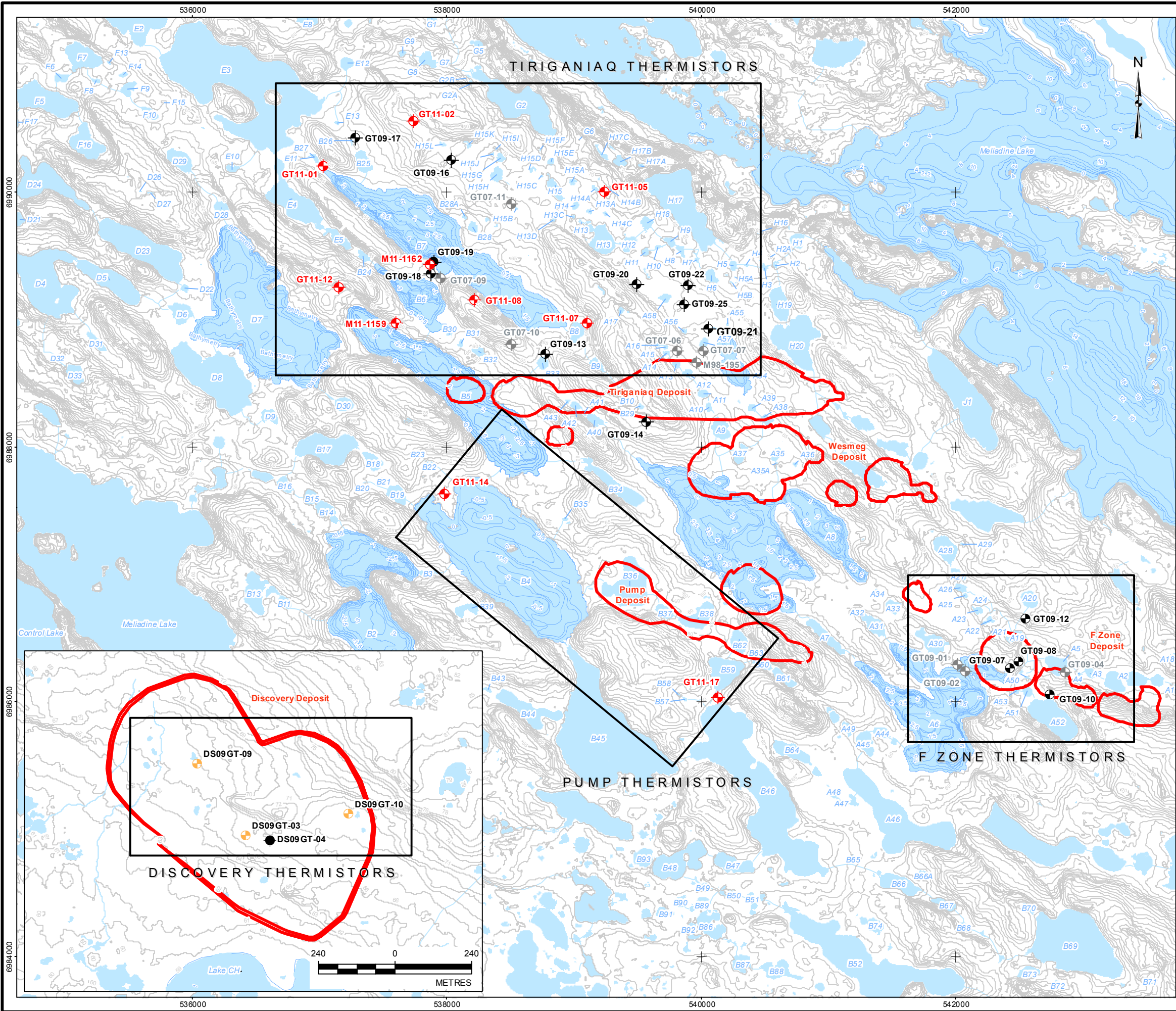


N:\Bur_Graphics\Projects\2013\1428\13-1428-0007\GIS\Mapping\MXD\FEIS\Volume_6\Main_Volume\Appendix_6.3-F\Figure_6.3-F1_Lake_Bathymetry_and_Thermistor_Locations.mxd



Appendix K

Water Balance

(Water Management Plan, AEM, 2019. Appendix H)

