WATER QUALITY MONITORING RESULTS – 2013-2023
TYPE A WATER LICENCE 2AM-MRY1325

In accordance with the terms of the Type 'A' Water Licence, surface run-off/seepage in facilities designed to contain, withhold, divert and retain water or wastes were monitored during periods of flow and after significant precipitation events. Active monitoring stations were monitored during periods of flow for the required parameters to protect receiving waters from the identified potential contaminants. A summary of the monitoring stations and monitoring results from 2013-2023 QIA-NWB Annual Reports are provided in the following attachments:

ATTACHMENT 1:
2013 QIA-NWB Annual Report
- Table 2.5 Water Licence Water Quality Monitoring Locations
- Table 2.6 Water Quality Results for Water Licence Monitoring Locations

ATTACHMENT 2:
2014 QIA-NWB Annual Report
- Table 2.5 Water Licence Water Quality Monitoring Locations
- Table 2.8 Water Quality Results for Water Licence Monitoring Locations

ATTACHMENT 3:
2015 QIA-NWB Annual Report
- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

ATTACHMENT 4:
2016 QIA-NWB Annual Report for Operations
- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

ATTACHMENT 5:
2017 QIA-NWB Annual Report for Operations
- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

ATTACHMENT 6:
2018 QIA-NWB Annual Report for Operations
- Table 7.0 Water Licence Water Quality Monitoring Locations – 2018
- Table 7.1 Water Quality Results for Water Licence Monitoring Locations - 2018

ATTACHMENT 7:
2019 QIA-NWB Annual Report for Operations
- Table 7.0 Water Licence Water Quality Monitoring Locations - 2019
- Table 7.1 Water Quality Results for Water Licence Monitoring Location

ATTACHMENT 8:
2020 QIA-NWB Annual Report for Operations
- Table 7.1 Water Licence Water Quality Monitoring Locations - 2020
- Table 7.2 Water Quality Results for Water Licence Monitoring Location

ATTACHMENT 9:
2021 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2021
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.5 Water Quality Results for Other Water Licence Monitoring Locations

ATTACHMENT 10:
2022 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2022
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.5 Water Quality Results for Other Water Licence Monitoring Locations

ATTACHMENT 11:
2023 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2023
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Tote Road Water Licence Monitoring Location
- Table 7.5 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.6 Water Quality Results for Other Water Licence Monitoring Locations
- Table 7.6 Water Quality Results for Milne Port Freshet Water Licence Monitoring Locations
- Table 7.6 Water Quality Results for Mine Site Freshet Water Licence Monitoring Locations

ATTACHMENT 1

2013 QIA-NWB Annual Report

- Table 2.5 Water Licence Water Quality Monitoring Locations
- Table 2.6 Water Quality Results for Water Licence Monitoring Locations

Baffinland

TABLE 2.5

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude
		Easting (m)	Northing (m)		
Milne Port Site					
MP-MRY-2 (MRY-2)	Fresh Water Intake at Philips Creek (Summer)	514,503	7,964,579	71° 46' 52" N	80° 35' 4" W
MP-MRY-3 (MRY-3)	Fresh Water Intake from Km 32 Lake (Winter)	521,547	7,953,735	71° 41' 00" N	80° 23' 09" W
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	503,209	7,976,485	71° 53' 18" N	80° 54' 27" W
MP-01a	Milne Port Waste Stabilisation Pond (PWSP)	503,625	7,976,015	71° 53' 03" N	80° 53' 44" W
MP-02	Milne Port Maintenance Shop Oily water (WWTF)	503,319	7,975,805	71° 52' 56" N	80° 54' 16" W
MP-MRY-04 (MRY-5)	Milne Exploration Phase Sewage Treatment Facilities (to become inactive after transition period)	503,462	7,975,764	71° 52' 55" N	80° 54' 1" W
MP-MRY-04a (MRY-5a)	Milne Exploration Phase Sewage PWSP (to become inactive after transition period)	503,344	7,976,118	71° 53' 6" N	80° 54' 13" W
MP-MRY-7 (MRY-7)	Milne Exploration Phase Bladder Farm Fuel Storage Facility Storm water (to become inactive after Transition period)	503,309	7,976,097	71° 53' 6" N	80° 54' 17" W
MP-MRY-12 (MRY-12)	Bulk Sample Stockpile Area Seepage	503,357	7,976,453	71° 53' 17" N	80° 54' 11" W
MP-C-A	Surface discharge downstream of construction area at Milne Port	503,214	7,976,483	71° 53' 18" N	80° 54' 27" W
MP-C-B		503,191	7,975,396	71° 52' 43" N	80° 54' 29" W
MP-C-C		503,436	7,975,427	71° 52' 44.0" N	80° 54' 03.7" W
MP-C-D		503,651	7,976,363	71° 53' 14" N	80° 53' 41" W
MP-C-E		503,736	7,976,346	71° 53' 13.7" N	80° 53' 32.4" W
MP-C-F		503,922	7,976,304	71° 53' 12" N	80° 53' 13" W
MP-C-G		503,006	7,976,484	71° 53' 18.2" N	80° 54' 48.1" W
MP-C-H		504,113	7,976,509	71° 53' 18.9" N	80° 52' 53.2" W
MP-Q1-01	Surface Runoff and or Discharge Quarries	503,828	7,975,062	71° 52' 32" N	80° 53' 23" W
MP-Q1-02		503,811	7,975,272	71° 52' 39" N	80° 53' 25" W
Mary River Mine Site					
MS-MRY-1 (MRY-1)	Fresh Water Intake from Camp Lake	557,793	7,914,684	71° 19' 38.6" N	79° 22' 57" W
MS-01	Mine Site Sewage Treatment Facilities	561,322	7,913,257	71° 18' 49.4"	79° 17' 5.6" W
MS-MRY-4 (MRY-4)	Exploration Camp Sewage Treaatment Facility	558,141	7,914,427	71° 19' 30" N	79° 22' 22.6" W
MS-MRY-4a (MRY-4a)	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	558,470	7,914,237	71° 19' 23.6" N	79° 21' 50" W
MS-MRY-6 (MRY-6)	Exploration Camp Bulk Fuel Storage Facility (Bladder Farm) Stormwater	558,186	7,914,780	71° 19' 41" N	79° 22' 17" W
MS-MRY-9 (MRY-9)	Bulk Sample Open Pit - Suface water drainage (to become inactive in future)	563,246	7,914,632	71° 19' 32" N	79° 13' 48" W
MS-MRY-10 (MRY-10)	Bulk Sample Weathered Ore Stockpile - Downstream surface water drainage (to become inactive in the future)	563,488	7,915,197	71° 19' 50" N	79° 13' 22" W
MRY-11	Bulk Sample Processing - Downstream surface water discharge (to become inactive in the future)	560,690	7,913,350	71° 18' 53" N	79° 18' 09" W

TABLE 2.5

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83) Easting (m)	UTM Coordinates (NAD83) Northing (m)	Latitude	Longitude
MS-MRY-13a & MS-MRY-13b (MRY-13a, MRY-13b)	Non-Hazarous Waste Landfill - Downstream surface water drainage	13a: 560,754 13b: 560,642	13a: 7,912,484 13b: 7,912,527	13a: 71° 18' 25" N 13b: 71° 18'26.5" N	13a: 79° 18' 5" W 13b: 79° 18' 16.1" W
MS-C-A	Surface discharge downstream of construction area at Mine Site	561,263	7,913,571	71° 18' 59.6" N	79° 17' 10.7" W
MS-C-B		561,454	7,913,537	71° 18' 58" N	79° 16' 52" W
MS-C-C		561,110	7,913,199	71° 18' 48" N	79° 17' 27" W
MS-C-D		561,008	7,913,280	71° 18' 50" N	79° 17' 37" W
MS-C-E		560,980	7,913,388	71° 18' 54" N	79° 17' 40" W
MS-C-F		561,797	7,913,278	71° 18' 49" N	79° 16' 17.8" W
MQ-C-B	Surface Runoff and or Discharge Quarries	560,083	7,913,905	71° 19' 11.4" N	79° 19' 09" W
MQ-C-D		559,447	7,914,258	71° 19' 23.4" N	79° 20' 12" W

Notes:
The designations for the camps have been modified from previous years so as to be in alignment with the terminologies used in the documentation for the approved Project. The following changes have been made from previous annual reports:
* Milne Inlet Camp site is now termed Milne Port;
* Mary River Camp site is now termed Mine Site; and,
* Steensby Inlet Campsite is now termed Steensby Port.

Monitoring Station names cooerspond to Water Licence No: 2AM-MRY1325, names in brackets correspond to Water Licence No: 2BB-MRY1114
Monitoring Station names beginning with MP-C and MS-C correspond to Water Licence No: 8BC-MRY1314
Monitoring Station names beginning with MP-Q and MQ-C correspond to QIA Quarry Lease and Quarry Management Plans
The locations of the following Monitoring Stations have not been established at this stage of construction:

MP-03	Milne Port Bulk Fuel Storage Facility Stormwater
MP-04	Milne Port Landfarm Facility Storm water
MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)
MS-02	Mine Site Maintenance Shop Oily Water WWTF
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater
MS-04	Mine Site Fuel Unloading Station Stormwater
MS-05	Mine Site Landfarm Facility Stormwater
MS-06+	Ore Stockpile Pond Stormwater
MS-07	Run of Mine Ore Stockpile Pond Stormwater
MS-08	Waste Rock Stockpile West pond
MS-09	Waste Rock Stockpile East pond

