	0.05	0.05	0.228	0.226	0.88	0.00	0.05	0.05	0.3	0.28	6.90	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000018	0.00002	10.53	0.00	0.00001	0.00001	0.00002	0.000017	16.22	0.00	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	107	104	2.84	-	0.05	-	116	107	8.07	-	0.05	-	176	168	4.65	-
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	0.001	0.001	0.002	0.002	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00127	0.00126	0.79	0.00	0.0002	0.0002	0.00108	0.00102	5.71	0.00	0.0002	0.0002	0.00211	0.00204	3.37	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00264	0.00263	0.38	0.00	0.0005	0.0005	0.00242	0.00234	3.36	0.00	0.0005	0.0005	0.0022	0.0021	4.65	0.00
Iron	mg/L	0.01	0.01	0.01	0.02	0.02	0.00	0.00	0.01	0.01	0.025	0.023	8.33	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	0.0001	0.0001	0.0002	0.0002	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.204	0.199	2.48	0.00	0.05	0.05	0.211	0.233	9.91	0.00	0.05	0.05	0.35	0.32	8.96	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000019	0.00002	5.13	0.00	0.00001	0.00001	0.000018	0.000019	5.41	0.00	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	107	109	1.85	-	0.05	-	122	122	0.00	-	0.1	-	208	187	10.63	-
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	0.001	0.001	0.002	0.002	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00126	0.00129	2.35	0.00	0.0002	0.0002	0.00114	0.00111	2.67	0.00	0.0002	0.0002	0.00246	0.00221	10.71	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00266	0.00271	1.86	0.00	0.0002	0.0002	0.00259	0.0026	0.39	0.00	0.0002	0.0002	0.00249	0.00224	10.57	0.00
Iron	mg/L	0.005	0.005	0.005	0.0078	0.0074	5.26	0.00	0.005	0.005	0.0122	0.0121	0.82	0.00	0.005	0.005	0.01	0.01	0.00	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	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0295	0.0302	2.35	0.00	0.002	0.002	0.0319	0.0338	5.78	0.00	0.002	0.002	0.0334	0.0305	9.08	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	37.9	37.8	0.26	-	0.05	-	41.9	43.6	3.98	-	0.05	-	73.6	66.3	10.44	-
Manganese	mg/L	0.001	0.001	0.001	0.0182	0.0184	1.09	0.00	0.001	0.001	0.0369	0.0365	1.09	0.00	0.001	0.001	0.235	0.203	14.61	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	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0069	0.0071	2.86	0.00	0.001	0.001	0.0067	0.0068	1.48	0.00	0.001	0.001	0.0061	0.0056	8.55	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0038	0.004	5.13	0.00	0.001	0.001	0.0051	0.005	1.98	0.00	0.001	0.001	0.0154	0.014	9.52	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	21.7	21.9	0.92	-	0.05	-	22.9	23.2	1.30	-	0.05	-	30.2	27	11.19	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0007	0.00071	1.42	0.00	0.0001	0.0001	0.00065	0.00063	3.12	0.00	0.0001	0.0001	0.00154	0.00139	10.24	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	0.00002	0.00002	0.00004	0.00004	0.00	0.00
Sodium (Dissolved)	mg/L	0.05	0.05	-	260	262	0.77	-	0.05	-	277	285	2.85	-	0.05	-	388	347	11.16	-
Strontium	mg/L	0.001	0.001	0.001	1.34	1.35	0.74	0.00	0.001	0.001	1.45	1.5	3.39	0.00	0.001	0.001	2.12	1.9	10.95	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000021	0.000023	9.09	0.00	0.00001	0.00001	0.000016	0.000014	13.33	0.00	0.00001	0.00001	0.000027	0.000027	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	0.005	0.005	0.01	0.01	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	0.005	0.005	0.01	0.01	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00122	0.00124	1.63	0.00	0.0001	0.0001	0.00174	0.00172	1.16	0.00	0.0001	0.0001	0.00523	0.00465	11.74	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	0.005	0.005	0.01	0.01	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	0.005	0.005	0.01	0.01	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	0.005	0.005	0.008	0.01	22.22	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	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	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	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	0.0004	0.0004	0.00	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	0.0004	0.0004	0.00	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	0.0002	0.0002	0.00	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	0.025	0.025	0.00	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	0.025	0.025	0.00	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	0.09	-	-	-	-	-	-	-	-	-	-	-	-	0.09	0.09	0.09	0.09	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	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	0.2	0.2	0.2	0.2	0.00	0.00
Reached baseline at C50	ug/L		YES	-	YES	YES	-	-	YES	-	YES	YES	-	-	YES	-	YES	YES	-	-
% Exceedance*							0%	0%					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.

MEL-15	CCME	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/5/2024
Parameter	Guideline	Units	2020	2021	2022	2023	2024						
Field Measured													
Temperature		°C	14.10	7.98	10.53	9.30	9.30	2.20	10.80	13.10	12.20	10.20	7.30
pH	6.5 to 9.0	pH units	8.11	7.79	7.52	7.80	7.69	7.79	7.46	7.53	7.59	7.94	7.81
Conductivity		uS/cm	102.73	342.32	133.40	131.47	134.07	72.20	114.30	133.70	146.40	152.50	185.30
Dissolved oxygen		mg/L	10.72	26.80	10.59	11.59	11.58	15.36	9.20	10.96	10.41	11.87	11.65
Dissolved oxygen		%	102.83	85.56	95.30	97.57	99.85	111.70	83.90	105.80	94.10	105.80	97.80
Conventional Parameters													
pH	6.5 to 9.0	pH units	7.62	7.63	7.62	7.61	7.60	7.06	7.51	7.74	7.78	7.77	7.76
Turbidity		NTU	0.43	0.23	0.60	0.50	0.77	1.20	0.60	0.50	0.90	0.70	0.70
Conductivity		umhos/cm	106.67	120.00	137.00	135.43	134.00	53.00	116.00	138.00	149.00	154.00	194.00
Hardness, as CaCO3		mg/L	40.97	43.33	50.10	45.09	45.73	16.80	44.00	46.60	50.80	56.10	60.10
Total alkalinity, as CaCO3		mg/L	35.00	36.83	43.00	40.57	41.33	14.00	40.00	46.00	49.00	49.00	50.00
Carbonate, as CaCO3		mg/L	1.00	0.50	0.50	0.50	0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	34.67	36.50	43.00	40.29	40.83	14.00	40.00	45.00	48.00	48.00	50.00
TDS		mg/L	75.00	60.00	85.00	77.14	83.33	50.00	115.00	80.00	90.00	90.00	75.00
TDS, calculated		mg/L	-	65.00	70.00	62.67	66.33	25.00	60.00	66.00	73.00	75.00	99.00
TSS		mg/L	1.00	1.58	1.00	1.21	1.50	2.00	1.00	1.00	2.00	1.00	2.00
Total organic carbon		mg/L	4.70	4.38	5.00	4.34	4.93	4.90	4.10	4.70	4.90	4.90	6.10
Dissolved organic carbon		mg/L	4.60	4.35	5.00	4.33	4.50	4.00	3.50	3.90	4.60	4.80	6.20
Major Ions													
Chloride	120	mg/L	7.93	10.42	11.30	9.33	9.85	3.30	7.90	9.90	12.00	12.00	14.00
Cyanide		mg/L	0.0050	0.0025	0.0007	0.0003	0.0004	< 0.00050	0.00	< 0.00050	0.00	< 0.00050	0.00
Cyanide (free)	0.005	mg/L	0.0017	0.0020	0.0015	0.0028	0.0010	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)		mg/L	0.0010	0.0006	0.0008	0.0003	0.0003	< 0.00050	0.00	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Silica		mg/L	1.12	0.63	1.05	10.49	1.04	0.49	1.20	0.69	0.85	1.30	1.70
Sulfate	128	mg/L	5.30	6.23	7.60	8.61	7.05	4.20	4.50	4.60	4.60	5.40	19.00
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)		mg/L	0.20	0.03	0.04	0.03	0.03	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Nitrate (as N)	13	mg/L	0.10	0.05	0.11	0.08	0.05	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite (as N)	0.06	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen		mg/L	0.27	0.24	0.30	0.25	0.30	0.33	0.11	0.27	0.33	0.31	0.47
Total phosphorus		mg/L	0.02	0.02	0.02	0.01	0.01	< 0.020	< 0.020	< 0.020	< 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
Total Metals													
Aluminum		mg/L	0.00467	0.00597	0.02100	0.00487	0.01487	0.04	0.02	0.01	0.00	0.00	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00112	0.00143	0.00277	0.00180	0.00536	0.02	0.01	0.00	0.00	0.00	0.00
Barium		mg/L	0.01237	0.01217	0.01350	0.01216	0.01227	0.01	0.02	0.01	0.01	0.01	0.01
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00083	0.00078	0.00124	0.00056	0.00055	0.00	0.00	0.00	0.00	< 0.00050	0.00
Iron	0.3	mg/L	0.08367	0.07133	0.09600	0.09043	0.12350	0.14	0.20	0.13	0.11	0.09	0.07
Lead	0.001	mg/L	0.00020	0.00012	0.00013	0.00010	0.00030	0.00	0.00	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00200	0.00100	0.00100	0.00100	0.00100	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Manganese		mg/L	0.01007	0.00720	0.01280	0.01236	0.02273	0.05	0.04	0.01	0.02	0.01	0.01
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00063	0.00050	0.00067	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00110	0.00072	0.00090	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Strontium		mg/L	0.07053	0.07312	0.08270	0.07753	0.07483	0.03	0.07	0.08	0.08	0.09	0.10
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00008	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Zinc	0.03	mg/L	0.00500	0.00378	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals													
Aluminum		mg/L	0.00317	0.00462	0.00310	0.00150	0.00275	0.01	< 0.0030	< 0.0030	< 0.0030	< 0.0030	0.00
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00098	0.00129	0.00240	0.00166	0.00428	0.02	0.00	0.00	0.00	0.00	0.00
Barium		mg/L	0.01230	0.01193	0.01300	0.01333	0.01293	0.01	0.02	0.01	0.01	0.01	0.02
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Calcium (Dissolved)		mg/L	-	14.43333	16.50000	17.44143	16.47500	5.85	15.50	15.80	18.30	19.20	24.20
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00077	0.00081	0.00075	0.00061	0.00064	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.04337	0.04073	0.04310	0.04913	0.04897	0.05	0.06	0.05	0.05	0.05	0.04
Lead	0.001	mg/L	0.00020	0.00010	0.00010	0.00010	0.00013	0.00	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00200	0.00100	0.00100	0.00100	0.00100	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Magnesium (Dissolved)		mg/L	-	1.65333	1.84000	1.98543	2.04233	0.77	1.88	1.97	2.21	2.28	3.14
Manganese		mg/L	0.00477	0.00315	0.00710	0.00520	0.01513	0.06	0.02	0.00	0.00	0.00	0.00
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00113	0.00070	0.00060	0.00059	0.00060	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00
Potassium (Dissolved)		mg/L	-	0.98817	1.31000	1.10500	1.14883	0.69	1.08	1.14	1.28	1.27	1.43
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Dissolved)		mg/L	-	6.05833	5.39000	5.10714	5.12833	1.75	4.70	5.25	6.05	5.90	7.12
Strontium		mg/L	0.07303	0.07290	0.08250	0.08826	0.07877	0.03	0.07	0.08	0.08	0.09	0.12
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00009	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00348	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Parameter	Sample date		5/26/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		6.23	-	7.13	7.06	0.99	-
Turbidity	NTU	0.1	0.1	0.1	1.3	1.2	8.00	0.00
Conductivity	ms/cm	0.001	0.001	0.001	0.054	0.053	1.87	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	17	16.8	1.18	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	16.2	17.8	9.41	-
Total alkalinity, as CaCO3	mg/L	1	1	1	15	14	6.90	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	15	14	6.90	-
TDS	mg/L	10	10	10	55	50	9.52	0.00
TDS, calculated	mg/L	1	1	-	24	25	4.08	-
TSS	mg/L	1	1	1	2	2	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	4.9	4.9	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	4.3	4	7.23	0.00
Major Ions								
Chloride	mg/L	1	1	1	2.8	3.3	16.39	0.00
Cyanide	mg/L	0.0005	0.00055	0.0005	0.0005	0.0005	0.00	9.52
Cyanide (free)	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.00063	0.0005	23.01	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.1	0.05	0.51	0.49	4.00	66.67
Sulfate	mg/L	0.5	0.5	0.5	4.3	4.2	2.35	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	0.28	0.33	16.39	0.00
Total phosphorus	mg/L	0.02	0.02	0.02	0.022	0.02	9.52	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	0.0381	0.044	14.37	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	0.0186	0.0189	1.60	0.00
Barium	mg/L	0.001	0.001	0.001	0.0067	0.0067	0.00	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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 (total)	mg/L	0.05	0.05	-	5.62	5.54	1.43	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00066	0.00074	11.43	0.00
Iron	mg/L	0.01	0.01	0.01	0.138	0.138	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00087	0.00086	1.16	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (total)	mg/L	0.05	0.05	-	0.709	0.712	0.42	-
Manganese	mg/L	0.001	0.001	0.001	0.0565	0.0517	8.87	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 (total)	mg/L	0.05	0.05	-	0.651	0.661	1.52	-
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 (total)	mg/L	0.05	0.05	-	1.58	1.58	0.00	-
Strontium	mg/L	0.001	0.001	0.001	0.0261	0.026	0.38	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	0.003	0.003	0.0067	0.0067	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	0.0148	0.0159	7.17	0.00
Barium	mg/L	0.001	0.001	0.001	0.0064	0.007	8.96	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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	-	5.34	5.85	9.12	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00066	0.00074	11.43	0.00
Iron	mg/L	0.005	0.005	0.005	0.0533	0.0524	1.70	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00024	0.00025	4.08	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	-	0.703	0.774	9.61	-
Manganese	mg/L	0.001	0.001	0.001	0.062	0.0601	3.11	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	-	0.649	0.693	6.56	-
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	-	1.56	1.75	11.48	-
Strontium	mg/L	0.001	0.001	0.001	0.0245	0.0275	11.54	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.