Meliadine Interim Closure and Reclamation Plan 2019		Original -V.00
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Containment Pond 1										
Result:	Inflows			Outflows						
	Truck Wash	STP	RO Permeate	Steady Rate Treatment	Overflow	Discharge to Sea	Evaporation	To CP5	Seepage through DCP1	EWTP
Unit:	m3	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	16	3798.21	0	0	0	0	0	0	0	0
2019 Feb	16	3437.13	0	0	0	0	0	0	0	0
2019 Mar	20	3824.16	0	0	0	0	0	0	0	0
2019 Apr	16	3700.8	0	0	0	0	0	0	0	0
2019 May	16	3824.16	0	0	0	0	0	0	0	0
2019 Jun	20	3700.8	0	0	0	0	0	0	0	106353.2
2019 Jul	16	3824.16	0	0	0	0	18444.97	0	0	4038.207
2019 Aug	16	3824.16	0	0	0	0	7409.704	0	0	4360.83
2019 Sep	20	3700.8	0	0	0	0	0	0	0	2149.706
2019 Oct	16	3824.16	0	0	0	0	0	0	0	0
2019 Nov	16	3700.8	0	0	0	0	0	0	0	0
2019 Dec	20	3700.8	0	0	0	0	0	0	0	0

Containment Pond 3								
Result:	Volume	TDS	Inflows				Outflows	
	Volume (end of month)	Monthly Average TDS	Direct Precipitation	Natural Runoff	Disturbed Runoff	TSF Runoff	To Environment	To CP1
Unit:	m3	mg/l	m3	m3	m3	m3	m3	m3
2019 Jan	0	0	0	0	0	0	0	0
2019 Feb	0	0	0	0	0	0	0	0
2019 Mar	0	0	0	0	0	0	0	0
2019 Apr	0	0	0	0	0	0	0	0
2019 May	0	0	0	0	0	0	0	0
2019 Jun	25454	4872.601	0	30075.3	5054	14398.98	0	24074.28
2019 Jul	25454	5158.659	0	5216.37	1368	3897.468	0	10481.84
2019 Aug	25454	5441.455	0	7567.41	1634	4655.309	0	13856.72
2019 Sep	25454	5460.194	0	6185.7	1178	3356.153	0	10719.85
2019 Oct	25454	5387.477	0	1910.22	304	866.104	0	3080.324
2019 Nov	25454	5349.831	0	0	0	0	0	0
2019 Dec	25454	5349.831	0	0	0	0	0	0

Containment Pond 5											
Result:	Volume	TDS	Inflows							Outflows	
	Volume (end of month)	Monthly Average TDS	CP5 Catchment	WRSF 1 Catchment	Direct Precipitation	WRSF1 Runoff	Pumped from DCP5	Pumped from P3	Pumped from CP1	Overflow to CP1	Overflow to P1
Unit:	m3	mg/L	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	21482.37	12200	0	0	0	0	0	0	0	0	0
2019 Feb	21482.37	12200	0	0	0	0	0	0	0	0	0
2019 Mar	21482.37	12200	0	0	0	0	0	0	0	0	0
2019 Apr	21482.37	12200	0	0	0	0	0	0	0	0	0
2019 May	21482.37	12200	0	0	0	0	0	0	0	0	0
2019 Jun	10000	5592.921	22712.53	18195.42	2956.112	3973.06	0	0	0	0	0
2019 Jul	10000	4334.254	4361.398	3340.417	0	1002.185	0	0	0	0	0
2019 Aug	10000	5705.95	6155.219	4714.314	0	1213.01	0	0	0	0	0
2019 Sep	13591.38	5630.497	4923.284	3794.34	287.2397	824.9692	0	0	0	0	0
2019 Oct	16964.68	6914.495	1431.923	1149.29	633.2043	158.8829	0	0	0	0	0
2019 Nov	16964.68	7950.064	0	0	0	0	0	0	0	0	0
2019 Dec	16964.68	7950.064	0	0	0	0	0	0	0	0	0

Containment Pond 5							
Result:	Outflows						
	Overflow to P2	Overflow to P3	Pumped to CP1	Seepage to DCP5	Evaporation	RO Unit - Brine	RO Unit - Permeate
Unit:	m3	m3	m3	m3	m3	m3	m3
2019 Jan	0	0	0	0	0	0	0
2019 Feb	0	0	0	0	0	0	0
2019 Mar	0	0	0	0	0	0	0
2019 Apr	0	0	0	0	0	0	0
2019 May	0	0	0	0	0	0	0
2019 Jun	0	0	0	0	0	10084.31	49235.18
2019 Jul	0	0	0	0	2460.033	2497.587	3746.38
2019 Aug	0	0	0	0	953.5013	4451.617	6677.425
2019 Sep	0	0	0	0	0	2495.382	3743.073
2019 Oct	0	0	0	0	0	0	0
2019 Nov	0	0	0	0	0	0	0
2019 Dec	0	0	0	0	0	0	0