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1006189	*MRY - 4*	*3-Jan-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1006189	*MRY - 4*	*3-Jan-13*	*Chemical Oxygen Demand*	19	*mg/L*	*Exova Accutest*
1006195	*MRY - 4*	*3-Jan-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1006189	*MRY - 4*	*3-Jan-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1006189	*MRY - 4*	*3-Jan-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1006189	*MRY - 4*	*3-Jan-13*	*pH*	7.83	*pH units*	*Exova Accutest*
1006190	*MRY - 401*	*3-Jan-13*	*Biochemical Oxygen Demand*	1	*mg/L*	*Exova Accutest*
1006190	*MRY - 401*	*3-Jan-13*	*Chemical Oxygen Demand*	11	*mg/L*	*Exova Accutest*
1006196	*MRY - 401*	*3-Jan-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1006190	*MRY - 401*	*3-Jan-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1006190	*MRY - 401*	*3-Jan-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1006190	*MRY - 401*	*3-Jan-13*	*pH*	7.86	*pH units*	*Exova Accutest*
1006191	*MRY - 402*	*3-Jan-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1006191	*MRY - 402*	*3-Jan-13*	*Chemical Oxygen Demand*	<5	*mg/L*	*Exova Accutest*
1006197	*MRY - 402*	*3-Jan-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1006191	*MRY - 402*	*3-Jan-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1006191	*MRY - 402*	*3-Jan-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1006191	*MRY - 402*	*3-Jan-13*	*pH*	7.82	*pH units*	*Exova Accutest*
1006192	*MRY - 403*	*3-Jan-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1006192	*MRY - 403*	*3-Jan-13*	*Chemical Oxygen Demand*	<5	*mg/L*	*Exova Accutest*
1006198	*MRY - 403*	*3-Jan-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1006192	*MRY - 403*	*3-Jan-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1006192	*MRY - 403*	*3-Jan-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1006192	*MRY - 403*	*3-Jan-13*	*pH*	8.43	*pH units*	*Exova Accutest*
1009089	*MRY - 4*	*24-Jan-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1009089	*MRY - 4*	*24-Jan-13*	*Chemical Oxygen Demand*	8	*mg/L*	*Exova Accutest*
	MRY - 4	*24-Jan-13*	*Faecal Coliforms*	*	*ct/100mL*	*Exova Accutest*
1009089	*MRY - 4*	*24-Jan-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1009089	*MRY - 4*	*24-Jan-13*	*Total Suspended Solids*	5	*mg/L*	*Exova Accutest*
1009089	*MRY - 4*	*24-Jan-13*	*pH*	7.86	*pH units*	*Exova Accutest*
Notes:	MRY-401 is a field duplicate of MRY-4 MRY-402 is a field blank of MRY-4 MRY-403 is a travel blank of MRY-4 * Feacal coliform analysis was not performed as the holding time for the samples was exceeded due to flight cancelations.					
1011996	*MRY - 4*	*14-Feb-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1011996	*MRY - 4*	*14-Feb-13*	*Chemical Oxygen Demand*	6	*mg/L*	*Exova Accutest*
1011999	*MRY - 4*	*14-Feb-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1011996	*MRY - 4*	*14-Feb-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1011996	*MRY - 4*	*14-Feb-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1011996	*MRY - 4*	*14-Feb-13*	*pH*	7.86	*pH units*	*Exova Accutest*
1014884	*MRY - 4*	*7-Mar-13*	*Biochemical Oxygen Demand*	1	*mg/L*	*Exova Accutest*
1014884	*MRY - 4*	*7-Mar-13*	*Chemical Oxygen Demand*	12	*mg/L*	*Exova Accutest*
1014864	*MRY - 4*	*7-Mar-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1014884	*MRY - 4*	*7-Mar-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1014884	*MRY - 4*	*7-Mar-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1014884	*MRY - 4*	*7-Mar-13*	*pH*	7.62	*pH units*	*Exova Accutest*
1014887	*MRY - 401*	*7-Mar-13*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova Accutest*
1014887	*MRY - 401*	*7-Mar-13*	*Chemical Oxygen Demand*	10	*mg/L*	*Exova Accutest*
1014867	*MRY - 401*	*7-Mar-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1014887	*MRY - 401*	*7-Mar-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1014887	*MRY - 401*	*7-Mar-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1014887	*MRY - 401*	*7-Mar-13*	*pH*	7.72	*pH units*	*Exova Accutest*
1018162	*MRY - 4*	*28-Mar-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1018162	*MRY - 4*	*28-Mar-13*	*Chemical Oxygen Demand*	12	*mg/L*	*Exova Accutest*
1018165	*MRY - 4*	*28-Mar-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1018162	*MRY - 4*	*28-Mar-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1018162	*MRY - 4*	*28-Mar-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1018162	*MRY - 4*	*28-Mar-13*	*pH*	7.56	*pH units*	*Exova Accutest*
Notes:	MRY-401 is a duplicate sample of MRY-4 for QA/QC purposes.					
1021685	*MRY - 4*	*17-Apr-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1021685	*MRY - 4*	*17-Apr-13*	*Chemical Oxygen Demand*	11	*mg/L*	*Exova Accutest*
1021532	*MRY - 4*	*17-Apr-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1021685	*MRY - 4*	*17-Apr-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1021685	*MRY - 4*	*17-Apr-13*	*Total Suspended Solids*	5	*mg/L*	*Exova Accutest*
1021685	*MRY - 4*	*17-Apr-13*	*pH*	7.77	*pH units*	*Exova Accutest*
1027960	*MRY - 4*	*9-May-13*	*Biochemical Oxygen Demand*	6	*mg/L*	*Exova Accutest*
1027960	*MRY - 4*	*9-May-13*	*Chemical Oxygen Demand*	41	*mg/L*	*Exova Accutest*
1027964	*MRY - 4*	*9-May-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1027960	*MRY - 4*	*9-May-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1027960	*MRY - 4*	*9-May-13*	*Total Suspended Solids*	10	*mg/L*	*Exova Accutest*
1027960	*MRY - 4*	*9-May-13*	*pH*	7.37	*pH units*	*Exova Accutest*
1027961	*MRY - 401*	*9-May-13*	*Biochemical Oxygen Demand*	6	*mg/L*	*Exova Accutest*
1027961	*MRY - 401*	*9-May-13*	*Chemical Oxygen Demand*	39	*mg/L*	*Exova Accutest*
1027965	*MRY - 401*	*9-May-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1027961	*MRY - 401*	*9-May-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1027961	*MRY - 401*	*9-May-13*	*Total Suspended Solids*	8	*mg/L*	*Exova Accutest*
1027961	*MRY - 401*	*9-May-13*	*pH*	7.36	*pH units*	*Exova Accutest*
1031638	*MRY-4*	*6-Jun-13*	*Biochemical Oxygen Demand*	23	*mg/L*	*Exova Accutest*
1031643	*MRY-4*	*6-Jun-13*	*Faecal Coliforms*	1	*ct/100mL*	*Exova Accutest*
1031638	*MRY-4*	*6-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1031638	*MRY-4*	*6-Jun-13*	*Total Suspended Solids*	42**	*mg/L*	*Exova Accutest*
1031638	*MRY-4*	*6-Jun-13*	*pH*	7.85	*pH units*	*Exova Accutest*
1032056	*MRY-4*	*10-Jun-13*	*Biochemical Oxygen Demand*	21	*mg/L*	*Exova Accutest*
1032063	*MRY-4*	*10-Jun-13*	*Faecal Coliforms*	2	*ct/100mL*	*Exova Accutest*
1032056	*MRY-4*	*10-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1032056	*MRY-4*	*10-Jun-13*	*Total Suspended Solids*	26	*mg/L*	*Exova Accutest*
1032056	*MRY-4*	*10-Jun-13*	*pH*	7.91	*pH units*	*Exova Accutest*
1033935	*MRY-4*	*17-Jun-13*	*Biochemical Oxygen Demand*	19	*mg/L*	*Exova Accutest*
1033954	*MRY-4*	*17-Jun-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1033935	*MRY-4*	*17-Jun-13*	*Oil & Grease - Total*	4	*mg/L*	*Exova Accutest*
1033935	*MRY-4*	*17-Jun-13*	*Total Suspended Solids*	24	*mg/L*	*Exova Accutest*
1033935	*MRY-4*	*17-Jun-13*	*pH*	7.56	*pH units*	*Exova Accutest*
1036133	*MRY-4*	*24-Jun-13*	*Biochemical Oxygen Demand*	22	*mg/L*	*Exova Accutest*
1036101	*MRY-4*	*24-Jun-13*	*Faecal Coliforms*	20	*ct/100mL*	*Exova Accutest*
1036133	*MRY-4*	*24-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1036133	*MRY-4*	*24-Jun-13*	*Total Suspended Solids*	31	*mg/L*	*Exova Accutest*
1036133	*MRY-4*	*24-Jun-13*	*pH*	7.01	*pH units*	*Exova Accutest*
1031639	*MRY-401*	*6-Jun-13*	*Biochemical Oxygen Demand*	24	*mg/L*	*Exova Accutest*
1031644	*MRY-401*	*6-Jun-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1031639	*MRY-401*	*6-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1031639	*MRY-401*	*6-Jun-13*	*Total Suspended Solids*	34	*mg/L*	*Exova Accutest*
1031639	*MRY-401*	*6-Jun-13*	*pH*	7.50	*pH units*	*Exova Accutest*
1032059	*MRY-401*	*10-Jun-13*	*Biochemical Oxygen Demand*	19	*mg/L*	*Exova Accutest*
1032066	*MRY-401*	*10-Jun-13*	*Faecal Coliforms*	1	*ct/100mL*	*Exova Accutest*
1032059	*MRY-401*	*10-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1032059	*MRY-401*	*10-Jun-13*	*Total Suspended Solids*	13	*mg/L*	*Exova Accutest*
1032059	*MRY-401*	*10-Jun-13*	*pH*	7.83	*pH units*	*Exova Accutest*
1033936	*MRY-401*	*17-Jun-13*	*Biochemical Oxygen Demand*	17	*mg/L*	*Exova Accutest*
1033955	*MRY-401*	*17-Jun-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1033936	*MRY-401*	*17-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033936	*MRY-401*	*17-Jun-13*	*Total Suspended Solids*	22	*mg/L*	*Exova Accutest*
1033936	*MRY-401*	*17-Jun-13*	*pH*	7.62	*pH units*	*Exova Accutest*
1036134	*MRY-401*	*24-Jun-13*	*Biochemical Oxygen Demand*	20	*mg/L*	*Exova Accutest*
1036102	*MRY-401*	*24-Jun-13*	*Faecal Coliforms*	10	*ct/100mL*	*Exova Accutest*
1036134	*MRY-401*	*24-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1036134	*MRY-401*	*24-Jun-13*	*Total Suspended Solids*	34	*mg/L*	*Exova Accutest*
1036134	*MRY-401*	*24-Jun-13*	*pH*	7.03	*pH units*	*Exova Accutest*
1031640	*MRY-402*	*6-Jun-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova Accutest*
1031645	*MRY-402*	*6-Jun-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova Accutest*
1031640	*MRY-402*	*6-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1031640	*MRY-402*	*6-Jun-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1031640	*MRY-402*	*6-Jun-13*	*pH*	5.56	*pH units*	*Exova Accutest*
1030653	*MRY-4B*	*2-Jun-13*	*Biochemical Oxygen Demand*	5	*mg/L*	*Exova Accutest*
1030609	*MRY-4B*	*2-Jun-13*	*Faecal Coliforms*	<10	*ct/100mL*	*Exova Accutest*
1030653	*MRY-4B*	*2-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1030653	*MRY-4B*	*2-Jun-13*	*Total Suspended Solids*	12	*mg/L*	*Exova Accutest*
1030653	*MRY-4B*	*2-Jun-13*	*pH*	7.27	*pH units*	*Exova Accutest*
1030858	*MRY-4B*	*3-Jun-13*	*Toxicity**	Non-lethal	-	*Exova Accutest*
1030654	*MRY-4C*	*2-Jun-13*	*Biochemical Oxygen Demand*	11	*mg/L*	*Exova Accutest*
1030610	*MRY-4C*	*2-Jun-13*	*Faecal Coliforms*	90	*ct/100mL*	*Exova Accutest*
1030654	*MRY-4C*	*2-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1030654	*MRY-4C*	*2-Jun-13*	*Total Suspended Solids*	6	*mg/L*	*Exova Accutest*
1030654	*MRY-4C*	*2-Jun-13*	*pH*	7.45	*pH units*	*Exova Accutest*
1030859	*MRY-4C*	*3-Jun-13*	*Toxicity**	Non-lethal	-	*Exova Accutest*
1034874	*MRY-4C*	*18-Jun-13*	*Biochemical Oxygen Demand*	9	*mg/L*	*Exova Accutest*
1034873	*MRY-4C*	*18-Jun-13*	*Faecal Coliforms*	1	*ct/100mL*	*Exova Accutest*
1034874	*MRY-4C*	*18-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1034874	*MRY-4C*	*18-Jun-13*	*Total Suspended Solids*	11	*mg/L*	*Exova Accutest*
1034874	*MRY-4C*	*18-Jun-13*	*pH*	7.39	*pH units*	*Exova Accutest*
1031232	*MRY-5*	*5-Jun-13*	*Biochemical Oxygen Demand*	42	*mg/L*	*Exova Accutest*
1031272	*MRY-5*	*5-Jun-13*	*Faecal Coliforms*	78000**	*ct/100mL*	*Exova Accutest*
1031232	*MRY-5*	*5-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1031232	*MRY-5*	*5-Jun-13*	*Total Suspended Solids*	42	*mg/L*	*Exova Accutest*
1031232	*MRY-5*	*5-Jun-13*	*pH*	7.70	*pH units*	*Exova Accutest*
1033187	*MRY-5A*	*11-Jun-13*	*Biochemical Oxygen Demand*	8	*mg/L*	*Exova Accutest*
1033187	*MRY-5A*	*11-Jun-13*	*Chemical Oxygen Demand*	27	*mg/L*	*Exova Accutest*
1033187	*MRY-5A*	*11-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033187	*MRY-5A*	*11-Jun-13*	*Total Suspended Solids*	14	*mg/L*	*Exova Accutest*
1033187	*MRY-5A*	*11-Jun-13*	*pH*	6.75	*pH units*	*Exova Accutest*
1033189	*MRY-5A*	*12-Jun-13*	*Biochemical Oxygen Demand*	7	*mg/L*	*Exova Accutest*
1033191	*MRY-5A*	*12-Jun-13*	*Faecal Coliforms*	4	*ct/100mL*	*Exova Accutest*
1033189	*MRY-5A*	*12-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033189	*MRY-5A*	*12-Jun-13*	*Total Suspended Solids*	9	*mg/L*	*Exova Accutest*
1033189	*MRY-5A*	*12-Jun-13*	*pH*	7.08	*pH units*	*Exova Accutest*
1033942	*MRY-6-1*	*16-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033942	*MRY-6-1*	*16-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033942	*MRY-6-1*	*16-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033942	*MRY-6-1*	*16-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033942	*MRY-6-1*	*16-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033945	*MRY-6-2*	*16-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033945	*MRY-6-2*	*16-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033945	*MRY-6-2*	*16-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033945	*MRY-6-2*	*16-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033945	*MRY-6-2*	*16-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033948	*MRY-6-3*	*16-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033948	*MRY-6-3*	*16-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033948	*MRY-6-3*	*16-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033948	*MRY-6-3*	*16-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033948	*MRY-6-3*	*16-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033951	*MRY-6-4*	*16-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033951	*MRY-6-4*	*16-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033951	*MRY-6-4*	*16-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033951	*MRY-6-4*	*16-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033951	*MRY-6-4*	*16-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1036610	*MRY-6*	*21-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1036610	*MRY-6*	*21-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1036610	*MRY-6*	*21-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1036610	*MRY-6*	*21-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1036610	*MRY-6*	*21-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1036615	*MRY-6*	*24-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1036615	*MRY-6*	*24-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1036615	*MRY-6*	*24-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1036615	*MRY-6*	*24-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1036615	*MRY-6*	*24-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1037856	*MRY-6*	*26-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1037856	*MRY-6*	*26-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033565	*MRY-7-1*	*13-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033565	*MRY-7-1*	*13-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033565	*MRY-7-1*	*13-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033565	*MRY-7-1*	*13-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033565	*MRY-7-1*	*13-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033566	*MRY-7-2*	*13-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033566	*MRY-7-2*	*13-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033566	*MRY-7-2*	*13-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033566	*MRY-7-2*	*13-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033566	*MRY-7-2*	*13-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1033567	*MRY-7-3*	*13-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1033567	*MRY-7-3*	*13-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1033567	*MRY-7-3*	*13-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1033567	*MRY-7-3*	*13-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1033567	*MRY-7-3*	*13-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1034868	*MRY-7*	*17-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1034868	*MRY-7*	*17-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1034868	*MRY-7*	*17-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1034868	*MRY-7*	*17-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1034868	*MRY-7*	*17-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1036137	*MRY-7*	*21-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1036137	*MRY-7*	*21-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1036137	*MRY-7*	*21-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1036137	*MRY-7*	*21-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1036137	*MRY-7*	*21-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1036618	*MRY-7*	*23-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1036618	*MRY-7*	*23-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1036618	*MRY-7*	*23-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1036618	*MRY-7*	*23-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1036618	*MRY-7*	*23-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1038312	*MRY-7*	*28-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1038312	*MRY-7*	*28-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1038312	*MRY-7*	*28-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1038312	*MRY-7*	*28-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1038312	*MRY-7*	*28-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1031224	*MRY-7A*	*4-Jun-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1031224	*MRY-7A*	*4-Jun-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1031224	*MRY-7A*	*4-Jun-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1031224	*MRY-7A*	*4-Jun-13*	*Lead (Total)*	<0.001	*mg/L*	*Exova Accutest*
1031224	*MRY-7A*	*4-Jun-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1039245	*MRY-11-TP1*	*30-Jun-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1039245	*MRY-11-TP1*	*30-Jun-13*	*pH*	7.53	*pH units*	*Exova Accutest*
1039245	*MRY-11-TP1*	*30-Jun-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1039249	*MRY-11-TP1*	*30-Jun-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1039249	*MRY-11-TP1*	*30-Jun-13*	*Copper (Total)*	0.99	*ug/L*	*Exova Accutest*
1039249	*MRY-11-TP1*	*30-Jun-13*	*Lead (Total)*	0.22	*ug/L*	*Exova Accutest*
1039249	*MRY-11-TP1*	*30-Jun-13*	*Nickel (Total)*	0.64	*ug/L*	*Exova Accutest*
1039249	*MRY-11-TP1*	*30-Jun-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1039246	*MRY-11-TP2*	*30-Jun-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1039246	*MRY-11-TP2*	*30-Jun-13*	*pH*	8.00	*pH units*	*Exova Accutest*
1039246	*MRY-11-TP2*	*30-Jun-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1039250	*MRY-11-TP2*	*30-Jun-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1039250	*MRY-11-TP2*	*30-Jun-13*	*Copper (Total)*	0.76	*ug/L*	*Exova Accutest*
1039250	*MRY-11-TP2*	*30-Jun-13*	*Lead (Total)*	0.06	*ug/L*	*Exova Accutest*
1039250	*MRY-11-TP2*	*30-Jun-13*	*Nickel (Total)*	0.61	*ug/L*	*Exova Accutest*
1039250	*MRY-11-TP2*	*30-Jun-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1039247	*MRY-11-TP3*	*30-Jun-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1039247	*MRY-11-TP3*	*30-Jun-13*	*pH*	7.9	*pH units*	*Exova Accutest*
1039247	*MRY-11-TP3*	*30-Jun-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1039251	*MRY-11-TP3*	*30-Jun-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1039251	*MRY-11-TP3*	*30-Jun-13*	*Copper (Total)*	0.67	*ug/L*	*Exova Accutest*
1039251	*MRY-11-TP3*	*30-Jun-13*	*Lead (Total)*	0.10	*ug/L*	*Exova Accutest*
1039251	*MRY-11-TP3*	*30-Jun-13*	*Nickel (Total)*	<0.50	*ug/L*	*Exova Accutest*
1039251	*MRY-11-TP3*	*30-Jun-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1039248	*MRY-11-TP4*	*30-Jun-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1039248	*MRY-11-TP4*	*30-Jun-13*	*pH*	8.18	*pH units*	*Exova Accutest*
1039248	*MRY-11-TP4*	*30-Jun-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1039252	*MRY-11-TP4*	*30-Jun-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1039252	*MRY-11-TP4*	*30-Jun-13*	*Copper (Total)*	1.18	*ug/L*	*Exova Accutest*
1039252	*MRY-11-TP4*	*30-Jun-13*	*Lead (Total)*	0.15	*ug/L*	*Exova Accutest*
1039252	*MRY-11-TP4*	*30-Jun-13*	*Nickel (Total)*	0.91	*ug/L*	*Exova Accutest*
1039252	*MRY-11-TP4*	*30-Jun-13*	*Zinc (Total)*	3.1	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*pH, Laboratory*	*	*pH units*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Alkalinity, Total as mg CaCO3 equiv.*	*	*mg/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Conductivity in Laboratory*	*	*uS/cm*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Total Dissolved Solids*	*	*mg/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Total Suspended Solids*	*	*mg/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Oil & Grease - Total*	*	*mg/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Aluminum (Al) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Antimony (Sb) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Barium (Ba) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Cadmium (Cd) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Chromium (Cr) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Cobalt (Co) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Copper (Cu) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Iron (Fe) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Lead (Pb) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Lithium (Li) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Manganese (Mn) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Molybdenum (Mo) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Nickel (Ni) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Selenium (Se) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Tin (Sn) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Strontium (Sr) Total*	*	*ug/L*	*Exova Accutest*
*	*MRY-13A*	*18-Jun-13*	*Thallium (Tl) Total*	*	*ug/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
*	MRY-13A	18-Jun-13	Titanium (Ti) Total	*	ug/L	Exova Accutest
*	MRY-13A	18-Jun-13	Uranium (U) Total	*	ug/L	Exova Accutest
*	MRY-13A	18-Jun-13	Vanadium (V) Total	*	ug/L	Exova Accutest
*	MRY-13A	18-Jun-13	Zinc (Zn) Total	*	ug/L	Exova Accutest
*	MRY-13A	18-Jun-13	Arsenic (As) Total	*	ug/L	Exova Accutest
*	MRY-13A	18-Jun-13	Mercury (Hg) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	pH, Laboratory	*	pH units	Exova Accutest
*	MRY-13B	18-Jun-13	Alkalinity, Total as mg CaCO3 equiv.	*	mg/L	Exova Accutest
*	MRY-13B	18-Jun-13	Conductivity in Laboratory	*	uS/cm	Exova Accutest
*	MRY-13B	18-Jun-13	Total Dissolved Solids	*	mg/L	Exova Accutest
*	MRY-13B	18-Jun-13	Total Suspended Solids	*	mg/L	Exova Accutest
*	MRY-13B	18-Jun-13	Oil & Grease - Total	*	mg/L	Exova Accutest
*	MRY-13B	18-Jun-13	Aluminum (Al) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Antimony (Sb) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Barium (Ba) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Cadmium (Cd) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Chromium (Cr) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Cobalt (Co) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Copper (Cu) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Iron (Fe) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Lead (Pb) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Lithium (Li) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Manganese (Mn) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Molybdenum (Mo) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Nickel (Ni) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Selenium (Se) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Tin (Sn) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Strontium (Sr) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Thallium (Tl) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Titanium (Ti) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Uranium (U) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Vanadium (V) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Zinc (Zn) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Arsenic (As) Total	*	ug/L	Exova Accutest
*	MRY-13B	18-Jun-13	Mercury (Hg) Total	*	ug/L	Exova Accutest

Notes:
* MRY-13A and MRY-13B -Laboratory results forthcoming. These results were included in the July Water Licence Report.
** Parameters exceed water licence criteria, however discharges were not to receiving environment.

1041844	MRY-4	8-Jul-13	Biochemical Oxygen Demand	15	mg/L	Exova Accutest
1041844	MRY-4	8-Jul-13	Chemical Oxygen Demand	77	mg/L	Exova Accutest
1041773	MRY-4	8-Jul-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1041844	MRY-4	8-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1041844	MRY-4	8-Jul-13	Total Suspended Solids	34	mg/L	Exova Accutest
1041844	MRY-4	8-Jul-13	pH	7.81	pH units	Exova Accutest
1042948	MRY-4	16-Jul-13	Biochemical Oxygen Demand	35	mg/L	Exova Accutest
1042948	MRY-4	16-Jul-13	Chemical Oxygen Demand	97	mg/L	Exova Accutest
1042853	MRY-4	16-Jul-13	Faecal Coliforms	102	ct/100mL	Exova Accutest
1042948	MRY-4	16-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1042948	MRY-4	16-Jul-13	Total Suspended Solids	46*	mg/L	Exova Accutest
1042948	MRY-4	16-Jul-13	pH	7.62	pH units	Exova Accutest
1044380	MRY-4	22-Jul-13	Biochemical Oxygen Demand	13	mg/L	Exova Accutest
1044380	MRY-4	22-Jul-13	Chemical Oxygen Demand	70	mg/L	Exova Accutest
1044463	MRY-4	22-Jul-13	Faecal Coliforms	1	ct/100mL	Exova Accutest
1044380	MRY-4	22-Jul-13	Oil & Grease - Total	2	mg/L	Exova Accutest
1044380	MRY-4	22-Jul-13	Total Suspended Solids	30	mg/L	Exova Accutest
1044380	MRY-4	22-Jul-13	pH	7.59	pH units	Exova Accutest
1046519	MRY-4	29-Jul-13	Biochemical Oxygen Demand	7	mg/L	Exova Accutest
1046519	MRY-4	29-Jul-13	Chemical Oxygen Demand	44	mg/L	Exova Accutest
1046616	MRY-4	29-Jul-13	Faecal Coliforms	15	ct/100mL	Exova Accutest
1046519	MRY-4	29-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1046519	MRY-4	29-Jul-13	Total Suspended Solids	22	mg/L	Exova Accutest
1046519	MRY-4	29-Jul-13	pH	7.57	pH units	Exova Accutest
1041847	MRY-401	8-Jul-13	Biochemical Oxygen Demand	15	mg/L	Exova Accutest
1041847	MRY-401	8-Jul-13	Chemical Oxygen Demand	73	mg/L	Exova Accutest
1041776	MRY-401	8-Jul-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1041847	MRY-401	8-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1041847	MRY-401	8-Jul-13	Total Suspended Solids	24	mg/L	Exova Accutest
1041847	MRY-401	8-Jul-13	pH	7.56	pH units	Exova Accutest
1042949	MRY-401	16-Jul-13	Biochemical Oxygen Demand	22	mg/L	Exova Accutest
1042949	MRY-401	16-Jul-13	Chemical Oxygen Demand	95	mg/L	Exova Accutest
1042854	MRY-401	16-Jul-13	Faecal Coliforms	11	ct/100mL	Exova Accutest
1042949	MRY-401	16-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1042949	MRY-401	16-Jul-13	Total Suspended Solids	39*	mg/L	Exova Accutest
1042949	MRY-401	16-Jul-13	pH	7.63	pH units	Exova Accutest
1044381	MRY-401	22-Jul-13	Biochemical Oxygen Demand	14	mg/L	Exova Accutest
1044381	MRY-401	22-Jul-13	Chemical Oxygen Demand	62	mg/L	Exova Accutest
1044464	MRY-401	22-Jul-13	Faecal Coliforms	2	ct/100mL	Exova Accutest
1044381	MRY-401	22-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1044381	MRY-401	22-Jul-13	Total Suspended Solids	27	mg/L	Exova Accutest
1044381	MRY-401	22-Jul-13	pH	7.62	pH units	Exova Accutest
1039010	MRY-4A	2-Jul-13	Biochemical Oxygen Demand	21	mg/L	Exova Accutest
1039010	MRY-4A	2-Jul-13	Chemical Oxygen Demand	183	mg/L	Exova Accutest
1039010	MRY-4A	2-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1039010	MRY-4A	2-Jul-13	Total Suspended Solids	48*	mg/L	Exova Accutest
1039010	MRY-4A	2-Jul-13	pH	8.33	pH units	Exova Accutest
1039008	MRY-4A	2-Jul-13	Toxicity**	Non-Lethal		Exova Accutest
1039011	MRY-4B	2-Jul-13	Biochemical Oxygen Demand	12	mg/L	Exova Accutest
1039011	MRY-4B	2-Jul-13	Chemical Oxygen Demand	108	mg/L	Exova Accutest
1039011	MRY-4B	2-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1039011	MRY-4B	2-Jul-13	Total Suspended Solids	30	mg/L	Exova Accutest
1039011	MRY-4B	2-Jul-13	pH	7.67	pH units	Exova Accutest
1045814	MRY-4B	24-Jul-13	Biochemical Oxygen Demand	34	mg/L	Exova Accutest
1045814	MRY-4B	24-Jul-13	Chemical Oxygen Demand	216	mg/L	Exova Accutest
1045892	MRY-4B	24-Jul-13	Faecal Coliforms	6	ct/100mL	Exova Accutest
1045814	MRY-4B	24-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1045814	MRY-4B	24-Jul-13	Total Suspended Solids	49*	mg/L	Exova Accutest
1045814	MRY-4B	24-Jul-13	pH	10.5	pH units	Exova Accutest
1039012	MRY-4C	2-Jul-13	Biochemical Oxygen Demand	19	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