MEL-16	CCME	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/5/2024
Parameter	Guideline	Units	2020	2021	2022	2023	2024						
Field Measured													
Temperature		°C	15.03	7.98	9.50	10.09	8.93	1.20	7.10	13.80	12.50	10.10	8.90
pH	6.5 to 9.0	pH units	8.13	7.73	7.63	7.84	7.71	7.80	7.27	7.88	7.69	7.89	7.73
Conductivity		uS/cm	69.57	117.63	159.20	126.06	143.57	31.40	108.80	151.20	172.20	190.20	207.60
Dissolved oxygen		mg/L	10.25	26.30	10.62	9.68	11.20	13.69	9.46	10.66	10.25	12.04	11.07
Dissolved oxygen		%	99.93	82.33	92.30	99.99	96.50	96.70	79.00	104.50	96.20	107.10	95.50
Conventional Parameters													
pH	6.5 to 9.0	pH units	7.54	7.64	7.50	7.57	7.60	7.08	7.37	7.79	7.80	7.80	7.78
Turbidity		NTU	0.50	0.48	0.40	0.46	0.82	1.30	0.60	0.30	1.00	1.10	0.60
Conductivity		umhos/cm	102.00	118.33	136.00	130.57	146.83	31.00	110.00	157.00	175.00	191.00	217.00
Hardness, as CaCO3		mg/L	36.23	42.83	48.30	42.27	47.25	9.17	35.20	50.40	51.00	68.40	69.30
Total alkalinity, as CaCO3		mg/L	24.67	30.67	33.00	33.57	37.95	8.70	31.00	44.00	46.00	50.00	48.00
Carbonate, as CaCO3		mg/L	1.00	0.50	0.50	0.50	0.50	< 1.0	< 1	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	24.67	30.50	33.00	33.57	37.78	8.70	31.00	43.00	46.00	50.00	48.00
TDS		mg/L	76.67	75.00	94.17	72.86	103.33	50.00	115.00	105.00	135.00	115.00	100.00
TDS, calculated		mg/L	-	64.67	65.00	60.43	71.50	14.00	55.00	74.00	84.00	92.00	110.00
TSS		mg/L	2.00	2.00	1.00	1.86	1.92	1.00	< 1	1.00	5.00	1.00	3.00
Total organic carbon		mg/L	4.00	4.23	4.50	3.97	4.42	3.10	3.10	4.20	4.80	5.10	6.20
Dissolved organic carbon		mg/L	3.83	4.22	4.10	3.99	4.07	2.60	2.80	4.10	4.70	4.70	5.50
Major Ions													
Chloride	120	mg/L	13.33	15.33	17.00	13.60	15.95	1.70	12.00	17.00	20.00	21.00	24.00
Cyanide		mg/L	0.0050	0.0025	0.0015	0.0006	0.0005	0.00	0.00	< 0.00050	0.00	< 0.00050	0.00
Cyanide (free)	0.005	mg/L	0.0012	0.0026	0.0014	0.0028	0.0012	< 0.0020	< 0.002	0.00	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)		mg/L	0.0010	0.0006	0.0011	0.0005	0.0005	0.00	< 0.0005	< 0.00050	0.00	< 0.00050	< 0.00050
Silica		mg/L	0.29	0.33	0.52	0.42	0.52	0.28	0.37	0.26	0.34	0.66	1.20
Sulfate	128	mg/L	2.37	4.03	4.50	4.11	6.50	2.10	3.70	4.70	4.80	6.70	17.00
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)		mg/L	0.09	0.03	0.03	0.03	0.03	< 0.050	0.07	< 0.050	< 0.050	< 0.050	< 0.050
Nitrate (as N)	13	mg/L	0.10	0.05	0.05	0.05	0.05	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite (as N)	0.06	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen		mg/L	0.21	0.24	0.22	0.28	0.30	0.19	0.16	0.24	0.30	0.38	0.54
Total phosphorus		mg/L	0.02	0.02	0.01	0.01	0.01	< 0.020	< 0.02	< 0.020	< 0.020	< 0.020	< 0.020
Orthophosphate (P)		mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals													
Aluminum		mg/L	0.01203	0.02493	0.01120	0.00884	0.01288	0.04	0.01	0.01	0.01	0.01	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00294	0.00545	0.00609	0.00847	0.01301	0.03	0.01	0.01	0.01	0.01	0.01
Barium		mg/L	0.01947	0.02120	0.02120	0.01960	0.02130	0.01	0.02	0.02	0.02	0.03	0.03
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00099	0.00134	0.00111	0.00089	0.00097	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.14567	0.11967	0.09000	0.09914	0.11150	0.14	0.12	0.07	0.14	0.13	0.07
Lead	0.001	mg/L	0.00026	0.00038	0.00016	0.00024	0.00029	0.001	0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00200	0.00100	0.00100	0.00100	0.00100	< 0.0020	< 0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Manganese		mg/L	0.00913	0.00797	0.00880	0.01049	0.01578	0.05	0.02	0.01	0.01	0.01	0.01
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00100	0.00060	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Strontium		mg/L	0.06343	0.07083	0.07880	0.07249	0.08208	0.01	0.06	0.09	0.09	0.13	0.12
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010

Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00005	0.00006	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	0.00
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00323	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals													
Aluminum		mg/L	0.00523	0.01420	0.00460	0.00440	0.00575	0.01	0.00	0.00	0.00	0.00	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00232	0.00389	0.00522	0.00761	0.01172	0.03	0.01	0.01	0.01	0.01	0.01
Barium		mg/L	0.01937	0.02078	0.02110	0.02133	0.02307	0.01	0.02	0.02	0.02	0.03	0.03
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Calcium (Dissolved)		mg/L	-	13.80000	15.67000	15.33429	16.99667	3.48	13.90	16.90	20.30	22.30	25.10
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00088	0.00122	0.00102	0.00092	0.00097	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.06183	0.04648	0.04100	0.04510	0.04132	0.06	0.05	0.03	0.04	0.04	0.03
Lead	0.001	mg/L	0.00020	0.00015	0.00010	0.00013	0.00013	0.00	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00200	0.00100	0.00100	0.00100	0.00100	< 0.0020	< 0.002	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Magnesium (Dissolved)		mg/L	-	1.88167	2.08000	2.01286	2.37967	0.47	1.90	2.50	2.87	2.96	3.58
Manganese		mg/L	0.00220	0.00370	0.00500	0.00649	0.01322	0.05	0.02	0.00	0.00	0.00	0.00
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00100	0.00060	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Potassium (Dissolved)		mg/L	-	1.11333	1.24300	1.25300	1.42817	0.45	1.18	1.47	1.70	1.82	1.95
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Dissolved)		mg/L	-	3.58000	4.34000	4.26857	5.40317	1.00	4.13	5.47	6.38	6.89	8.55
Strontium		mg/L	0.06430	0.07045	0.07910	0.07876	0.08587	0.02	0.06	0.09	0.09	0.12	0.13
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00005	0.00006	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	0.00
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	1.11	0.999	10.53	-
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 (total)	mg/L	0.05	0.05	-	3.68	3.32	10.29	-
Strontium	mg/L	0.001	0.001	0.001	0.0651	0.0583	11.02	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	0.003	0.003	0.003	0.0034	12.50	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	0.00657	0.0065	1.07	0.00
Barium	mg/L	0.001	0.001	0.001	0.0209	0.0211	0.95	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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	-	13.8	13.9	0.72	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00077	0.00064	18.44	0.00
Iron	mg/L	0.005	0.005	0.005	0.0492	0.0497	1.01	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	-	1.84	1.9	3.21	-
Manganese	mg/L	0.001	0.001	0.001	0.0161	0.0164	1.85	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	-	1.17	1.18	0.85	-
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	-	4.11	4.13	0.49	-
Strontium	mg/L	0.001	0.001	0.001	0.0625	0.0637	1.90	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.

MEL-17	CCME	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/5/2024
Parameter	Guideline	Units	2020	2021	2022	2023	2024						
Field Measured													
Temperature		°C	14.67	8.98	8.70	9.70	9.62	5.30	13.90	13.30	11.50	10.00	3.70
pH	6.5 to 9.0	pH units	7.91	7.89	7.11	7.98	7.98	7.60	8.04	8.26	7.94	8.25	7.76
Conductivity		uS/cm	293.87	249.70	429.30	312.85	377.87	163.00	278.40	373.70	444.80	462.50	544.80
Dissolved oxygen		mg/L	39.80	27.17	10.78	9.79	11.79	14.74	8.56	11.13	11.10	11.03	14.18
Dissolved oxygen		%	99.73	85.61	105.40	97.08	102.68	116.20	83.60	107.80	102.10	98.80	107.60
Conventional Parameters													
pH	6.5 to 9.0	pH units	7.90	7.78	7.63	7.77	7.71	7.27	7.61	7.75	7.94	8.01	7.70
Turbidity		NTU	0.93	0.63	0.80	0.85	0.90	1.00	0.70	1.30	0.90	1.00	0.50
Conductivity		umhos/cm	316.67	236.67	297.00	322.50	385.50	157.00	281.00	373.00	453.00	473.00	576.00
Hardness, as CaCO3		mg/L	112.70	86.43	110.10	110.51	121.62	38.00	90.70	129.00	145.00	163.00	164.00
Total alkalinity, as CaCO3		mg/L	59.33	50.00	51.00	60.50	56.17	25.00	48.00	68.00	69.00	81.00	46.00
Carbonate, as CaCO3		mg/L	1.00	0.50	0.50	0.50	0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	59.00	49.67	51.00	60.13	55.83	25.00	48.00	68.00	69.00	80.00	45.00
TDS		mg/L	221.67	205.83	205.83	215.63	280.00	110.00	235.00	270.00	335.00	375.00	355.00
TDS, calculated		mg/L	-	140.00	160.00	167.25	203.00	78.00	150.00	200.00	230.00	240.00	320.00
TSS		mg/L	4.00	4.83	2.00	2.75	1.33	2.00	1.00	2.00	1.00	1.00	1.00
Total organic carbon		mg/L	9.90	8.30	8.70	9.99	9.50	5.00	7.00	11.00	12.00	12.00	10.00
Dissolved organic carbon		mg/L	9.70	8.42	8.10	9.50	9.25	4.30	6.40	9.80	12.00	13.00	10.00
Major Ions													
Chloride	120	mg/L	44.67	30.00	36.00	37.25	46.17	15.00	31.00	47.00	60.00	64.00	60.00
Cyanide		mg/L	0.0050	0.0025	0.0093	0.0008	0.0008	< 0.00050	0.00	0.00	0.00	0.00	0.00
Cyanide (free)	0.005	mg/L	0.0013	0.0025	0.0026	0.0035	0.0017	0.003	0.0022	0.0021	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)		mg/L	0.0010	0.0007	0.0105	0.0006	0.0006	< 0.00050	< 0.00050	0.00	0.00	< 0.00050	0.00
Silica		mg/L	2.20	1.74	2.53	1.80	1.94	1.20	0.42	0.62	1.40	2.90	5.10
Sulfate	128	mg/L	16.17	17.75	38.40	34.88	53.17	22.00	37.00	44.00	45.00	41.00	130.00
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)		mg/L	0.30	0.03	0.09	0.04	0.03	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.07
Unionized Ammonia, calculated internally		mg/L	-	0.002	-	-	-	-	-	-	-	-	-
Nitrate (as N)	13	mg/L	0.13	0.05	0.10	0.06	0.13	0.13	< 0.10	< 0.10	< 0.10	< 0.10	0.47
Nitrite (as N)	0.06	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Kjeldahl nitrogen		mg/L	0.60	0.39	0.42	0.56	0.58	0.25	0.36	0.72	0.64	0.73	0.77
Total phosphorus		mg/L	0.02	0.01	0.02	0.01	0.01	0.03	< 0.020	< 0.020	< 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
Total Metals													
Aluminum		mg/L	0.01017	0.01065	0.00700	0.00505	0.01358	0.04	0.01	0.00	0.01	0.01	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00108	0.00109	0.00114	0.00109	0.00127	0.00	0.00	0.00	0.00	0.00	0.00
Barium		mg/L	0.03383	0.02935	0.02800	0.03194	0.03437	0.02	0.03	0.04	0.04	0.04	0.04
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00120	0.00134	0.00112	0.00103	0.00101	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.31500	0.49800	0.23600	0.21325	0.17133	0.22	0.12	0.14	0.14	0.18	0.24
Lead	0.001	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00783	0.00438	0.00450	0.00434	0.00455	< 0.0020	0.00	0.01	0.01	0.01	0.00
Manganese		mg/L	0.05880	0.12482	0.04510	0.06455	0.04860	0.08	0.03	0.04	0.05	0.04	0.05
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00203	0.00202	0.00210	0.00190	0.00182	< 0.0010	0.00	0.00	0.00	0.00	0.00
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Strontium		mg/L	0.31967	0.20933	0.24200	0.25550	0.28343	0.08	0.24	0.31	0.34	0.40	0.34
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010

Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00008	0.00010	0.00011	0.00011	< 0.00010	< 0.00010	< 0.00010	0.00	0.00	0.00
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals													
Aluminum		mg/L	0.00337	0.01050	0.00430	0.00195	0.00527	0.01	0.01	< 0.0030	< 0.0030	0.01	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00098	0.00092	0.00104	0.00105	0.00124	0.00	0.00	0.00	0.00	0.00	0.00
Barium		mg/L	0.03377	0.02692	0.02760	0.03334	0.03673	0.02	0.03	0.04	0.04	0.05	0.05
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Calcium (Dissolved)		mg/L	38.77	29.63	36.40	38.51	42.35	15.60	32.50	39.60	49.30	53.00	64.10
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00113	0.00130	0.00110	0.00102	0.00110	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.16933	0.19500	0.15000	0.12479	0.10277	0.08	0.08	0.09	0.07	0.10	0.20
Lead	0.001	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.00757	0.00460	0.00440	0.00451	0.00527	0.00	0.00	0.01	0.01	0.01	0.01
Magnesium (Dissolved)		mg/L	4.44	3.43	4.45	4.73	6.21	2.17	4.24	5.80	7.72	7.39	9.96
Manganese		mg/L	0.03573	0.04425	0.04030	0.05184	0.03883	0.08	0.02	0.03	0.03	0.02	0.05
Mercury	0.000026	mg/L	0.00001	0.00057	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00197	0.00173	0.00190	0.00181	0.00193	0.00	0.00	0.00	0.00	0.00	0.00
Potassium (Dissolved)		mg/L	2.67	1.87	2.17	2.44	2.82	1.31	2.18	2.77	3.70	3.75	3.19
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Dissolved)		mg/L	11.30	8.75	11.07	12.34	16.79	5.85	11.80	15.70	20.50	19.30	27.60
Strontium		mg/L	0.32400	0.20933	0.25220	0.26738	0.30267	0.11	0.24	0.31	0.36	0.39	0.41
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00006	0.00010	0.00012	0.00012	< 0.00010	< 0.00010	0.00	0.00	0.00	0.00
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00367	0.00250	0.00250	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Parameter	Sample date		9/1/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.86	-	7.97	8.01	0.50	-
Turbidity	NTU	0.1	0.1	0.1	1	1	0.00	0.00
Conductivity	ms/cm	0.001	0.0015	0.0007	0.475	0.473	0.42	72.73
Hardness, as CaCO3	mg/L	0.5	0.5	-	165	163	1.22	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	163	163	0.00	-
Total alkalinity, as CaCO3	mg/L	1	1	1	78	81	3.77	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	78	80	2.53	-
TDS	mg/L	10	10	10	335	375	11.27	0.00
TDS, calculated	mg/L	1	1	-	240	240	0.00	-
TSS	mg/L	1	1	1	1	1	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	12	13	8.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	63	64	1.57	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00053	0.0006	12.39	0.00
Cyanide (free)	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	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
Silica	mg/L	0.05	0.05	0.05	2.8	2.9	3.51	0.00
Sulfate	mg/L	0.5	0.5	0.5	41	41	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	0.75	0.73	2.70	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	0.0038	0.0078	68.97	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	0.00125	0.00123	1.61	0.00
Barium	mg/L	0.001	0.001	0.001	0.0448	0.0443	1.12	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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 (total)	mg/L	0.05	0.05	-	53.2	52.7	0.94	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00076	0.00075	1.32	0.00
Iron	mg/L	0.01	0.01	0.01	0.184	0.18	2.20	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	0.0072	0.0071	1.40	0.00
Magnesium (total)	mg/L	0.05	0.05	-	7.79	7.57	2.86	-
Manganese	mg/L	0.001	0.001	0.001	0.0431	0.0441	2.29	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 (total)	mg/L	0.05	0.05	-	3.83	3.79	1.05	-
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 (total)	mg/L	0.05	0.05	-	20.5	20.2	1.47	-
Strontium	mg/L	0.001	0.001	0.001	0.415	0.401	3.43	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	0.00021	0.0002	4.88	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	0.003	0.003	0.003	0.0057	62.07	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	0.00123	0.00121	1.64	0.00
Barium	mg/L	0.001	0.001	0.001	0.045	0.045	0.00	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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	-	53	53	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00076	0.00084	10.00	0.00
Iron	mg/L	0.005	0.005	0.005	0.101	0.102	0.99	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	0.0069	0.007	1.44	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	7.52	7.39	1.74	-
Manganese	mg/L	0.001	0.001	0.001	0.0221	0.0212	4.16	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	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0021	0.002	4.88	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	3.82	3.75	1.85	-
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	-	20	19.3	3.56	-
Strontium	mg/L	0.001	0.001	0.001	0.393	0.386	1.80	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	0.00019	0.0002	5.13	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
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	0.00024	0.0002	0.0002	0.0002	0.00	18.18
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.

MEL-18	CCME	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/5/2024
Parameter	Guideline	Units	2020	2021	2022	2023	2024						
Field Measured													
Temperature		°C	14.40	8.15	9.80	9.74	8.92	4.60	6.90	14.20	12.20	10.50	5.10
pH	6.5 to 9.0	pH units	7.84	7.81	7.54	7.89	7.75	7.66	7.26	8.18	7.81	7.98	7.61
Conductivity		uS/cm	142.20	416.50	204.90	186.49	225.42	150.50	192.90	216.50	235.60	246.80	310.20
Dissolved oxygen		mg/L	40.17	29.86	10.27	10.15	11.54	12.10	9.56	10.15	11.87	11.72	13.85
Dissolved oxygen		%	75.18	85.44	86.90	101.71	99.67	93.80	79.20	100.30	110.70	105.30	108.70
Conventional Parameters													
pH	6.5 to 9.0	pH units	7.54	7.60	7.57	7.68	7.66	7.31	7.51	7.80	7.81	7.79	7.71
Turbidity		NTU	0.53	0.39	0.50	0.59	0.73	0.80	0.40	0.60	0.90	0.80	0.90
Conductivity		umhos/cm	156.67	156.67	162.00	195.71	231.83	160.00	195.00	223.00	240.00	245.00	328.00
Hardness, as CaCO3		mg/L	57.17	64.87	61.30	65.17	73.48	39.40	69.70	71.50	73.40	85.90	101.00
Total alkalinity, as CaCO3		mg/L	30.67	34.67	38.00	43.71	47.50	26.00	46.00	50.00	54.00	55.00	54.00
Carbonate, as CaCO3		mg/L	1.00	0.50	0.50	0.50	0.50	< 1.0	< 1	< 1.0	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3		mg/L	30.67	34.50	38.00	43.14	47.33	26.00	46.00	50.00	54.00	55.00	53.00
TDS		mg/L	110.00	122.50	134.00	120.00	160.00	105.00	175.00	160.00	165.00	160.00	195.00
TDS, calculated		mg/L	-	88.67	80.00	96.29	115.33	84.00	98.00	100.00	120.00	120.00	170.00
TSS		mg/L	3.33	2.08	1.00	6.71	2.58	2.00	< 1	4.00	4.00	3.00	2.00
Total organic carbon		mg/L	3.97	4.05	4.20	4.41	4.75	3.90	3.70	4.40	4.90	5.10	6.50
Dissolved organic carbon		mg/L	3.70	4.03	4.00	4.26	4.43	3.50	3.40	3.80	4.60	4.90	6.40
Major Ions													
Chloride	120	mg/L	23.33	21.17	21.30	24.57	29.33	17.00	25.00	28.00	32.00	31.00	43.00
Cyanide		mg/L	0.0050	0.0025	0.0007	0.0004	0.0005	< 0.00050	0.00	< 0.00050	0.00	< 0.00050	0.00
Cyanide (free)	0.005	mg/L	0.0011	0.0017	0.0022	0.0044	0.0014	< 0.0020	0.00	0.00	< 0.0020	< 0.0020	< 0.0020
Cyanide (WAD)		mg/L	0.0010	0.0008	0.0006	0.0004	0.0005	0.00	0.00	< 0.00050	0.00	< 0.00050	< 0.00050
Silica		mg/L	0.74	0.45	0.52	0.70	0.89	0.80	0.65	0.33	0.47	1.30	1.80
Sulfate	128	mg/L	5.80	7.48	7.19	9.13	15.35	23.00	8.10	8.50	8.60	9.90	34.00
Nutrients and Chlorophyll a													
Ammonia Nitrogen (as N)		mg/L	0.06	0.03	0.03	0.04	0.06	0.10	< 0.05	< 0.050	< 0.050	< 0.050	0.15
Nitrate (as N)	13	mg/L	0.10	0.05	0.05	0.05	0.11	0.42	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite (as N)	0.06	mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate + nitrite (as N)		mg/L	0.10	0.05	-	-	0.11	0.42	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10
Total Kjeldahl nitrogen		mg/L	0.25	0.21	0.22	0.33	0.37	0.39	0.16	0.44	0.34	0.36	0.51
Total phosphorus		mg/L	0.02	0.01	0.02	0.02	0.01	< 0.020	< 0.02	< 0.020	< 0.020	< 0.020	< 0.020
Orthophosphate (P)		mg/L	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals													
Aluminum		mg/L	0.01003	0.01070	0.00820	0.01881	0.03202	0.16	0.01	0.01	0.01	0.00	0.01
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00274	0.00209	0.00269	0.00498	0.00521	0.01	0.00	0.00	0.00	0.00	0.00
Barium		mg/L	0.02020	0.01895	0.01560	0.01831	0.02028	0.01	0.02	0.02	0.02	0.02	0.02
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00084	0.00098	0.00087	0.00093	0.00085	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.24600	0.12883	0.15000	0.20429	0.11133	0.18	0.12	0.11	0.10	0.08	0.08
Lead	0.001	mg/L	0.00020	0.00014	0.00010	0.00021	0.00019	0.00	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.01440	0.00862	0.00780	0.00820	0.00855	0.00	0.01	0.01	0.01	0.01	0.01
Manganese		mg/L	0.06147	0.01595	0.01400	0.02287	0.01908	0.04	0.02	0.01	0.02	0.02	0.01
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00110	0.00075	0.00050	0.00066	0.00058	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	0.00
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Strontium		mg/L	0.14933	0.17083	0.14390	0.15986	0.18038	0.07	0.18	0.18	0.18	0.21	0.25

Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals													
Aluminum		mg/L	0.00597	0.00597	0.00320	0.00373	0.00237	0.01	< 0.003	< 0.0030	< 0.0030	< 0.0030	0.00
Antimony		mg/L	0.00050	0.00025	0.00025	0.00025	0.00025	< 0.00050	< 0.0005	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	0.005	mg/L	0.00197	0.00175	0.00207	0.00319	0.00436	0.01	0.00	0.00	0.00	0.00	0.00
Barium		mg/L	0.01987	0.01615	0.01480	0.01966	0.02188	0.02	0.02	0.02	0.02	0.02	0.03
Beryllium		mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron		mg/L	0.05000	0.02500	0.02500	0.02500	0.02500	< 0.050	< 0.05	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	0.00006	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Calcium (Dissolved)		mg/L	-	18.73	19.70	23.77	26.48	14.80	25.20	24.20	28.20	28.20	38.30
Chromium		mg/L	0.00100	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	0.002	mg/L	0.00067	0.00078	0.00085	0.00074	0.00080	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.3	mg/L	0.14150	0.05253	0.06370	0.04864	0.04167	0.06	0.06	0.03	0.03	0.03	0.03
Lead	0.001	mg/L	0.00020	0.00010	0.00010	0.00010	0.00010	< 0.00020	< 0.0002	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium		mg/L	0.01493	0.00907	0.00750	0.00927	0.00913	0.00	0.01	0.01	0.01	0.01	0.01
Magnesium (Dissolved)		mg/L	-	2.40	2.52	3.04	3.72	2.34	3.35	3.38	3.83	3.89	5.52
Manganese		mg/L	0.04593	0.00690	0.01000	0.00971	0.01233	0.04	0.02	0.00	0.00	0.00	0.00
Mercury	0.000026	mg/L	0.00001	0.00001	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	0.00050	0.00050	0.00050	0.00050	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Nickel	0.025	mg/L	0.00107	0.00058	0.00050	0.00057	0.00062	< 0.0010	< 0.001	< 0.0010	< 0.0010	< 0.0010	0.00
Potassium (Dissolved)		mg/L	-	1.19	1.15	1.46	1.74	1.53	1.53	1.59	1.81	1.83	2.16
Selenium	0.001	mg/L	0.00010	0.00005	0.00005	0.00005	0.00005	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	0.0025	mg/L	0.00002	0.00001	0.00001	0.00001	0.00001	< 0.000020	< 0.00002	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium (Dissolved)		mg/L	-	4.82	5.09	6.74	9.04	8.66	7.32	8.04	9.09	9.10	12.00
Strontium		mg/L	0.14927	0.15133	0.14500	0.17643	0.19240	0.09	0.18	0.19	0.20	0.22	0.28
Thallium	0.0008	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	< 0.000010	< 0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	0.015	mg/L	0.00010	0.00005	0.00005	0.00005	0.00006	< 0.00010	< 0.0001	< 0.00010	< 0.00010	< 0.00010	0.00
Vanadium		mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	0.03	mg/L	0.00500	0.00250	0.00250	0.00250	0.00250	< 0.0050	< 0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Parameter	Sample date		10/5/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.68	-	7.77	7.71	0.78	-
Turbidity	NTU	0.1	0.1	0.1	0.7	0.9	25.00	0.00
Conductivity	ms/cm	0.001	0.0012	0.0007	0.327	0.328	0.31	52.63
Hardness, as CaCO3	mg/L	0.5	0.5	-	105	101	3.88	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	118	118	0.00	-
Total alkalinity, as CaCO3	mg/L	1	1	1	57	54	5.41	0.00
Carbonate, as CaCO3	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as CaCO3	mg/L	1	1	-	57	53	7.27	-
TDS	mg/L	10	10	10	160	195	19.72	0.00
TDS, calculated	mg/L	1	1	-	170	170	0.00	-
TSS	mg/L	1	1	1	2	2	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	6.5	6.5	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	6.4	6.4	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	42	43	2.35	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00078	0.00059	27.74	0.00
Cyanide (free)	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	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
Silica	mg/L	0.05	0.05	0.05	1.8	1.8	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	34	34	0.00	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.05	0.15	100.00	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	0.18	0.1	0.5	0.51	1.98	57.14
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	0.0084	0.0082	2.41	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	0.00374	0.00368	1.62	0.00
Barium	mg/L	0.001	0.001	0.001	0.0249	0.0241	3.27	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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	0.000013	0.00001	0.00001	0.00001	0.00	26.09
Calcium (total)	mg/L	0.05	0.05	-	33.7	32.4	3.93	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00123	0.00133	7.81	0.00
Iron	mg/L	0.01	0.01	0.01	0.081	0.078	3.77	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	0.0108	0.0107	0.93	0.00
Magnesium (total)	mg/L	0.05	0.05	-	4.97	4.9	1.42	-
Manganese	mg/L	0.001	0.001	0.001	0.0106	0.0099	6.83	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	0.0011	0.001	9.52	0.00
Potassium (total)	mg/L	0.05	0.05	-	1.92	1.88	2.11	-
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 (total)	mg/L	0.05	0.05	-	10.5	10.3	1.92	-
Strontium	mg/L	0.001	0.001	0.001	0.25	0.249	0.40	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	0.003	0.003	0.003	0.0032	6.45	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	0.0035	0.00349	0.29	0.00
Barium	mg/L	0.001	0.001	0.001	0.0282	0.0281	0.36	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	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	-	38.3	38.3	0.00	-

Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00091	0.00108	17.09	0.00
Iron	mg/L	0.005	0.005	0.005	0.0328	0.0313	4.68	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00028	0.0002	33.33	0.00
Lithium	mg/L	0.002	0.002	0.002	0.0117	0.0118	0.85	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	5.41	5.52	2.01	-
Manganese	mg/L	0.001	0.001	0.001	0.0035	0.0036	2.82	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	0.0012	0.0012	0.00	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	2.2	2.16	1.83	-
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	-	11.7	12	2.53	-
Strontium	mg/L	0.001	0.001	0.001	0.278	0.279	0.36	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	0.00011	0.00012	8.70	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.