Saline Pond											
Result:	Volume	TDS	Inflows						Outflows		
	Volume (end of month)	Monthly Average TDS	Catchment Runoff	Direct Precipitation	Pumped P3	RO Brine	SWTP Brine	Pumped from UG	Evaporation	Pumped to SWTP Brine Mode	Pumped to SWTP Solids Mode
Unit:	m3	mg/L	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	13742.88	14808.54	0	0	0	0	1415.88	0	0	0	0
2019 Feb	13742.88	13903.09	0	0	0	0	0	0	0	0	0
2019 Mar	13742.88	13903.09	0	0	0	0	0	0	0	0	0
2019 Apr	13742.88	13903.09	0	0	0	0	0	0	0	0	0
2019 May	13742.88	13903.09	0	0	0	0	0	0	0	0	0
2019 Jun	24627.83	20260.96	1006.166	346.7753	0	10084.31	0	0	0	0	552.3078
2019 Jul	22919.93	19988.99	266.0104	0	0	2497.587	0	0	379.4909	0	4092
2019 Aug	23451.4	19071.36	318.4354	0	0	4451.617	0	0	146.5843	0	4092
2019 Sep	22715.32	18078	229.4377	42.59506	0	2495.382	0	0	0	0	3503.5
2019 Oct	22850.69	17785.79	59.33286	76.04437	0	0	0	0	0	0	0
2019 Nov	22850.69	17736.85	0	0	0	0	0	0	0	0	0
2019 Dec	22850.69	17736.85	0	0	0	0	0	0	0	0	0

Saline Pond		
Result:	Outflows	
	Pumped to P3	Overflow (tracked)
Unit:	m3	m3
2019 Jan	0	0
2019 Feb	0	0
2019 Mar	0	0
2019 Apr	0	0
2019 May	0	0
2019 Jun	0	0
2019 Jul	0	0
2019 Aug	0	0
2019 Sep	0	0
2019 Oct	0	0
2019 Nov	0	0
2019 Dec	0	0

Underground											
Result:	Volume				TDS			Inflows		Outflows	
	Sump System Volume (end of month)	Stope 75 Volume (end of month)	Stope 350 Volume (end of month)	Cumulative Underground Overflow (tracked)	Sump System Monthly Average TDS	Stope 75 Monthly Average TDS	Stope 350 Monthly Average TDS	Truck Wash	Groundwater Inflow	Lost to Rock Water Content	To SWTP Solids Mode
Unit:	m3	m3	m3	m3	mg/L	mg/L	mg/L	m3	m3	m3	m3
2019 Jan	830	4830	1100	0	55800	55794.9	55800	0	1240	0	0
2019 Feb	830	2254	1100	0	55800	55772.9	55800	0	1120	0	3696
2019 Mar	830	1	1100	0	55800	56572.61	55800	0	1240	0	3493
2019 Apr	830	1	1100	0	55800	55800	55800	0	1200	0	1200
2019 May	830	1	1100	0	55800	55800	55800	0	1240	0	1240
2019 Jun	830	168.366	1100	0	55800	55800	55800	0	1200	0	1032.634
2019 Jul	813.2645	1370.033	1100	0	55800	55800	55800	0	1240	55.06886	0
2019 Aug	830	7253.963	1100	0	55800	55800	55800	0	7440	1539.334	0
2019 Sep	830	10000	3543.666	0	55800	55800	55800	0	7200	1553.797	456.5
2019 Oct	830	10000	5169.999	0	55800	55800	55800	0	7440	1721.668	4092
2019 Nov	830	10000	6340	509.5294	55800	55800	55800	0	7200	1560.469	3960
2019 Dec	830	10000	6340	2390.044	55800	55800	55800	0	7200	1359.485	3960

Underground							
Result:	Outflows						
	To SWTP Brine Mode	Pumped to P3	Pumped to P2	Pumped to P1	Pumped to Saline Pond	Discharged to Sea	Uncontained
Unit:	m3	m3	m3	m3	m3	m3	m3
2019 Jan	5244	0	0	0	0	0	0
2019 Feb	0	0	0	0	0	0	0
2019 Mar	0	0	0	0	0	0	0
2019 Apr	0	0	0	0	0	0	0
2019 May	0	0	0	0	0	0	0
2019 Jun	0	0	0	0	0	0	0
2019 Jul	0	0	0	0	0	0	0
2019 Aug	0	0	0	0	0	0	0
2019 Sep	0	0	0	0	0	0	0
2019 Oct	0	0	0	0	0	0	0
2019 Nov	0	0	0	0	0	0	509.5294
2019 Dec	0	0	0	0	0	0	1880.515