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WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1039012	MRY-4C	2-Jul-13	Chemical Oxygen Demand	145	mg/L	Exova Accutest
1039012	MRY-4C	2-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1039012	MRY-4C	2-Jul-13	Total Suspended Solids	21	mg/L	Exova Accutest
1039012	MRY-4C	2-Jul-13	pH	7.85	pH units	Exova Accutest
1045832	MRY-5	24-Jul-13	Biochemical Oxygen Demand	86	mg/L	Exova Accutest
1045832	MRY-5	24-Jul-13	Chemical Oxygen Demand	355	mg/L	Exova Accutest
1045894	MRY-5	24-Jul-13	Faecal Coliforms	374000*	ct/100mL	Exova Accutest
1045832	MRY-5	24-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1045832	MRY-5	24-Jul-13	Total Suspended Solids	61	mg/L	Exova Accutest
1045832	MRY-5	24-Jul-13	pH	7.66	pH units	Exova Accutest
1038284	MRY-6	1-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1038284	MRY-6	1-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1038284	MRY-6	1-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1038284	MRY-6	1-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1038284	MRY-6	1-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1038287	MRY-6	1-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1038287	MRY-6	1-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1038287	MRY-6	1-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1038287	MRY-6	1-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1038287	MRY-6	1-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1038290	MRY-6	1-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1038290	MRY-6	1-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1038290	MRY-6	1-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1038290	MRY-6	1-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1038290	MRY-6	1-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1040278	MRY-6	6-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1040282	MRY-6	6-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1042142	MRY-6	11-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1042142	MRY-6	11-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1042142	MRY-6	11-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1042142	MRY-6	11-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1042142	MRY-6	11-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1042476	MRY-6	13-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1042476	MRY-6	13-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1042476	MRY-6	13-Jul-13	Oil & Grease - Total	4	mg/L	Exova Accutest
1042476	MRY-6	13-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1038398	MRY-7	2-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1038398	MRY-7	2-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1038398	MRY-7	2-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1038398	MRY-7	2-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1038398	MRY-7	2-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1040299	MRY-7	5-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1040299	MRY-7	5-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1040299	MRY-7	5-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1040299	MRY-7	5-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1040299	MRY-7	5-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1041856	MRY-7	7-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1041856	MRY-7	7-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1041856	MRY-7	7-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1041856	MRY-7	7-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1041856	MRY-7	7-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1042469	MRY-7	12-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1042469	MRY-7	12-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1042469	MRY-7	12-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1042469	MRY-7	12-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1042469	MRY-7	12-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1044110	MRY-7	16-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1044110	MRY-7	16-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1044110	MRY-7	16-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1044110	MRY-7	16-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1044110	MRY-7	16-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1044211	MRY-7	18-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1044211	MRY-7	18-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1044211	MRY-7	18-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1044211	MRY-7	18-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1044211	MRY-7	18-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1044373	MRY-7	20-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1044373	MRY-7	20-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1044373	MRY-7	20-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1044373	MRY-7	20-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1044373	MRY-7	20-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1045835	MRY-7	24-Jul-13	Benzene	<0.5	ug/L	Exova Accutest
1045835	MRY-7	24-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1045835	MRY-7	24-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1045835	MRY-7	24-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1045835	MRY-7	24-Jul-13	Toluene	<0.5	ug/L	Exova Accutest
1046522	MRY-7	27-Jul-13	Benzene	2.2	ug/L	Exova Accutest
1046522	MRY-7	27-Jul-13	Ethylbenzene	<0.5	ug/L	Exova Accutest
1046522	MRY-7	27-Jul-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1046522	MRY-7	27-Jul-13	Lead (Total)	<0.001	mg/L	Exova Accutest
1046522	MRY-7	27-Jul-13	Toluene	1.2	ug/L	Exova Accutest
1042429	MRY-9	14-Jul-13	Oil & Grease	no sheen	mg/L	Exova Accutest
1042429	MRY-9	14-Jul-13	pH	6.95	pH units	Exova Accutest
1042429	MRY-9	14-Jul-13	Total Suspended Solids	2	mg/L	Exova Accutest
1042454	MRY-9	14-Jul-13	Arsenic (Total)	<0.10	ug/L	Exova Accutest
1042454	MRY-9	14-Jul-13	Copper (Total)	0.60	ug/L	Exova Accutest
1042454	MRY-9	14-Jul-13	Lead (Total)	0.05	ug/L	Exova Accutest
1042454	MRY-9	14-Jul-13	Nickel (Total)	0.52	ug/L	Exova Accutest
1042454	MRY-9	14-Jul-13	Zinc (Total)	<3.0	ug/L	Exova Accutest
1049296	MRY-9	31-Jul-13	Oil & Grease	no sheen	mg/L	Exova Accutest
1049296	MRY-9	31-Jul-13	pH	6.77	pH units	Exova Accutest
1049296	MRY-9	31-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049304	MRY-9	31-Jul-13	Arsenic (Total)	<0.10	ug/L	Exova Accutest
1049304	MRY-9	31-Jul-13	Copper (Total)	<0.20	ug/L	Exova Accutest
1049304	MRY-9	31-Jul-13	Lead (Total)	0.05	ug/L	Exova Accutest
1049304	MRY-9	31-Jul-13	Nickel (Total)	1.40	ug/L	Exova Accutest
1049304	MRY-9	31-Jul-13	Zinc (Total)	3.4	ug/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

