



Meliadine Gold Project
NWB 2BB-MEL1424
June 2021 Monthly Report

Prepared for:
Nunavut Water Board

Prepared by:
Agnico Eagle Mines Limited – Meliadine Division

September 2021

This monthly report is delivered under water license 2BB-MEL1424, PART J, Item 13.

1. The Licensee shall maintain Monitoring Stations at the following locations:

Table 1: Monitoring stations

Monitoring Station	Description	Status
MEL-1	Raw water supply intake at Meliadine Lake	Active (Volume m ³)
MEL-2	Raw water supply intake at Pump, A8 or other Lakes	Active (Volume m ³)
MEL-5	Point of discharge for the Bermed Fuel Containment Facilities	Inactive
MEL-6	Effluent from the Landfarm Treatment Facility prior to release	Inactive
MEL-7	Final Effluent Discharge from the BIODISK treatment system	Active (no direct discharge)
MEL-8	Point of discharge or runoff from the Non-Hazardous Waste landfill	Inactive

2. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes from all sources.

Table 2: Water quantities utilized (average)

MEL-1 ¹	Camp	m ³ /day	0.48
	Pump Shack	m ³ /day	0.00
	Construction	m ³ /day	0.00
MEL-2	Drilling	m ³ /day	31.90
Daily Average		m ³ /day	32.38
Total June 2021		m ³	971.36
Total 2021		m ³	3,850

3. The Licensee shall measure and record the volume of all soil from all locations entering the Landfarm Treatment Facility.

In June 2021 no material was deposited in the Type B landfarm. Any new contaminated soil generated will be deposited in the landfarm approved in the Type A Water License.

¹ MEL-1: 541943E, 6989174N

- 4. The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil that is entering the Land Treatment Unit from all sources and excavations.**

In June 2021 no material was deposited in the Type B landfarm. Any new contaminated soil generated will be deposited in the landfarm approved in the Type A Water License.

- 5. The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.**

No more waste from camp operations and exploration is deposited in locations related to Licence 2BB-MEL1424.

- 6. Licensee shall sample at Monitoring Program Station MEL-7, monthly during wastewater effluent discharge. Samples shall be analyzed for the parameters listed under Part D Item 11:**

pH

Biochemical Oxygen Demand – BOD5

Total Suspended Solids (TSS)

Fecal Coliforms

Oil and Grease (and visual)

From November 2017 to April 2019, all treated sewage from the Exploration Camp STP was trucked and deposited in CP1. From April 15th, 2019 to early June 2019, due to inconsistency in the amount of people at the exploration camp resulting in unsteady STP effluent results, AEM decided to transfer all treated water from the exploration STP to the main camp STP for a second treatment before being discharged in CP-1. Since early June 2019, the treated sewage from the exploration camp is deposited in CP-1 as sampling results went back to normal.

If the Exploration Camp STP operators suspect any upsets in the Exploration Camp STP prior to receiving accredited lab results, the effluent will be placed in the arctic corridor lift station for additional treatment in the main camp sewage treatment plant.

Agnico continued to monitor the quality of the effluent; 4 samples were collected during the month. The summary of the results is provided in Table 3 below.

Table 3: Effluent testing results at STP-FINAL (MEL-7) sampling station, June 2021