P-Area (P1)											
Result:	Volume	TDS	Inflows								
	Volume (end of month)	Monthly Average TDS	Pumped from Portal 2	Overflow from CP5	Natural Runoff	Disturbed Runoff	Direct Precipitation	Waste Rock Runoff	From WRSF1	Batch Plant	Pumped from DP1
Unit:	m3	mg/L	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	4780.69	21869.53	0	0	0	0	0	0	0	0	0
2019 Feb	4780.69	22578.54	0	0	0	0	0	0	0	0	0
2019 Mar	4780.69	23287.54	0	0	0	0	0	0	0	0	0
2019 Apr	4780.69	24020.59	0	0	0	0	0	0	0	0	0
2019 May	4780.69	24753.63	0	0	0	0	0	0	0	0	0
2019 Jun	2519.543	71092.29	0	0	0	10797.06	1339.07	1442.724	0	0	0
2019 Jul	1000	385783.2	0	0	0	3301.09	0	390.5118	0	0	0
2019 Aug	1000	477220.1	0	0	0	3957.756	0	466.4446	0	0	0
2019 Sep	1000	553830.9	0	0	0	2853.266	61.0435	336.274	0	0	0
2019 Oct	2447.435	406213.1	0	0	0	705.5518	171.3472	86.7804	0	0	0
2019 Nov	2447.435	250700.6	0	0	0	0	0	0	0	0	0
2019 Dec	2447.435	252109	0	0	0	0	0	0	0	0	0

P-Area (P1)								
Result:	Inflows				Outflows			
	Cement Truck Water	Pumped from P2	Pumped from P3	Overflow from P3	Evaporators	Seepage to DP1	Evaporation	Overflow (tracked)
Unit:	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	0	0	0	0	0	0	0	0
2019 Feb	0	0	0	0	0	0	0	0
2019 Mar	0	0	0	0	0	0	0	0
2019 Apr	0	0	0	0	0	0	0	0
2019 May	0	0	0	0	0	0	0	0
2019 Jun	0	0	0	0	15840	0	0	0
2019 Jul	0	0	0	0	4641.166	0	569.9786	0
2019 Aug	0	0	0	0	4213.94	0	210.2609	0
2019 Sep	0	0	0	0	3250.583	0	0	0
2019 Oct	0	0	0	513.8342	30.0788	0	0	0
2019 Nov	0	0	0	0	0	0	0	0
2019 Dec	0	0	0	0	0	0	0	0

P-Area (P2)											
Result:	Volume	TDS	Inflows								Outflows
	Volume (end of month)	Monthly Average Concentration	Natural Runoff	Disturbed Runoff	Direct Precipitation	Waste Rock Runoff	Pumped from P3	Pumped from Stope 75	Overflow from CP5	Waste Rock Drainage	Evaporation
Unit:	m3	mg/L	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	104.81	19600	0	0	0	0	0	0	0	0	0
2019 Feb	104.81	19600	0	0	0	0	0	0	0	0	0
2019 Mar	104.81	19600	0	0	0	0	0	0	0	0	0
2019 Apr	104.81	19600	0	0	0	0	0	0	0	0	0
2019 May	104.81	19600	0	0	0	0	0	0	0	0	0
2019 Jun	5563.494	11014.63	378.162	3440.459	463.2935	1176.769	0	0	0	0	0
2019 Jul	6226.724	10836.17	65.5898	880.3659	0	318.524	0	0	0	0	601.2498
2019 Aug	6828.18	11539.06	95.1514	1044.319	0	380.4593	0	0	0	0	238.2542
2019 Sep	6828.18	11569.89	77.778	751.9566	69.43901	274.2846	0	0	0	0	0
2019 Oct	6828.18	11355.95	24.0188	194.0533	124.373	70.78312	0	0	0	0	0
2019 Nov	6828.18	11245.97	0	0	0	0	0	0	0	0	0
2019 Dec	6828.18	11245.97	0	0	0	0	0	0	0	0	0

P-Area (P2)		
Result:	Outflows	
	Pumped to P1	Overflow (to P3)
Unit:	m3	m3
2019 Jan	0	0
2019 Feb	0	0
2019 Mar	0	0
2019 Apr	0	0
2019 May	0	0
2019 Jun	0	0
2019 Jul	0	0
2019 Aug	0	680.2193
2019 Sep	0	1173.458
2019 Oct	0	413.2282
2019 Nov	0	0
2019 Dec	0	0