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WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1042428	*MRY-10*	*13-Jul-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1042428	*MRY-10*	*13-Jul-13*	*pH*	7.20	*pH units*	*Exova Accutest*
1042428	*MRY-10*	*13-Jul-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1042453	*MRY-10*	*13-Jul-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1042453	*MRY-10*	*13-Jul-13*	*Copper (Total)*	0.87	*ug/L*	*Exova Accutest*
1042453	*MRY-10*	*13-Jul-13*	*Lead (Total)*	0.19	*ug/L*	*Exova Accutest*
1042453	*MRY-10*	*13-Jul-13*	*Nickel (Total)*	0.63	*ug/L*	*Exova Accutest*
1042453	*MRY-10*	*13-Jul-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1049303	*MRY-10*	*31-Jul-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1049303	*MRY-10*	*31-Jul-13*	*pH*	7.55	*pH units*	*Exova Accutest*
1049303	*MRY-10*	*31-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1049311	*MRY-10*	*31-Jul-13*	*Arsenic (Total)*	<0.10	*ug/L*	*Exova Accutest*
1049311	*MRY-10*	*31-Jul-13*	*Copper (Total)*	0.85	*ug/L*	*Exova Accutest*
1049311	*MRY-10*	*31-Jul-13*	*Lead (Total)*	<0.05	*ug/L*	*Exova Accutest*
1049311	*MRY-10*	*31-Jul-13*	*Nickel (Total)*	<0.50	*ug/L*	*Exova Accutest*
1049311	*MRY-10*	*31-Jul-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1042432	*MRY-11-TP1*	*14-Jul-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1042432	*MRY-11-TP1*	*14-Jul-13*	*pH*	8.18	*pH units*	*Exova Accutest*
1042432	*MRY-11-TP1*	*14-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042457	*MRY-11-TP1*	*14-Jul-13*	*Arsenic (Total)*	0.11	*ug/L*	*Exova Accutest*
1042457	*MRY-11-TP1*	*14-Jul-13*	*Copper (Total)*	1.32	*ug/L*	*Exova Accutest*
1042457	*MRY-11-TP1*	*14-Jul-13*	*Lead (Total)*	0.08	*ug/L*	*Exova Accutest*
1042457	*MRY-11-TP1*	*14-Jul-13*	*Nickel (Total)*	0.80	*ug/L*	*Exova Accutest*
1042457	*MRY-11-TP1*	*14-Jul-13*	*Zinc (Total)*	3.5	*ug/L*	*Exova Accutest*
1049299	*MRY-11-TP1*	*31-Jul-13*	*Oil & Grease*	no sheen	*mg/L*	*Exova Accutest*
1049299	*MRY-11-TP1*	*31-Jul-13*	*pH*	8.24	*pH units*	*Exova Accutest*
1049299	*MRY-11-TP1*	*31-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1049307	*MRY-11-TP1*	*31-Jul-13*	*Arsenic (Total)*	0.13	*ug/L*	*Exova Accutest*
1049307	*MRY-11-TP1*	*31-Jul-13*	*Copper (Total)*	1.65	*ug/L*	*Exova Accutest*
1049307	*MRY-11-TP1*	*31-Jul-13*	*Lead (Total)*	0.09	*ug/L*	*Exova Accutest*
1049307	*MRY-11-TP1*	*31-Jul-13*	*Nickel (Total)*	1.13	*ug/L*	*Exova Accutest*
1049307	*MRY-11-TP1*	*31-Jul-13*	*Zinc (Total)*	<3.0	*ug/L*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*pH, Laboratory*	8.02	*pH units*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	91	*mg/L*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*Conductivity in Laboratory*	214	*uS/cm*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*Total Dissolved Solids*	139	*mg/L*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042430	*MRY-13A*	*14-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Aluminum (Al) Total*	3.9	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Barium (Ba) Total*	12.3	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Chromium (Cr) Total*	0.47	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Copper (Cu) Total*	1.37	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Iron (Fe) Total*	<3	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Lead (Pb) Total*	<0.05	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Lithium (Li) Total*	1.11	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Manganese (Mn) Total*	0.201	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Molybdenum (Mo) Total*	0.266	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Nickel (Ni) Total*	7.93	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Strontium (Sr) Total*	10.5	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Thallium (Tl) Total*	<0.001	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Uranium (U) Total*	0.259	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Zinc (Zn) Total*	3.2	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Arsenic (As) Total*	0.14	*ug/L*	*Exova Accutest*
1042455	*MRY-13A*	*14-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*pH, Laboratory*	7.95	*pH units*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	124	*mg/L*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*Conductivity in Laboratory*	300	*uS/cm*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*Total Dissolved Solids*	195	*mg/L*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045825	*MRY-13A*	*24-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Aluminum (Al) Total*	3.8	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Barium (Ba) Total*	18.3	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Chromium (Cr) Total*	0.58	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Copper (Cu) Total*	1.68	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Iron (Fe) Total*	<3	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Lead (Pb) Total*	<0.05	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Lithium (Li) Total*	0.88	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Manganese (Mn) Total*	0.593	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Molybdenum (Mo) Total*	0.244	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Nickel (Ni) Total*	8.84	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Strontium (Sr) Total*	14.4	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Thallium (Tl) Total*	0.011	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Uranium (U) Total*	0.336	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Zinc (Zn) Total*	3.6	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Arsenic (As) Total*	0.14	*ug/L*	*Exova Accutest*
1045828	*MRY-13A*	*24-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*pH, Laboratory*	7.92	*pH units*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	133	*mg/L*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*Conductivity in Laboratory*	347	*uS/cm*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*Total Dissolved Solids*	226	*mg/L*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1049297	*MRY-13A*	*31-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Aluminum (Al) Total*	3.9	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1049305	*MRY-13A*	*31-Jul-13*	*Barium (Ba) Total*	18.8	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Chromium (Cr) Total*	0.47	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Copper (Cu) Total*	1.19	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Iron (Fe) Total*	<3	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Lead (Pb) Total*	<0.05	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Lithium (Li) Total*	1.33	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Manganese (Mn) Total*	0.347	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Molybdenum (Mo) Total*	0.185	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Nickel (Ni) Total*	8.23	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Strontium (Sr) Total*	15.7	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Thallium (Tl) Total*	<0.001	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Uranium (U) Total*	0.598	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Zinc (Zn) Total*	4.6	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Arsenic (As) Total*	0.11	*ug/L*	*Exova Accutest*
1049305	*MRY-13A*	*31-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*pH, Laboratory*	8.02	*pH units*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	123	*mg/L*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*Conductivity in Laboratory*	300	*uS/cm*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*Total Dissolved Solids*	195	*mg/L*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045826	*MRY-1301A*	*24-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Aluminum (Al) Total*	11.7	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Barium (Ba) Total*	17.5	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Chromium (Cr) Total*	1.01	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Copper (Cu) Total*	1.42	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Iron (Fe) Total*	31	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Lead (Pb) Total*	<0.05	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Lithium (Li) Total*	1.54	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Manganese (Mn) Total*	1.58	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Molybdenum (Mo) Total*	0.191	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Nickel (Ni) Total*	8.78	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Strontium (Sr) Total*	13.8	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Thallium (Tl) Total*	0.011	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Uranium (U) Total*	0.339	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Zinc (Zn) Total*	3.6	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Arsenic (As) Total*	0.12	*ug/L*	*Exova Accutest*
1045829	*MRY-1301A*	*24-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*pH, Laboratory*	8.19	*pH units*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	102	*mg/L*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*Conductivity in Laboratory*	231	*uS/cm*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*Total Dissolved Solids*	150	*mg/L*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042431	*MRY-13B*	*14-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Aluminum (Al) Total*	3.6	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Barium (Ba) Total*	12.6	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Chromium (Cr) Total*	0.44	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Copper (Cu) Total*	1.52	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Iron (Fe) Total*	11	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Lead (Pb) Total*	<0.050	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Lithium (Li) Total*	1.12	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Manganese (Mn) Total*	0.244	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Molybdenum (Mo) Total*	0.194	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Nickel (Ni) Total*	6.93	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Strontium (Sr) Total*	10.9	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Thallium (Tl) Total*	<0.001	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Uranium (U) Total*	0.198	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Zinc (Zn) Total*	<3.0	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Arsenic (As) Total*	0.12	*ug/L*	*Exova Accutest*
1042456	*MRY-13B*	*14-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*pH, Laboratory*	8.19	*pH units*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	122	*mg/L*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*Conductivity in Laboratory*	279	*uS/cm*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*Total Dissolved Solids*	181	*mg/L*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045827	*MRY-13B*	*24-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Aluminum (Al) Total*	5.0	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Barium (Ba) Total*	16.6	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Chromium (Cr) Total*	0.52	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Copper (Cu) Total*	1.56	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Iron (Fe) Total*	13	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Lead (Pb) Total*	<0.050	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Lithium (Li) Total*	1.32	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Manganese (Mn) Total*	0.335	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Molybdenum (Mo) Total*	0.141	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Nickel (Ni) Total*	7.54	*ug/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1045830	*MRY-13B*	*24-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Tin (Sn) Total*	0.79	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Strontium (Sr) Total*	12.4	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Thallium (Tl) Total*	<0.001	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Uranium (U) Total*	0.201	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Zinc (Zn) Total*	<3.0	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Arsenic (As) Total*	0.13	*ug/L*	*Exova Accutest*
1045830	*MRY-13B*	*24-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*pH, Laboratory*	8.15	*pH units*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*Alkalinity, Total as mg CaCO3 equiv.*	129	*mg/L*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*Conductivity in Laboratory*	299	*uS/cm*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*Total Dissolved Solids*	194	*mg/L*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1049298	*MRY-13B*	*31-Jul-13*	*Oil & Grease - Total*	no sheen	*mg/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Aluminum (Al) Total*	15.6	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Antimony (Sb) Total*	<0.10	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Barium (Ba) Total*	17.3	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Cadmium (Cd) Total*	<0.010	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Chromium (Cr) Total*	0.50	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Cobalt (Co) Total*	<0.10	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Copper (Cu) Total*	1.62	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Iron (Fe) Total*	28	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Lead (Pb) Total*	0.09	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Lithium (Li) Total*	1.21	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Manganese (Mn) Total*	0.665	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Molybdenum (Mo) Total*	0.155	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Nickel (Ni) Total*	6.98	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Selenium (Se) Total*	<0.01	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Tin (Sn) Total*	<0.10	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Strontium (Sr) Total*	14.0	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Thallium (Tl) Total*	<0.001	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Titanium (Ti) Total*	<10	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Uranium (U) Total*	0.312	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Vanadium (V) Total*	<1.0	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Zinc (Zn) Total*	3.6	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Arsenic (As) Total*	0.11	*ug/L*	*Exova Accutest*
1049306	*MRY-13B*	*31-Jul-13*	*Mercury (Hg) Total*	<0.010	*ug/L*	*Exova Accutest*
1039014	*MP-C-A*	*2-Jul-13*	*pH*	8.05	*pH units*	*Exova Accutest*
1039014	*MP-C-A*	*2-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042159	*MP-C-A*	*10-Jul-13*	*Conductivity*	812	*uS/cm*	*Exova Accutest*
1042159	*MP-C-A*	*10-Jul-13*	*pH*	8.13	*pH units*	*Exova Accutest*
1042159	*MP-C-A*	*10-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042159	*MP-C-A*	*10-Jul-13*	*Turbidity*	0.50	*NTU*	*Exova Accutest*
1042422	*MP-C-A*	*12-Jul-13*	*Conductivity*	1570	*uS/cm*	*Exova Accutest*
1042422	*MP-C-A*	*12-Jul-13*	*pH*	8.09	*pH units*	*Exova Accutest*
1042422	*MP-C-A*	*12-Jul-13*	*Total Suspended Solids*	26	*mg/L*	*Exova Accutest*
1042422	*MP-C-A*	*12-Jul-13*	*Turbidity*	6.70	*NTU*	*Exova Accutest*
1045318	*MP-C-A*	*22-Jul-13*	*Conductivity*	824	*uS/cm*	*Exova Accutest*
1045318	*MP-C-A*	*22-Jul-13*	*pH*	8.21	*pH units*	*Exova Accutest*
1045318	*MP-C-A*	*22-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045318	*MP-C-A*	*22-Jul-13*	*Turbidity*	0.60	*NTU*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*Ammonia (total NH3-N)*	0.04	*mg/L*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*Nitrate (total NO3-N)*	<0.10	*mg/L*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*Conductivity*	326	*mg/L*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*pH*	8.16	*pH units*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042417	*MP-C-B*	*14-Jul-13*	*Turbidity*	0.7	*NTU*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*Ammonia (total NH3-N)*	<0.02	*mg/L*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*Nitrate (total NO3-N)*	<0.10	*mg/L*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*Conductivity*	344	*uS/cm*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*pH*	8.25	*pH units*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045317	*MP-C-B*	*22-Jul-13*	*Turbidity*	0.40	*NTU*	*Exova Accutest*
1045184	*MP-C-B*	*22-Jul-13*	*Toxicity***	non lethal		*Exova Accutest*
1039013	*MP-C-D*	*2-Jul-13*	*pH*	8.17	*pH units*	*Exova Accutest*
1039013	*MP-C-D*	*2-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1042160	*MP-C-D*	*10-Jul-13*	*Conductivity*	506	*uS/cm*	*Exova Accutest*
1042160	*MP-C-D*	*10-Jul-13*	*pH*	8.20	*pH units*	*Exova Accutest*
1042160	*MP-C-D*	*10-Jul-13*	*Total Suspended Solids*	96	*mg/L*	*Exova Accutest*
1042160	*MP-C-D*	*10-Jul-13*	*Turbidity*	1.1	*NTU*	*Exova Accutest*
1042423	*MP-C-D*	*12-Jul-13*	*Conductivity*	461	*uS/cm*	*Exova Accutest*
1042423	*MP-C-D*	*12-Jul-13*	*pH*	8.17	*pH units*	*Exova Accutest*
1042423	*MP-C-D*	*12-Jul-13*	*Total Suspended Solids*	47	*mg/L*	*Exova Accutest*
1042423	*MP-C-D*	*12-Jul-13*	*Turbidity*	0.9	*NTU*	*Exova Accutest*
1044386	*MP-C-D*	*19-Jul-13*	*Conductivity*	409	*uS/cm*	*Exova Accutest*
1044386	*MP-C-D*	*19-Jul-13*	*pH*	8.06	*pH units*	*Exova Accutest*
1044386	*MP-C-D*	*19-Jul-13*	*Total Suspended Solids*	3	*mg/L*	*Exova Accutest*
1044386	*MP-C-D*	*19-Jul-13*	*Turbidity*	1.1	*NTU*	*Exova Accutest*
1045319	*MP-C-D*	*22-Jul-13*	*Conductivity*	685	*uS/cm*	*Exova Accutest*
1045319	*MP-C-D*	*22-Jul-13*	*pH*	8.14	*pH units*	*Exova Accutest*
1045319	*MP-C-D*	*22-Jul-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1045319	*MP-C-D*	*22-Jul-13*	*Turbidity*	0.2	*NTU*	*Exova Accutest*
1042424	*MP-C-F*	*12-Jul-13*	*Conductivity*	352	*uS/cm*	*Exova Accutest*
1042424	*MP-C-F*	*12-Jul-13*	*pH*	8.02	*pH units*	*Exova Accutest*
1042424	*MP-C-F*	*12-Jul-13*	*Total Suspended Solids*	188	*mg/L*	*Exova Accutest*
1042424	*MP-C-F*	*12-Jul-13*	*Turbidity*	1.7	*NTU*	*Exova Accutest*
1045320	*MP-C-F*	*22-Jul-13*	*Conductivity*	773	*uS/cm*	*Exova Accutest*
1045320	*MP-C-F*	*22-Jul-13*	*pH*	8.22	*pH units*	*Exova Accutest*
1045320	*MP-C-F*	*22-Jul-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1045320	*MP-C-F*	*22-Jul-13*	*Turbidity*	0.2	*NTU*	*Exova Accutest*
1039406	*MP-Q1-01*	*3-Jul-13*	*Ammonia (total NH_3-N)*	0.06	*mg/L*	*Exova Accutest*
1039406	*MP-Q1-01*	*3-Jul-13*	*Nitrate (total NO_3-N)*	<0.10	*mg/L*	*Exova Accutest*
1039406	*MP-Q1-01*	*3-Jul-13*	*pH*	8.04	*pH units*	*Exova Accutest*
1039406	*MP-Q1-01*	*3-Jul-13*	*Conductivity*	160	*mg/L*	*Exova Accutest*
1042157	*MP-Q1-01*	*10-Jul-13*	*Ammonia (total NH_3-N)*	<0.02	*mg/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1042157	MP-Q1-01	10-Jul-13	Nitrate (total NO_3-N)	<0.10	mg/L	Exova Accutest
1042157	MP-Q1-01	10-Jul-13	pH	8.10	pH units	Exova Accutest
1042157	MP-Q1-01	10-Jul-13	Conductivity	170	mg/L	Exova Accutest
1042420	MP-Q1-01	12-Jul-13	Ammonia (total NH_3-N)	0.05	mg/L	Exova Accutest
1042420	MP-Q1-01	12-Jul-13	Nitrate (total NO_3-N)	<0.10	mg/L	Exova Accutest
1042420	MP-Q1-01	12-Jul-13	pH	8.06	pH units	Exova Accutest
1042420	MP-Q1-01	12-Jul-13	Conductivity	179	mg/L	Exova Accutest
1045315	MP-Q1-01	22-Jul-13	Ammonia (total NH_3-N)	0.69	mg/L	Exova Accutest
1045315	MP-Q1-01	22-Jul-13	Nitrate (total NO_3-N)	1.82	mg/L	Exova Accutest
1045315	MP-Q1-01	22-Jul-13	pH	7.99	pH units	Exova Accutest
1045315	MP-Q1-01	22-Jul-13	Conductivity	229	mg/L	Exova Accutest
1039407	MP-Q1-02	3-Jul-13	Ammonia (total NH_3-N)	0.13	mg/L	Exova Accutest
1039407	MP-Q1-02	3-Jul-13	Nitrate (total NO_3-N)	0.64	mg/L	Exova Accutest
1039407	MP-Q1-02	3-Jul-13	pH	7.97	pH units	Exova Accutest
1039407	MP-Q1-02	3-Jul-13	Conductivity	145	mg/L	Exova Accutest
1042158	MP-Q1-02	10-Jul-13	Ammonia (total NH_3-N)	0.03	mg/L	Exova Accutest
1042158	MP-Q1-02	10-Jul-13	Nitrate (total NO_3-N)	2.02	mg/L	Exova Accutest
1042158	MP-Q1-02	10-Jul-13	pH	8.09	pH units	Exova Accutest
1042158	MP-Q1-02	10-Jul-13	Conductivity	228	mg/L	Exova Accutest
1042421	MP-Q1-02	12-Jul-13	Ammonia (total NH_3-N)	0.31	mg/L	Exova Accutest
1042421	MP-Q1-02	12-Jul-13	Nitrate (total NO_3-N)	2.38	mg/L	Exova Accutest
1042421	MP-Q1-02	12-Jul-13	pH	7.99	pH units	Exova Accutest
1042421	MP-Q1-02	12-Jul-13	Conductivity	197	mg/L	Exova Accutest
1042416	MP-Q1-02	14-Jul-13	Ammonia (total NH_3-N)	0.71	mg/L	Exova Accutest
1042416	MP-Q1-02	14-Jul-13	Nitrate (total NO_3-N)	1.23	mg/L	Exova Accutest
1042416	MP-Q1-02	14-Jul-13	pH	7.9	pH units	Exova Accutest
1042416	MP-Q1-02	14-Jul-13	Conductivity	201	mg/L	Exova Accutest
1045316	MP-Q1-02	22-Jul-13	Ammonia (total NH_3-N)	3.16	mg/L	Exova Accutest
1045316	MP-Q1-02	22-Jul-13	Nitrate (total NO_3-N)	14.4	mg/L	Exova Accutest
1045316	MP-Q1-02	22-Jul-13	pH	7.53	pH units	Exova Accutest
1045316	MP-Q1-02	22-Jul-13	Conductivity	348	mg/L	Exova Accutest
1042155	MQ-C-B	11-Jul-13	Ammonia (total NH3-N)	<0.02	mg/L	Exova Accutest
1042155	MQ-C-B	11-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1042155	MQ-C-B	11-Jul-13	pH	7.98	pH units	Exova Accutest
1042155	MQ-C-B	11-Jul-13	Conductivity	119	mg/L	Exova Accutest
1049334	MQ-C-B	30-Jul-13	Ammonia (total NH3-N)	<0.02	mg/L	Exova Accutest
1049334	MQ-C-B	30-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1049334	MQ-C-B	30-Jul-13	pH	8.05	pH units	Exova Accutest
1049334	MQ-C-B	30-Jul-13	Conductivity	238	mg/L	Exova Accutest
1044392	MQ-C-B	20-Jul-13	Ammonia (total NH3-N)	<0.02	mg/L	Exova Accutest
1044392	MQ-C-B	20-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1044392	MQ-C-B	20-Jul-13	pH	8.01	pH units	Exova Accutest
1044392	MQ-C-B	20-Jul-13	Conductivity	175	mg/L	Exova Accutest
1042156	MQ-C-D	11-Jul-13	Ammonia (total NH3-N)	<0.02	mg/L	Exova Accutest
1042156	MQ-C-D	11-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1042156	MQ-C-D	11-Jul-13	pH	8.01	pH units	Exova Accutest
1042156	MQ-C-D	11-Jul-13	Conductivity	130	mg/L	Exova Accutest
1044393	MQ-C-D	20-Jul-13	Ammonia (total NH3-N)	0.03	mg/L	Exova Accutest
1044393	MQ-C-D	20-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1044393	MQ-C-D	20-Jul-13	pH	7.98	pH units	Exova Accutest
1044393	MQ-C-D	20-Jul-13	Conductivity	147	mg/L	Exova Accutest
1049335	MQ-C-D	30-Jul-13	Ammonia (total NH3-N)	<0.02	mg/L	Exova Accutest
1049335	MQ-C-D	30-Jul-13	Nitrate (total NO3-N)	<0.10	mg/L	Exova Accutest
1049335	MQ-C-D	30-Jul-13	pH	8.01	pH units	Exova Accutest
1049335	MQ-C-D	30-Jul-13	Conductivity	174	mg/L	Exova Accutest
1042151	MS-C-A	11-Jul-13	Conductivity	94	uS/cm	Exova Accutest
1042151	MS-C-A	11-Jul-13	pH	7.87	pH units	Exova Accutest
1042151	MS-C-A	11-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1042151	MS-C-A	11-Jul-13	Turbidity	0.4	NTU	Exova Accutest
1044387	MS-C-A	20-Jul-13	Conductivity	102	uS/cm	Exova Accutest
1044387	MS-C-A	20-Jul-13	pH	7.81	pH units	Exova Accutest
1044387	MS-C-A	20-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1044387	MS-C-A	20-Jul-13	Turbidity	0.5	NTU	Exova Accutest
1045815	MS-C-A	24-Jul-13	Conductivity	119	uS/cm	Exova Accutest
1045815	MS-C-A	24-Jul-13	pH	7.99	pH units	Exova Accutest
1045815	MS-C-A	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045815	MS-C-A	24-Jul-13	Turbidity	0.4	NTU	Exova Accutest
1042150	MS-C-B	11-Jul-13	Conductivity	107	uS/cm	Exova Accutest
1042150	MS-C-B	11-Jul-13	pH	7.79	pH units	Exova Accutest
1042150	MS-C-B	11-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1042150	MS-C-B	11-Jul-13	Turbidity	0.4	NTU	Exova Accutest
1044388	MS-C-B	20-Jul-13	Conductivity	99	uS/cm	Exova Accutest
1044388	MS-C-B	20-Jul-13	pH	7.75	pH units	Exova Accutest
1044388	MS-C-B	20-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1044388	MS-C-B	20-Jul-13	Turbidity	0.5	NTU	Exova Accutest
1045816	MS-C-B	24-Jul-13	Conductivity	114	uS/cm	Exova Accutest
1045816	MS-C-B	24-Jul-13	pH	7.83	pH units	Exova Accutest
1045816	MS-C-B	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045816	MS-C-B	24-Jul-13	Turbidity	0.5	NTU	Exova Accutest
1042152	MS-C-C	11-Jul-13	Conductivity	254	uS/cm	Exova Accutest
1042152	MS-C-C	11-Jul-13	pH	8.15	pH units	Exova Accutest
1042152	MS-C-C	11-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1042152	MS-C-C	11-Jul-13	Turbidity	0.2	NTU	Exova Accutest
1044389	MS-C-C	20-Jul-13	Conductivity	246	uS/cm	Exova Accutest
1044389	MS-C-C	20-Jul-13	pH	8.02	pH units	Exova Accutest
1044389	MS-C-C	20-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1044389	MS-C-C	20-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1045817	MS-C-C	24-Jul-13	Conductivity	269	uS/cm	Exova Accutest
1045817	MS-C-C	24-Jul-13	pH	8.07	pH units	Exova Accutest
1045817	MS-C-C	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045817	MS-C-C	24-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1042153	MS-C-D	11-Jul-13	Conductivity	105	uS/cm	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1042153	MS-C-D	11-Jul-13	pH	7.97	pH units	Exova Accutest
1042153	MS-C-D	11-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1042153	MS-C-D	11-Jul-13	Turbidity	1.2	NTU	Exova Accutest
1044390	MS-C-D	20-Jul-13	Conductivity	206	uS/cm	Exova Accutest
1044390	MS-C-D	20-Jul-13	pH	8.11	pH units	Exova Accutest
1044390	MS-C-D	20-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1044390	MS-C-D	20-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1045818	MS-C-D	24-Jul-13	Conductivity	232	uS/cm	Exova Accutest
1045818	MS-C-D	24-Jul-13	pH	8.19	pH units	Exova Accutest
1045818	MS-C-D	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045818	MS-C-D	24-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1042154	MS-C-E	11-Jul-13	Conductivity	178	uS/cm	Exova Accutest
1042154	MS-C-E	11-Jul-13	pH	8.19	pH units	Exova Accutest
1042154	MS-C-E	11-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1042154	MS-C-E	11-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1044391	MS-C-E	20-Jul-13	Conductivity	199	uS/cm	Exova Accutest
1044391	MS-C-E	20-Jul-13	pH	8.17	pH units	Exova Accutest
1044391	MS-C-E	20-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1044391	MS-C-E	20-Jul-13	Turbidity	0.4	NTU	Exova Accutest
1045819	MS-C-E	24-Jul-13	Conductivity	225	uS/cm	Exova Accutest
1045819	MS-C-E	24-Jul-13	pH	8.19	pH units	Exova Accutest
1045819	MS-C-E	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045819	MS-C-E	24-Jul-13	Turbidity	0.3	NTU	Exova Accutest
1045820	MS-C-E01	24-Jul-13	Conductivity	223	uS/cm	Exova Accutest
1045820	MS-C-E01	24-Jul-13	pH	8.23	pH units	Exova Accutest
1045820	MS-C-E01	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045820	MS-C-E01	24-Jul-13	Turbidity	0.2	NTU	Exova Accutest
1045821	MS-C-E02	24-Jul-13	Conductivity	<5	uS/cm	Exova Accutest
1045821	MS-C-E02	24-Jul-13	pH	7.47	pH units	Exova Accutest
1045821	MS-C-E02	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045821	MS-C-E02	24-Jul-13	Turbidity	0.2	NTU	Exova Accutest
1045822	MS-C-E03	24-Jul-13	Conductivity	<5	uS/cm	Exova Accutest
1045822	MS-C-E03	24-Jul-13	pH	6.61	pH units	Exova Accutest
1045822	MS-C-E03	24-Jul-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1045822	MS-C-E03	24-Jul-13	Turbidity	0.1	NTU	Exova Accutest
1035463	MRY-13A	18-Jun-12	pH, Laboratory	7.38	pH units	Exova Accutest
1035463	MRY-13A	18-Jun-12	Alkalinity, Total as mg CaCO3 equiv.	30	mg/L	Exova Accutest
1035463	MRY-13A	18-Jun-12	Conductivity in Laboratory	65	uS/cm	Exova Accutest
1035463	MRY-13A	18-Jun-12	Total Dissolved Solids	42	mg/L	Exova Accutest
1035463	MRY-13A	18-Jun-12	Total Suspended Solids	<2	mg/L	Exova Accutest
1035463	MRY-13A	18-Jun-12	Oil & Grease - Total	no sheen	mg/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Aluminum (Al) Total	13.8	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Antimony (Sb) Total	<0.10	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Barium (Ba) Total	3.67	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Cadmium (Cd) Total	<0.010	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Chromium (Cr) Total	0.21	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Cobalt (Co) Total	<0.10	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Copper (Cu) Total	1	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Iron (Fe) Total	16	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Lead (Pb) Total	<0.05	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Lithium (Li) Total	<0.05	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Manganese (Mn) Total	0.307	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Molybdenum (Mo) Total	0.200	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Nickel (Ni) Total	4.80	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Selenium (Se) Total	<0.01	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Tin (Sn) Total	<0.10	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Strontium (Sr) Total	2.98	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Thallium (Tl) Total	<0.001	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Titanium (Ti) Total	<10	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Uranium (U) Total	0.121	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Vanadium (V) Total	<1.0	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Zinc (Zn) Total	4.2	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Arsenic (As) Total	<0.10	ug/L	Exova Accutest
1035465	MRY-13A	18-Jun-12	Mercury (Hg) Total	<0.010	ug/L	Exova Accutest
1035464	MRY-13B	18-Jun-12	pH, Laboratory	7.46	pH units	Exova Accutest
1035464	MRY-13B	18-Jun-12	Alkalinity, Total as mg CaCO3 equiv.	33	mg/L	Exova Accutest
1035464	MRY-13B	18-Jun-12	Conductivity in Laboratory	71	uS/cm	Exova Accutest
1035464	MRY-13B	18-Jun-12	Total Dissolved Solids	46	mg/L	Exova Accutest
1035464	MRY-13B	18-Jun-12	Total Suspended Solids	<2	mg/L	Exova Accutest
1035464	MRY-13B	18-Jun-12	Oil & Grease - Total	no sheen	mg/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Aluminum (Al) Total	10.2	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Antimony (Sb) Total	<0.10	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Barium (Ba) Total	3.79	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Cadmium (Cd) Total	<0.010	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Chromium (Cr) Total	0.24	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Cobalt (Co) Total	<0.10	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Copper (Cu) Total	0.93	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Iron (Fe) Total	19	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Lead (Pb) Total	<0.05	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Lithium (Li) Total	<0.05	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Manganese (Mn) Total	0.394	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Molybdenum (Mo) Total	0.186	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Nickel (Ni) Total	4.84	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Selenium (Se) Total	<0.01	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Tin (Sn) Total	<0.10	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Strontium (Sr) Total	3.13	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Thallium (Tl) Total	<0.001	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Titanium (Ti) Total	<10	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Uranium (U) Total	0.089	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Vanadium (V) Total	<1.0	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Zinc (Zn) Total	3.7	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Arsenic (As) Total	<0.10	ug/L	Exova Accutest
1035466	MRY-13B	18-Jun-12	Mercury (Hg) Total	<0.010	ug/L	Exova Accutest

* Note: Polishing/waste stabilization ponds (PWSPs) are in place to receive treated sewage not meeting criteria for direct discharge to the receiving environment at Mary River and Milne Port Camps