MEL-19	Sample date	Annual Average			5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/6/2024
Parameter	Units	2022	2023	2024						
Field Measured										
Temperature	°C	10.8	8.4	6.5	1.40	4.30	11.80	11.50	7.90	2.00
pH	pH units	7.88	8.21	7.65	5.65	8.05	8.01	8.07	8.16	7.98
Conductivity	uS/cm	4061	3,399	2,362	333.30	719.00	2032.00	2665.00	5759.00	2666.00
Dissolved oxygen	mg/L	9.90	9.84	11.82	17.93	11.57	10.58	9.56	9.13	12.12
Dissolved oxygen	%	86.7	92.7	95.7	127.60	89.20	100.50	88.60	78.50	89.90
Conventional Parameters										
pH	pH units	7.98	7.88	7.86	7.69	7.69	7.91	7.99	8.02	7.88
Turbidity	NTU	14.8	2.5	4.6	10.00	6.20	2.70	1.00	0.50	7.00
Hardness, as CaCO3	mg/L	594	673	604	64.80	135.00	439.00	747.00	1310.00	928.00
Total alkalinity, as CaCO3	mg/L	111	94	85	37.00	42.00	74.00	99.00	140.00	120.00
TDS	mg/L	1710	2,144	1,908	195.00	460.00	1270.00	2410.00	3950.00	3160.00
TDS, calculated	mg/L	1588	1,974	1,640	170.00	370.00	1100.00	2100.00	3300.00	2800.00
TSS	mg/L	11	10	7	14.00	5.00	3.00	3.00	4.00	11.00
Major Ions										
Chloride	mg/L	618	801	604	44.00	120.00	400.00	800.00	1300.00	960.00
Cyanide	mg/L	0.00426	0.00196	0.00242	0.00	0.00	0.00	0.00	0.00	0.01
Fluoride	mg/L	0.19	0.13	0.13	< 0.10	< 0.10	0.11	0.17	0.21	0.20
Silica	mg/L	5.10	2.12	2.23	0.80	1.20	0.89	1.20	5.00	4.30
Sulfate	mg/L	328.0	387.3	380.3	45.00	97.00	290.00	470.00	700.00	680.00
Nutrients and Chlorophyll a										
Ammonia Nitrogen (as N)	mg/L	2.8	1.2	1.0	0.47	0.43	0.39	0.09	0.26	4.10
Nitrate (as N)	mg/L	5.62	6.37	7.61	1.08	1.54	4.84	8.29	11.20	18.70
Nitrite (as N)	mg/L	0.236	0.141	0.062	0.01	0.01	0.09	0.06	0.09	0.12
Total phosphorus	mg/L	0.030	0.012	0.017	0.02	< 0.020	< 0.020	< 0.020	< 0.020	0.04
Orthophosphate (P)	mg/L	0.008	0.005	0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals										
Aluminum	mg/L	0.4209	0.2084	0.1181	0.23	0.14	0.09	0.02	0.02	0.21
Arsenic	mg/L	0.0228	0.0128	0.0114	0.01	0.01	0.01	0.01	0.01	0.01
Barium	mg/L	0.0782	0.0628	0.0491	0.01	0.02	0.03	0.07	0.10	0.07
Cadmium	mg/L	0.000053	0.000069	0.000048	< 0.000010	0.00	0.00	0.00	0.00	0.00
Chromium	mg/L	0.0014	0.0012	0.0009	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0020
Copper	mg/L	0.00776	0.00455	0.00411	0.00	0.00	0.00	0.00	0.01	0.01
Iron	mg/L	0.656	0.347	0.200	0.39	0.23	0.14	0.03	< 0.050	0.40
Lead	mg/L	0.00080	0.00053	0.00055	0.00	0.00	0.00	< 0.00020	< 0.0010	0.00
Manganese	mg/L	0.1158	0.1229	0.1445	0.04	0.06	0.08	0.04	0.23	0.42
Mercury	mg/L	0.000005	0.000005	0.000005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.0050	0.0035	0.0026	0.00	0.00	0.00	0.00	< 0.0050	0.00
Nickel	mg/L	0.0370	0.0410	0.0347	0.01	0.01	0.03	0.04	0.08	0.05
Selenium	mg/L	0.00082	0.00084	0.00104	0.00	0.00	0.00	0.00	0.00	0.00
Silver	mg/L	0.000014	0.000019	0.000018	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.00010	< 0.000040
Thallium	mg/L	0.000032	0.000020	0.000018	< 0.000010	< 0.000010	0.00	0.00	< 0.000050	0.00
Titanium	mg/L	-	-	-	0.01	0.01	< 0.0050	< 0.0050	< 0.025	< 0.010
Zinc	mg/L	0.0035	0.0050	0.0046	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.010
Dissolved Metals										
Calcium (Dissolved)	mg/L	156.3	186.7	165.1	23.50	45.10	119.00	218.00	358.00	227.00
Magnesium (Dissolved)	mg/L	48.2	63.4	54.6	5.08	11.80	37.60	67.90	108.00	97.20
Potassium (Dissolved)	mg/L	24.4	26.4	22.0	3.48	5.98	15.40	28.80	38.90	39.50
Sodium (Dissolved)	mg/L	314	420	329	26.60	65.50	199.00	413.00	642.00	626.00

Parameter	Sample date		5/26/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.84	-	7.69	7.69	0.00	-
Turbidity	NTU	0.1	0.1	0.1	10	10	0.00	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	70.7	64.8	8.71	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	80.5	79.7	1.00	-
Total alkalinity, as CaCO3	mg/L	1	1	1	37	37	0.00	0.00
TDS	mg/L	10	10	10	195	195	0.00	0.00
TDS, calculated	mg/L	1	1	-	170	170	0.00	-
TSS	mg/L	1	1	1	12	14	15.38	0.00
Major Ions								
Chloride	mg/L	1	1	1	43	44	2.30	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00117	0.00145	21.37	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	0.8	0.8	0.00	0.00
Sulfate	mg/L	0.5	0.59	0.5	44	45	2.25	16.51
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.47	0.47	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	1.08	1.08	0.00	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.012	0.012	0.00	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	1.09	1.09	0.00	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.02	0.021	4.88	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	0.224	0.229	2.21	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0128	0.0125	2.37	0.00
Barium	mg/L	0.001	0.001	0.001	0.0079	0.0076	3.87	0.00
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	-	20.9	18.6	11.65	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00137	0.00135	1.47	0.00
Iron	mg/L	0.01	0.01	0.01	0.442	0.385	13.78	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00103	0.001	2.96	0.00
Magnesium (total)	mg/L	0.05	0.05	-	4.51	4.48	0.67	-
Manganese	mg/L	0.001	0.001	0.001	0.0463	0.0448	3.29	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	0.0013	14.29	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0053	0.0053	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	3.03	2.94	3.02	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00021	0.00019	10.00	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	-	23.6	22.9	3.01	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.0058	0.0068	15.87	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	0.003	0.003	0.014	0.0185	27.69	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0109	0.0111	1.82	0.00
Barium	mg/L	0.001	0.001	0.001	0.0066	0.0071	7.30	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	-	23.5	23.5	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00098	0.0009	8.51	0.00
Iron	mg/L	0.005	0.005	0.005	0.0051	0.0057	11.11	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	5.3	5.08	4.24	-
Manganese	mg/L	0.001	0.001	0.001	0.0488	0.048	1.65	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	0.0016	0.0018	11.76	0.00
Nickel	mg/L	0.001	0.001	0.001	0.005	0.0047	6.19	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	3.47	3.48	0.29	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00024	0.00025	4.08	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	0.06	-	26.9	26.6	1.12	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	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.

MEL-21	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/6/2024
Parameter	Units	2020	2021	2022	2023	2024						
Field Measured												
Temperature	°C	6.67	5.94	7.50	8.88	6.97	2.10	5.10	12.40	12.20	7.20	2.80
pH	pH units	7.68	7.89	7.71	8.35	8.03	7.57	8.13	8.08	8.10	8.23	8.09
Conductivity	uS/cm	2431.81	1961.45	2741.98	3021.43	1,317.17	591.00	1168.00	2000.00	1273.00	1291.00	1580.00
Dissolved oxygen	mg/L	10.94	38.94	33.23	9.69	11.05	15.22	10.28	9.66	9.91	10.07	11.17
Dissolved oxygen	%	89.30	63.81	171.40	92.90	88.98	110.50	81.00	92.10	83.60	83.70	83.00
Conventional Parameters												
pH	pH units	7.75	7.87	7.85	8.04	7.96	7.86	7.76	8.03	8.12	8.03	7.93
Turbidity	NTU	6.60	15.92	7.00	1.80	8.90	6.70	6.10	7.10	19.00	9.30	5.20
Hardness, as CaCO3	mg/L	606.29	488.33	577.00	724.57	343.33	149.00	286.00	422.00	378.00	400.00	425.00
Total alkalinity, as CaCO3	mg/L	83.86	81.50	110.00	114.00	89.17	58.00	76.00	100.00	97.00	110.00	94.00
TDS	mg/L	1281.43	1159.17	1389.00	2008.57	931.67	390.00	775.00	1240.00	1090.00	955.00	1140.00
TDS, calculated	mg/L	-	1366.67	1320.00	1900.00	768.33	330.00	640.00	1100.00	940.00	680.00	920.00
TSS	mg/L	15.43	28.50	18.00	11.00	9.83	7.00	6.00	10.00	17.00	12.00	7.00
Major Ions												
Chloride	mg/L	468.57	415.00	507.00	671.43	229.33	66.00	190.00	360.00	300.00	230.00	230.00
Cyanide	mg/L	0.01	0.01	0.03	0.01	0.02	0.09	0.03	0.00	0.00	0.00	0.01
Fluoride	mg/L	0.12	0.11	0.13	0.16	0.08	< 0.10	< 0.10	0.12	0.15	< 0.10	< 0.10
Silica	mg/L	-	4.37	4.50	3.36	3.15	1.40	2.10	2.80	3.10	4.40	5.10
Sulfate	mg/L	188.43	215.83	284.00	432.86	205.00	110.00	180.00	270.00	220.00	150.00	300.00
Nutrients and Chlorophyll a												
Ammonia Nitrogen (as N)	mg/L	0.52	0.64	2.75	1.52	0.79	0.78	0.77	1.20	0.77	0.24	1.00
Nitrate (as N)	mg/L	1.51	3.96	8.70	14.40	5.12	1.90	4.23	8.40	7.46	2.15	6.58
Nitrite (as N)	mg/L	0.02	0.04	0.14	0.20	0.08	0.03	0.05	0.09	0.17	0.03	0.08
Total phosphorus	mg/L	0.02	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	< 0.020
Orthophosphate (P)	mg/L	0.02	0.01	0.01	0.01	0.01	0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Total Metals												
Aluminum	mg/L	0.24541	0.47067	0.31300	0.16724	0.19822	0.16	0.15	0.27	0.32	0.22	0.08
Arsenic	mg/L	0.11237	0.06500	0.07620	0.06010	0.08018	0.23	0.14	0.05	0.02	0.03	0.01
Barium	mg/L	0.08844	0.06827	0.07790	0.06447	0.03905	0.01	0.03	0.04	0.04	0.08	0.05
Cadmium	mg/L	0.00007	0.00006	0.00004	0.00008	0.00002	< 0.000010	0.00	0.00	0.00	0.00	< 0.000010
Chromium	mg/L	0.00086	0.00123	0.00110	0.00083	0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	mg/L	0.00697	0.00555	0.00970	0.00531	0.00727	0.02	0.01	0.00	0.00	0.00	0.00
Iron	mg/L	0.47529	1.01917	0.86800	0.37086	0.47167	0.48	0.46	0.44	0.58	0.58	0.30
Lead	mg/L	0.00566	0.00752	0.00470	0.00319	0.00276	0.01	0.01	0.00	0.00	0.00	0.00
Manganese	mg/L	0.33914	0.20467	0.33770	0.28071	0.12452	0.03	0.10	0.19	0.14	0.12	0.17
Mercury	mg/L	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	0.00954	0.00577	0.00820	0.01116	0.00578	0.00	0.01	0.01	0.01	0.00	0.00
Nickel	mg/L	0.02683	0.02010	0.02400	0.03141	0.01287	0.00	0.01	0.02	0.02	0.01	0.01
Selenium	mg/L	0.00039	0.00048	0.00068	0.00100	0.00076	0.00	0.00	0.00	0.00	0.00	0.00
Silver	mg/L	0.00001	0.00002	0.00003	0.00001	0.00001	< 0.000020	0.00	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Thallium	mg/L	0.00001	0.00002	0.00002	0.00002	0.00001	< 0.000010	< 0.000010	0.00	0.00	0.00	0.00
Zinc	mg/L	0.00321	0.00325	0.00510	0.00421	0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals												
Calcium (Dissolved)	mg/L	188.43000	136.68333	152.50000	205.71429	100.23333	51.80	77.60	119.00	100.00	115.00	138.00
Magnesium (Dissolved)	mg/L	34.51000	34.93333	42.60000	68.02857	28.00000	10.30	23.30	43.10	35.80	25.30	30.20
Potassium (Dissolved)	mg/L	13.73000	12.87167	19.60000	27.60000	11.31833	5.76	10.30	16.00	15.50	9.05	11.30
Sodium (Dissolved)	mg/L	140.97000	169.78333	233.00000	342.71429	118.73333	42.40	103.00	189.00	174.00	79.00	125.00

Parameter	Sample date		9/1/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		6.11	-	7.99	8.03	0.50	-
Turbidity	NTU	0.1	0.1	0.1	13	9.3	33.18	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	375	400	6.45	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	399	391	2.03	-
Total alkalinity, as CaCO3	mg/L	1	1	1	100	110	9.52	0.00
TDS	mg/L	10	10	10	915	955	4.28	0.00
TDS, calculated	mg/L	1	1	-	680	680	0.00	-
TSS	mg/L	1	1	1	12	12	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	230	230	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00243	0.00241	0.83	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	4.5	4.4	2.25	0.00
Sulfate	mg/L	0.5	0.5	0.5	150	150	0.00	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	0.24	0.24	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	2.21	2.15	2.75	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.032	0.031	3.17	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	2.24	2.19	2.26	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.035	0.032	8.96	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	0.197	0.22	11.03	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0242	0.0254	4.84	0.00
Barium	mg/L	0.001	0.001	0.001	0.0704	0.075	6.33	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.000023	13.95	0.00
Calcium (total)	mg/L	0.05	0.05	-	109	117	7.08	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00289	0.00311	7.33	0.00
Iron	mg/L	0.01	0.01	0.01	0.544	0.579	6.23	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00177	0.00183	3.33	0.00
Magnesium (total)	mg/L	0.05	0.05	-	24.6	26.3	6.68	-
Manganese	mg/L	0.001	0.001	0.001	0.109	0.116	6.22	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	0.0034	0.0035	2.90	0.00

