

MELIADINE GOLD PROJECT

MONTHLY ENVIRONMENTAL REPORT: SEPTEMBER 2011

MELIADINE GOLD PROJECT
MONTHLY ENVIRONMENTAL REPORT

Executive summary

Environment

- The monthly report is delivered under water licence 2BB-MEL0914, PART J, items 13.
- Monthly monitoring program has been done on September 11th and 12th, 2011. Monitoring station MEL-3, MEL-3a, MEL-5 and MEL-6 were not sample this month because there is no effluent at those stations during the sampling period.
- MEL-7 TSS parameter were inadvertently missed during the sampling.
- MEL-4 TSS parameter were inadvertently missed during the sampling.
- The detailed results of the enhanced Monthly Monitoring Programme (including results for monitoring station not subject to special attention under water licence 2BB-MEL0914, PART J, item 13) are available in APPENDIX 1: MONTHLY SAMPLING RESULTS.
- Item 3 is not all available for this month (GPS coordinates for location where sources of water are utilized). Mel-1: 541 934 E 6 989 173 N
- Item 5 is not applicable this month. There was no effluent at MEL-5 and MEL-6 stations.
- Item 6 is not applicable this month. There was no drilling activities on ice.

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1. WATER USAGE (ITEM 2)

Table 1. The consumption of fresh water for the site was 265.3 m³ /day for the month of September 2011

	August
Camp (m ³ /day)	25.2
Drill (m ³ /day)	240.1
Total for the month (m³/day)	265.3

2. MONITORING STATIONS (ITEM 4)

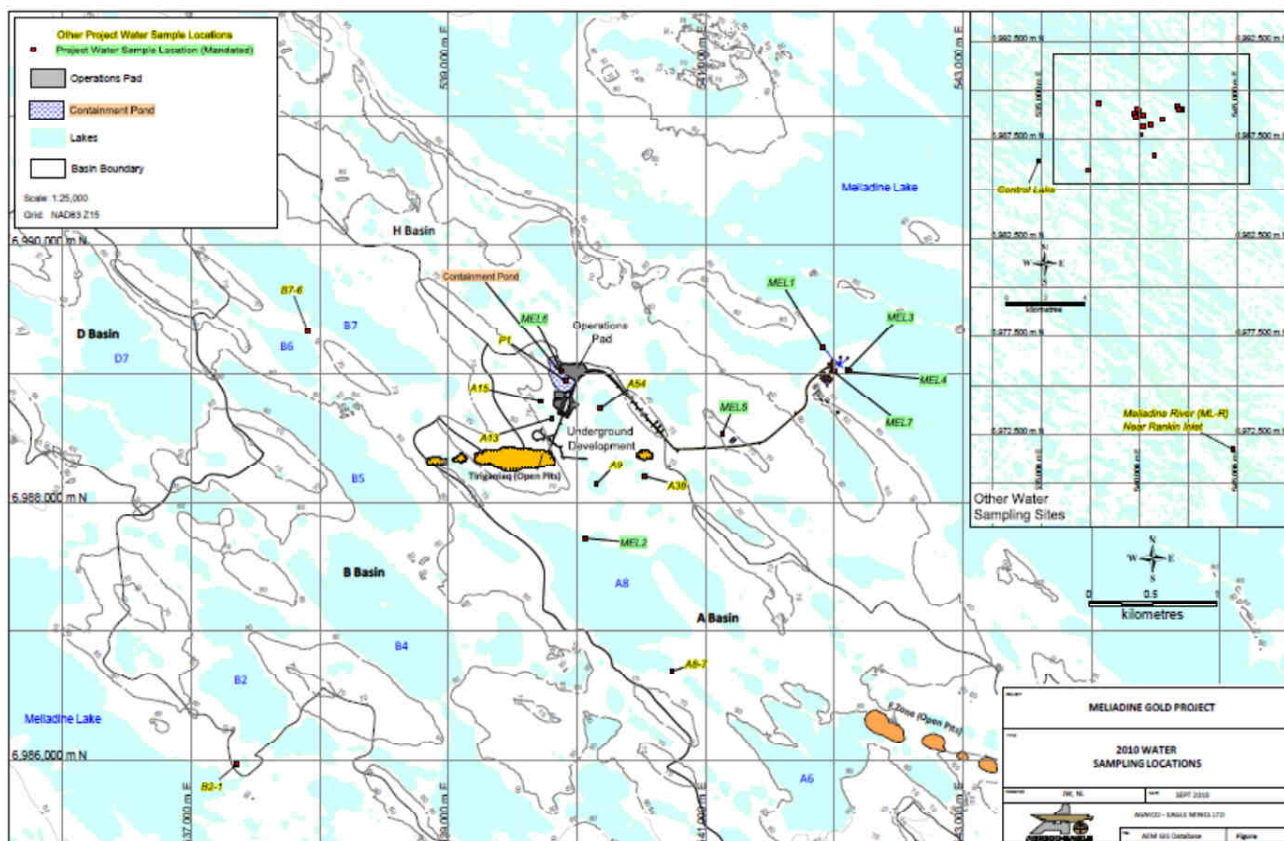
Table 2. Station MEL-4 and MEL-7 lab results. The stations has been sampled on September 12th..