MEL-7	MEL-7 LIMITS	Sample date	6/7/2021	6/14/2021	6/21/2021	6/28/2021
Parameter		Unit				
WQ02- Conventional Parameters						
pH	9.5	pH units	7.01	6.73	7.05	6.78
Specific conductivity		umhos/cm	790	910	970	1300
TSS	100	mg/L	3	4	3	4
Volatile TSS		mg/L	2	3	3	4
Total alkalinity, as CaCO3		mg/L	26	22	36	35
WQ04- Nutrients and Chlorophyll a						
Biochemical Oxygen Demand, 5 Day	80	mg/L	5	8	6	9
Chemical oxygen demand		mg/L	75	71	80	120
Total ammonia-N		mg/L	15	15	23	47
Nitrate		mg/L	30.6	46.5	41.5	66.0
Nitrite		mg/L	0.477	0.372	0.619	0.877
Nitrate + nitrite		mg/L	31.1	46.9	42.2	66.8
Total Kjeldahl nitrogen		mg/L	16	17	24	52
Total phosphorus		mg/L	9.4	12	14	19
WQ05- General Organics						
Total oil and grease	5	mg/L	< 0.50	< 0.50	< 0.50	1.6
WQ13- Coliforms						
Total Coliform		CFU/100mL	8000	10	290	10
Fecal Coliform	1000	CFU/100mL	40	< 0	2	< 0
Atypical colonies		CFU/100mL	3000	310	590	1660
Aerobic heterotrophic bacteria		CFU/mL	380000	909	2182	31000
Escherichia coli		CFU/100mL	40	< 0	< 0	< 0

7. The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station MEL-5 and the Landfarm Treatment Facility at Monitoring Program Station MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D item 15.

In June 2021, no water was discharged from the Fuel Containment Facilities (Monitoring station MEL-5) nor the Landfarm Treatment Facility (Monitoring Station MEL-6).

- 8. The Licensee shall obtain representative samples of the water column below any ice where required under part F, Items 5 and 6. Monitoring shall include but not limited to the following:**

Total Suspended Solids

pH

Electrical Conductivity, and

Total trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury.

On-ice drilling was conducted during the winter 2020-2021; samples are collected before, during and after drilling and sent for analysis. Results of analysis for these sampling events which occurred between November 2020 and May 2021 are attached in Appendix.

- 9. Modify the monthly monitoring reports, starting April 2016, to include, at a minimum, waste water treatment options; and modifications of the freshet action plan.**

From November 2017 to April 2019, all treated sewage from the Exploration Camp STP was trucked and deposited in CP1. From April 15th, 2019 to June 2019, due to inconsistency in the amount of people at the exploration camp resulting in unsteady STP effluent results, AEM decided to transfer all treated water from the exploration STP to the main camp STP for a second treatment before being discharged in CP-1. Since early June 2019, the treated sewage from the exploration camp is deposited in CP-1 as sampling results went back to normal.

Appendix – Before, During and After Drilling Lakes Sampling Results

	Sample date	12/3/2020
	Sample name	A6 LAKE-BEFORE
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.78
Specific conductivity	umhos/cm	360
Hardness, as CaCO3 (T)	mg/L	134
Hardness, as CaCO3 (D)	mg/L	124
TSS	mg/L	5
WQ03- Major Ions		
Calcium (E200.8)	mg/L	40.8
Magnesium (E200.8)	mg/L	5.45
Potassium (E200.8)	mg/L	2.61
Sodium (E200.8)	mg/L	13.0
WQ06- Total Metals		
Aluminum	mg/L	0.0137
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00535
Barium	mg/L	0.0376
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	0.000058
Calcium	mg/L	44.3
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00204
Iron	mg/L	0.064
Lead	mg/L	0.00058
Lithium	mg/L	0.0057
Magnesium	mg/L	5.77
Manganese	mg/L	0.0071
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0012
Potassium	mg/L	2.8
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.654
Silver	mg/L	< 0.000020
Sodium	mg/L	13.2
Strontium	mg/L	0.22
Sulphur	mg/L	6.81
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0296
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00433
Barium	mg/L	0.0345
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	0.000050
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00184
Iron	mg/L	0.0115
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0045
Manganese	mg/L	0.0022
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0011
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.551
Silver	mg/L	< 0.000020
Strontium	mg/L	0.2
Sulphur	mg/L	6.4
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0278
Zirconium	mg/L	< 0.00010