Nickel	mg/L	0.001	0.001	0.001	0.0117	0.0123	5.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	8.56	9.02	5.23	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00028	0.00029	3.51	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	-	76.8	82.1	6.67	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000015	0.000014	6.90	0.00
Titanium	mg/L	0.005	0.005	0.005	0.0105	0.0112	6.45	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	0.003	0.003	0.0047	0.0036	26.51	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0166	0.0171	2.97	0.00
Barium	mg/L	0.001	0.001	0.001	0.0723	0.0745	3.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000013	0.000015	14.29	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	117	115	1.72	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00198	0.00198	0.00	0.00
Iron	mg/L	0.005	0.005	0.005	0.0797	0.0797	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00035	0.00031	12.12	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	26	25.3	2.73	-
Manganese	mg/L	0.001	0.001	0.001	0.0862	0.0873	1.27	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	0.0035	0.0036	2.82	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0116	0.0117	0.86	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	9.1	9.05	0.55	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00025	0.00029	14.81	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	-	80.6	79	2.01	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							2%	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					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/6/2024
Parameter	Units	2020	2021	2022	2023	2024						
Field Measured												
Temperature	°C	11.54	7.76	9.00	7.81	9.83	11.40	13.10	14.70	11.60	6.70	1.50
pH	pH units	7.78	8.14	7.48	7.67	7.96	7.60	8.09	8.06	7.87	8.07	8.07
Conductivity	uS/cm	5327.00	2896.08	6472.00	6209.86	5,175.67	1831.00	7232.00	7489.00	6309.00	6528.00	1665.00
Dissolved oxygen	mg/L	9.91	11.60	34.57	11.30	10.49	11.92	9.20	8.72	10.68	9.53	12.90
Dissolved oxygen	%	89.48	96.22	431.10	896.90	93.82	109.80	89.70	89.20	101.30	79.80	93.10
Conventional Parameters												
pH	pH units	7.70	7.91	7.72	7.78	7.83	7.75	7.80	7.99	7.73	7.82	7.88
Turbidity	NTU	2.94	2.22	1.10	3.30	4.97	3.90	2.40	0.90	0.60	1.00	21.00
Hardness, as CaCO3	mg/L	1087.88	852.50	1418.00	1350.71	990.83	439.00	1240.00	1150.00	1270.00	1210.00	636.00
Total alkalinity, as CaCO3	mg/L	73.88	94.67	74.00	90.14	92.67	70.00	110.00	120.00	61.00	95.00	100.00
TDS	mg/L	2889.38	2223.33	3213.00	3477.14	3,826.67	1480.00	4790.00	4780.00	5430.00	4360.00	2120.00
TDS, calculated	mg/L	-	2166.67	2917.00	3085.71	3,265.00	990.00	4100.00	4300.00	4900.00	3600.00	1700.00
TSS	mg/L	8.13	5.00	4.00	8.43	12.17	56.00	3.00	5.00	2.00	3.00	4.00
Major Ions												
Chloride	mg/L	1327.50	1023.33	1455.00	1480.00	1,545.00	400.00	2000.00	2100.00	2400.00	1800.00	570.00
Cyanide	mg/L	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.02	0.00	0.00	0.01
Fluoride	mg/L	0.11	0.12	0.08	0.10	0.11	< 0.10	0.11	0.14	0.11	0.12	0.10
Silica	mg/L	-	1.71	1.69	3.26	3.00	2.00	1.70	4.70	1.80	3.80	4.00
Sulfate	mg/L	213.88	285.00	398.00	455.71	445.00	210.00	550.00	590.00	520.00	420.00	380.00
Nutrients and Chlorophyll a												
Ammonia Nitrogen (as N)	mg/L	7.61	3.88	1.04	2.47	5.63	1.10	12.00	8.60	4.50	3.50	4.10
Nitrate (as N)	mg/L	19.08	12.13	4.64	5.57	13.34	1.52	20.30	17.60	17.10	10.20	13.30
Nitrite (as N)	mg/L	0.47	0.28	0.08	0.09	0.28	0.04	0.29	0.44	0.50	0.20	0.21
Total phosphorus	mg/L	0.03	0.02	0.02	0.03	0.01	0.04	< 0.020	< 0.020	< 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
Total Metals												
Aluminum	mg/L	0.15640	0.03765	0.02380	0.05563	0.07808	0.32	0.04	0.02	< 0.015	< 0.015	0.08
Arsenic	mg/L	0.01172	0.00692	0.00498	0.00506	0.00962	0.01	0.01	0.02	0.00	0.00	0.01
Barium	mg/L	0.08998	0.06870	0.10190	0.08896	0.06083	0.03	0.08	0.06	0.08	0.07	0.04
Cadmium	mg/L	0.00010	0.00005	0.00004	0.00003	0.00003	0.00	0.00	0.00	< 0.000050	< 0.000050	< 0.000010
Chromium	mg/L	0.00288	0.00092	0.00130	0.00157	0.00195	0.00	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0010
Copper	mg/L	0.00369	0.00315	0.00386	0.00329	0.00279	0.00	0.00	< 0.0025	0.00	0.00	0.00
Iron	mg/L	0.32888	0.15883	0.22100	0.64114	0.27700	0.97	0.18	0.07	< 0.050	0.22	0.19
Lead	mg/L	0.00132	0.00030	0.00029	0.00035	0.00056	0.00	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00
Manganese	mg/L	0.29361	0.17250	0.39600	0.52276	0.26750	0.35	0.41	0.29	0.10	0.28	0.17
Mercury	mg/L	0.00004	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	0.00	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.00445	0.00557	0.00520	0.00490	0.00705	0.00	0.01	0.01	0.01	0.01	0.01
Nickel	mg/L	0.01898	0.01640	0.02360	0.02640	0.03160	0.01	0.04	0.06	0.03	0.03	0.02
Selenium	mg/L	0.00036	0.00055	0.00028	0.00036	0.00153	0.00	0.00	0.00	0.00	0.00	0.00
Silver	mg/L	0.00006	0.00002	0.00003	0.00003	0.00004	< 0.000020	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.000020
Thallium	mg/L	0.00006	0.00004	0.00005	0.00003	0.00002	0.00	< 0.000050	< 0.000050	< 0.000050	< 0.000050	0.00
Zinc	mg/L	0.01403	0.00625	0.00670	0.01250	0.01817	< 0.0050	0.04	< 0.025	< 0.025	0.04	< 0.0050
Dissolved Metals												
Calcium (Dissolved)	mg/L	308.65000	224.33333	379.00000	416.14286	261.00000	155.00	258.00	277.00	334.00	328.00	214.00
Magnesium (Dissolved)	mg/L	75.43000	63.03333	87.60000	104.90000	102.95000	31.80	141.00	132.00	147.00	101.00	64.90
Potassium (Dissolved)	mg/L	32.96000	34.35000	36.50000	41.91429	51.21667	12.70	60.00	71.50	80.10	53.50	29.50
Sodium (Dissolved)	mg/L	472.75000	414.00000	470.00000	522.28571	737.16667	132.00	998.00	1000.00	1260.00	741.00	292.00

Parameter	Sample date		10/6/2024					
	Unit	MDL	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters								
pH	pH units		5.85	-	7.86	7.88	0.25	-
Turbidity	NTU	0.1	0.1	0.1	20	21	4.88	0.00
Hardness, as CaCO3	mg/L	0.5	0.5	-	663	636	4.16	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	0.5	-	758	802	5.64	-
Total alkalinity, as CaCO3	mg/L	1	1	1	100	100	0.00	0.00
TDS	mg/L	10	15	10	2090	2120	1.43	40.00
TDS, calculated	mg/L	1	1	-	1600	1700	6.06	-
TSS	mg/L	1	1	1	5	4	22.22	0.00
Major Ions								
Chloride	mg/L	1	1	1	580	570	1.74	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0107	0.0105	1.89	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	4.1	4	2.47	0.00
Sulfate	mg/L	0.5	0.5	0.5	390	380	2.60	0.00
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	0.05	0.05	0.05	4	4.1	2.47	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	13.3	13.3	0.00	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	0.206	0.208	0.97	0.00
Nitrate + nitrite (as N)	mg/L	0.1	0.1	-	13.5	13.5	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
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0748	0.0785	4.83	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00959	0.00968	0.93	0.00
Barium	mg/L	0.001	0.001	0.001	0.0413	0.041	0.73	0.00
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	-	177	167	5.81	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00245	0.00252	2.82	0.00
Iron	mg/L	0.01	0.01	0.01	0.197	0.191	3.09	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00049	0.0005	2.02	0.00
Magnesium (total)	mg/L	0.05	0.05	-	53.8	53	1.50	-
Manganese	mg/L	0.001	0.001	0.001	0.172	0.172	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	0.0053	0.0054	1.87	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0221	0.0225	1.79	0.00
Potassium (total)	mg/L	0.05	0.05	-	22.8	22.8	0.00	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00107	0.00104	2.84	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	-	223	225	0.89	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000027	0.00003	10.53	0.00
Titanium	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	0.003	0.003	0.0065	0.0067	3.03	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00864	0.00923	6.60	0.00
Barium	mg/L	0.001	0.001	0.001	0.0487	0.0523	7.13	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Calcium (Dissolved)	mg/L	0.05	0.05	-	204	214	4.78	-
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00278	0.003	7.61	0.00
Iron	mg/L	0.005	0.005	0.005	0.028	0.025	11.32	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	0.05	-	60.3	64.9	7.35	-
Manganese	mg/L	0.001	0.001	0.001	0.196	0.225	13.78	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	0.0061	0.0066	7.87	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0275	0.0296	7.36	0.00
Potassium (Dissolved)	mg/L	0.05	0.05	-	27.5	29.5	7.02	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00133	0.0014	5.13	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	-	267	292	8.94	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.000031	0.000037	17.65	0.00
Zinc	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	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.

MEL-23	Sample date	Annual Average					5/26/2024	6/16/2024	7/8/2024	8/5/2024	9/1/2024	10/6/2024
Parameter	Units	2020	2021	2022	2023	2024						
Field Measured												
Temperature	°C	11.41	5.08	9.50	9.93	8.08	2.30	8.00	13.30	13.40	8.60	2.90
pH	pH units	7.88	7.97	7.74	7.97	7.98	7.35	8.00	8.12	8.12	8.36	7.91
Conductivity	uS/cm	4688.86	5400.00	4561.00	4692.43	2,419.17	309.60	505.00	3524.00	2.42	6438.00	3736.00
Dissolved oxygen	mg/L	8.87	9.86	10.25	8.60	11.70	18.42	11.15	9.60	9.44	8.94	12.62
Dissolved oxygen	%	78.80	78.75	80.70	85.10	96.67	134.50	94.40	94.00	82.70	78.50	95.90
Conventional Parameters												
pH	pH units	7.95	7.93	7.87	7.90	7.90	7.70	7.61	7.98	8.11	8.14	7.83
Turbidity	NTU	30.14	18.77	2.40	2.00	3.28	7.30	6.10	2.60	1.10	0.80	1.80
Hardness, as CaCO3	mg/L	679.14	681.83	762.00	546.71	623.33	76.70	92.30	536.00	917.00	948.00	1170.00
Total alkalinity, as CaCO3	mg/L	158.57	115.17	116.00	101.00	101.00	38.00	38.00	90.00	150.00	160.00	130.00
TDS	mg/L	2521.43	1994.17	2387.00	2111.43	2,540.00	200.00	310.00	2110.00	4200.00	4040.00	4380.00
TDS, calculated	mg/L	-	2766.67	2526.00	1998.57	2,343.33	190.00	270.00	2000.00	3900.00	3700.00	4000.00
TSS	mg/L	42.14	21.17	9.00	6.86	6.50	7.00	12.00	5.00	5.00	3.00	7.00
Major Ions												
Chloride	mg/L	1107.14	736.67	960.00	818.57	926.17	43.00	84.00	830.00	1700.00	1600.00	1300.00
Cyanide	mg/L	0.01	0.02	0.00	0.00	0.003	0.00	0.00	0.00	0.00	0.00	0.01
Fluoride	mg/L	0.26	0.20	0.21	0.19	0.19	< 0.10	< 0.10	0.18	0.32	0.31	0.24
Silica	mg/L	-	5.27	3.60	1.97	2.15	1.00	0.90	1.80	2.10	2.40	4.70
Sulfate	mg/L	351.29	485.00	572.00	398.86	463.33	59.00	61.00	360.00	570.00	630.00	1100.00
Nutrients and Chlorophyll a												
Ammonia Nitrogen (as N)	mg/L	5.33	9.38	5.00	0.67	1.75	0.45	0.39	1.30	0.69	0.28	7.40
Nitrate (as N)	mg/L	8.64	18.91	16.81	6.25	9.71	0.94	1.18	6.25	10.20	10.00	29.70
Nitrite (as N)	mg/L	0.31	0.22	0.44	0.15	0.19	< 0.010	0.01	0.10	0.25	0.17	0.58
Total phosphorus	mg/L	0.14	0.04	0.02	0.02	0.01	< 0.020	< 0.020	< 0.020	< 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
Total Metals												
Aluminum	mg/L	1.33829	0.32533	0.18000	0.12653	0.23900	0.16	0.18	0.12	< 1.8	0.03	0.05
Arsenic	mg/L	0.02077	0.01039	0.00949	0.01163	0.01542	0.01	0.01	0.01	< 0.059	0.01	0.01
Barium	mg/L	0.09450	0.05442	0.05320	0.03250	0.07275	0.01	0.01	0.04	< 0.59	0.06	0.03
Cadmium	mg/L	0.00006	0.00007	0.00010	0.00007	0.00052	< 0.000010	0.00	0.00	< 0.0059	0.00	< 0.000050
Chromium	mg/L	0.00540	0.00113	0.00110	0.00121	0.05033	< 0.0010	< 0.0010	< 0.0020	< 0.59	< 0.0050	< 0.0050
Copper	mg/L	0.00732	0.01048	0.00466	0.00384	0.02628	0.00	0.00	0.00	< 0.29	0.00	0.00
Iron	mg/L	2.28529	0.63717	0.28800	0.20943	0.65600	0.31	0.39	0.17	< 5.9	< 0.050	0.08
Lead	mg/L	0.00263	0.00171	0.00076	0.00060	0.01066	0.00	0.00	0.00	< 0.12	< 0.0010	< 0.0010
Manganese	mg/L	0.40727	0.39850	0.41800	0.16887	0.16898	0.04	0.06	0.15	< 0.59	0.12	0.35
Mercury	mg/L	0.00005	0.00001	0.00001	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.01463	0.01030	0.01000	0.00704	0.05398	0.00	0.00	0.01	< 0.59	0.01	0.01
Nickel	mg/L	0.06100	0.06252	0.06780	0.04551	0.08767	0.01	0.01	0.05	< 0.59	0.07	0.10
Selenium	mg/L	0.00125	0.00137	0.00142	0.00076	0.00575	0.00	0.00	0.00	< 0.059	0.00	0.00
Silver	mg/L	0.00005	0.00002	0.00002	0.00002	0.00102	< 0.000020	< 0.000020	< 0.000040	< 0.012	< 0.00010	< 0.00010
Thallium	mg/L	0.00005	0.00003	0.00002	0.00002	0.00050	< 0.000010	< 0.000010	< 0.000020	< 0.0059	< 0.000050	< 0.000050
Zinc	mg/L	0.01484	0.00417	0.00550	0.00571	0.24750	< 0.0050	< 0.0050	< 0.010	< 2.9	< 0.025	< 0.025
Dissolved Metals												
Calcium (Dissolved)	mg/L	119.17000	142.93333	159.60000	107.41429	123.98333	23.90	24.30	93.70	167.00	170.00	265.00
Magnesium (Dissolved)	mg/L	89.70000	75.30000	90.40000	74.98571	96.95167	6.98	9.83	81.90	159.00	144.00	180.00
Potassium (Dissolved)	mg/L	40.19000	39.58333	41.90000	29.33286	35.05500	3.56	4.67	28.40	56.20	52.40	65.10
Sodium (Dissolved)	mg/L	624.71000	414.83333	536.00000	465.15714	569.78333	27.20	52.50	490.00	1060.00	937.00	852.00