	BOD-5	TSS	Oil and Grease	Faecal Coliforms	pH
MEL-4	7.2	NA	<1.0	150	7.61
MEL-7	<6.0	NA	<1.0	430	7.59

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APPENDIX 1: MONTHLY SAMPLING RESULT



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B-5					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.32
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	3.51
Total Kjeldahl Nitrogen	mg/L	0.39	Strontium (Sr)-Total	mg/L	0.115
Calcium (Ca)-Dissolved	mg/L	20	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	2.33	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	1.2	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	4.01	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	32.7	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	39.8	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	20.7	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	141	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.49
Hardness (as CaCO ₃)	mg/L	59.50	pH	pH units	7.64
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	7.2
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	6.24			
TDS (Calculated)	mg/L	74.1			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0019			
Barium (Ba)-Total	mg/L	0.0155			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	19.7			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	0.21			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0052			
Magnesium (Mg)-Total	mg/L	2.53			
Manganese (Mn)-Total	mg/L	0.0432			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	1.02			
Rubidium (Rb)-Total	mg/L	0.00126	14-Sep		

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A8-7*					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.74
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	5.43
Total Kjeldahl Nitrogen	mg/L	0.5	Strontium (Sr)-Total	mg/L	0.155
Calcium (Ca)-Dissolved	mg/L	23.5	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	3.01	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	1.28	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	4.35	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	37.6	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	45.9	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	30.9	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	175	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	1.32
Hardness (as CaCO ₃)	mg/L	79.60	pH	pH units	7.83
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	4.63
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	4.27			
TDS (Calculated)	mg/L	94.3			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0026			
Barium (Ba)-Total	mg/L	0.0207			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	26.1			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	0.17			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0125			
Magnesium (Mg)-Total	mg/L	3.53			
Manganese (Mn)-Total	mg/L	0.0223			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	1.52			
Rubidium (Rb)-Total	mg/L	0.00159	11-Sep		

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B7-6					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.38
Phosphorus (P)-Total	mg/L	0.014	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	4.14
Total Kjeldahl Nitrogen	mg/L	0.51	Strontium (Sr)-Total	mg/L	0.195
Calcium (Ca)-Dissolved	mg/L	25.4	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	2.4	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	1.53	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	3.41	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	33.3	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	40.6	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	34	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	176	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	1.44
Hardness (as CaCO ₃)	mg/L	81.20	pH	pH units	7.72
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	2.86
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	3.26			
TDS (Calculated)	mg/L	93.8			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0018			
Barium (Ba)-Total	mg/L	0.0268			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	27.9			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	0.29			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0164			
Magnesium (Mg)-Total	mg/L	2.8			
Manganese (Mn)-Total	mg/L	0.0152			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	1.71			
Rubidium (Rb)-Total	mg/L	0.00182	11-Sep		

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B2-1					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.41
Phosphorus (P)-Total	mg/L	0.012	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	4.35
Total Kjeldahl Nitrogen	mg/L	0.4	Strontium (Sr)-Total	mg/L	0.0614
Calcium (Ca)-Dissolved	mg/L	13.2	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	1.53	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	0.91	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	3.82	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	32.7	Titanium (Ti)-Total	mg/L	0.0029
Bicarbonate (HCO ₃)	mg/L	39.9	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	10.8	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	105	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.87
Hardness (as CaCO ₃)	mg/L	41.30	pH	pH units	7.72
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	4.88
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	3.73			
TDS (Calculated)	mg/L	55			
Aluminum (Al)-Total	mg/L	0.042			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0014			
Barium (Ba)-Total	mg/L	0.0137			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	13.8			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	0.26			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0025			
Magnesium (Mg)-Total	mg/L	1.65			
Manganese (Mn)-Total	mg/L	0.0219			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	1.05			
Rubidium (Rb)-Total	mg/L	0.00114	11-Sep		