P-Area (P3)											
Result:	Volume	TDS	Inflows								
	Volume (end of month)	Monthly Average TDS	Natural Runoff	Disturbed Runoff	Direct Precipitation	Waste Rock Runoff	Pumped from DP3	Pumped from Saline Pond	Pumped from Portal 1	Overflow from P2	Pumped from Stope 75
Unit:	m3	mg/L	m3	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	7482.97	20100	0	0	0	0	0	0	0	0	0
2019 Feb	7482.97	20100	0	0	0	0	0	0	0	0	0
2019 Mar	7482.97	20100	0	0	0	0	0	0	0	0	0
2019 Apr	7482.97	20100	0	0	0	0	0	0	0	0	0
2019 May	7482.97	20100	0	0	0	0	0	0	0	0	0
2019 Jun	13783.23	16377.66	0	3433.21	1228.547	0	0	0	1638.5	0	0
2019 Jul	13747.94	14232.56	0	892.0443	0	0	0	0	450	0	0
2019 Aug	15480.77	14502.28	0	1055.891	0	0	0	0	537.5	680.2193	0
2019 Sep	17951.49	13947.89	0	749.296	160.4624	0	0	0	387.5	1173.458	0
2019 Oct	18431.67	13431.39	0	193.3503	287.4392	0	0	0	100	413.2282	0
2019 Nov	18431.67	13259.85	0	0	0	0	0	0	0	0	0
2019 Dec	18431.67	13259.85	0	0	0	0	0	0	0	0	0

P-Area (P3)								
Result:	Inflows	Outflows						
	Overflow from CP5	Evaporation	Pumped to P1	Pumped to P2	Pumped to CP5	Seepage to DP3	Pumped to Saline Pond	Overflow (to P1)
Unit:	m3	m3	m3	m3	m3	m3	m3	m3
2019 Jan	0	0	0	0	0	0	0	0
2019 Feb	0	0	0	0	0	0	0	0
2019 Mar	0	0	0	0	0	0	0	0
2019 Apr	0	0	0	0	0	0	0	0
2019 May	0	0	0	0	0	0	0	0
2019 Jun	0	0	0	0	0	0	0	0
2019 Jul	0	1377.335	0	0	0	0	0	0
2019 Aug	0	540.7764	0	0	0	0	0	0
2019 Sep	0	0	0	0	0	0	0	0
2019 Oct	0	0	0	0	0	0	0	513.8342
2019 Nov	0	0	0	0	0	0	0	0
2019 Dec	0	0	0	0	0	0	0	0

Appendix L

Ecological Land

Meliadine Interim Closure and Reclamation Plan 2019		Original -V.00
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Appendix L

Ecological Land

Total Area and Percent Cover of Land Cover Classes within the Regional Study Area (FEIS, AEM, 2014)

Regional Land Cover Class	Regional Land Cover Class Description	Total Area of RSA (ha)	Total percent of RSA
Heath			
Heath boulder	Occurs on rapidly to well-drained sites that contain a high proportion of boulder deposits in association with bedrock outcrop.	26,499	11
Heath lichen – hair lichen	Typically associated with eskers and the crests and upper slopes of small ridges with poorly developed, rapidly drained soils.	4,503	2
Heath lichen – <i>Cetraria</i>	Typically occurs on the lower slopes of ridges and eskers or as veneers over flat rocky plains characterized by frost boils.	1,733	1
Heath tundra	Occurs on well-drained soils.	109,826	45
Heath vegetation subtotal		142,562	58
Wetlands / Riparian			
Low shrub	Associated with imperfectly to poorly drained soils characteristic of riparian areas and depressions.	3,478	1
Tussock-hummock	Typically found in flat to low-lying areas, where soils are poorly to very poorly drained.	25,699	10
Wetlands / riparian subtotal		29,177	12
Miscellaneous			
Bare ground (rock outcrop)	Represents areas with limited to no vegetation cover and is typically associated with eskers, steep sandy slopes, and the tidal and inter-tidal beaches along Hudson's Bay.	5,263	2
Water	Associated with rivers and lakes, as well as portions of Hudson's Bay.	69,298	28
Miscellaneous subtotal		74,561	30
Total		246,300	100

Note: Some numbers are rounded for presentation purposes. Therefore, it may appear that the totals do not equal the sum of the individual values.

ha = hectares; RSA = Regional Study Area

Meliadine Interim Closure and Reclamation Plan 2019		Original -V.00
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Appendix M

Water Quality Results

(Water Management Plan, AEM, 2019)

Meliadine Interim Closure and Reclamation Plan 2019		Original -V.00
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MELIADINE GOLD PROJECT

Table 18: Effluent Characteristics of MEL-14 (CP1 to Meliadine Lake)