MEL-24	Sample date	Annual Average	6/5/2024	6/26/2024	8/1/2024	9/1/2024	9/22/2024	10/1/2024
Parameter	Units	2024						
Field Measured								
Temperature	°C	8.55	1.8	13.1	13.3	7.3	10.1	5.7
pH	pH units	7.85	6.64	8.44	8.24	8	7.59	8.2
Conductivity	uS/cm	3,171.50	1341	1990	4325	5258	3204	2911
Dissolved oxygen	mg/L	3.64	10.23	3.21	0.66	0.31	2.05	5.37
Dissolved oxygen	%	33.86	73.9	31.1	-	2.6	18.4	43.3
Conventional Parameters								
pH	pH units	7.36	7.54	7.29	7.45	7.21	7.3	7.38
Turbidity	NTU	41.52	2.3	4.8	48	130	23	41
Hardness, as CaCO3	mg/L	956.17	463	784	1190	1620	930	750
Total alkalinity, as CaCO3	mg/L	149.33	76	130	190	200	150	150
TDS	mg/L	2,377	1050	1770	3050	4060	2250	2080
TDS, calculated	mg/L	2,178.33	870	1700	2900	3500	2200	1900
TSS	mg/L	37.17	7	18	110	23	31	34
Major Ions								
Chloride	mg/L	397.83	87	210	430	780	400	480
Cyanide	mg/L	0.08	0.0416	0.0376	0.138	0.114	0.0681	0.0657
Fluoride	mg/L	0.24	0.13	0.3	0.32	0.26	0.22	0.21
Silica	mg/L	15.65	6.9	14	27	24	12	10
Sulfate	mg/L	988.33	440	860	1400	1400	1100	730
Nutrients and Chlorophyll a								
Ammonia Nitrogen (as N)	mg/L	23.05	6.3	16	48	29	20	19
Nitrate (as N)	mg/L	2.43	7.16	5.12	< 0.10	< 0.10	0.89	1.29
Nitrite (as N)	mg/L	1.09	0.809	5.57	< 0.010	< 0.010	0.031	0.092
Orthophosphate (P)	mg/L	0.35	0.09	0.12	1.4	0.21	0.21	0.049
Total Metals								
Aluminum	mg/L	0.61917	0.173	0.395	0.615	1.44	0.418	0.674
Arsenic	mg/L	0.68833	0.212	0.316	1.17	1.55	0.511	0.371
Barium	mg/L	0.06120	0.0316	0.0522	0.072	0.105	0.0569	0.0495
Cadmium	mg/L	0.00021	0.000073	0.000082	0.000205	0.000574	0.000185	0.00014
Chromium	mg/L	0.00618	0.0035	0.0054	0.0067	0.01	0.005	0.0065
Copper	mg/L	0.03105	0.0274	0.0336	0.0329	0.0365	0.0277	0.0282
Iron	mg/L	2.98033	0.502	1.25	4.14	7.33	1.76	2.9
Lead	mg/L	0.02469	0.00456	0.00787	0.0345	0.0667	0.0167	0.0178
Manganese	mg/L	0.28250	0.111	0.136	0.282	0.633	0.249	0.284
Mercury	mg/L	0.00003	0.00001	< 0.00001	< 0.00010	< 0.00010	< 0.00010	< 0.00001
Molybdenum	mg/L	0.03547	0.0085	0.0221	0.0531	0.0557	0.0372	0.0362
Nickel	mg/L	0.02315	0.0062	0.0143	0.0387	0.0394	0.022	0.0183
Selenium	mg/L	0.00261	0.0011	0.00233	0.00361	0.00233	0.00276	0.00351
Silver	mg/L	0.00032	0.000071	0.000068	0.00019	0.00138	0.000117	0.00012
Thallium	mg/L	0.00002	0.000013	< 0.000020	< 0.000050	< 0.000050	0.000019	0.000032
Zinc	mg/L	0.36483	0.175	0.236	0.443	0.653	0.373	0.309
Dissolved Metals								
Calcium (Dissolved)	mg/L	369.50000	180	314	493	579	365	286
Magnesium (Dissolved)	mg/L	24.60000	11.1	14	27.7	40	28.6	26.2
Potassium (Dissolved)	mg/L	64.10000	12.9	37	94.5	109	68.3	62.9
Sodium (Dissolved)	mg/L	237.75000	64.5	138	335	430	239	220

MEL-SR1	MEL-SR	MEL-SR	Sample date	Annual Average	5/18/2024	5/19/2024	6/5/2024	7/6/2024	9/4/2024	9/14/2024	9/28/2024	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024								
Field Measured												
Temperature			°C	8.7	11.00	11.60	4.70	19.50	5.70	6.6	6.70	4.00
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.76	6.89	6.76	8.92	7.70	7.71	7.94	8.01	8.11
Conductivity			uS/cm	858.9	391.80	459.90	719.00	1141.00	1599.00	1041	94.80	1425.00
Dissolved oxygen			mg/L	12.22	11.02	13.17	16.75	7.08	12.92	11.84	11.55	13.45
Dissolved oxygen			%	92.84	100.10	-	78.30	79.10	103.50	-	-	103.20
Turbidity			NTU	49.28	310.00	32.50	2.17	1.28	2.42	42	2.04	1.84
Conventional Parameters												
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.99	7.82	7.77	8.01	8.00	8.03	8.15	8.07	8.06
Turbidity			NTU	10.2	46.00	4.30	0.80	0.30	0.60	28	0.70	0.70
Hardness, as CaCO3			mg/L	294.3	149.00	137.00	207.00	328.00	483.00	302	387.00	361.00
Total alkalinity, as CaCO3			mg/L	127	58.00	60.00	120.00	150.00	150.00	120	180.00	180.00
TDS			mg/L	688	265.00	315.00	415.00	840.00	1110.00	695	955.00	910.00
TDS, calculated			mg/L	599	230.00	270.00	390.00	700.00	940.00	630	830.00	800.00
TSS	100	50	mg/L	53	330.00	54.00	1.00	1.00	2.00	29	1.00	2.00
Major Ions												
Chloride			mg/L	154	53.00	58.00	90.00	220.00	260.00	140	210.00	200.00
Cyanide			mg/L	0.00063	0.00	0.00	< 0.00050	0.00	0.00	0.00076	0.00	< 0.00050
Fluoride			mg/L	0.10	< 0.10	< 0.10	< 0.10	0.10	0.15	0.11	0.13	0.12
Silica			mg/L	3.41	1.80	2.10	2.60	3.40	5.20	3.5	4.40	4.30
Sulfate			mg/L	166	59.00	71.00	96.00	150.00	290.00	220	230.00	210.00
Nutrients and Chlorophyll a												
Ammonia Nitrogen (as N)			mg/L	0.163	0.16	0.22	< 0.050	< 0.050	< 0.050	< 0.050	0.37	0.45
Nitrate (as N)			mg/L	0.27	0.17	0.15	< 0.10	0.36	0.19	0.15	0.44	0.64
Nitrite (as N)			mg/L	0.006	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.01	< 0.010
Total phosphorus			mg/L	0.030	0.11	0.05	< 0.020	< 0.020	< 0.020	0.029	< 0.020	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
General Organics												
Total oil and grease			mg/L	1.26	2.40	1.80	2.40	1.10	0.80	1.1	< 0.50	< 0.50
Total Metals												
Aluminum			mg/L	0.7708	4.96	0.36	0.04	0.01	0.02	0.727	0.02	0.02
Arsenic			mg/L	0.00471	0.02	0.00	0.00	0.00	0.00	0.0035	0.00	0.00
Barium			mg/L	0.0439	0.05	0.02	0.03	0.05	0.06	0.0416	0.05	0.04
Cadmium			mg/L	0.000019	0.00	0.00	< 0.000010	0.00	0.00	0.000016	0.00	< 0.000010
Chromium			mg/L	0.0052	0.03	0.00	< 0.0010	< 0.0010	< 0.0010	0.005	< 0.0010	< 0.0010
Copper			mg/L	0.00597	0.02	0.00	0.00	0.00	0.00	0.00552	0.00	0.00
Iron			mg/L	1.462	9.13	0.72	0.10	0.04	0.11	1.45	0.08	0.08
Lead			mg/L	0.00074	0.00	0.00	< 0.00020	< 0.00020	< 0.00020	0.00059	< 0.00020	< 0.00020
Manganese			mg/L	0.0635	0.18	0.21	0.02	0.00	0.03	0.0374	0.02	0.02
Mercury			mg/L	0.000016	< 0.00010	< 0.00010	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0010	< 0.0010	< 0.0010	0.00	< 0.0010	0.00	0.0012	0.00	0.00
Nickel			mg/L	0.0136	0.02	0.01	0.01	0.01	0.02	0.0091	0.02	0.01
Selenium			mg/L	0.00010	0.00	< 0.00010	< 0.00010	0.00	0.00	< 0.00010	0.00	0.00
Silver			mg/L	0.000012	0.00	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Thallium			mg/L	0.000016	0.00	0.00	< 0.000010	0.00	0.00	0.000011	< 0.000010	< 0.000010
Titanium			mg/L	0.032	0.21	0.01	< 0.0050	< 0.0050	< 0.0050	0.024	< 0.0050	< 0.0050
Zinc			mg/L	0.0218	0.05	0.02	0.02	0.04	0.02	0.0163	0.01	0.01
Dissolved Metals												
Calcium (Dissolved)			mg/L	99.1	45.70	55.30	71.50	110.00	150.00	107	128.00	125.00
Magnesium (Dissolved)			mg/L	18.76	7.37	8.72	12.10	24.20	28.00	18.6	25.00	26.10
Potassium (Dissolved)			mg/L	10.00	5.57	7.57	6.63	10.60	14.00	10.4	12.80	12.40
Sodium (Dissolved)			mg/L	74.5	23.80	29.70	46.00	93.40	114.00	64.1	112.00	113.00

Parameter	Sample date		6/5/2024				9/4/2024					
	Unit	MDL	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		7.97	8.01	0.50	-	5.68	-	8.04	8.03	0.12	-
Turbidity	NTU	0.1	1	0.8	22.22	-	0.1	0.1	0.8	0.6	28.57	0.00
Hardness, as CaCO3	mg/L	0.5	215	207	3.79	-	0.5	-	483	483	0.00	-
Hardness, as CaCO3 (dissolved)	mg/L	0.5	230	228	0.87	-	0.5	-	485	489	0.82	-
Total alkalinity, as CaCO3	mg/L	1	120	120	0.00	-	1	1	150	150	0.00	0.00
TDS	mg/L	10	420	415	1.20	-	10	10	1060	1110	4.61	0.00
TDS, calculated	mg/L	1	400	390	2.53	-	1	-	930	940	1.07	-
TSS	mg/L	1	1	1	0.00	-	1	1	1	2	66.67	0.00
Major Ions												
Chloride	mg/L	1	89	90	1.12	-	1	1	250	260	3.92	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00	-	0.0005	0.0005	0.00088	0.00082	7.06	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.00	-	0.1	0.1	0.13	0.15	14.29	0.00
Silica	mg/L	0.05	2.6	2.6	0.00	-	0.05	0.05	5.3	5.2	1.90	0.00
Sulfate	mg/L	0.5	97	96	1.04	-	0.5	0.5	280	290	3.51	0.00
Nutrients and Chlorophyll a												
Ammonia Nitrogen (as N)	mg/L	0.05	0.058	0.05	14.81	-	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate (as N)	mg/L	0.1	0.1	0.1	0.00	-	0.1	0.1	0.17	0.19	11.11	0.00
Nitrite (as N)	mg/L	0.01	0.01	0.01	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	0.00	-	0.1	-	0.17	0.19	11.11	-
Total phosphorus	mg/L	0.02	0.02	0.02	0.00	-	0.02	0.02	0.02	0.02	0.00	0.00
Orthophosphate (P)	mg/L	0.01	0.01	0.01	0.00	-	0.01	0.01	0.01	0.01	0.00	0.00
General Organics												
Total oil and grease	mg/L	0.5	0.5	2.4	131.03	-	0.5	0.5	0.9	0.8	11.76	0.00
Total Metals												
Aluminum	mg/L	0.003	0.0285	0.0423	38.98	-	0.003	0.003	0.0298	0.0246	19.12	0.00
Arsenic	mg/L	0.0001	0.00229	0.00221	3.56	-	0.0001	0.0001	0.00383	0.00382	0.26	0.00
Barium	mg/L	0.001	0.0284	0.0274	3.58	-	0.001	0.001	0.0611	0.0604	1.15	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00	-	0.00001	0.00001	0.000023	0.00002	13.95	0.00
Calcium (total)	mg/L	0.05	67.4	64	5.18	-	0.055	-	145	146	0.69	-
Chromium	mg/L	0.001	0.001	0.001	0.00	-	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.00263	0.00262	0.38	-	0.0005	0.0005	0.00381	0.00376	1.32	0.00
Iron	mg/L	0.01	0.097	0.096	1.04	-	0.01	0.01	0.119	0.112	6.06	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00	-	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Magnesium (total)	mg/L	0.05	11.4	11.4	0.00	-	0.05	-	29.4	29	1.37	-
Manganese	mg/L	0.001	0.0186	0.0182	2.17	-	0.001	0.001	0.0255	0.0254	0.39	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	0.0011	0.001	9.52	-	0.001	0.001	0.0013	0.0012	8.00	0.00
Nickel	mg/L	0.001	0.009	0.0087	3.39	-	0.001	0.001	0.017	0.017	0.00	0.00
Potassium (total)	mg/L	0.05	6.15	6.04	1.80	-	0.05	-	14	14.1	0.71	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00	-	0.0001	0.0001	0.00011	0.00012	8.70	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
Sodium (total)	mg/L	0.05	43.9	43.6	0.69	-	0.05	-	115	114	0.87	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00	-	0.00001	0.00001	0.000012	0.000013	8.00	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
Zinc	mg/L	0.005	0.0161	0.0158	1.88	-	0.005	0.005	0.0214	0.0215	0.47	0.00
Dissolved Metals												
Aluminum	mg/L	0.003	0.0049	0.009	58.99	-	0.003	0.003	0.0052	0.0034	41.86	0.00
Arsenic	mg/L	0.0001	0.00221	0.00218	1.37	-	0.0001	0.0001	0.00339	0.00364	7.11	0.00
Barium	mg/L	0.001	0.0296	0.0299	1.01	-	0.001	0.001	0.0595	0.0605	1.67	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00	-	0.00001	0.00001	0.000017	0.000016	6.06	0.00
Calcium (Dissolved)	mg/L	0.05	71.6	71.5	0.14	-	0.05	-	149	150	0.67	-