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MEL-R					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.92
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	15.7
Total Kjeldahl Nitrogen	mg/L	0.26	Strontium (Sr)-Total	mg/L	0.0942
Calcium (Ca)-Dissolved	mg/L	17.3	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	3.24	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	2.02	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	13.7	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	37.9	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	46.2	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	30.9	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	195	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.47
Hardness (as CaCO ₃)	mg/L	61.00	pH	pH units	7.81
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	3.53
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	14.4			
TDS (Calculated)	mg/L	108			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	<0.0010			
Barium (Ba)-Total	mg/L	0.0152			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	18.5			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	<0.10			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	<0.0020			
Magnesium (Mg)-Total	mg/L	3.58			
Manganese (Mn)-Total	mg/L	0.0035			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	2.34			
Rubidium (Rb)-Total	mg/L	0.00228	11-Sep		

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CONTROL LAKE					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	<0.30
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	5.17
Total Kjeldahl Nitrogen	mg/L	0.3	Strontium (Sr)-Total	mg/L	0.0323
Calcium (Ca)-Dissolved	mg/L	10.1	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	1.11	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	1.05	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	4.67	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	27.4	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	33.4	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	8.78	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	85.6	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.36
Hardness (as CaCO ₃)	mg/L	30.50	pH	pH units	7.77
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	6.06
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	2.04			
TDS (Calculated)	mg/L	45			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	<0.0010			
Barium (Ba)-Total	mg/L	0.00829			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	10.3			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	<0.10			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0022			
Magnesium (Mg)-Total	mg/L	1.18			
Manganese (Mn)-Total	mg/L	0.0029			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	1.1			
Rubidium (Rb)-Total	mg/L	0.00126	11-Sep		

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P-1					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.81
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	19
Total Kjeldahl Nitrogen	mg/L	0.97	Strontium (Sr)-Total	mg/L	0.555
Calcium (Ca)-Dissolved	mg/L	83.5	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	11.2	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	4.54	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	17.6	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	133	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	162	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	0.00062
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	107	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	587	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	3.13
Hardness (as CaCO ₃)	mg/L	255.00	pH	pH units	8.28
Nitrate-N	mg/L	0.059	Field Water Temperature	oC	3.43
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	12.8			
TDS (Calculated)	mg/L	318			
Aluminum (Al)-Total	mg/L	0.022			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0045			
Barium (Ba)-Total	mg/L	0.0606			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	82.4			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	0.0025			
Iron (Fe)-Total	mg/L	0.64			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0066			
Magnesium (Mg)-Total	mg/L	12			
Manganese (Mn)-Total	mg/L	0.0367			
Molybdenum (Mo)-Total	mg/L	0.00113			
Nickel (Ni)-Total	mg/L	0.0043			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	4.68			
Rubidium (Rb)-Total	mg/L	0.0035	11-Sep		

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A-13					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	0.123	Selenium (Se)-Total	mg/L	0.0168
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	3.12
Phosphorus (P)-Total	mg/L	0.011	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	31
Total Kjeldahl Nitrogen	mg/L	0.66	Strontium (Sr)-Total	mg/L	1.91
Calcium (Ca)-Dissolved	mg/L	226	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	21.8	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	7.78	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	24.6	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	25.1	Titanium (Ti)-Total	mg/L	0.0016
Bicarbonate (HCO ₃)	mg/L	30.6	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	511	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	1560	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.50	Turbidity	NTU	3.64
Hardness (as CaCO ₃)	mg/L	712.00	pH	pH units	7.54
Nitrate-N	mg/L	<0.25	Field Water Temperature	oC	5.12
Nitrate and Nitrite as N	mg/L	<0.35			
Nitrite-N	mg/L	<0.25			
Sulfate	mg/L	63.4			
TDS (Calculated)	mg/L	896			
Aluminum (Al)-Total	mg/L	0.025			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0027			
Barium (Ba)-Total	mg/L	0.209			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	240			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	0.00086			
Copper (Cu)-Total	mg/L	0.0025			
Iron (Fe)-Total	mg/L	0.82			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.101			
Magnesium (Mg)-Total	mg/L	27.3			
Manganese (Mn)-Total	mg/L	0.0894			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	0.0082			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	8.04			
Rubidium (Rb)-Total	mg/L	0.00644	11-Sep		