	Sample date	11/30/2020
	Sample name	A8 LAKE-BEFORE
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	8.06
Specific conductivity	umhos/cm	440
Hardness, as CaCO3 (T)	mg/L	161
Hardness, as CaCO3 (D)	mg/L	161
TSS	mg/L	22
WQ03- Major Ions		
Calcium (E200.8)	mg/L	52.8
Magnesium (E200.8)	mg/L	7.17
Potassium (E200.8)	mg/L	3.04
Sodium (E200.8)	mg/L	12.9
WQ06- Total Metals		
Aluminum	mg/L	0.0410
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00574
Barium	mg/L	0.0408
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Calcium	mg/L	53
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00155
Iron	mg/L	0.087
Lead	mg/L	0.00022
Lithium	mg/L	0.0108
Magnesium	mg/L	7.03
Manganese	mg/L	0.0045
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0014
Potassium	mg/L	2.99
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.525
Silver	mg/L	< 0.000020
Sodium	mg/L	12.6
Strontium	mg/L	0.351
Sulphur	mg/L	6.4
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00011
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00521
Barium	mg/L	0.0406
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00102
Iron	mg/L	0.0117
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0123
Manganese	mg/L	0.0023
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0012
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.462
Silver	mg/L	< 0.000020
Strontium	mg/L	0.362
Sulphur	mg/L	6.9
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010

	Sample date	2/8/2021
	Sample name	A8 LAKE-DURING
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.77
Specific conductivity	umhos/cm	750
Hardness, as CaCO3 (T)	mg/L	289
Hardness, as CaCO3 (D)	mg/L	282
TSS	mg/L	< 1
WQ03- Major Ions		
Calcium (E200.8)	mg/L	92.6
Magnesium (E200.8)	mg/L	12.4
Potassium (E200.8)	mg/L	5.33
Sodium (E200.8)	mg/L	23.0
WQ06- Total Metals		
Aluminum	mg/L	0.0060
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00669
Barium	mg/L	0.0790
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	< 0.000010
Calcium	mg/L	94.4
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00198
Iron	mg/L	0.037
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0214
Magnesium	mg/L	13.0
Manganese	mg/L	0.0531
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0021
Potassium	mg/L	5.44
Selenium	mg/L	< 0.00010
Silicon	mg/L	1.19
Silver	mg/L	< 0.000020
Sodium	mg/L	23.2
Strontium	mg/L	0.617
Sulphur	mg/L	11.2
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00020
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00583
Barium	mg/L	0.0756
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00861
Iron	mg/L	0.0100
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0196
Manganese	mg/L	0.0377
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0022
Selenium	mg/L	< 0.00010
Silicon	mg/L	1.13
Silver	mg/L	< 0.000020
Strontium	mg/L	0.623
Sulphur	mg/L	9.7
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00017
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0053
Zirconium	mg/L	< 0.00010