** Note: Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14).

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
MILNE PORT						
1052823	*MP-MRY-04*	*21-Aug-13*	*Biochemical Oxygen Demand*	108	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*Chemical Oxygen Demand*	356	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*Total Kjeldahl Nitrogen*	105	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*N-NH3 (Ammonia)*	90.1	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*Oil & Grease - Total*	8	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*Total Phosphorus*	12.1	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*Total Suspended Solids*	132	*mg/L*	*Exova Accutest*
1052823	*MP-MRY-04*	*21-Aug-13*	*pH*	7.71	*pH units*	*Exova Accutest*
1054424	*MP-MRY-7*	*27-Aug-13*	*Ethylbenzene*	<0.5	*ug/L*	*Exova Accutest*
1054424	*MP-MRY-7*	*27-Aug-13*	*Benzene*	<0.5	*ug/L*	*Exova Accutest*
1054424	*MP-MRY-7*	*27-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1054424	*MP-MRY-7*	*27-Aug-13*	*Lead (Total);Lead*	<0.001	*mg/L*	*Exova Accutest*
1054424	*MP-MRY-7*	*27-Aug-13*	*Toluene*	<0.5	*ug/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Conductivity*	1050	*uS/cm*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*N-NH3 (Ammonia)*	0.06	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*N-NO3 (Nitrate)*	2.37	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Total Suspended Solids*	2	*mg/L*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*Turbidity*	1.5	*NTU*	*Exova Accutest*
1052826	*MP-C-A*	*20-Aug-13*	*pH*	8.2	*pH units*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Conductivity*	792	*uS/cm*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*N-NH3 (Ammonia)*	0.23	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*N-NO3 (Nitrate)*	1.06	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Total Suspended Solids*	98	*mg/L*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*Turbidity*	74.8	*NTU*	*Exova Accutest*
1055087	*MP-C-A-1*	*24-Aug-13*	*pH*	8.12	*pH units*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Conductivity*	813	*uS/cm*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*N-NH3 (Ammonia)*	0.14	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*N-NO3 (Nitrate)*	1.32	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Total Suspended Solids*	7	*mg/L*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*Turbidity*	8.3	*NTU*	*Exova Accutest*
1055090	*MP-C-A-2*	*24-Aug-13*	*pH*	8.19	*pH units*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Conductivity*	464	*uS/cm*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*N-NH3 (Ammonia)*	0.06	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*N-NO3 (Nitrate)*	<0.10	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*Turbidity*	>100	*NTU*	*Exova Accutest*
1052829	*MP-C-B*	*20-Aug-13*	*pH*	8.16	*pH units*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Conductivity*	428	*uS/cm*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*N-NH3 (Ammonia)*	0.38	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*N-NO3 (Nitrate)*	<0.10	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*Turbidity*	1	*NTU*	*Exova Accutest*
1055089	*MP-C-B*	*24-Aug-13*	*pH*	8.09	*pH units*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Conductivity*	1070	*uS/cm*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*N-NH3 (Ammonia)*	1.6	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*N-NO3 (Nitrate)*	2.78	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Total Suspended Solids*	190	*mg/L*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*Turbidity*	67	*NTU*	*Exova Accutest*
1052827	*MP-C-F*	*20-Aug-13*	*pH*	8.2	*pH units*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Conductivity*	1010	*uS/cm*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*N-NH3 (Ammonia)*	3.77	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*N-NO3 (Nitrate)*	11.8	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Total Suspended Solids*	8	*mg/L*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*Turbidity*	2.3	*NTU*	*Exova Accutest*
1052828	*MP-C-F*	*21-Aug-13*	*pH*	8.15	*pH units*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Conductivity*	1030	*uS/cm*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*N-NH3 (Ammonia)*	2.34	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*N-NO3 (Nitrate)*	9.16	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Total Suspended Solids*	3	*mg/L*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*Turbidity*	2.4	*NTU*	*Exova Accutest*
1055088	*MP-C-F*	*24-Aug-13*	*pH*	8.1	*pH units*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Conductivity*	393	*uS/cm*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*N-NH3 (Ammonia)*	0.17	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*N-NO3 (Nitrate)*	13.1	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Total Suspended Solids*	14	*mg/L*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*Turbidity*	3.1	*NTU*	*Exova Accutest*
1052824	*MP-Q1-01*	*20-Aug-13*	*pH*	8.00	*pH units*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1055085	*MP-Q1-01*	*24-Aug-13*	*Conductivity*	503	*uS/cm*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*N-NH3 (Ammonia)*	6.38	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*N-NO3 (Nitrate)*	25.3	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*Total Suspended Solids*	19	*mg/L*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*Turbidity*	16.8	*NTU*	*Exova Accutest*
1055085	*MP-Q1-01*	*24-Aug-13*	*pH*	7.81	*pH units*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Conductivity*	340	*uS/cm*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*N-NH3 (Ammonia)*	1.25	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*N-NO3 (Nitrate)*	5.28	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*Turbidity*	0.6	*NTU*	*Exova Accutest*
1052825	*MP-Q1-02*	*20-Aug-13*	*pH*	8.08	*pH units*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Conductivity*	327	*uS/cm*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*N-NH3 (Ammonia)*	1.95	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*N-NO3 (Nitrate)*	5.38	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Oil & Grease - Mineral*	<1	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Oil & Grease - Non-mineral*	<1	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*Turbidity*	0.6	*NTU*	*Exova Accutest*
1055086	*MP-Q1-02*	*24-Aug-13*	*pH*	8.00	*pH units*	*Exova Accutest*
MARY RIVER MINE SITE						
1049064	*MS-MRY-04*	*5-Aug-13*	*Faecal Coliforms*	10	*CFU/100mL*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Biochemical Oxygen Demand*	7	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Chemical Oxygen Demand*	69	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Total Kjeldahl Nitrogen*	4.37	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*N-NH3 (Ammonia)*	1.1	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Total Phosphorus*	1.57	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*Total Suspended Solids*	28	*mg/L*	*Exova Accutest*
1049146	*MS-MRY-04*	*5-Aug-13*	*pH*	7.48	*pH units*	*Exova Accutest*
1051597	*MS-MRY-04*	*16-Aug-13*	*Faecal Coliforms*	3	*CFU/100mL*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Biochemical Oxygen Demand*	6	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Chemical Oxygen Demand*	59	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Total Kjeldahl Nitrogen*	5.94	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*N-NH3 (Ammonia)*	5.02	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Total Phosphorus*	0.705	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*Total Suspended Solids*	14	*mg/L*	*Exova Accutest*
1051598	*MS-MRY-04*	*16-Aug-13*	*pH*	7.3	*pH units*	*Exova Accutest*
1052916	*MS-MRY-04*	*22-Aug-13*	*Faecal Coliforms*	0	*CFU/100mL*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Biochemical Oxygen Demand*	11	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Chemical Oxygen Demand*	59	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Total Kjeldahl Nitrogen*	5.63	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*N-NH3 (Ammonia)*	3.18	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Total Phosphorus*	0.89	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*Total Suspended Solids*	29	*mg/L*	*Exova Accutest*
1052838	*MS-MRY-04*	*22-Aug-13*	*pH*	7.62	*pH units*	*Exova Accutest*
1047941	*MS-MRY-04B*	*1-Aug-13*	*Faecal Coliforms*	0	*CFU/100mL*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Biochemical Oxygen Demand*	21	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Chemical Oxygen Demand*	190	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Total Kjeldahl Nitrogen*	6.29	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*N-NH3 (Ammonia)*	0.3	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Total Phosphorus*	0.71	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*Total Suspended Solids*	19	*mg/L*	*Exova Accutest*
1047973	*MS-MRY-04B*	*1-Aug-13*	*pH*	9.08	*pH units*	*Exova Accutest*
1049317	*MS-MRY-04B*	*7-Aug-13*	*Faecal Coliforms*	0	*CFU/100mL*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Biochemical Oxygen Demand*	10	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Chemical Oxygen Demand*	139	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Total Kjeldahl Nitrogen*	5.4	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*N-NH3 (Ammonia)*	1.82	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Total Phosphorus*	0.76	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*Total Suspended Solids*	12	*mg/L*	*Exova Accutest*
1049293	*MS-MRY-04B*	*7-Aug-13*	*pH*	7.71	*pH units*	*Exova Accutest*
1049880	*MS-MRY-04B*	*11-Aug-13*	*Faecal Coliforms*	0	*CFU/100mL*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Biochemical Oxygen Demand*	12	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Chemical Oxygen Demand*	101	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Total Kjeldahl Nitrogen*	5.58	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*N-NH3 (Ammonia)*	2.65	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Oil & Grease - Total*	3	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Total Phosphorus*	0.535	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*Total Suspended Solids*	4	*mg/L*	*Exova Accutest*
1049770	*MS-MRY-04B*	*11-Aug-13*	*pH*	7.88	*pH units*	*Exova Accutest*
1040771	*MS-MRY-04B*	*11-Aug-13*	*Toxicity**	non-lethal		*Exova Accutest*
1050865	*MS-MRY-04B*	*14-Aug-13*	*Faecal Coliforms*	0	*CFU/100mL*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Biochemical Oxygen Demand*	13	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Chemical Oxygen Demand*	106	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Total Kjeldahl Nitrogen*	5.95	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*N-NH3 (Ammonia)*	3.41	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Total Phosphorus*	0.57	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*Total Suspended Solids*	7	*mg/L*	*Exova Accutest*
1050739	*MS-MRY-04B*	*14-Aug-13*	*pH*	7.64	*pH units*	*Exova Accutest*
1052841	*MS-MRY-04B*	*19-Aug-13*	*Biochemical Oxygen Demand*	19	*mg/L*	*Exova Accutest*
1052841	*MS-MRY-04B*	*19-Aug-13*	*Chemical Oxygen Demand*	118	*mg/L*	*Exova Accutest*
1052841	*MS-MRY-04B*	*19-Aug-13*	*Total Kjeldahl Nitrogen*	6.26	*mg/L*	*Exova Accutest*
1052841	*MS-MRY-04B*	*19-Aug-13*	*N-NH3 (Ammonia)*	3.11	*mg/L*	*Exova Accutest*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1052841	MS-MRY-04B	19-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052841	MS-MRY-04B	19-Aug-13	Total Phosphorus	0.62	mg/L	Exova Accutest
1052841	MS-MRY-04B	19-Aug-13	Total Suspended Solids	10	mg/L	Exova Accutest
1052841	MS-MRY-04B	19-Aug-13	pH	7.58	pH units	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Biochemical Oxygen Demand	22	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Chemical Oxygen Demand	129	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Total Kjeldahl Nitrogen	8.02	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	N-NH3 (Ammonia)	2.56	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Total Phosphorus	0.78	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	Total Suspended Solids	26	mg/L	Exova Accutest
1052843	MS-MRY-04B	21-Aug-13	pH	8.26	pH units	Exova Accutest
1052918	MS-MRY-04B	23-Aug-13	Faecal Coliforms	0	CFU/100mL	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Biochemical Oxygen Demand	19	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Chemical Oxygen Demand	117	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Total Kjeldahl Nitrogen	6.66	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	N-NH3 (Ammonia)	0.83	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Total Phosphorus	0.77	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	Total Suspended Solids	29	mg/L	Exova Accutest
1052845	MS-MRY-04B	23-Aug-13	pH	8.24	pH units	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	HCO3 as CaCO3	48	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Alkalinity as CaCO3	48	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Chloride	32	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Conductivity	355	uS/cm	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Total Kjeldahl Nitrogen	0.15	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	NO2 + NO3 as N	1.02	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	N-NO3 (Nitrate)	1.02	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Total Phosphorus	0.007	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Sulphate	70	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Total Dissolved Solids (COND - CALC)	231	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	Turbidity	0.3	NTU	Exova Accutest
1050726	MS-MRY-09	14-Aug-13	pH	7.24	pH units	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Silver (Total)	<0.000001	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Aluminum (Total)	0.0099	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Arsenic (Total)	<0.00010	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Boron (Total)	0.029	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Barium (Total)	0.016	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Beryllium (Total)	<0.00002	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Calcium (Total)	39.1	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Cadmium (Total)	0.000014	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Cobalt (Total)	0.00023	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Chromium (Total)	0.00027	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Copper (Total)	0.00075	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Iron (Total)	0.01	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Hardness as CaCO3 (Total)	156	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Potassium (Total)	1.9	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Lithium (Total)	0.00311	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Magnesium (Total)	14.2	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Manganese (Total)	0.277	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Molybdenum (Total)	0.000352	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Sodium (Total)	4.78	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Nickel (Total)	0.00068	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Lead (Total);Lead	0.00006	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Selenium (Total)	0.00025	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Silicon (Total)	0.31	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Strontium (Total)	0.231	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Thallium (Total)	<0.000001	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Uranium (Total)	0.000136	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1050731	MS-MRY-09	14-Aug-13	Zinc (Total)	<0.0030	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	HCO3 as CaCO3	238	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	CO3 as CaCO3	5	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Alkalinity as CaCO3	243	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Dissolved Organic Carbon	3	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Total Organic Carbon	3.3	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Chloride	3	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Conductivity	833	uS/cm	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Total Kjeldahl Nitrogen	0.22	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	NO2 + NO3 as N	3.61	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	N-NO3 (Nitrate)	3.61	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Total Phosphorus	0.017	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Sulphate	189	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Total Dissolved Solids (COND - CALC)	541	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	Turbidity	1.5	NTU	Exova Accutest
1050727	MS-MRY-11-TP1	14-Aug-13	pH	8.37	pH units	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Silver (Total)	<0.000001	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Aluminum (Total)	0.0277	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Arsenic (Total)	0.00018	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Boron (Total)	0.073	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Barium (Total)	0.0419	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Beryllium (Total)	<0.00002	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Calcium (Total)	84.2	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Cadmium (Total)	<0.000010	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Cobalt (Total)	0.00044	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Chromium (Total)	0.00044	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Copper (Total)	0.00203	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Iron (Total)	0.026	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Hardness as CaCO3 (Total)	453	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1050732	MS-MRY-11-TP1	14-Aug-13	Potassium (Total)	4.64	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Lithium (Total)	0.00589	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Magnesium (Total)	58.9	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Manganese (Total)	0.00505	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Molybdenum (Total)	0.00105	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Sodium (Total)	15.8	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Nickel (Total)	0.00153	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Lead (Total);Lead	0.00008	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Selenium (Total)	0.00079	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Silicon (Total)	1.11	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Strontium (Total)	0.0416	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Thallium (Total)	0.000037	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Uranium (Total)	0.00689	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1050732	MS-MRY-11-TP1	14-Aug-13	Zinc (Total)	<0.0030	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Sulphate	189	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Total Dissolved Solids (COND - CALC)	454	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Total Suspended Solids	6	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Turbidity	9.5	NTU	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	pH	8.09	pH units	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Silver (Total)	<0.000001	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Aluminum (Total)	0.0046	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Arsenic (Total)	0.00013	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Boron (Total)	0.039	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Barium (Total)	0.0301	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Beryllium (Total)	<0.00010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Calcium (Total)	70.8	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Cadmium (Total)	0.000010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Cobalt (Total)	0.00034	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Chromium (Total)	0.0002	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Copper (Total)	0.00133	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Iron (Total)	<0.00010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Hardness as CaCO3 (Total)	375	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Potassium (Total)	2.87	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Lithium (Total)	0.00341	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Magnesium (Total)	48.1	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Manganese (Total)	0.00434	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Molybdenum (Total)	0.00074	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Sodium (Total)	14.1	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Nickel (Total)	0.00106	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Lead (Total);Lead	<0.00005	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Antimony (Total)	0.00017	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Selenium (Total)	0.0006	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Silicon (Total)	1.18	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Strontium (Total)	0.0286	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Thallium (Total)	0.000026	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Uranium (Total)	0.00438	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1054783	MS-MRY-11-TP1	28-Aug-13	Zinc (Total)	<0.0010	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Alkalinity as CaCO3	145	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Dissolved Organic Carbon	4	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Total Organic Carbon	4.5	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Conductivity	350	uS/cm	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	DRO (C10-C24)	<0.2	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	GRO (<C10)	<0.2	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	GRO + DRO	<0.2	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Total Dissolved Solids (COND - CALC)	228	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	Total Suspended Solids	11	mg/L	Exova Accutest
1049319	MS-MRY-13A	7-Aug-13	pH	8.06	pH units	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Silver (Total)	<0.0000010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Aluminum (Total)	0.0318	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Arsenic (Total)	0.00014	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Boron (Total)	<0.0100	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Barium (Total)	0.0237	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Beryllium (Total)	<0.00010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Calcium (Total)	29.6	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Cadmium (Total)	0.000017	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Cobalt (Total)	0.00014	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Chromium (Total)	0.00048	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Copper (Total)	0.00166	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Iron (Total)	0.05	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Hardness as CaCO3 (Total)	169	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Potassium (Total)	1.33	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Lithium (Total)	0.0018	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Magnesium (Total)	23.1	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Manganese (Total)	0.0125	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Molybdenum (Total)	0.000121	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Sodium (Total)	3.93	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Nickel (Total)	0.0104	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Lead (Total);Lead	0.00018	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Selenium (Total)	<0.00010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Silicon (Total)	4.3	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Strontium (Total)	0.0165	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1049330	MS-MRY-13A	7-Aug-13	Thallium (Total)	0.000023	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Uranium (Total)	0.000416	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1049330	MS-MRY-13A	7-Aug-13	Zinc (Total)	0.006	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Alkalinity as CaCO3	155	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Dissolved Organic Carbon	4.3	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Total Organic Carbon	3.8	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Conductivity	378	uS/cm	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	F1 (C6-C10)	<0.1	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	F1-BTEX (C6-C10)	<0.1	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	F2 (C10-C16)	<0.1	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	F3 (C16-C34)	<0.2	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	F4 (C34-C50)	<0.2	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Total Dissolved Solids (COND - CALC)	246	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	m/p-xylene	<0.5	ug/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	o-xylene	<0.5	ug/L	Exova Accutest
1050719	MS-MRY-13A	14-Aug-13	pH	8.14	pH units	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Silver (Total)	<0.000001	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Aluminum (Total)	0.0046	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Arsenic (Total)	0.00013	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Boron (Total)	0.012	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Barium (Total)	0.0214	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Beryllium (Total)	<0.00002	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Calcium (Total)	34.3	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Cadmium (Total)	<0.000010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Cobalt (Total)	<0.00010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Chromium (Total)	0.00058	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Copper (Total)	0.00143	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Iron (Total)	<0.003	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Hardness as CaCO3 (Total)	196	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Potassium (Total)	1.32	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Lithium (Total)	0.00183	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Magnesium (Total)	26.8	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Manganese (Total)	0.000315	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Molybdenum (Total)	0.000169	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Sodium (Total)	4.41	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Nickel (Total)	0.00833	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Lead (Total);Lead	<0.00005	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Selenium (Total)	<0.00001	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Silicon (Total)	4.28	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Strontium (Total)	0.0171	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Thallium (Total)	<0.000001	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Uranium (Total)	0.000614	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1050721	MS-MRY-13A	14-Aug-13	Zinc (Total)	0.0038	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Alkalinity as CaCO3	158	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Dissolved Organic Carbon	3.5	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Total Organic Carbon	3.6	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Conductivity	417	uS/cm	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	F2 (C10-C16)	<0.1	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	F3 (C16-C34)	<0.2	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	F4 (C34-C50)	<0.2	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Total Dissolved Solids (COND - CALC)	280	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052847	MS-MRY-13A	21-Aug-13	pH	8.05	pH units	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Alkalinity as CaCO3	146	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Dissolved Organic Carbon	4.6	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Total Organic Carbon	4.6	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Conductivity	342	uS/cm	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	DRO (C10-C24)	<0.2	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	GRO (<C10)	<0.2	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	GRO + DRO	<0.2	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Total Dissolved Solids (COND - CALC)	222	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049320	MS-MRY-13B	7-Aug-13	pH	8.34	pH units	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Silver (Total)	<0.0000010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Aluminum (Total)	0.0167	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Arsenic (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Boron (Total)	<0.0100	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Barium (Total)	0.021	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Beryllium (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Calcium (Total)	31.2	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Cadmium (Total)	<0.000010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Cobalt (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Chromium (Total)	0.00042	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Copper (Total)	0.00149	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Iron (Total)	0.04	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Hardness as CaCO3 (Total)	176	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Potassium (Total)	1.09	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Lithium (Total)	0.00179	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Magnesium (Total)	23.7	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Manganese (Total)	0.000875	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Molybdenum (Total)	0.000137	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1049331	MS-MRY-13B	7-Aug-13	Sodium (Total)	2.13	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Nickel (Total)	0.00733	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Lead (Total);Lead	<0.00005	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Selenium (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Silicon (Total)	4.05	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Strontium (Total)	0.0157	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Thallium (Total)	<0.000010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Uranium (Total)	0.0003	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1049331	MS-MRY-13B	7-Aug-13	Zinc (Total)	0.0049	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Alkalinity as CaCO3	154	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Dissolved Organic Carbon	3.7	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Total Organic Carbon	4.1	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Conductivity	357	uS/cm	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	F1 (C6-C10)	<0.1	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	F1-BTEX (C6-C10)	<0.1	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	F2 (C10-C16)	<0.1	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	F3 (C16-C34)	<0.2	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	F4 (C34-C50)	<0.2	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Total Dissolved Solids (COND - CALC)	232	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	m/p-xylene	<0.5	ug/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	o-xylene	<0.5	ug/L	Exova Accutest
1050720	MS-MRY-13B	14-Aug-13	pH	8.3	pH units	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Silver (Total)	<0.000001	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Aluminum (Total)	0.0078	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Arsenic (Total)	0.00013	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Boron (Total)	0.011	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Barium (Total)	0.0207	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Beryllium (Total)	<0.00002	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Bismuth (Total)	<0.00050	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Calcium (Total)	33.7	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Cadmium (Total)	<0.000010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Cobalt (Total)	<0.00010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Chromium (Total)	0.00052	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Copper (Total)	0.00138	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Iron (Total)	0.012	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Hardness as CaCO3 (Total)	190	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Mercury (Total)	<0.000010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Potassium (Total)	1.01	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Lithium (Total)	0.0019	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Magnesium (Total)	25.7	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Manganese (Total)	0.000418	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Molybdenum (Total)	0.000142	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Sodium (Total)	2.22	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Nickel (Total)	0.00675	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Lead (Total);Lead	<0.00005	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Antimony (Total)	<0.00010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Selenium (Total)	<0.00001	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Silicon (Total)	3.99	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Tin (Total)	<0.00010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Strontium (Total)	0.0162	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Titanium (Total)	<0.01	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Thallium (Total)	<0.000001	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Uranium (Total)	0.000343	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Vanadium (Total)	<0.0010	mg/L	Exova Accutest
1050722	MS-MRY-13B	14-Aug-13	Zinc (Total)	<0.0030	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Alkalinity as CaCO3	148	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Dissolved Organic Carbon	3.6	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Total Organic Carbon	3.6	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Conductivity	342	uS/cm	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	F2 (C10-C16)	<0.1	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	F3 (C16-C34)	<0.2	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	F4 (C34-C50)	<0.2	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Lead (Dissolved)	<0.00005	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Phenol	<0.001	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Total Dissolved Solids (COND - CALC)	200	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052848	MS-MRY-13B	21-Aug-13	pH	8.17	pH units	Exova Accutest
1049321	MS-C-A	7-Aug-13	Conductivity	152	uS/cm	Exova Accutest
1049321	MS-C-A	7-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1049321	MS-C-A	7-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1049321	MS-C-A	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049321	MS-C-A	7-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049321	MS-C-A	7-Aug-13	pH	7.75	pH units	Exova Accutest
1050703	MS-C-A	14-Aug-13	Conductivity	166	uS/cm	Exova Accutest
1050703	MS-C-A	14-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1050703	MS-C-A	14-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1050703	MS-C-A	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050703	MS-C-A	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050703	MS-C-A	14-Aug-13	pH	7.94	pH units	Exova Accutest
1052830	MS-C-A	21-Aug-13	Conductivity	186	uS/cm	Exova Accutest
1052830	MS-C-A	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	N-NO3 (Nitrate)	0.14	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052830	MS-C-A	21-Aug-13	pH	7.52	pH units	Exova Accutest
1053208	MS-C-A	25-Aug-13	Conductivity	177	uS/cm	Exova Accutest
1053208	MS-C-A	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053208	MS-C-A	25-Aug-13	N-NO3 (Nitrate)	0.15	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1053208	MS-C-A	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053208	MS-C-A	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053208	MS-C-A	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053208	MS-C-A	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053208	MS-C-A	25-Aug-13	pH	7.52	pH units	Exova Accutest
1054428	MS-C-A	27-Aug-13	Conductivity	178	uS/cm	Exova Accutest
1054428	MS-C-A	27-Aug-13	N-NH3 (Ammonia)	0.07	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	N-NO3 (Nitrate)	0.16	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054428	MS-C-A	27-Aug-13	pH	7.57	pH units	Exova Accutest
1049322	MS-C-B	7-Aug-13	Conductivity	154	uS/cm	Exova Accutest
1049322	MS-C-B	7-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1049322	MS-C-B	7-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1049322	MS-C-B	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049322	MS-C-B	7-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049322	MS-C-B	7-Aug-13	pH	7.89	pH units	Exova Accutest
1050704	MS-C-B	14-Aug-13	Conductivity	182	uS/cm	Exova Accutest
1050704	MS-C-B	14-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1050704	MS-C-B	14-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1050704	MS-C-B	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050704	MS-C-B	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050704	MS-C-B	14-Aug-13	pH	7.8	pH units	Exova Accutest
1052831	MS-C-B	21-Aug-13	Conductivity	188	uS/cm	Exova Accutest
1052831	MS-C-B	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	N-NO3 (Nitrate)	0.14	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052831	MS-C-B	21-Aug-13	pH	7.85	pH units	Exova Accutest
1053209	MS-C-B	25-Aug-13	Conductivity	180	uS/cm	Exova Accutest
1053209	MS-C-B	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	N-NO3 (Nitrate)	0.16	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053209	MS-C-B	25-Aug-13	pH	7.88	pH units	Exova Accutest
1054429	MS-C-B	27-Aug-13	Conductivity	192	uS/cm	Exova Accutest
1054429	MS-C-B	27-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	N-NO3 (Nitrate)	0.18	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054429	MS-C-B	27-Aug-13	pH	7.89	pH units	Exova Accutest
1049323	MS-C-C	7-Aug-13	Conductivity	306	uS/cm	Exova Accutest
1049323	MS-C-C	7-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1049323	MS-C-C	7-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1049323	MS-C-C	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049323	MS-C-C	7-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049323	MS-C-C	7-Aug-13	pH	8.11	pH units	Exova Accutest
1050705	MS-C-C	14-Aug-13	Conductivity	319	uS/cm	Exova Accutest
1050705	MS-C-C	14-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1050705	MS-C-C	14-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1050705	MS-C-C	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050705	MS-C-C	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050705	MS-C-C	14-Aug-13	pH	8.06	pH units	Exova Accutest
1052832	MS-C-C	21-Aug-13	Conductivity	309	uS/cm	Exova Accutest
1052832	MS-C-C	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052832	MS-C-C	21-Aug-13	pH	8.16	pH units	Exova Accutest
1053210	MS-C-C	25-Aug-13	Conductivity	308	uS/cm	Exova Accutest
1053210	MS-C-C	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053210	MS-C-C	25-Aug-13	pH	8.13	pH units	Exova Accutest
1054430	MS-C-C	27-Aug-13	Conductivity	307	uS/cm	Exova Accutest
1054430	MS-C-C	27-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054430	MS-C-C	27-Aug-13	pH	8.24	pH units	Exova Accutest
1049324	MS-C-D	7-Aug-13	Conductivity	273	uS/cm	Exova Accutest
1049324	MS-C-D	7-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1049324	MS-C-D	7-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1049324	MS-C-D	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049324	MS-C-D	7-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1049324	MS-C-D	7-Aug-13	pH	8.12	pH units	Exova Accutest
1050706	MS-C-D	14-Aug-13	Conductivity	302	uS/cm	Exova Accutest
1050706	MS-C-D	14-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1050706	MS-C-D	14-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1050706	MS-C-D	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050706	MS-C-D	14-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1050706	MS-C-D	14-Aug-13	pH	8.1	pH units	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1052833	MS-C-D	21-Aug-13	Conductivity	288	uS/cm	Exova Accutest
1052833	MS-C-D	21-Aug-13	N-NH3 (Ammonia)	0.1	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052833	MS-C-D	21-Aug-13	pH	8.13	pH units	Exova Accutest
1053211	MS-C-D	25-Aug-13	Conductivity	267	uS/cm	Exova Accutest
1053211	MS-C-D	25-Aug-13	N-NH3 (Ammonia)	0.06	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053211	MS-C-D	25-Aug-13	pH	8.15	pH units	Exova Accutest
1054431	MS-C-D	27-Aug-13	Conductivity	271	uS/cm	Exova Accutest
1054431	MS-C-D	27-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054431	MS-C-D	27-Aug-13	pH	8.3	pH units	Exova Accutest
1049325	MS-C-E	7-Aug-13	Conductivity	280	uS/cm	Exova Accutest
1049325	MS-C-E	7-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1049325	MS-C-E	7-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1049325	MS-C-E	7-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1049325	MS-C-E	7-Aug-13	Total Suspended Solids	4	mg/L	Exova Accutest
1049325	MS-C-E	7-Aug-13	pH	8.27	pH units	Exova Accutest
1050707	MS-C-E	14-Aug-13	Conductivity	298	uS/cm	Exova Accutest
1050707	MS-C-E	14-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1050707	MS-C-E	14-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1050707	MS-C-E	14-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1050707	MS-C-E	14-Aug-13	Total Suspended Solids	23	mg/L	Exova Accutest
1050707	MS-C-E	14-Aug-13	pH	8.16	pH units	Exova Accutest
1052834	MS-C-E	21-Aug-13	Conductivity	288	uS/cm	Exova Accutest
1052834	MS-C-E	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	Total Suspended Solids	2	mg/L	Exova Accutest
1052834	MS-C-E	21-Aug-13	pH	8.2	pH units	Exova Accutest
1053212	MS-C-E	25-Aug-13	Conductivity	271	uS/cm	Exova Accutest
1053212	MS-C-E	25-Aug-13	N-NH3 (Ammonia)	0.06	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053212	MS-C-E	25-Aug-13	pH	8.18	pH units	Exova Accutest
1054432	MS-C-E	27-Aug-13	Conductivity	282	uS/cm	Exova Accutest
1054432	MS-C-E	27-Aug-13	N-NH3 (Ammonia)	0.05	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054432	MS-C-E	27-Aug-13	pH	8.28	pH units	Exova Accutest
1052835	MS-C-F	21-Aug-13	Conductivity	204	uS/cm	Exova Accutest
1052835	MS-C-F	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	N-NO3 (Nitrate)	0.14	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052835	MS-C-F	21-Aug-13	pH	8.1	pH units	Exova Accutest
1053213	MS-C-F	25-Aug-13	Conductivity	191	uS/cm	Exova Accutest
1053213	MS-C-F	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	N-NO3 (Nitrate)	0.18	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053213	MS-C-F	25-Aug-13	pH	8.05	pH units	Exova Accutest
1054433	MS-C-F	27-Aug-13	Conductivity	190	uS/cm	Exova Accutest
1054433	MS-C-F	27-Aug-13	N-NH3 (Ammonia)	0.05	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	N-NO3 (Nitrate)	0.19	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054433	MS-C-F	27-Aug-13	pH	8.07	pH units	Exova Accutest
1052836	MQ-C-B	21-Aug-13	Conductivity	313	uS/cm	Exova Accutest
1052836	MQ-C-B	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1052836	MQ-C-B	21-Aug-13	pH	8.13	pH units	Exova Accutest
1053214	MQ-C-B	25-Aug-13	Conductivity	279	uS/cm	Exova Accutest
1053214	MQ-C-B	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053214	MQ-C-B	25-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1053214	MQ-C-B	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053214	MQ-C-B	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1053214	MQ-C-B	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053214	MQ-C-B	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053214	MQ-C-B	25-Aug-13	pH	8.12	pH units	Exova Accutest
1054434	MQ-C-B	27-Aug-13	Conductivity	232	uS/cm	Exova Accutest
1054434	MQ-C-B	27-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054434	MQ-C-B	27-Aug-13	pH	8.16	pH units	Exova Accutest
1052837	MQ-C-D	21-Aug-13	Conductivity	224	uS/cm	Exova Accutest
1052837	MQ-C-D	21-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	Total Suspended Solids	8	mg/L	Exova Accutest
1052837	MQ-C-D	21-Aug-13	pH	8.06	pH units	Exova Accutest
1053215	MQ-C-D	25-Aug-13	Conductivity	222	uS/cm	Exova Accutest
1053215	MQ-C-D	25-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1053215	MQ-C-D	25-Aug-13	pH	8.03	pH units	Exova Accutest
1054435	MQ-C-D	27-Aug-13	Conductivity	233	uS/cm	Exova Accutest
1054435	MQ-C-D	27-Aug-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1054435	MQ-C-D	27-Aug-13	pH	8.17	pH units	Exova Accutest