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A-15					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Selenium (Se)-Total	mg/L	0.013
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	2.87
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	26.6
Total Kjeldahl Nitrogen	mg/L	0.42	Strontium (Sr)-Total	mg/L	1.54
Calcium (Ca)-Dissolved	mg/L	196	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	21.1	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	6.45	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	22.5	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	26.6	Titanium (Ti)-Total	mg/L	0.0015
Bicarbonate (HCO ₃)	mg/L	32.4	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	409	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	1310	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.50	Turbidity	NTU	0.67
Hardness (as CaCO ₃)	mg/L	613.00	pH	pH units	7.6
Nitrate-N	mg/L	<0.25	Field Water Temperature	oC	3.93
Nitrate and Nitrite as N	mg/L	<0.35			
Nitrite-N	mg/L	<0.25			
Sulfate	mg/L	66.2			
TDS (Calculated)	mg/L	753			
Aluminum (Al)-Total	mg/L	0.028			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0019			
Barium (Ba)-Total	mg/L	0.17			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	203			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	0.00061			
Copper (Cu)-Total	mg/L	0.0022			
Iron (Fe)-Total	mg/L	0.45			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0718			
Magnesium (Mg)-Total	mg/L	25.6			
Manganese (Mn)-Total	mg/L	0.036			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	0.0065			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	6.68			
Rubidium (Rb)-Total	mg/L	0.00473	11-Sep		

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A-54					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	0.264	Selenium (Se)-Total	mg/L	<0.0050
Mercury (Hg)-Total	mg/L	<0.000050	Silicon (Si)-Total	mg/L	0.64
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	83.1
Total Kjeldahl Nitrogen	mg/L	1.21	Strontium (Sr)-Total	mg/L	1.19
Calcium (Ca)-Dissolved	mg/L	121	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	23	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	11.2	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	70.6	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	68.1	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	83	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	335	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	1150	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.94
Hardness (as CaCO ₃)	mg/L	429.00	pH	pH units	7.97
Nitrate-N	mg/L	0.809	Field Water Temperature	oC	4.92
Nitrate and Nitrite as N	mg/L	0.809			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	64			
TDS (Calculated)	mg/L	691			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0034			
Barium (Ba)-Total	mg/L	0.0899			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	126			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	0.3			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	0.0389			
Magnesium (Mg)-Total	mg/L	27.8			
Manganese (Mn)-Total	mg/L	0.0248			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	0.0054			
Phosphorus (P)-Total	mg/L	<0.50			
Potassium (K)-Total	mg/L	11.8			
Rubidium (Rb)-Total	mg/L	0.0078	11-Sep		

MELIADINE GOLD PROJECT
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MEL-1					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Phosphorus (P)-Total	mg/L	<0.50
Biochemical Oxygen Demand	mg/L	6.6	Potassium (K)-Total	mg/L	0.95
Fecal Coliforms	MPN/100mL	15	Rubidium (Rb)-Total	mg/L	0.00134
Mercury (Hg)-Total	mg/L	<0.000050	Selenium (Se)-Total	mg/L	<0.0050
Oil & Grease-(IR)	mg/L	<1.0	Silicon (Si)-Total	mg/L	0.39
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	4.86
Total Kjeldahl Nitrogen	mg/L	0.21	Strontium (Sr)-Total	mg/L	0.0471
Calcium (Ca)-Dissolved	mg/L	10.8	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	1.41	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	0.98	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	5.06	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	22.4	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	27.3	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	11.70	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	96.5	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.36
Hardness (as CaCO ₃)	mg/L	29.7	pH	pH units	7.53
Nitrate-N	mg/L	<0.050	Field Water Temperature	oC	5.3
Nitrate and Nitrite as N	mg/L	<0.071			
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	11.4			
TDS (Calculated)	mg/L	53.4			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	<0.0010			
Barium (Ba)-Total	mg/L	0.0101			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	9.69			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.00050			
Cobalt (Co)-Total	mg/L	<0.0020			
Copper (Cu)-Total	mg/L	<0.00050			
Iron (Fe)-Total	mg/L	0.11			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	<0.0020			
Magnesium (Mg)-Total	mg/L	1.35			
Manganese (Mn)-Total	mg/L	0.0097			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020	12-Sep		

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MEL-4					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	0.055	Phosphorus (P)-Total	mg/L	<0.50
Biochemical Oxygen Demand	mg/L	7.2	Potassium (K)-Total	mg/L	0.99
Fecal Coliforms	MPN/100mL	150	Rubidium (Rb)-Total	mg/L	0.00123
Mercury (Hg)-Total	mg/L	<0.000050	Selenium (Se)-Total	mg/L	<0.0050
Oil & Grease-(IR)	mg/L	<1.0	Silicon (Si)-Total	mg/L	<0.30
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	5.69
Total Kjeldahl Nitrogen	mg/L	0.23	Strontium (Sr)-Total	mg/L	0.0463
Calcium (Ca)-Dissolved	mg/L	7.45	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	1.15	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	0.86	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	4.51	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	19.7	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	24.1	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	8.61	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	75.9	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.36
Hardness (as CaCO ₃)	mg/L	24.7	pH	pH units	7.61
Nitrate-N	mg/L	<0.050	TSS	mg/L	NA
Nitrate and Nitrite as N	mg/L	<0.071	Field Water Temperature	oC	6.32
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	3.47			
TDS (Calculated)	mg/L	39.7			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	0.0018			
Barium (Ba)-Total	mg/L	0.0081			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	7.81			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	<0.10			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	<0.0020			
Magnesium (Mg)-Total	mg/L	1.27			
Manganese (Mn)-Total	mg/L	0.0057			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020	12-Sep		