Chromium	mg/L	0.001	0.001	0.001	0.00	-	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0025	0.0025	0.00	-	0.0002	0.0002	0.00363	0.00371	2.18	0.00
Iron	mg/L	0.005	0.0334	0.0329	1.51	-	0.005	0.005	0.0245	0.0272	10.44	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00	-	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Magnesium (Dissolved)	mg/L	0.05	12.6	12.1	4.05	-	0.05	-	27.6	28	1.44	-
Manganese	mg/L	0.001	0.0195	0.0189	3.13	-	0.001	0.001	0.0256	0.0262	2.32	0.00
Molybdenum	mg/L	0.001	0.0011	0.0011	0.00	-	0.001	0.001	0.0013	0.0014	7.41	0.00
Nickel	mg/L	0.001	0.0092	0.009	2.20	-	0.001	0.001	0.0179	0.0182	1.66	0.00
Potassium (Dissolved)	mg/L	0.05	6.76	6.63	1.94	-	0.05	-	13.7	14	2.17	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.00	-	0.0001	0.0001	0.00013	0.00014	7.41	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
Sodium (Dissolved)	mg/L	0.05	48.1	46	4.46	-	0.05	-	112	114	1.77	-
Thallium	mg/L	0.00001	0.00001	0.00001	0.00	-	0.00001	0.00001	0.000011	0.000012	8.70	0.00
Zinc	mg/L	0.005	0.0162	0.016	1.24	-	0.005	0.005	0.0214	0.0215	0.47	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-SR11	MEL-SR	MEL-SR	Sample date	Annual Average	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	4.4	4.40
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.18	8.18
Conductivity			uS/cm	893.0	893.00
Dissolved oxygen			mg/L	12.72	12.72
Dissolved oxygen			%	98.40	98.40
Turbidity			NTU	1.42	1.42
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.05	8.05
Turbidity			NTU	0.2	0.20
Hardness, as CaCO3			mg/L	218.0	218.00
Total alkalinity, as CaCO3			mg/L	110	110.00
TDS			mg/L	485.00	485.00
TDS, calculated			mg/L	470	470.00
TSS	100	50	mg/L	1	1.00
Major Ions					
Chloride			mg/L	64	64.00
Cyanide			mg/L	0.00025	< 0.00050
Fluoride			mg/L	0.25	0.25
Silica			mg/L	4.90	4.90
Sulfate			mg/L	180	180.00
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.025	< 0.050
Nitrate (as N)			mg/L	1.72	1.72
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	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0038	0.00
Arsenic			mg/L	0.00137	0.00
Barium			mg/L	0.0263	0.03
Cadmium			mg/L	0.000005	< 0.000010
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00087	0.00
Iron			mg/L	0.011	0.01
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0005	< 0.0010
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0038	0.00
Nickel			mg/L	0.0014	0.00
Selenium			mg/L	0.00032	0.00
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	72.3	72.30
Magnesium (Dissolved)			mg/L	19.80	19.80
Potassium (Dissolved)			mg/L	13.60	13.60
Sodium (Dissolved)			mg/L	46.5	46.50

MEL-SR12	MEL-SR	MEL-SR	Sample date	Annual Average	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	4.5	4.50
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.29	8.29
Conductivity			uS/cm	539.0	539.00
Dissolved oxygen			mg/L	14.82	14.82
Dissolved oxygen			%	115.00	115.00
Turbidity			NTU	0.58	0.58
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.01	8.01
Turbidity			NTU	0.3	0.30
Hardness, as CaCO3			mg/L	213.0	213.00
Total alkalinity, as CaCO3			mg/L	86	86.00
TDS			mg/L	520.00	520.00
TDS, calculated			mg/L	470	470.00
TSS	100	50	mg/L	1	< 1
Major Ions					
Chloride			mg/L	140	140.00
Cyanide			mg/L	0.00072	0.00
Fluoride			mg/L	0.05	< 0.10
Silica			mg/L	4.70	4.70
Sulfate			mg/L	120	120.00
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	0.010	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010
General Organics					
Total oil and grease			mg/L	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0061	0.01
Arsenic			mg/L	0.00085	0.00
Barium			mg/L	0.0584	0.06
Cadmium			mg/L	0.000005	< 0.000010
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00236	0.00
Iron			mg/L	0.021	0.02
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0005	< 0.0010
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0005	< 0.0010
Nickel			mg/L	0.0015	0.00
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	72.6	72.60
Magnesium (Dissolved)			mg/L	12.70	12.70
Potassium (Dissolved)			mg/L	5.90	5.90
Sodium (Dissolved)			mg/L	64.8	64.80

MEL-SR13	MEL-SR	MEL-SR	Sample date	Annual Average	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	3.9	3.90
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.04	8.04
Conductivity			uS/cm	1,349.0	1349.00
Dissolved oxygen			mg/L	12.93	12.93
Dissolved oxygen			%	98.70	98.70
Turbidity			NTU	0.43	0.43
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	8.06	8.06
Turbidity			NTU	0.2	0.20
Hardness, as CaCO3			mg/L	295.0	295.00
Total alkalinity, as CaCO3			mg/L	160	160.00
TDS			mg/L	790.00	790.00
TDS, calculated			mg/L	710	710.00
TSS	100	50	mg/L	2	2.00
Major Ions					
Chloride			mg/L	170	170.00
Cyanide			mg/L	0.00061	0.00
Fluoride			mg/L	0.13	0.13
Silica			mg/L	4.40	4.40
Sulfate			mg/L	200	200.00
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.056	0.06
Nitrate (as N)			mg/L	0.13	0.13
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	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0166	0.02
Arsenic			mg/L	0.00054	0.00
Barium			mg/L	0.0294	0.03
Cadmium			mg/L	0.000005	< 0.000010
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00476	0.00
Iron			mg/L	0.032	0.03
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0005	< 0.0010
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0010	0.00
Nickel			mg/L	0.0028	0.00
Selenium			mg/L	0.00005	< 0.00010
Silver			mg/L	0.000010	< 0.000020
Thallium			mg/L	0.000005	< 0.000010
Zinc			mg/L	0.0147	0.01
Dissolved Metals					
Calcium (Dissolved)			mg/L	104.0	104.00
Magnesium (Dissolved)			mg/L	26.10	26.10
Potassium (Dissolved)			mg/L	9.92	9.92
Sodium (Dissolved)			mg/L	97.2	97.20

MEL-SR14	MEL-SR	MEL-SR	Sample date	Annual Average	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	3.0	3.00
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.74	7.74
Conductivity			uS/cm	2,157.0	2157.00
Dissolved oxygen			mg/L	12.90	12.90
Dissolved oxygen			%	96.60	96.60
Turbidity			NTU	0.78	0.78
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.88	7.88
Turbidity			NTU	0.4	0.40
Hardness, as CaCO3			mg/L	446.0	446.00
Total alkalinity, as CaCO3			mg/L	120	120.00
TDS			mg/L	1430.00	1430.00
TDS, calculated			mg/L	1,200	1200.00
TSS	100	50	mg/L	1	< 1
Major Ions					
Chloride			mg/L	390	390.00
Cyanide			mg/L	0.00083	0.00
Fluoride			mg/L	0.14	0.14
Silica			mg/L	4.90	4.90
Sulfate			mg/L	360	360.00
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.070	0.07
Nitrate (as N)			mg/L	0.05	< 0.10
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	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0183	0.02
Arsenic			mg/L	0.00071	0.00
Barium			mg/L	0.0630	0.06
Cadmium			mg/L	0.000011	0.00
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.01260	0.01
Iron			mg/L	0.039	0.04
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0586	0.06
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0020	0.00
Nickel			mg/L	0.0067	0.01
Selenium			mg/L	0.00025	0.00
Silver			mg/L	0.000010	< 0.000020
Thallium			mg/L	0.000026	0.00
Zinc			mg/L	0.1390	0.14
Dissolved Metals					
Calcium (Dissolved)			mg/L	133.0	133.00
Magnesium (Dissolved)			mg/L	44.70	44.70
Potassium (Dissolved)			mg/L	12.60	12.60
Sodium (Dissolved)			mg/L	234.0	234.00

MEL-SR15	MEL-SR	MEL-SR	Sample date	Annual Average	5/25/2024	10/4/2024	10/6/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024			
Field Measured							
Temperature			°C	10.3	-	-	10.3
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.61	-	-	7.61
Conductivity			uS/cm	618.9	-	-	618.9
Dissolved oxygen			mg/L	10.51	-	-	10.51
Turbidity			NTU	138.99	35	379	2.97
Conventional Parameters							
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.53	7.13	7.68	7.77
Turbidity			NTU	11.9	0.8	34	0.9
Hardness, as CaCO3			mg/L	100.4	20.2	154	127
Total alkalinity, as CaCO3			mg/L	49	15	70	62
TDS			mg/L	255	60	370	335
TDS, calculated			mg/L	227	50	320	310
TSS	100	50	mg/L	48	1	140	2
Major Ions							
Chloride			mg/L	89	18	130	120
Cyanide			mg/L	0.00036	< 0.00050	0.00059	< 0.00050
Fluoride			mg/L	0.05	< 0.10	< 0.10	< 0.10
Silica			mg/L	1.36	0.39	2.1	1.6
Sulfate			mg/L	28	5.2	41	39
Nutrients and Chlorophyll a							
Ammonia Nitrogen (as N)			mg/L	0.042	0.075	< 0.050	< 0.050
Nitrate (as N)			mg/L	0.05	< 0.10	< 0.10	< 0.10
Nitrite (as N)			mg/L	0.005	< 0.010	< 0.010	< 0.010
Total phosphorus			mg/L	0.077	< 0.020	0.21	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.010	< 0.010
General Organics							
Total oil and grease			mg/L	0.53	1.1	< 0.50	< 0.50
Total Metals							
Aluminum			mg/L	1.6784	0.0393	4.98	0.0159
Arsenic			mg/L	0.00648	0.00302	0.0151	0.00131
Barium			mg/L	0.0457	0.007	0.0901	0.0401
Cadmium			mg/L	0.000019	< 0.000010	0.000047	< 0.000010
Chromium			mg/L	0.0065	< 0.0010	0.0186	< 0.0010
Copper			mg/L	0.01202	0.00072	0.0338	0.00153
Iron			mg/L	2.990	0.119	8.7	0.152
Lead			mg/L	0.00197	0.00024	0.00557	< 0.00020
Manganese			mg/L	0.0593	0.0126	0.156	0.0093
Mercury			mg/L	0.000005	< 0.00001	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0010	< 0.0010	0.0019	< 0.0010
Nickel			mg/L	0.0069	< 0.0010	0.0185	0.0017
Selenium			mg/L	0.00009	< 0.00010	0.00018	< 0.00010
Silver			mg/L	0.000017	< 0.000020	0.000032	< 0.000020
Thallium			mg/L	0.000033	< 0.000010	0.00009	< 0.000010
Zinc			mg/L	0.0087	< 0.0050	0.021	< 0.0050
Dissolved Metals							
Calcium (Dissolved)			mg/L	30.6	7.11	44.6	40.1
Magnesium (Dissolved)			mg/L	6.69	1.6	9.08	9.38
Potassium (Dissolved)			mg/L	4.39	1.29	7.52	4.37
Sodium (Dissolved)			mg/L	39.0	8.73	52.6	55.6

MEL-SR16	MEL-SR	MEL-SR	Sample date	Annual Average	9/28/2024	10/4/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024		
Field Measured						
Temperature			°C	8.2	9.90	6.40
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.21	7.35	7.06
Conductivity			uS/cm	713.4	796.00	630.70
Dissolved oxygen			mg/L	13.40	14.25	12.54
Dissolved oxygen			%	126.40	126.40	-
Turbidity			NTU	1.05	1.14	0.95
Conventional Parameters						
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.89	7.80	7.98
Turbidity			NTU	0.5	0.30	0.60
Hardness, as CaCO3			mg/L	226.5	248	205.00
Total alkalinity, as CaCO3			mg/L	91	92.00	90.00
TDS			mg/L	430.00	510.00	350.00
TDS, calculated			mg/L	345	370.00	320.00
TSS	100	50	mg/L	1	< 1	2.00
Major Ions						
Chloride			mg/L	72	76.00	67.00
Cyanide			mg/L	0.00042	< 0.00050	0.00
Fluoride			mg/L	0.05	< 0.10	< 0.10
Silica			mg/L	3.30	3.30	3.30
Sulfate			mg/L	104	120.00	88.00
Nutrients and Chlorophyll a						
Ammonia Nitrogen (as N)			mg/L	0.025	< 0.050	< 0.050
Nitrate (as N)			mg/L	0.33	0.29	0.37
Nitrite (as N)			mg/L	0.005	< 0.010	< 0.010
Total phosphorus			mg/L	0.010	< 0.020	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.010
General Organics						
Total oil and grease			mg/L	0.25	< 0.50	< 0.50
Total Metals						
Aluminum			mg/L	0.0175	0.01	0.02
Arsenic			mg/L	0.00439	0.00	0.00
Barium			mg/L	0.0396	0.04	0.04
Cadmium			mg/L	0.000005	< 0.000010	< 0.000010
Chromium			mg/L	0.0005	< 0.0010	< 0.0010
Copper			mg/L	0.00203	0.00	0.00
Iron			mg/L	0.061	0.05	0.08
Lead			mg/L	0.00010	< 0.00020	< 0.00020
Manganese			mg/L	0.0066	0.01	0.01
Mercury			mg/L	0.000005	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0012	0.00	0.00
Nickel			mg/L	0.0038	0.00	0.00
Selenium			mg/L	0.00008	0.00	< 0.00010
Silver			mg/L	0.000010	< 0.000020	< 0.000020
Thallium			mg/L	0.000005	< 0.000010	< 0.000010
Zinc			mg/L	0.0025	< 0.0050	< 0.0050
Dissolved Metals						
Calcium (Dissolved)			mg/L	69.9	75.10	64.70
Magnesium (Dissolved)			mg/L	14.20	14.70	13.70
Potassium (Dissolved)			mg/L	5.55	6.08	5.02
Sodium (Dissolved)			mg/L	21.9	22.70	21.10