*Notes: Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14).
Areas of Non Compliances: Sample at MP-MRY-04 (Milne Port RBC) showed a noncompliance for BOD on August 21 (108 mg/L vs. criteria of 100 mg/L for BOD). The discharge from the RBC was not to the receiving environment, but was to the newly constructed PWSP.
The RBC is to be replaced shortly by a new sewager treatment plant. Sample Station MP-C-F (downstream of construction at Milne Port) exceeded the water licence criteria for TSS on August 20 (190 mg/L vs. 100 mg/L max. grab concentration TSS). This was a short term condition.

MILNE PORT						
1059279	MP-01	18-Sep-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1059218	MP-01	18-Sep-13	Biochemical Oxygen Demand	4	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	Chemical Oxygen Demand	157	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	Total Kjeldahl Nitrogen	41.1	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	N-NH3 (Ammonia)	41.1	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	Total Phosphorus	15.1	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1059218	MP-01	18-Sep-13	pH	6.89	pH units	Exova Accutest
1062419	MP-01	30-Sep-13	Faecal Coliforms	<10	ct/100mL	Exova Accutest
1062461	MP-01	30-Sep-13	Biochemical Oxygen Demand	1	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	Chemical Oxygen Demand	127	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	Total Kjeldahl Nitrogen	2.01	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	N-NH3 (Ammonia)	1.11	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	Total Phosphorus	6.46	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1062461	MP-01	30-Sep-13	pH	7.72	pH units	Exova Accutest
1062460	MP-01	30-Sep-13	Toxicity*	Non-lethal		Exova Accutest
1056021	MRY-5	2-Sep-13	Faecal Coliforms	2000	ct/100mL	Exova Accutest
1056072	MRY-5	2-Sep-13	Biochemical Oxygen Demand	50	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	Chemical Oxygen Demand	210	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	Total Kjeldahl Nitrogen	119	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	N-NH3 (Ammonia)	110	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	Oil & Grease - Total	3	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	Total Phosphorus	10.2	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	Total Suspended Solids	33	mg/L	Exova Accutest
1056072	MRY-5	2-Sep-13	pH	8	pH units	Exova Accutest
1056063	MP-C-B	2-Sep-13	Conductivity	453	uS/cm	Exova Accutest
1056063	MP-C-B	2-Sep-13	N-NH3 (Ammonia)	0.03	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056063	MP-C-B	2-Sep-13	Turbidity	0.7	NTU	Exova Accutest
1056063	MP-C-B	2-Sep-13	pH	8.25	pH units	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Conductivity	453	uS/cm	Exova Accutest
1056064	MP-C-B01	2-Sep-13	N-NH3 (Ammonia)	0.03	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056064	MP-C-B01	2-Sep-13	Turbidity	0.7	NTU	Exova Accutest
1056064	MP-C-B01	2-Sep-13	pH	8.25	pH units	Exova Accutest
MARY RIVER MINE SITE						
1056048	MS-MRY-04	3-Sep-13	Faecal Coliforms	150	ct/100mL	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Biochemical Oxygen Demand	20	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Chemical Oxygen Demand	78	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Total Kjeldahl Nitrogen	22.3	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1056067	MS-MRY-04	3-Sep-13	N-NH3 (Ammonia)	22.2	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Oil & Grease - Total	2	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Total Phosphorus	0.99	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	Total Suspended Solids	43	mg/L	Exova Accutest
1056067	MS-MRY-04	3-Sep-13	pH	7.75	pH units	Exova Accutest
1057230	MS-MRY-04	9-Sep-13	Faecal Coliforms	100	ct/100mL	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Biochemical Oxygen Demand	21	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Chemical Oxygen Demand	87	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Total Kjeldahl Nitrogen	30	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	N-NH3 (Ammonia)	27.2	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Total Phosphorus	1.39	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	Total Suspended Solids	42	mg/L	Exova Accutest
1057248	MS-MRY-04	9-Sep-13	pH	7.57	pH units	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Biochemical Oxygen Demand	69	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Chemical Oxygen Demand	91	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Total Kjeldahl Nitrogen	30	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	N-NH3 (Ammonia)	27.7	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Total Phosphorus	1.51	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	Total Suspended Solids	48	mg/L	Exova Accutest
1057251	MS-MRY-0401	9-Sep-13	pH	7.45	pH units	Exova Accutest
1059401	MS-MRY-04	17-Sep-13	Faecal Coliforms	7000	ct/100mL	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Biochemical Oxygen Demand	13	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Chemical Oxygen Demand	77	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Total Kjeldahl Nitrogen	9.46	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	N-NH3 (Ammonia)	6.03	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Total Phosphorus	1.09	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	Total Suspended Solids	25	mg/L	Exova Accutest
1059375	MS-MRY-04	17-Sep-13	pH	7.47	pH units	Exova Accutest
1060644	MS-MRY-04	23-Sep-13	Faecal Coliforms	80	ct/100mL	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Biochemical Oxygen Demand	20	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Chemical Oxygen Demand	84	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Total Kjeldahl Nitrogen	11.1	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	N-NH3 (Ammonia)	7.37	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Total Phosphorus	1.26	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	Total Suspended Solids	34	mg/L	Exova Accutest
1060698	MS-MRY-04	23-Sep-13	pH	7.45	pH units	Exova Accutest
1056049	MS-C-A	4-Sep-13	Conductivity	176	uS/cm	Exova Accutest
1056049	MS-C-A	4-Sep-13	N-NO3 (Nitrate)	0.12	mg/L	Exova Accutest
1056049	MS-C-A	4-Sep-13	pH	7.42	pH units	Exova Accutest
1056049	MS-C-A	4-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056049	MS-C-A	4-Sep-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1056049	MS-C-A	4-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056049	MS-C-A	4-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056049	MS-C-A	4-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	Conductivity	189	uS/cm	Exova Accutest
1056050	MS-C-B	4-Sep-13	N-NO3 (Nitrate)	0.14	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	pH	7.69	pH units	Exova Accutest
1056050	MS-C-B	4-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	N-NH3 (Ammonia)	0.03	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056050	MS-C-B	4-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	Conductivity	305	uS/cm	Exova Accutest
1056051	MS-C-D	4-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	pH	8.08	pH units	Exova Accutest
1056051	MS-C-D	4-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056051	MS-C-D	4-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	Conductivity	287	uS/cm	Exova Accutest
1056052	MS-C-E	4-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	pH	8.13	pH units	Exova Accutest
1056052	MS-C-E	4-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1056052	MS-C-E	4-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	Conductivity	180	uS/cm	Exova Accutest
1058137	MS-C-A	10-Sep-13	N-NO3 (Nitrate)	0.13	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	pH	7.36	pH units	Exova Accutest
1058137	MS-C-A	10-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	N-NH3 (Ammonia)	0.06	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1058137	MS-C-A	10-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	Conductivity	301	uS/cm	Exova Accutest
1058138	MS-C-E	10-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	pH	8.05	pH units	Exova Accutest
1058138	MS-C-E	10-Sep-13	Total Suspended Solids	5	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	N-NH3 (Ammonia)	0.15	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1058138	MS-C-E	10-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	Conductivity	317	uS/cm	Exova Accutest
1058139	MQ-C-B	10-Sep-13	N-NO3 (Nitrate)	0.12	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	pH	8.01	pH units	Exova Accutest
1058139	MQ-C-B	10-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	Oil & Grease - Non-mineral	<1	mg/L	Exova Accutest
1058139	MQ-C-B	10-Sep-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1058140	MQ-C-D	10-Sep-13	Conductivity	269	uS/cm	Exova Accutest
1058140	MQ-C-D	10-Sep-13	N-NO3 (Nitrate)	<0.10	mg/L	Exova Accutest

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1058140	MQ-C-D	10-Sep-13	pH	7.96	pH units	Exova Accutest
1058140	MQ-C-D	10-Sep-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1058140	MQ-C-D	10-Sep-13	N-NH3 (Ammonia)	0.02	mg/L	Exova Accutest
1058140	MQ-C-D	10-Sep-13	Oil & Grease - Mineral	<1	mg/L	Exova Accutest
1058140	MQ-C-D	10-Sep-13	Oil & Grease - Non-mineral	2	mg/L	Exova Accutest
1058140	MQ-C-D	10-Sep-13	Oil & Grease - Total	2	mg/L	Exova Accutest