	A	B	C
1		Sample date	5/13/2021
2		Sample name	A8-LAKE-AFTER
3		Sample type	N
4		Depth range	-
5	Parameter	Unit	
6	WQ02- Conventional Parameters		
7	pH	pH units	7.92
8	Specific conductivity	umhos/cm	520
9	Hardness, as CaCO3 (T)	mg/L	189
10	Hardness, as CaCO3 (D)	mg/L	184
11	TSS	mg/L	2
12	WQ03- Major Ions		
13	Calcium (E200.8)	mg/L	66.7
14	Magnesium (E200.8)	mg/L	4.18
15	Potassium (E200.8)	mg/L	4.03
16	Sodium (E200.8)	mg/L	14.1
17	WQ05- General Organics		
18	Total oil and grease	mg/L	< 0.50
19	WQ06- Total Metals		
20	Aluminum	mg/L	0.135
21	Antimony	mg/L	< 0.00050
22	Arsenic	mg/L	0.0798
23	Barium	mg/L	0.0242
24	Beryllium	mg/L	< 0.00010
25	Bismuth	mg/L	< 0.0010
26	Boron	mg/L	0.080
27	Cadmium	mg/L	0.000030
28	Calcium	mg/L	68.8
29	Chromium	mg/L	< 0.0010
30	Cobalt	mg/L	0.00047
31	Copper	mg/L	0.00520
32	Iron	mg/L	0.313
33	Lead	mg/L	0.00276
34	Lithium	mg/L	0.0778
35	Magnesium	mg/L	4.22
36	Manganese	mg/L	0.0696
37	Mercury	mg/L	< 0.00001
38	Molybdenum	mg/L	0.0018
39	Nickel	mg/L	0.0021
40	Potassium	mg/L	4.08
41	Selenium	mg/L	0.00044
42	Silicon	mg/L	0.77
43	Silver	mg/L	< 0.000020
44	Sodium	mg/L	14.0
45	Strontium	mg/L	1.32
46	Sulphur	mg/L	5.0
47	Thallium	mg/L	0.000066
48	Tin	mg/L	< 0.0050
49	Titanium	mg/L	< 0.0050
50	Uranium	mg/L	0.00022
51	Vanadium	mg/L	< 0.0050
52	Zinc	mg/L	0.0133
53	Zirconium	mg/L	0.00010
54	WQ07- Dissolved Metals		
55	Aluminum	mg/L	0.0316
56	Antimony	mg/L	< 0.00050
57	Arsenic	mg/L	0.0683
58	Barium	mg/L	0.0227
59	Beryllium	mg/L	< 0.00010
60	Bismuth	mg/L	< 0.0010
61	Boron	mg/L	0.084
62	Cadmium	mg/L	0.000023
63	Chromium	mg/L	< 0.0010
64	Cobalt	mg/L	0.00040
65	Copper	mg/L	0.00454
66	Iron	mg/L	< 0.0050
67	Lead	mg/L	< 0.00020
68	Lithium	mg/L	0.0778
69	Manganese	mg/L	0.0658
70	Mercury	mg/L	< 0.00001
71	Molybdenum	mg/L	0.0017
72	Nickel	mg/L	0.0018
73	Selenium	mg/L	0.00044
74	Silicon	mg/L	0.61
75	Silver	mg/L	< 0.000020
76	Strontium	mg/L	1.30
77	Sulphur	mg/L	4.5
78	Thallium	mg/L	0.000062
79	Tin	mg/L	< 0.0050
80	Titanium	mg/L	< 0.0050
81	Uranium	mg/L	0.00023
82	Vanadium	mg/L	< 0.0050
83	Zinc	mg/L	0.0123
84	Zirconium	mg/L	< 0.00010

	Sample date	12/3/2020
	Sample name	B38 LAKE-BEFORE
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	8.06
Specific conductivity	umhos/cm	1500
Hardness, as CaCO3 (T)	mg/L	708
Hardness, as CaCO3 (D)	mg/L	657
TSS	mg/L	2
WQ03- Major Ions		
Calcium (E200.8)	mg/L	213
Magnesium (E200.8)	mg/L	30.5
Potassium (E200.8)	mg/L	11.9
Sodium (E200.8)	mg/L	40.9
WQ06- Total Metals		
Aluminum	mg/L	0.0075
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.0184
Barium	mg/L	0.187
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	0.000103
Calcium	mg/L	232
Chromium	mg/L	< 0.0010
Cobalt	mg/L	0.00022
Copper	mg/L	0.00377
Iron	mg/L	0.078
Lead	mg/L	0.00021
Lithium	mg/L	0.0220
Magnesium	mg/L	31.5
Manganese	mg/L	0.128
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0054
Potassium	mg/L	12.5
Selenium	mg/L	0.00017
Silicon	mg/L	5.14
Silver	mg/L	< 0.000020
Sodium	mg/L	41.4
Strontium	mg/L	1.12
Sulphur	mg/L	49.1
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00042
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0224
Zirconium	mg/L	0.00013
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.0179
Barium	mg/L	0.178
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	0.000095
Chromium	mg/L	< 0.0010
Cobalt	mg/L	0.00022
Copper	mg/L	0.00380
Iron	mg/L	0.0579
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0164
Manganese	mg/L	0.127
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0055
Selenium	mg/L	0.00014
Silicon	mg/L	4.38
Silver	mg/L	< 0.000020
Strontium	mg/L	0.994
Sulphur	mg/L	47.2
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00039
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0222
Zirconium	mg/L	0.00011