MEL-SR18	MEL-SR	MEL-SR	Sample date	Annual Average	5/28/2024	6/8/2024	6/19/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024			
Field Measured							
Temperature			°C	4.5	4.5	4.2	4.7
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.56	8	7.29	7.4
Conductivity			uS/cm	56.8	77.4	36.9	56
Dissolved oxygen			mg/L	9.73	13.77	12.95	2.46
Dissolved oxygen			%	104.05	110	-	98.1
Turbidity			NTU	19.13	30	14.4	13
Conventional Parameters							
pH	6.0 - 9.5	6.0 - 9.5	pH units	6.89	7.03	7.23	6.4
Turbidity			NTU	10.8	12	15	5.5
Hardness, as CaCO3			mg/L	14.9	11	14.5	19.3
Total alkalinity, as CaCO3			mg/L	11	9.1	11	14
TDS			mg/L	-	25	35	50
TDS, calculated			mg/L	21	16	19	29
TSS	100	50	mg/L	11	11	16	6
Major Ions							
Chloride			mg/L	2	1.5	1.3	1.8
Cyanide			mg/L	0.00025	< 0.00050	< 0.00050	< 0.00050
Fluoride			mg/L	0.05	< 0.10	< 0.10	< 0.10
Silica			mg/L	0.31	0.12	0.31	0.51
Sulfate			mg/L	5	2.8	3.9	7.7
Nutrients and Chlorophyll a							
Ammonia Nitrogen (as N)			mg/L	0.060	0.13	< 0.050	< 0.050
Nitrate (as N)			mg/L	0.11	0.14	0.15	< 0.10
Nitrite (as N)			mg/L	0.005	< 0.010	< 0.010	< 0.010
Total phosphorus			mg/L	0.024	< 0.020	0.025	0.036
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.010	< 0.010
General Organics							
Total oil and grease			mg/L	0.37	< 0.50	< 0.50	0.6
Total Metals							
Aluminum			mg/L	0.3913	0.418	0.472	0.284
Arsenic			mg/L	0.00381	0.0043	0.004	0.00314
Barium			mg/L	0.0100	0.0072	0.0119	0.0108
Cadmium			mg/L	0.000005	< 0.000010	< 0.000010	< 0.000010
Chromium			mg/L	0.0011	0.0012	0.0016	< 0.0010
Copper			mg/L	0.00284	0.00198	0.00382	0.00272
Iron			mg/L	0.687	0.727	0.924	0.409
Lead			mg/L	0.00076	0.00092	0.00089	0.00048
Manganese			mg/L	0.0184	0.0206	0.0259	0.0088
Mercury			mg/L	0.000005	< 0.00001	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0005	< 0.0010	< 0.0010	< 0.0010
Nickel			mg/L	0.0012	0.0011	0.0019	< 0.0010
Selenium			mg/L	0.00005	< 0.00010	< 0.00010	< 0.00010
Silver			mg/L	0.000010	< 0.000020	< 0.000020	< 0.000020
Thallium			mg/L	0.000005	< 0.000010	< 0.000010	< 0.000010
Zinc			mg/L	0.0025	< 0.0050	< 0.0050	< 0.0050
Dissolved Metals							
Calcium (Dissolved)			mg/L	5.4	4.24	4.51	7.47
Magnesium (Dissolved)			mg/L	0.54	0.372	0.51	0.747
Potassium (Dissolved)			mg/L	0.82	0.447	0.654	1.36
Sodium (Dissolved)			mg/L	1.2	1.04	1	1.49

MEL-SR19	MEL-SR	MEL-SR	Sample date	Annual Average	5/26/2024	9/14/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024		
Field Measured						
Temperature			°C	6.30	-	6.3
pH	6.0 - 9.5	6.0 - 9.5	pH units	6.85	-	6.85
Conductivity			uS/cm	496.20	-	496.2
Dissolved oxygen			mg/L	11.42	-	11.42
Turbidity			NTU	7.49	7.49	4.5
Conventional Parameters						
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.42	7.42	7.57
Turbidity			NTU	1.7	1.7	2.4
Hardness, as CaCO3			mg/L	47.0	47	120
Total alkalinity, as CaCO3			mg/L	44	44	33
TDS			mg/L	210	95	325
TDS, calculated			mg/L	85	85	350
TSS	100	50	mg/L	3	3	3
Major Ions						
Chloride			mg/L	16	16	61
Cyanide			mg/L	0.00025	< 0.00050	0.00057
Fluoride			mg/L	0.05	< 0.10	< 0.10
Silica			mg/L	0.96	0.96	3.9
Sulfate			mg/L	12	12	69
Nutrients and Chlorophyll a						
Ammonia Nitrogen (as N)			mg/L	0.120	0.12	< 0.050
Nitrate (as N)			mg/L	0.05	< 0.10	< 0.10
Nitrite (as N)			mg/L	0.005	< 0.010	< 0.010
Total phosphorus			mg/L	0.010	< 0.020	0.02
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.010
General Organics						
Total oil and grease			mg/L	0.80	0.8	0.5
Total Metals						
Aluminum			mg/L	0.0528	0.0528	0.0331
Arsenic			mg/L	0.00383	0.00383	0.00113
Barium			mg/L	0.0116	0.0116	0.0325
Cadmium			mg/L	0.000005	< 0.000010	< 0.000010
Chromium			mg/L	0.0005	< 0.0010	< 0.0010
Copper			mg/L	0.00072	0.00072	0.00136
Iron			mg/L	0.221	0.221	0.385
Lead			mg/L	0.00010	< 0.00020	< 0.00020
Manganese			mg/L	0.0948	0.0948	0.0172
Mercury			mg/L	0.000005	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0005	< 0.0010	< 0.0010
Nickel			mg/L	0.0005	< 0.0010	0.0015
Selenium			mg/L	0.00005	< 0.00010	< 0.00010
Silver			mg/L	0.000010	< 0.000020	< 0.000020
Thallium			mg/L	0.000005	< 0.000010	< 0.000010
Titanium			mg/L	0.0025	< 0.0050	< 0.0050
Zinc			mg/L	0.0025	< 0.0050	< 0.0050
Dissolved Metals						
Calcium (Dissolved)			mg/L	17.4	17.4	48.4
Magnesium (Dissolved)			mg/L	3.15	3.15	6.98
Potassium (Dissolved)			mg/L	1.83	1.83	3.20
Sodium (Dissolved)			mg/L	7.9	7.92	13.5

MEL-SR20	MEL-SR	MEL-SR	Sample date	Annual Average	5/27/2024	6/12/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024		
Field Measured						
Temperature			°C	9.6	8.00	11.2
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.59	7.44	7.73
Conductivity			uS/cm	367.5	455.00	279.9
Dissolved oxygen			mg/L	11.74	-	11.74
Dissolved oxygen			%	107.00	-	107
Turbidity			NTU	0.93	16.4	0.93
Conventional Parameters						
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.70	7.59	7.81
Turbidity			NTU	1.7	2.8	0.6
Hardness, as CaCO3			mg/L	131.0	145	117
Total alkalinity, as CaCO3			mg/L	79	83	75
TDS			mg/L	253	280	225
TDS, calculated			mg/L	205	240	170
TSS	100	50	mg/L	9	16	2
Major Ions						
Chloride			mg/L	39	55	22
Cyanide			mg/L	0.00055	< 0.00050	0.00084
Fluoride			mg/L	0.05	< 0.10	< 0.1
Silica			mg/L	2.03	3.6	0.46
Sulfate			mg/L	49	59	38
Nutrients and Chlorophyll a						
Ammonia Nitrogen (as N)			mg/L	0.333	0.64	< 0.05
Nitrate (as N)			mg/L	0.20	0.16	0.23
Nitrite (as N)			mg/L	0.005	< 0.010	< 0.01
Total phosphorus			mg/L	0.022	0.034	< 0.02
Orthophosphate (P)			mg/L	0.005	< 0.010	< 0.01
General Organics						
Total oil and grease			mg/L	1.05	0.8	1.3
Total Metals						
Aluminum			mg/L	0.1447	0.275	0.0144
Arsenic			mg/L	0.01580	0.0236	0.00799
Barium			mg/L	0.0260	0.0357	0.0163
Cadmium			mg/L	0.000011	0.000016	< 0.00001
Chromium			mg/L	0.0005	< 0.0010	< 0.001
Copper			mg/L	0.00254	0.00351	0.00157
Iron			mg/L	0.766	1.45	0.081
Lead			mg/L	0.00091	0.00172	< 0.0002
Manganese			mg/L	0.2545	0.458	0.0509
Mercury			mg/L	0.000005	< 0.00001	< 0.00001
Molybdenum			mg/L	0.0008	< 0.0010	0.0011
Nickel			mg/L	0.0039	0.003	0.0048
Selenium			mg/L	0.00005	< 0.00010	< 0.0001
Silver			mg/L	0.000010	< 0.000020	< 0.00002
Thallium			mg/L	0.000005	< 0.000010	< 0.00001
Zinc			mg/L	0.0025	< 0.0050	< 0.005
Dissolved Metals						
Calcium (Dissolved)			mg/L	43.3	48.1	38.5
Magnesium (Dissolved)			mg/L	7.19	6.83	7.54
Potassium (Dissolved)			mg/L	3.19	3.03	3.35
Sodium (Dissolved)			mg/L	14.2	17.9	10.4

MEL-SR21	MEL-SR	MEL-SR	Sample date	Annual Average	5/28/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	4.6	4.60
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.35	7.35
Conductivity			uS/cm	170.0	170.00
Dissolved oxygen			mg/L	11.12	11.12
Dissolved oxygen			%	87.80	87.80
Turbidity			NTU	15.00	15.00
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.51	7.51
Turbidity			NTU	0.7	0.70
Hardness, as CaCO3			mg/L	50.7	50.70
Total alkalinity, as CaCO3			mg/L	58	58.00
TDS			mg/L	110	110.00
TDS, calculated			mg/L	84	84.00
TSS	100	50	mg/L	10	10.00
Major Ions					
Chloride			mg/L	3	3.20
Cyanide			mg/L	0.00025	< 0.00050
Fluoride			mg/L	0.05	< 0.10
Silica			mg/L	1.70	1.70
Sulfate			mg/L	15	15.00
Nutrients and Chlorophyll a					
Ammonia Nitrogen (as N)			mg/L	0.058	0.06
Nitrate (as N)			mg/L	0.27	0.27
Nitrite (as N)			mg/L	0.005	< 0.010
Total phosphorus			mg/L	0.041	0.04
Orthophosphate (P)			mg/L	0.014	0.01
General Organics					
Total oil and grease			mg/L	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0472	0.05
Arsenic			mg/L	0.00866	0.01
Barium			mg/L	0.0131	0.01
Cadmium			mg/L	0.000005	< 0.000010
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00200	0.00
Iron			mg/L	0.099	0.10
Lead			mg/L	0.00024	0.00
Manganese			mg/L	0.0151	0.02
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0005	< 0.0010
Nickel			mg/L	0.0005	< 0.0010
Selenium			mg/L	0.00005	< 0.00010
Silver			mg/L	0.000010	< 0.000020
Sodium (total)			mg/L	1.40	1.40
Thallium			mg/L	0.000005	< 0.000010
Zinc			mg/L	0.0025	< 0.0050
Dissolved Metals					
Calcium (Dissolved)			mg/L	21.2	21.20
Magnesium (Dissolved)			mg/L	3.07	3.07
Potassium (Dissolved)			mg/L	4.02	4.02
Sodium (Dissolved)			mg/L	1.9	1.90

MEL-SR22	MEL-SR	MEL-SR	Sample date	Annual Average	9/18/2024
Parameter	MAX GRAB	MAX MEAN	Unit	2024	
Field Measured					
Temperature			°C	14.2	14.20
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.77	7.77
Conductivity			uS/cm	331.7	331.70
Dissolved oxygen			mg/L	10.19	10.19
Turbidity			NTU	1.43	1.43
Conventional Parameters					
pH	6.0 - 9.5	6.0 - 9.5	pH units	7.67	7.67
Turbidity			NTU	1.0	1.00
Hardness, as CaCO3			mg/L	87.0	87.00
Total alkalinity, as CaCO3			mg/L	40	40.00
TDS			mg/L	190.00	190.00
TDS, calculated			mg/L	170	170.00
TSS	100	50	mg/L	3	3.00
Major Ions					
Chloride			mg/L	23	23.00
Cyanide			mg/L	0.00025	< 0.00050
Fluoride			mg/L	0.05	< 0.10
Silica			mg/L	0.66	0.66
Sulfate			mg/L	67	67.00
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	0.010	< 0.020
Orthophosphate (P)			mg/L	0.005	< 0.010
General Organics					
Total oil and grease			mg/L	0.25	< 0.50
Total Metals					
Aluminum			mg/L	0.0164	0.02
Arsenic			mg/L	0.00084	0.00
Barium			mg/L	0.0330	0.03
Cadmium			mg/L	0.000029	0.00
Chromium			mg/L	0.0005	< 0.0010
Copper			mg/L	0.00260	0.00
Iron			mg/L	0.145	0.15
Lead			mg/L	0.00010	< 0.00020
Manganese			mg/L	0.0040	0.00
Mercury			mg/L	0.000005	< 0.00001
Molybdenum			mg/L	0.0005	< 0.0010
Nickel			mg/L	0.0017	0.00
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	31.7	31.70
Magnesium (Dissolved)			mg/L	5.42	5.42
Potassium (Dissolved)			mg/L	3.79	3.79
Sodium (Dissolved)			mg/L	14.7	14.70