**Note: Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Envinronmental Protection Series Method EPS/1/RM/13)*
Acute Lethality to Daphnia magna (as per Environment Canada's Envinronmental Protection Series Method EPS/1/RM/14).
Areas of Non-Compliances:
Sample Station MP-01(Milne Port WWTP) showed a non compliance for ammonia on September 18 (41.1mg/L vs. criteria of 4 mg/L for N-NH3). The discharge from the WWTP was not to the receiving environment, but was to the newly constructed PWSP. The WWTP is being commissioned shortly to replace the old RBC.
Sample Station MS-MRY-04(Mine Site RBC) showed non compliance for several parameters during September. The discharge from the RBC was not to the receiving environment, but was to the PWSP. The RBC is currently

Milne Port						
1064853	MP-01	10-Oct-13	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
1064853	MP-01	10-Oct-13	Chemical Oxygen Demand	46	mg/L	Exova Accutest
1064855	MP-01	10-Oct-13	Faecal Coliforms	10	ct/100mL	Exova Accutest
1064853	MP-01	10-Oct-13	Total Kjeldahl Nitrogen	1.86	mg/L	Exova Accutest
1064853	MP-01	10-Oct-13	N-NH3 (Ammonia)	0.19	mg/L	Exova Accutest
1064853	MP-01	10-Oct-13	Oil & Grease - Total	2	mg/L	Exova Accutest
1064853	MP-01	10-Oct-13	Total Suspended Solids	3	mg/L	Exova Accutest
1064853	MP-01	10-Oct-13	pH	7.86	pH units	Exova Accutest
1065649	MP-01	15-Oct-13	Biochemical Oxygen Demand	3	mg/L	Exova Accutest
1065649	MP-01	15-Oct-13	Chemical Oxygen Demand	39	mg/L	Exova Accutest
1065652	MP-01	15-Oct-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1065649	MP-01	15-Oct-13	Total Kjeldahl Nitrogen	1.93	mg/L	Exova Accutest
1065649	MP-01	15-Oct-13	N-NH3 (Ammonia)	0.2	mg/L	Exova Accutest
1065649	MP-01	15-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1065649	MP-01	15-Oct-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1065649	MP-01	15-Oct-13	pH	7.87	pH units	Exova Accutest
1067299	MP-01	22-Oct-13	Alkalinity as CaCO3	200	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	Chemical Oxygen Demand	35	mg/L	Exova Accutest
1067547	MP-01	22-Oct-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1067299	MP-01	22-Oct-13	Total Kjeldahl Nitrogen	1.95	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	N-NH3 (Ammonia)	0.1	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1067299	MP-01	22-Oct-13	pH	7.57	pH units	Exova Accutest
1069637	MP-01	29-Oct-13	Alkalinity as CaCO3	215	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	Chemical Oxygen Demand	37	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	Total Kjeldahl Nitrogen	1.64	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	N-NH3 (Ammonia)	0.11	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1069637	MP-01	29-Oct-13	pH	8.12	pH units	Exova Accutest
MARY RIVER MINE SITE						
1065602	MS-MRY-04	15-Oct-13	Biochemical Oxygen Demand	40	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	Chemical Oxygen Demand	182	mg/L	Exova Accutest
1065622	MS-MRY-04	15-Oct-13	Faecal Coliforms	1800	ct/100mL	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	Total Kjeldahl Nitrogen	13.6	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	N-NH3 (Ammonia)	9.17	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	Total Phosphorus	5.44	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	Total Suspended Solids	163	mg/L	Exova Accutest
1065602	MS-MRY-04	15-Oct-13	pH	7.28	pH units	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Biochemical Oxygen Demand	39	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Chemical Oxygen Demand	242	mg/L	Exova Accutest
1065623	MS-MRY-0401	15-Oct-13	Faecal Coliforms	1700	ct/100mL	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Total Kjeldahl Nitrogen	15.6	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	N-NH3 (Ammonia)	9.57	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Total Phosphorus	6.9	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	Total Suspended Solids	180	mg/L	Exova Accutest
1065603	MS-MRY-0401	15-Oct-13	pH	7.37	pH units	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Chemical Oxygen Demand	<5	mg/L	Exova Accutest
1065624	MS-MRY-0402	15-Oct-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Total Phosphorus	<0.003	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1065604	MS-MRY-0402	15-Oct-13	pH	7.23	pH units	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Chemical Oxygen Demand	<5	mg/L	Exova Accutest
1065625	MS-MRY-0403	15-Oct-13	Faecal Coliforms	0	ct/100mL	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	N-NH3 (Ammonia)	<0.02	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Total Phosphorus	<0.003	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	Total Suspended Solids	<2	mg/L	Exova Accutest
1065605	MS-MRY-0403	15-Oct-13	pH	6.84	pH units	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Alkalinity as CaCO3	194	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Biochemical Oxygen Demand	36	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Chemical Oxygen Demand	190	mg/L	Exova Accutest
1067551	MS-MRY-04	22-Oct-13	Faecal Coliforms	1400	ct/100mL	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Total Kjeldahl Nitrogen	21.8	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	N-NH3 (Ammonia)	15.9	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Oil & Grease - Total	<1	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Total Phosphorus	6.38	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	Total Suspended Solids	131	mg/L	Exova Accutest
1067302	MS-MRY-04	22-Oct-13	pH	7.56	pH units	Exova Accutest
1069634	MS-MRY-04	29-Oct-13	Alkalinity as CaCO3	112	mg/L	Exova Accutest

Baffinland

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1069634	*MS-MRY-04*	*29-Oct-13*	*Biochemical Oxygen Demand*	18	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*Chemical Oxygen Demand*	141	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*Total Kjeldahl Nitrogen*	6.74	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*N-NH3 (Ammonia)*	3.26	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*Total Phosphorus*	3.45	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*Total Suspended Solids*	87	*mg/L*	*Exova Accutest*
1069634	*MS-MRY-04*	*29-Oct-13*	*pH*	7.72	*pH units*	*Exova Accutest*

Non-compliances to the Water Licence are indicated by yellow shading. Sample Station MS-MRY-04 (Mine Site RBC) showed non-compliance for several parameters during October. The discharge from the RBC was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The RBC was in an upset condition due in part to the fluctuating loadings received during commissioning of the new sewage treatment pland (MS-01). The RBC is currently being phased out and is soon to be replaced shortly with the above referenced plant.
Note: *MS-MRY-0401 is a field duplicate of MS-MRY-04. MS-MRY-0402 is a field blank for MS-MRY-04. MS-MRY-0403 is a travel blank for MS-MRY-04.*

Milne Port

1070666	*MP-01*	*5-Nov-13*	*Biochemical Oxygen Demand*	1	*mg/L*	*Exova*
1070683	*MP-01*	*5-Nov-13*	*Faecal Coliforms*	5	*ct/100mL*	*Exova*
1070666	*MP-01*	*5-Nov-13*	*Total Kjeldahl Nitrogen*	1.4	*mg/L*	*Exova*
1070666	*MP-01*	*5-Nov-13*	*N-NH3 (Ammonia)*	0.18	*mg/L*	*Exova*
1070666	*MP-01*	*5-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1070666	*MP-01*	*5-Nov-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova*
1070666	*MP-01*	*5-Nov-13*	*pH*	8.65	*pH units*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*Biochemical Oxygen Demand*	9	*mg/L*	*Exova*
1072307	*MP-01*	*12-Nov-13*	*Faecal Coliforms*	300	*ct/100mL*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*Total Kjeldahl Nitrogen*	2.01	*mg/L*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*N-NH3 (Ammonia)*	1.88	*mg/L*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*Oil & Grease - Total*	5	*mg/L*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova*
1072304	*MP-01*	*12-Nov-13*	*pH*	7.84	*pH units*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*Biochemical Oxygen Demand*	10	*mg/L*	*Exova*
1073900	*MP-01*	*19-Nov-13*	*Faecal Coliforms*	6	*ct/100mL*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*Total Kjeldahl Nitrogen*	6.94	*mg/L*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*N-NH3 (Ammonia)*	5.69	*mg/L*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*Total Suspended Solids*	<2	*mg/L*	*Exova*
1073897	*MP-01*	*19-Nov-13*	*pH*	8.03	*pH units*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova*
1075776	*MP-01*	*26-Nov-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*Total Kjeldahl Nitrogen*	1.15	*mg/L*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*N-NH3 (Ammonia)*	0.24	*mg/L*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*Total Suspended Solids*	3	*mg/L*	*Exova*
1075773	*MP-01*	*26-Nov-13*	*pH*	7.79	*pH units*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1075778	*MP-0101*	*26-Nov-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*Total Kjeldahl Nitrogen*	2.26	*mg/L*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*N-NH3 (Ammonia)*	1.89	*mg/L*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1075775	*MP-0101*	*26-Nov-13*	*pH*	7.8	*pH units*	*Exova*

MARY RIVER MINE SITE

1070689	*MS-MRY-04*	*5-Nov-13*	*Biochemical Oxygen Demand*	6	*mg/L*	*Exova*
1070692	*MS-MRY-04*	*5-Nov-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*Total Kjeldahl Nitrogen*	2.73	*mg/L*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*N-NH3 (Ammonia)*	0.31	*mg/L*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*Total Phosphorus*	1.25	*mg/L*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*Total Suspended Solids*	11	*mg/L*	*Exova*
1070689	*MS-MRY-04*	*5-Nov-13*	*pH*	7.81	*pH units*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*Biochemical Oxygen Demand*	29	*mg/L*	*Exova*
1072303	*MS-MRY-04*	*12-Nov-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*Total Kjeldahl Nitrogen*	11.2	*mg/L*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*N-NH3 (Ammonia)*	4.61	*mg/L*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*Total Phosphorus*	3.63	*mg/L*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*Total Suspended Solids*	38	*mg/L*	*Exova*
1072299	*MS-MRY-04*	*12-Nov-13*	*pH*	8	*pH units*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova*
1075789	*MS-01*	*26-Nov-13*	*Faecal Coliforms*	1	*ct/100mL*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*Total Kjeldahl Nitrogen*	0.82	*mg/L*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*N-NH3 (Ammonia)*	0.43	*mg/L*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*Total Phosphorus*	19	*mg/L*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*Total Suspended Solids*	3	*mg/L*	*Exova*
1075787	*MS-01*	*26-Nov-13*	*pH*	7.81	*pH units*	*Exova*

Non-compliances to the Water Licence are indicated by yellow shading. Sample Stations MS-MRY-04 (Mine Site RBC) and MS-01 (Mine Site MBR) showed non-compliance for several parameters during November. The discharge from the WWTPs was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The RBC was in an upset condition due in part to the fluctuating loadings received during the commissionng of the new sewage treatment plant (MS-01). The RBC is currently being phased out and is soon to be replaced shortly with the above referenced plant.

Note: MP-0101 is a field duplicate of MP-01.

Milne Port

1077051	*MP-01*	*3-Dec-13*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1077053	*MP-01*	*3-Dec-13*	*Faecal Coliforms*	1	*ct/100mL*	*Exova*
1077051	*MP-01*	*3-Dec-13*	*Total Kjeldahl Nitrogen*	1.29	*mg/L*	*Exova*
1077051	*MP-01*	*3-Dec-13*	*N-NH3 (Ammonia)*	0.34	*mg/L*	*Exova*
1077051	*MP-01*	*3-Dec-13*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1077051	*MP-01*	*3-Dec-13*	*Total Suspended Solids*	3	*mg/L*	*Exova*
1077051	*MP-01*	*3-Dec-13*	*pH*	7.88	*pH units*	*Exova*
1078423	*MP-01*	*10-Dec-13*	*Biochemical Oxygen Demand*	1	*mg/L*	*Exova*
1078426	*MP-01*	*10-Dec-13*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*

TABLE 2.6

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2013 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1078423	MP-01	10-Dec-13	Total Kjeldahl Nitrogen	2.03	mg/L	Exova
1078423	MP-01	10-Dec-13	N-NH3 (Ammonia)	0.42	mg/L	Exova
1078423	MP-01	10-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1078423	MP-01	10-Dec-13	Total Suspended Solids	<2	mg/L	Exova
1078423	MP-01	10-Dec-13	pH	7.92	pH units	Exova
1079394	MP-01	16-Dec-13	Biochemical Oxygen Demand	<1	mg/L	Exova
1079397	MP-01	16-Dec-13	Faecal Coliforms	0	ct/100mL	Exova
1079394	MP-01	16-Dec-13	Total Kjeldahl Nitrogen	0.65	mg/L	Exova
1079394	MP-01	16-Dec-13	N-NH3 (Ammonia)	0.4	mg/L	Exova
1079394	MP-01	16-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1079394	MP-01	16-Dec-13	Total Suspended Solids	<2	mg/L	Exova
1079394	MP-01	16-Dec-13	pH	7.85	pH units	Exova
1080504	MP-01	26-Dec-13	Biochemical Oxygen Demand	3	mg/L	Exova
1080506	MP-01	26-Dec-13	Faecal Coliforms	0	ct/100mL	Exova
1080504	MP-01	26-Dec-13	Total Kjeldahl Nitrogen	1.63	mg/L	Exova
1080504	MP-01	26-Dec-13	N-NH3 (Ammonia)	0.42	mg/L	Exova
1080504	MP-01	26-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1080504	MP-01	26-Dec-13	Total Suspended Solids	3	mg/L	Exova
1080504	MP-01	26-Dec-13	pH	7.84	pH units	Exova
MARY RIVER MINE SITE						
1079382	MS-MRY-04	14-Dec-13	Biochemical Oxygen Demand	17	mg/L	Exova
1079386	MS-MRY-04	14-Dec-13	Faecal Coliforms	48	ct/100mL	Exova
1079382	MS-MRY-04	14-Dec-13	Total Kjeldahl Nitrogen	34.7	mg/L	Exova
1079382	MS-MRY-04	14-Dec-13	N-NH3 (Ammonia)	34.7	mg/L	Exova
1079382	MS-MRY-04	14-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1079382	MS-MRY-04	14-Dec-13	Total Phosphorus	3.91	mg/L	Exova
1079382	MS-MRY-04	14-Dec-13	Total Suspended Solids	13	mg/L	Exova
1079382	MS-MRY-04	14-Dec-13	pH	7.61	pH units	Exova
1080498	MS-MRY-04	26-Dec-13	Biochemical Oxygen Demand	20	mg/L	Exova
1080500	MS-MRY-04	26-Dec-13	Faecal Coliforms	170	ct/100mL	Exova
1080498	MS-MRY-04	26-Dec-13	Total Kjeldahl Nitrogen	5.51	mg/L	Exova
1080498	MS-MRY-04	26-Dec-13	N-NH3 (Ammonia)	3.47	mg/L	Exova
1080498	MS-MRY-04	26-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1080498	MS-MRY-04	26-Dec-13	Total Phosphorus	3.03	mg/L	Exova
1080498	MS-MRY-04	26-Dec-13	Total Suspended Solids	21	mg/L	Exova
1080498	MS-MRY-04	26-Dec-13	pH	7.58	pH units	Exova
1077059	MS-01	3-Dec-13	Biochemical Oxygen Demand	2	mg/L	Exova
1077061	MS-01	3-Dec-13	Faecal Coliforms	0	ct/100mL	Exova
1077059	MS-01	3-Dec-13	Total Kjeldahl Nitrogen	1.32	mg/L	Exova
1077059	MS-01	3-Dec-13	N-NH3 (Ammonia)	0.16	mg/L	Exova
1077059	MS-01	3-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1077059	MS-01	3-Dec-13	Total Phosphorus	16.3	mg/L	Exova
1077059	MS-01	3-Dec-13	Total Suspended Solids	<2	mg/L	Exova
1077059	MS-01	3-Dec-13	pH	7.63	pH units	Exova
1078416	MS-01	10-Dec-13	Biochemical Oxygen Demand	3	mg/L	Exova
1078418	MS-01	10-Dec-13	Faecal Coliforms	1	ct/100mL	Exova
1078416	MS-01	10-Dec-13	Total Kjeldahl Nitrogen	6.74	mg/L	Exova
1078416	MS-01	10-Dec-13	N-NH3 (Ammonia)	4.7	mg/L	Exova
1078416	MS-01	10-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1078416	MS-01	10-Dec-13	Total Phosphorus	25.6	mg/L	Exova
1078416	MS-01	10-Dec-13	Total Suspended Solids	3	mg/L	Exova
1078416	MS-01	10-Dec-13	pH	6.31	pH units	Exova
1079384	MS-01	14-Dec-13	Biochemical Oxygen Demand	10	mg/L	Exova
1079387	MS-01	14-Dec-13	Faecal Coliforms	490	ct/100mL	Exova
1079384	MS-01	14-Dec-13	Total Kjeldahl Nitrogen	18.8	mg/L	Exova
1079384	MS-01	14-Dec-13	N-NH3 (Ammonia)	15	mg/L	Exova
1079384	MS-01	14-Dec-13	Oil & Grease - Total	4	mg/L	Exova
1079384	MS-01	14-Dec-13	Total Phosphorus	30.3	mg/L	Exova
1079384	MS-01	14-Dec-13	Total Suspended Solids	14	mg/L	Exova
1079384	MS-01	14-Dec-13	pH	5.68	pH units	Exova
1080501	MS-01	26-Dec-13	Biochemical Oxygen Demand	8	mg/L	Exova
1080503	MS-01	26-Dec-13	Faecal Coliforms	280	ct/100mL	Exova
1080501	MS-01	26-Dec-13	Total Kjeldahl Nitrogen	2.16	mg/L	Exova
1080501	MS-01	26-Dec-13	N-NH3 (Ammonia)	1.29	mg/L	Exova
1080501	MS-01	26-Dec-13	Oil & Grease - Total	<1	mg/L	Exova
1080501	MS-01	26-Dec-13	Total Phosphorus	34.4	mg/L	Exova
1080501	MS-01	26-Dec-13	Total Suspended Solids	10	mg/L	Exova
1080501	MS-01	26-Dec-13	pH	7.51	pH units	Exova

Non-compliances to the Water Licence are indicated by yellow shading. Sample Stations MS-MRY-04 (Mine Site RBC) and MS-01 (Mine Site MBR) showed non-compliance for several parameters during December. The discharge from the WWTPs was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The RBC was in an upset condition due in part to the fluctuating loadings received during the commissionng of the new sewage treatment plant (MS-01). The RBC is currently being phased out and is soon to be replaced shortly with the above referenced plant..