	Sample date	11/29/2020
	Sample name	B5 LAKE-BEFORE
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.82
Specific conductivity	umhos/cm	340
Hardness, as CaCO3 (T)	mg/L	122
Hardness, as CaCO3 (D)	mg/L	129
TSS	mg/L	2
WQ03- Major Ions		
Calcium (E200.8)	mg/L	42.6
Magnesium (E200.8)	mg/L	5.48
Potassium (E200.8)	mg/L	2.55
Sodium (E200.8)	mg/L	11.0
WQ06- Total Metals		
Aluminum	mg/L	0.0134
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00259
Barium	mg/L	0.0381
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Calcium	mg/L	40.1
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00153
Iron	mg/L	0.151
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0160
Magnesium	mg/L	5.4
Manganese	mg/L	0.0187
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0015
Potassium	mg/L	2.52
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.737
Silver	mg/L	< 0.000020
Sodium	mg/L	10.8
Strontium	mg/L	0.305
Sulphur	mg/L	5.33
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00183
Barium	mg/L	0.0385
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00156
Iron	mg/L	0.0209
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0172
Manganese	mg/L	0.0113
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0015
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.738
Silver	mg/L	< 0.000020
Strontium	mg/L	0.309
Sulphur	mg/L	5.7
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010

	Sample date	3/21/2021
	Sample name	B5 DURING
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.83
Specific conductivity	umhos/cm	630
Hardness, as CaCO3 (T)	mg/L	255
Hardness, as CaCO3 (D)	mg/L	249
TSS	mg/L	31
WQ03- Major Ions		
Calcium (E200.8)	mg/L	82.8
Magnesium (E200.8)	mg/L	10.4
Potassium (E200.8)	mg/L	4.83
Sodium (E200.8)	mg/L	20.8
WQ06- Total Metals		
Aluminum	mg/L	0.148
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00397
Barium	mg/L	0.0910
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000030
Calcium	mg/L	84.3
Chromium	mg/L	< 0.0010
Cobalt	mg/L	0.00049
Copper	mg/L	0.00446
Iron	mg/L	0.483
Lead	mg/L	0.00073
Lithium	mg/L	0.0346
Magnesium	mg/L	10.8
Manganese	mg/L	0.134
Mercury	mg/L	0.00003
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0038
Potassium	mg/L	5.02
Selenium	mg/L	0.00012
Silicon	mg/L	2.48
Silver	mg/L	< 0.000020
Sodium	mg/L	21.3
Strontium	mg/L	0.634
Sulphur	mg/L	10.2
Thallium	mg/L	0.000013
Tin	mg/L	< 0.0050
Titanium	mg/L	0.0090
Uranium	mg/L	0.00020
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0164
Zirconium	mg/L	0.00011
WQ07- Dissolved Metals		
Aluminum	mg/L	0.0032
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00223
Barium	mg/L	0.0865
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000011
Chromium	mg/L	< 0.0010
Cobalt	mg/L	0.00023
Copper	mg/L	0.00199
Iron	mg/L	0.0533
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0347
Manganese	mg/L	0.111
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0028
Selenium	mg/L	< 0.00010
Silicon	mg/L	2.18
Silver	mg/L	< 0.000020
Strontium	mg/L	0.618
Sulphur	mg/L	9.8
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00017
Vanadium	mg/L	< 0.0050
Zinc	mg/L	0.0095
Zirconium	mg/L	< 0.00010