	MDMER and Licence Part F, Item 3 Maximum Concentrations		2018 MEL-14 End-of-Pipe Concentrations		Maximum MEL-14 End-of-Pipe Concentrations Predictions based on Tiriganiaq Monthly Average	
	Maximum MEL-14 Average Concentration [mg/L]	Maximum MEL-14 Concentration of Any Grab Sample [mg/L]	Maximum MEL-14 Average Concentration [mg/L]	Maximum MEL-14 Concentration Grab Sample [mg/L]	Dissolved Concentration[mg/L]	Total Used in the Model (Dissolved + 15 mg/L TSS) [mg/L]
pH	6 to 9.5	6 to 9.5	7.1 to 7.4	6.8 to 7.5	-	-
Total Dissolved Solids	1400	1400	1254	1430*	204	204
Total Suspended	15	30	12	21	-	15
Total Ammonia as Nitrogen	14	18	2.4	4.1	4.6	4.6
Phosphorus (total)	2	4	0.0475	0.099	0.4	0.4
Total cyanide	0.5	1.0	<0.005	<0.005	0.005	0.005
Aluminum	2	3	1.8	4.39*	0.09	1.20
Arsenic	0.3	0.6	0.002	0.002	0.101	0.191
Copper	0.2	0.4	0.003	0.009	0.0011	0.0037
Lead	0.2	0.4	0.0003	0.0003	0.0011	0.0049
Nickel	0.5	1.0	0.003	0.003	0.0023	0.0032
Zinc	0.4	0.8	0.007	0.009	0.009	0.010
Radium-226	0.37 Bq/L	1.11 Bq/L	0.0058 Bq/L	0.008 Bq/L	-	-
Total Petroleum Hydrocarbon	5	5	1.2	1.8	-	-

*Exceeds effluent quality limit listed under Part F, Item 3 of the Licence (2AM-MEL1631).

Table 19: MEL-SR-1 to MEL-SR-14 runoff quality characteristics - Licence requirements & 2018 results

		TSS (mg/L)	Oil and Grease	pH
Licence Part D, Item 18 Maximum Concentrations	Max. Average Concentration	50	No Visible Sheen	6.0 - 9.5
	Max. Concentration of Any Grab Sample	100	No Visible Sheen	6.0 - 9.5
MEL-SR-1	Max. Average Concentration	143*	No Visible Sheen	7.8 - 8.0
	Max. Concentration of Any Grab Sample	500*	No Visible Sheen	7.5 - 8.1
MEL-SR-2	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	38	No Visible Sheen	7.6
MEL-SR-7	Max. Average Concentration	12	No Visible Sheen	7.8
	Max. Concentration of Any Grab Sample	42	No Visible Sheen	8.0
MEL-SR-8	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	3	No Visible Sheen	7.9
MEL-SR-9	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	670*	No Visible Sheen	8.0
MEL-SR-11	Max. Average Concentration	450*	No Visible Sheen	7.9 - 8.0
	Max. Concentration of Any Grab Sample	1200*	No Visible Sheen	7.8 - 8.1
MEL-SR-12	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	15	No Visible Sheen	7.0
MEL-SR-13	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	3	No Visible Sheen	8.0
MEL-SR-14	Max. Average Concentration	N/A ^a	No Visible Sheen	N/A ^a
	Max. Concentration of Any Grab Sample	17	No Visible Sheen	7.9

^a Insufficient quantity of sample results to calculate an average as it is defined in the Licence (requires 4 sample dates for moving average).

*Exceeds effluent quality limit listed under Part F, Item 3 of the Licence (2AM-MEL1631).

Table 3: Average Saline Groundwater Quality

Source: Groundwater quality data from DDH sample location (Agnico Eagle, December 2018)