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MEL-7					
Parameters	Units	Results	Parameters	Units	Results
Ammonia as N	mg/L	<0.050	Phosphorus (P)-Total	mg/L	<0.50
Biochemical Oxygen Demand	mg/L	<6.0	Potassium (K)-Total	mg/L	0.92
Fecal Coliforms	MPN/100mL	430	Rubidium (Rb)-Total	mg/L	0.00137
Mercury (Hg)-Total	mg/L	<0.000050	Selenium (Se)-Total	mg/L	<0.0050
Oil & Grease-(IR)	mg/L	<1.0	Silicon (Si)-Total	mg/L	<0.30
Phosphorus (P)-Total	mg/L	<0.010	Silver (Ag)-Total	mg/L	<0.0010
Phosphorus (P)-Total Reactive	mg/L	<0.010	Sodium (Na)-Total	mg/L	4.96
Total Kjeldahl Nitrogen	mg/L	0.25	Strontium (Sr)-Total	mg/L	0.0379
Calcium (Ca)-Dissolved	mg/L	7.01	Tellurium (Te)-Total	mg/L	<0.0010
Magnesium (Mg)-Dissolved	mg/L	1.12	Thallium (Tl)-Total	mg/L	<0.0050
Potassium (K)-Dissolved	mg/L	0.82	Thorium (Th)-Total	mg/L	<0.0010
Sodium (Na)-Dissolved	mg/L	4.35	Tin (Sn)-Total	mg/L	<0.00060
Alkalinity, Total (as CaCO ₃)	mg/L	19	Titanium (Ti)-Total	mg/L	<0.0010
Bicarbonate (HCO ₃)	mg/L	23.2	Tungsten (W)-Total	mg/L	<0.0020
Carbonate (CO ₃)	mg/L	<0.60	Uranium (U)-Total	mg/L	<0.00050
Hydroxide (OH)	mg/L	<0.40	Vanadium (V)-Total	mg/L	<0.0020
Chloride	mg/L	9.42	Zinc (Zn)-Total	mg/L	<0.020
Conductivity	umhos/cm	74.5	Zirconium (Zr)-Total	mg/L	<0.0010
Fluoride	mg/L	<0.10	Turbidity	NTU	0.49
Hardness (as CaCO ₃)	mg/L	24.4	pH	pH units	7.59
Nitrate-N	mg/L	<0.050	TSS	mg/L	NA
Nitrate and Nitrite as N	mg/L	<0.071	Field Water Temperature	oC	6.35
Nitrite-N	mg/L	<0.050			
Sulfate	mg/L	4.68			
TDS (Calculated)	mg/L	40.4			
Aluminum (Al)-Total	mg/L	<0.020			
Antimony (Sb)-Total	mg/L	<0.0010			
Arsenic (As)-Total	mg/L	<0.0010			
Barium (Ba)-Total	mg/L	0.00814			
Beryllium (Be)-Total	mg/L	<0.0010			
Bismuth (Bi)-Total	mg/L	<0.00050			
Boron (B)-Total	mg/L	<0.030			
Cadmium (Cd)-Total	mg/L	<0.00020			
Calcium (Ca)-Total	mg/L	7.76			
Cesium (Cs)-Total	mg/L	<0.00050			
Chromium (Cr)-Total	mg/L	<0.0020			
Cobalt (Co)-Total	mg/L	<0.00050			
Copper (Cu)-Total	mg/L	<0.0020			
Iron (Fe)-Total	mg/L	<0.10			
Lead (Pb)-Total	mg/L	<0.0010			
Lithium (Li)-Total	mg/L	<0.0020			
Magnesium (Mg)-Total	mg/L	1.23			
Manganese (Mn)-Total	mg/L	0.0039			
Molybdenum (Mo)-Total	mg/L	<0.00050			
Nickel (Ni)-Total	mg/L	<0.0020	12-Sep		