	Sample date	5/14/2021
	Sample name	B5 AFTER
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	7.72
Specific conductivity	umhos/cm	510
Hardness, as CaCO3 (T)	mg/L	192
Hardness, as CaCO3 (D)	mg/L	196
TSS	mg/L	5
WQ03- Major Ions		
Calcium (E200.8)	mg/L	66.1
Magnesium (E200.8)	mg/L	7.51
Potassium (E200.8)	mg/L	3.70
Sodium (E200.8)	mg/L	15.3
WQ05- General Organics		
Total oil and grease	mg/L	< 0.50
WQ06- Total Metals		
Aluminum	mg/L	0.0078
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00227
Barium	mg/L	0.0632
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000010
Calcium	mg/L	65.1
Chromium	mg/L	< 0.0010
Cobalt	mg/L	0.00022
Copper	mg/L	0.00172
Iron	mg/L	0.189
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0305
Magnesium	mg/L	7.19
Manganese	mg/L	0.0862
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0022
Potassium	mg/L	3.70
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.65
Silver	mg/L	< 0.000020
Sodium	mg/L	14.8
Strontium	mg/L	0.564
Sulphur	mg/L	6.5
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00018
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00193
Barium	mg/L	0.0645
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.050
Cadmium	mg/L	0.000045
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00165
Iron	mg/L	0.0434
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0306
Manganese	mg/L	0.0816
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0024
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.67
Silver	mg/L	< 0.000020
Strontium	mg/L	0.573
Sulphur	mg/L	6.3
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00019
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010

	Sample date	11/29/2020
	Sample name	B7 LAKE-BEFORE
	Sample type	N
	Depth range	-
Parameter	Unit	
WQ02- Conventional Parameters		
pH	pH units	8.01
Specific conductivity	umhos/cm	460
Hardness, as CaCO3 (T)	mg/L	169
Hardness, as CaCO3 (D)	mg/L	165
TSS	mg/L	2
WQ03- Major Ions		
Calcium (E200.8)	mg/L	57.2
Magnesium (E200.8)	mg/L	5.47
Potassium (E200.8)	mg/L	3.18
Sodium (E200.8)	mg/L	12.7
WQ06- Total Metals		
Aluminum	mg/L	0.0075
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00451
Barium	mg/L	0.0510
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Calcium	mg/L	58.2
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00144
Iron	mg/L	0.041
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0373
Magnesium	mg/L	5.64
Manganese	mg/L	0.0062
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0016
Potassium	mg/L	3.36
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.716
Silver	mg/L	< 0.000020
Sodium	mg/L	12.9
Strontium	mg/L	0.582
Sulphur	mg/L	6.46
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	0.00011
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010
WQ07- Dissolved Metals		
Aluminum	mg/L	< 0.0030
Antimony	mg/L	< 0.00050
Arsenic	mg/L	0.00396
Barium	mg/L	0.0484
Beryllium	mg/L	< 0.00010
Bismuth	mg/L	< 0.0010
Boron	mg/L	< 0.05
Cadmium	mg/L	< 0.000010
Chromium	mg/L	< 0.0010
Cobalt	mg/L	< 0.00020
Copper	mg/L	0.00128
Iron	mg/L	0.0168
Lead	mg/L	< 0.00020
Lithium	mg/L	0.0399
Manganese	mg/L	0.0018
Mercury	mg/L	< 0.00001
Molybdenum	mg/L	< 0.0010
Nickel	mg/L	0.0016
Selenium	mg/L	< 0.00010
Silicon	mg/L	0.687
Silver	mg/L	< 0.000020
Strontium	mg/L	0.565
Sulphur	mg/L	6.6
Thallium	mg/L	< 0.000010
Tin	mg/L	< 0.0050
Titanium	mg/L	< 0.0050
Uranium	mg/L	< 0.00010
Vanadium	mg/L	< 0.0050
Zinc	mg/L	< 0.0050
Zirconium	mg/L	< 0.00010