Representative Months (average per month)		Jan-17	Feb-17	Mar-17	Apr-17	-	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
Parameters (total metal)	Units																							
pH	pH	7.08	6.87	7.11	7.32	7.38	7.27	8.27	7.45	7.33	7.41	7.26	7.18	7.35	7.49	7.80	7.26	7.26	7.79	7.08	7.72	6.99	7.02	7.28
Alkalinity	mg/L	57	61.7	51	64.5	68	68	75	68.2	64	64	69	66	73	73	78	70	62	67	65	85	71	67	57
Conductivity	µmhos/cm	77000	76500	77000	79000	79000	76308	74385	72200	72667	78667	85000	80667	81083	82667	81200	83000	69500	83125	83333	83000	78000	69571	81000
Total Hardness (as CaCO ₃)	mg/L	13200	18267	12700	18400	12433	12623	12500	12583	11700	12600	14100	12733	13164	14367	12680	13550	13100	13538	13450	13925	13500	11131	16500
Turbidity	NTU	123.75	69	88	90	51	75	61	47.02	104.33	55.00	30.00	53.00	74.83	72.89	27.18	49.33	75.50	27.51	52.00	27.5	83.95	69.43	52
Total Dissolved Solids (TDS)	mg/L	54350	66433	54900	57500	57300	55123	57815	57520	54567	57867	62000	55133	53975	52233	55460	51367	56900	58325	55917	60975	56900	49229	57600
Total Suspended Solids (TSS)	mg/L	45	75.7	63	248.5	102.7	102.2	156	86	102	316.7	30.0	56.0	181.8	108.1	31.0	38.7	37.5	85.4	58.5	50.0	216.0	42.4	46
Aluminum (Al)	mg/L	0.21	0.1	6.02	1.29	0.51	1.45	0.73	0.97	1.75	2.063	0.150	0.250	2.979	1.466	0.270	0.290	0.128	0.798	0.245	0.261	4.145	0.353	0.15
Ammonia Nitrogen (NH ₃ -NH ₄)	mg/L	4.125	7.9	4.5	4.95	5.2	5.508	11.08	4.87	4.7	6.100	4.800	4.700	5.825	4.711	5.180	4.800	4.300	5.250	4.233	6.925	4.550	5.714	6.55
Arsenic (As)	mg/L	0.003	0.005	0.01	0.008	0.004	0.016	0.016	0.102	0.013	0.047	0.006	0.009	0.027	0.057	0.009	0.010	0.004	0.024	0.006	0.005	0.011	0.009	0.0138
Barium (Ba)	mg/L	0.06	0.61	0.1	0.27	0.07	0.09	0.25	0.1	0.07	0.113	0.082	0.094	0.109	0.109	0.098	0.072	0.073	0.100	0.058	0.073	0.170	0.110	0.163
Beryllium (Be)	mg/L	0.003	0.002	0.01	0.002	0.002	0.005	0.008	0.01	0.01	0.008	0.005	0.008	0.010	0.009	0.009	0.007	0.004	0.004	0.006	0.004	0.005	0.009	0.005
Boron (B)	mg/L	1.6	4.98	5	4.9	1.5	2.7	3.97	5	2.5	4.17	2.50	4.17	4.79	4.72	4.50	3.33	2.10	2.28	2.92	2.35	2.80	4.64	3
Total Organic Carbon (TOC)	mg/L	2.23	11.67	2.1	2.95	2.63	3.2	5.3	2.57	2.5	16.27	3.00	2.67	2.50	2.42	2.36	2.47	2.20	3.00	1.97	2.4	2.95	2.73	5.3
Dissolved Organic Carbon	mg/L	1.9	10.17	1.7	2.3	2.37	2.7	4.9	2.32	2.1	13.70	2.80	2.33	2.38	2.27	2.36	2.27	1.90	2.55	1.90	2.4	2.55	2.53	5
Calcium (Ca)	mg/L	1710	3777	1650	3737	1593	1608	1771	1610	1565	1720	1770	1587	1646	1777	1656	1737	1690	1748	1653	1715	2165	1487	2960
Cadmium (Cd)	mg/L	0.0003	0.0002	0.001	0.0003	0.0002	0.0005	0.001	0.001	0.002	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	0.0005
Chloride (Cl - dissolved)	mg/L	31250	38000	31000	31500	32000	31385	31538	32800	29333	32333	34000	33000	33833	34444	34800	34333	32500	33875	33333	36250	33500	27143	35000
Chromium (Cr)	mg/L	0.025	0.017	0.01	0.02	0.017	0.05	0.075	0.1	0.88	0.083	0.050	0.083	0.096	0.094	0.090	0.067	0.035	0.043	0.058	0.043	0.052	0.093	0.05
Copper (Cu)	mg/L	0.01	0.008	0.05	0.01	0.01	0.02	0.04	0.05	0.03	0.042	0.025	0.032	0.048	0.048	0.045	0.028	0.018	0.021	0.029	0.021	0.040	0.046	0.025
Cyanide (Cn)	mg/L	0.005	0.19	0.005	0.028	0.005	0.006	0.01	0.005	0.008	0.005	0.025	0.015	0.017	0.033	0.021	0.012	0.025	0.005	0.005	0.005	0.005	0.005	–
Iron (Fe)	mg/L	4.76	8.96	3.6	8.78	6.19	9.81	6.33	8.24	4.1	10.67	6.46	6.50	14.84	12.79	5.50	5.37	6.36	5.94	7.96	5.36	18.80	5.64	6.81
Lead (Pb)	mg/L	0.005	0.005	0.02	0.004	0.003	0.009	0.015	0.02	0.018	0.017	0.010	0.017	0.020	0.019	0.018	0.013	0.007	0.009	0.012	0.009	0.010	0.019	0.01
Magnesium (Mg)	mg/L	2168	2150	2080	2200	2050	2092	1962	2105	1975	2017	2350	2150	2208	2411	2078	2220	2150	2229	2267	2335	1970	1800	2200
Mercury (Hg)	mg/L	0.00001	0.00001	0.00001	0.000001	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	0.00001	0.00001
Molybdenum (Mo)	mg/L	0.025	0.055	0.01	0.25	0.026	0.047	0.075	0.1	0.17	0.083	0.050	0.083	0.096	0.094	0.090	0.067	0.035	0.043	0.058	0.043	0.050	0.093	0.061
Nickel (Ni)	mg/L	0.025	0.04	0.1	0.07	0.017	0.05	0.08	0.1	0.35	0.083	0.050	0.083	0.096	0.094	0.090	0.067	0.035	0.043	0.058	0.043	0.050	0.093	0.05
Nitrate (NO ₃) as N	mg/L	0.5	116.39	0.1	2.58	0.23	0.89	4.35	0.17	0.34	0.293	0.100	0.213	2.015	0.376	0.240	0.297	0.300	0.420	0.517	0.608	0.455	2.929	0.1
Nitrite (NO ₂) as N	mg/L	0.05	8.01	0.1	0.125	0.086	0.14	0.391	0.042	0.027	0.032	0.024	0.023	0.120	0.043	0.042	0.028	0.030	0.044	0.052	0.065	0.039	0.109	0.061
Total Kjeldahl Nitrogen (TKN)	mg/L	3.78	8.7	4.6	5.2	7.83	7.4	12	72.02	4.5	9.00	5.60	4.87	6.12	4.97	5.90	5.27	4.95	5.54	4.18	7.5	4.60	6.77	6.5
Phosphorous (P)	mg/L	0.07	0.14	0.04	0.13	0.12	0.08	0.09	0.1	—	0.390	0.080	0.080	0.075	0.083	0.162	0.073	0.200	0.173	0.118	0.175	0.420	0.154	0.1
Potassium (K)	mg/L	496	595	407	609	433	463	518	488	763	502	528	465	490	532	512	479	474	500	491	539	444	391	680
Radium-226 (Ra 226)	mg/L	0.49	0.33	0.3	1.2	1.95	1.8	1.9	2.2	0.29	2.200	2.400	1.673	1.853	3.678	3.880	2.633	2.050	1.938	1.833	2.450	0.670	0.906	1.8
Selenium (Se)	mg/L	0.003	0.002	0.01	0.002	0.002	0.005	0.0075	0.01	0.007	0.008	0.005	0.008	0.010	0.009	0.009	0.007	0.004	0.004	0.006	0.016	0.005	0.009	0.005
Silver (Ag)	mg/L	0.001	0.0003	0.002	0.0009	0.0004	0.0012	0.0018	0.0002	0.018	0.003	0.001	0.002	0.002	0.004	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001
Sodium (Na)	mg/L	14625	14700	13400	15400	13900	14369	14654	14417	9433	14900	17000	15300	15183	16389	14860	14967	14750	15725	15333	16450	13550	12629	16600
Strontium (Sr)	mg/L	43.1	171	38.4	136	40	39	43.5	36.5	23.6	40.03	35.10	35.70	37.24	37.30	37.14	40.10	47.65	43.85	40.00	41.33	61.90	47.40	83.4
Sulphate (SO ₄ – dissolved)	mg/L	3125	2700	3100	3100	3233	3169	2969	3120	3067	3200	3500	3433	3367	3500	3320	3367	3350	3250	3467	3625	3200	2829	3200
Thallium (Tl)	mg/L	0.001	0.001	0.001	0.0002	0.0002	0.0005	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.001	0.000	0.001	0.001	0.0005
Uranium (U)	mg/L	0.003	0.002	0.01	0.006	0.002	0.005	0.008	0.01	0.09	0.008	0.005	0.008	0.010	0.009	0.009	0.007	0.004	0.004	0.006	0.006	0.005	0.009	0.005
Vanadium (V)	mg/L	0.13	0.08	0.5	0.1	0.08	0.23	0.38	0.5	0.33	0.417	0.250	0.417	0.479	0.472	0.450	0.333	0.175	0.213	0.292	0.213	0.250	0.464	0.25
Zinc (Zn)	mg/L	0.125	0.1	0.5	0.12	0.08	0.23	0.38	0.5	0.34	0.417	0.250	0.417	0.479	0.472	0.450	0.333	0.175	0.259	0.292	0.213	0.250	0.464	0.25

Appendix N

Post Closure General Site Layout

Meliadine Interim Closure and Reclamation Plan 2019		Original -V.00
2019/12/12	668523-4000-4EER-0001	Technical Report