ATTACHMENT 2

2014 QIA-NWB Annual Report

- Table 2.5 Water Licence Water Quality Monitoring Locations
- Table 2.8 Water Quality Results for Water Licence Monitoring Locations

Baffinland

TABLE 2.5

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83) Easting (m)	UTM Coordinates (NAD83) Northing (m)	Latitude	Longitude
Milne Port Site					
MP-MRY-2	Fresh Water Intake at Philips Creek (Summer)	514,503	7,964,579	71Á46' 52" N	80Á35' 4" W
MP-MRY-3	Fresh Water Intake from Km 32 Lake (Winter)	521,547	7,953,735	71Á41' 00" N	80Á23' 09" W
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	503,209	7,976,485	71Á53' 18" N	80Á54' 27" W
MP-01a	Milne Port Waste Stabilisation Pond (PWSP)	503,625	7,976,015	71Á53' 03" N	80Á53' 44" W
MP-02	Milne Port Maintenance Shop Oily water (WWTF)	503,754	7,976,209	71Á53' 09" N	80Á53' 30" W
MP-03	Milne Port Bulk Fuel Storage Facility Stormwater	503,638	7,976,272	71Á52' 11" N	80Á53' 43" W
MP-04	Milne Port Landfarm Facility Storm water	503,710	7,975,574	71Á52' 49" N	80Á53' 35" W
MP-MRY-04	Milne Exploration Phase Sewage Treatment Facilities (to become inactive after transition period)	503,462	7,975,764	71Á52' 55" N	80Á54' 1" W
MP-MRY-04a	Milne Exploration Phase Sewage PWSP (to become inactive after transition period)	503,344	7,976,118	71Á53' 6" N	80Á54' 13" W
MP-MRY-7	Milne Exploration Phase Bladder Farm Fuel Storage Facility Storm water (to become inactive after Transition period)	503,309	7,976,097	71Á53' 6" N	80Á54' 17" W
MP-MRY-12	Bulk Sample Stockpile Area Seepage	503,357	7,976,453	71Á53' 17" N	80Á54' 11" W
MP-C-A	Surface discharge downstream of construction area at Milne Port	503,214	7,976,483	71Á53' 18" N	80Á54' 27" W
MP-C-B		503,191	7,975,396	71Á52' 43" N	80Á54' 29" W
MP-C-C		503,436	7,975,427	71Á52' 44.0" N	80Á54' 03.7" W
MP-C-D		503,651	7,976,363	71Á53' 14" N	80Á53' 41" W
MP-C-E		503,736	7,976,346	71Á53' 13.7" N	80Á53' 32.4" W
MP-C-F		503,922	7,976,304	71Á53' 12" N	80Á53' 13" W
MP-C-G		502,939	7,976,238	71Á53' 10.2" N	80Á54' 55.1" W
MP-C-H		504,113	7,976,509	71Á53' 18.9" N	80Á52' 53.2" W
MP-Q1-01	Surface Runoff and or Discharge Quarries	503,828	7,975,062	71Á52' 32" N	80Á53' 23" W
MP-Q1-02		503,811	7,975,272	71Á52' 39" N	80Á53' 25" W
Mary River Mine Site					
MS-MRY-1	Fresh Water Intake from Camp Lake	557,793	7,914,684	71Á19' 38.6" N	79Á22' 57" W
MS-01	Mine Site Sewage Treatment Facilities	561,322	7,913,257	71Á18' 49.4"	79Á17' 5.6" W
MS-MRY-4	Exploration Camp Sewage Treaatment Facility	558,141	7,914,427	71Á19' 30" N	79Á22' 22.6" W
MS-MRY-4a	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	558,470	7,914,237	71Á19' 23.6" N	79Á21' 50" W
MS-MRY-6	Exploration Camp Bulk Fuel Storage Facility (Bladder Farm) Stormwater	558,186	7,914,780	71Á19' 41" N	79Á22' 17" W
MS-MRY-9	Bulk Sample Open Pit - Suface water drainage (to become inactive in future)	563,246	7,914,632	71Á19' 32" N	79Á13' 48" W
MS-MRY-10	Bulk Sample Weathered Ore Stockpile - Downstream surface water drainage (to become inactive in the future)	563,488	7,915,197	71Á19' 50" N	79Á13' 22" W
MRY-11	Bulk Sample Processing - Downstream surface water discharge (to become inactive in the future)	560,690	7,913,350	71Á18' 53" N	79Á18' 09" W
MS-MRY-13a & MS-MRY-13b	Non-Hazarous Waste Landfill - Downstream surface water drainage	13a: 560,754 13b: 560,642	13a: 7,912,484 13b: 7,912,527	13a: 71Á18' 25" N 13b: 71Á18'26.5" N	13a: 79Á18' 5" W 13b: 79Á18' 16.1" W
MS-C-A	Surface discharge downstream of construction area at Mine Site	561,263	7,913,571	71Á19' 00" N	79Á17' 11" W
MS-C-B		561,454	7,913,537	71Á18' 58" N	79Á16' 52" W
MS-C-C		561,110	7,913,199	71Á18' 48" N	79Á17' 27" W
MS-C-D		561,008	7,913,280	71Á18' 50" N	79Á17' 37" W
MS-C-E		560,980	7,913,388	71Á18' 54" N	79Á17' 40" W
MS-C-F		561,797	7,913,278	71Á18' 49" N	79Á16' 17" W
MS-C-G		561,813	7,911,830	71Á18' 03" N	79Á16' 20" W
MS-C-H		561,162	7,912,067	71Á18" 11" N	79Á17' 25" W
MQ-C-A	Surface Runoff and or Discharge Quarries	559,489	7,914,408	71Á19' 28" N	79Á20' 07" W
MQ-C-B		560,076	7,913,888	71Á19' 11" N	79Á19' 09" W
MQ-C-D		559,422	7,914,223	71Á19' 23" N	79Á20' 14" W

Notes:
Monitoring Station names beginning with MP-Q and MQ-C correspond to QIA Quarry Lease and Quarry Management Plans
The locations of the following Monitoring Stations have not been established at this stage of construction:

MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)
MS-02	Mine Site Maintenance Shop Oily Water WWTF
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater
MS-04	Mine Site Fuel Unloading Station Stormwater
MS-05	Mine Site Landfarm Facility Stormwater
MS-06+	Ore Stockpile Pond Stormwater
MS-07	Run of Mine Ore Stockpile Pond Stormwater
MS-08	Waste Rock Stockpile West pond
MS-09	Waste Rock Stockpile East pond

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
MILNE PORT						
1080947	MP-01	2-Jan-14	Biochemical Oxygen Demand	2	mg/L	Exova
1080951	MP-01	2-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1080947	MP-01	2-Jan-14	Total Kjeldahl Nitrogen	0.32	mg/L	Exova
1080947	MP-01	2-Jan-14	N-NH3 (Ammonia)	0.19	mg/L	Exova
1080947	MP-01	2-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1080947	MP-01	2-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1080947	MP-01	2-Jan-14	pH	7.82	pH units	Exova
1080948	**MP-0101	2-Jan-14	Biochemical Oxygen Demand	2	mg/L	Exova
1080952	**MP-0101	2-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1080948	**MP-0101	2-Jan-14	Total Kjeldahl Nitrogen	0.26	mg/L	Exova
1080948	**MP-0101	2-Jan-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1080948	**MP-0101	2-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1080948	**MP-0101	2-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1080948	**MP-0101	2-Jan-14	pH	7.84	pH units	Exova
1081261	MP-01	7-Jan-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1081264	MP-01	7-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1081261	MP-01	7-Jan-14	Total Kjeldahl Nitrogen	1.2	mg/L	Exova
1081261	MP-01	7-Jan-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1081261	MP-01	7-Jan-14	Oil & Grease - Total	3	mg/L	Exova
1081261	MP-01	7-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1081261	MP-01	7-Jan-14	pH	7.91	pH units	Exova
1082633	MP-01	14-Jan-14	Biochemical Oxygen Demand	1	mg/L	Exova
1082635	MP-01	14-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1082633	MP-01	14-Jan-14	Total Kjeldahl Nitrogen	1.98	mg/L	Exova
1082633	MP-01	14-Jan-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1082633	MP-01	14-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1082633	MP-01	14-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1082633	MP-01	14-Jan-14	pH	7.85	pH units	Exova
1083721	MP-01	21-Jan-14	Biochemical Oxygen Demand	2	mg/L	Exova
1083723	MP-01	21-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1083721	MP-01	21-Jan-14	Total Kjeldahl Nitrogen	1.39	mg/L	Exova
1083721	MP-01	21-Jan-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1083721	MP-01	21-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1083721	MP-01	21-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1083721	MP-01	21-Jan-14	pH	7.92	pH units	Exova
1084752	MP-01	28-Jan-14	Biochemical Oxygen Demand	5	mg/L	Exova
1084754	MP-01	28-Jan-14	Faecal Coliforms	0	ct/100mL	Exova
1084752	MP-01	28-Jan-14	Total Kjeldahl Nitrogen	0.63	mg/L	Exova
1084752	MP-01	28-Jan-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1084752	MP-01	28-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1084752	MP-01	28-Jan-14	Total Suspended Solids	3.4	mg/L	Exova
1084752	MP-01	28-Jan-14	pH	7.92	pH units	Exova
1084752	MP-01	28-Jan-14	*Toxicity	Non-lethal		Exova
MARY RIVER MINE SITE						
1080941	MS-MRY-04	2-Jan-14	Biochemical Oxygen Demand	12	mg/L	Exova
1080943	MS-MRY-04	2-Jan-14	Faecal Coliforms	5	ct/100mL	Exova
1080941	MS-MRY-04	2-Jan-14	Total Kjeldahl Nitrogen	4.12	mg/L	Exova
1080941	MS-MRY-04	2-Jan-14	N-NH3 (Ammonia)	0.66	mg/L	Exova
1080941	MS-MRY-04	2-Jan-14	Oil & Grease - Total	5	mg/L	Exova
1080941	MS-MRY-04	2-Jan-14	Total Phosphorus	2.49	mg/L	Exova
1080941	MS-MRY-04	2-Jan-14	Total Suspended Solids	21	mg/L	Exova
1080941	MS-MRY-04	2-Jan-14	pH	7.59	pH units	Exova
1081258	MS-MRY-04	7-Jan-14	Biochemical Oxygen Demand	21	mg/L	Exova
1081260	MS-MRY-04	7-Jan-14	Faecal Coliforms	1260	ct/100mL	Exova
1081258	MS-MRY-04	7-Jan-14	Total Kjeldahl Nitrogen	8.71	mg/L	Exova
1081258	MS-MRY-04	7-Jan-14	N-NH3 (Ammonia)	5.19	mg/L	Exova
1081258	MS-MRY-04	7-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1081258	MS-MRY-04	7-Jan-14	Total Phosphorus	4.16	mg/L	Exova
1081258	MS-MRY-04	7-Jan-14	Total Suspended Solids	26	mg/L	Exova
1081258	MS-MRY-04	7-Jan-14	pH	7.75	pH units	Exova
1084226	MS-MRY-04	23-Jan-14	Biochemical Oxygen Demand	12	mg/L	Exova
1084227	MS-MRY-04	23-Jan-14	Faecal Coliforms	190	ct/100mL	Exova
1084226	MS-MRY-04	23-Jan-14	Total Kjeldahl Nitrogen	18.5	mg/L	Exova
1084226	MS-MRY-04	23-Jan-14	N-NH3 (Ammonia)	17.2	mg/L	Exova
1084226	MS-MRY-04	23-Jan-14	Oil & Grease - Total	3	mg/L	Exova
1084226	MS-MRY-04	23-Jan-14	Total Phosphorus	3.47	mg/L	Exova
1084226	MS-MRY-04	23-Jan-14	Total Suspended Solids	9	mg/L	Exova
1084226	MS-MRY-04	23-Jan-14	pH	7.66	pH units	Exova
1084720	MS-MRY-04	28-Jan-14	Biochemical Oxygen Demand	19	mg/L	Exova
1084722	MS-MRY-04	28-Jan-14	Faecal Coliforms	160	ct/100mL	Exova
1084720	MS-MRY-04	28-Jan-14	Total Kjeldahl Nitrogen	10.7	mg/L	Exova
1084720	MS-MRY-04	28-Jan-14	N-NH3 (Ammonia)	7.53	mg/L	Exova
1084720	MS-MRY-04	28-Jan-14	Oil & Grease - Total	2	mg/L	Exova
1084720	MS-MRY-04	28-Jan-14	Total Phosphorus	4.11	mg/L	Exova
1084720	MS-MRY-04	28-Jan-14	Total Suspended Solids	19	mg/L	Exova
1084720	MS-MRY-04	28-Jan-14	pH	7.51	pH units	Exova
1080954	MS-01	2-Jan-14	Biochemical Oxygen Demand	22	mg/L	Exova
1080958	MS-01	2-Jan-14	Faecal Coliforms	400	ct/100mL	Exova
1080954	MS-01	2-Jan-14	Total Kjeldahl Nitrogen	18.5	mg/L	Exova
1080954	MS-01	2-Jan-14	N-NH3 (Ammonia)	8.52	mg/L	Exova
1080954	MS-01	2-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1080954	MS-01	2-Jan-14	Total Phosphorus	29.7	mg/L	Exova
1080954	MS-01	2-Jan-14	Total Suspended Solids	28	mg/L	Exova
1080954	MS-01	2-Jan-14	pH	7.5	pH units	Exova
1081252	MS-01	7-Jan-14	Biochemical Oxygen Demand	53	mg/L	Exova
1081254	MS-01	7-Jan-14	Faecal Coliforms	140	ct/100mL	Exova
1081252	MS-01	7-Jan-14	Total Kjeldahl Nitrogen	18.9	mg/L	Exova
1081252	MS-01	7-Jan-14	N-NH3 (Ammonia)	16.7	mg/L	Exova
1081252	MS-01	7-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1081252	MS-01	7-Jan-14	Total Phosphorus	21.9	mg/L	Exova
1081252	MS-01	7-Jan-14	Total Suspended Solids	10	mg/L	Exova
1081252	MS-01	7-Jan-14	pH	7.34	pH units	Exova
1084223	MS-01	23-Jan-14	Biochemical Oxygen Demand	2	mg/L	Exova
1084224	MS-01	23-Jan-14	Faecal Coliforms	17	ct/100mL	Exova
1084223	MS-01	23-Jan-14	Total Kjeldahl Nitrogen	1.19	mg/L	Exova
1084223	MS-01	23-Jan-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1084223	MS-01	23-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1084223	MS-01	23-Jan-14	Total Phosphorus	12.7	mg/L	Exova
1084223	MS-01	23-Jan-14	Total Suspended Solids	<2	mg/L	Exova
1084223	MS-01	23-Jan-14	pH	7.98	pH units	Exova
1084737	MS-01	28-Jan-14	Biochemical Oxygen Demand	4	mg/L	Exova
1084751	MS-01	28-Jan-14	Faecal Coliforms	140	ct/100mL	Exova
1084737	MS-01	28-Jan-14	Total Kjeldahl Nitrogen	0.76	mg/L	Exova
1084737	MS-01	28-Jan-14	N-NH3 (Ammonia)	0.6	mg/L	Exova
1084737	MS-01	28-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1084737	MS-01	28-Jan-14	Total Phosphorus	0.17	mg/L	Exova
1084737	MS-01	28-Jan-14	Total Suspended Solids	4	mg/L	Exova
1084737	MS-01	28-Jan-14	pH	7.84	pH units	Exova
1084737	MS-01	28-Jan-14	*Toxicity	Non-lethal		Exova
1085204	MS-01	30-Jan-14	Biochemical Oxygen Demand	6	mg/L	Exova
1085205	MS-01	30-Jan-14	Faecal Coliforms	130	ct/100mL	Exova
1085204	MS-01	30-Jan-14	Total Kjeldahl Nitrogen	1.01	mg/L	Exova
1085204	MS-01	30-Jan-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1085204	MS-01	30-Jan-14	Oil & Grease - Total	<1	mg/L	Exova
1085204	MS-01	30-Jan-14	Total Phosphorus	0.26	mg/L	Exova
1085204	MS-01	30-Jan-14	Total Suspended Solids	16	mg/L	Exova
1085204	MS-01	30-Jan-14	pH	7.79	pH units	Exova

Exceedances to the Water Licence criteria are indicated by yellow shading. Sample Stations MS-MRY-04 (Mine Site RBC) and MS-01 (Mine Site MBR) showed exceedances for several parameters during January.
The discharge from the WWTPs was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The non-compliances for MS-MRY-04 and MS-01 were due to the decommissioning and commissioning process (for the exploration camp RBC and the new MBR, respectively) which caused upset conditions in the plants.
The RBC (MS-MRY-04) was in the process of being phased out and is soon to be replaced shortly with the new MBR plant.
**Note: Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Biological Test Method EPS/1/RM/14).
***Note: MP-0101 is a field duplicate of MP-01.*

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
MILNE PORT						
1085952	*MP-01*	*4-Feb-14*	*Biochemical Oxygen Demand*	5	*mg/L*	*Exova*
1085954	*MP-01*	*4-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Total Kjeldahl Nitrogen*	0.12	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*N-NH3 (Ammonia)*	0.09	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*Total Suspended Solids*	6	*mg/L*	*Exova*
1085952	*MP-01*	*4-Feb-14*	*pH*	7.95	*pH units*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Biochemical Oxygen Demand*	7	*mg/L*	*Exova*
1087026	*MP-01*	*11-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	1.03	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*N-NH3 (Ammonia)*	0.28	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1087024	*MP-01*	*11-Feb-14*	*pH*	7.98	*pH units*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Biochemical Oxygen Demand*	4	*mg/L*	*Exova*
1088014	*MP-01*	*18-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Total Kjeldahl Nitrogen*	0.84	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*N-NH3 (Ammonia)*	0.14	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1088012	*MP-01*	*18-Feb-14*	*pH*	8.05	*pH units*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Biochemical Oxygen Demand*	*2*	*mg/L*	*Exova*
1089631	*MP-01*	*25-Feb-14*	*Faecal Coliforms*	65	*ct/100mL*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	1.32	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.16	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*Total Suspended Solids*	<2	*mg/L*	*Exova*
1089629	*MP-01*	*25-Feb-14*	*pH*	8.06	*pH units*	*Exova*
MARY RIVER MINE SITE						
1087031	*MS-MRY-04*	*11-Feb-14*	*Biochemical Oxygen Demand*	13	*mg/L*	*Exova*
1087034	*MS-MRY-04*	*11-Feb-14*	*Faecal Coliforms*	40	*ct/100mL*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	14.2	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*N-NH3 (Ammonia)*	10.9	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Oil & Grease - Total*	5	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Phosphorus*	4.75	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*Total Suspended Solids*	8	*mg/L*	*Exova*
1087031	*MS-MRY-04*	*11-Feb-14*	*pH*	7.55	*pH units*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Biochemical Oxygen Demand*	3	*mg/L*	*Exova*
1085958	*MS-01*	*4-Feb-14*	*Faecal Coliforms*	2	*ct/100mL*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Kjeldahl Nitrogen*	0.15	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*N-NH3 (Ammonia)*	0.12	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Phosphorus*	0.389	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*Total Suspended Solids*	35	*mg/L*	*Exova*
1085956	*MS-01*	*4-Feb-14*	*pH*	7.72	*pH units*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Biochemical Oxygen Demand*	3	*mg/L*	*Exova*
1087033	*MS-01*	*11-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Kjeldahl Nitrogen*	<0.10	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*N-NH3 (Ammonia)*	0.09	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Phosphorus*	0.13	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*Total Suspended Solids*	18	*mg/L*	*Exova*
1087029	*MS-01*	*11-Feb-14*	*pH*	7.80	*pH units*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Biochemical Oxygen Demand*	5	*mg/L*	*Exova*
1088018	*MS-01*	*18-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Kjeldahl Nitrogen*	2.45	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*N-NH3 (Ammonia)*	2.2	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Phosphorus*	0.18	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1088016	*MS-01*	*18-Feb-14*	*pH*	7.72	*pH units*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1089636	*MS-01*	*25-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	0.32	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.31	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Oil & Grease - Total*	2	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Phosphorus*	0.13	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1089633	*MS-01*	*25-Feb-14*	*pH*	7.78	*pH units*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Biochemical Oxygen Demand*	<1	*mg/L*	*Exova*
1089637	*MS-0101*	*25-Feb-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Kjeldahl Nitrogen*	0.48	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*N-NH3 (Ammonia)*	0.4	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Phosphorus*	0.16	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*Total Suspended Solids*	4	*mg/L*	*Exova*
1089634	*MS-0101*	*25-Feb-14*	*pH*	7.70	*pH units*	*Exova*

Exceedances to the Water Licence criteria are indicated by yellow shading. Sample Stations MS-MRY-04 (Mine Site RBC) and MS-01 (Mine Site MBR) showed exceedances for several parameters at the beginning of February. Up until February 14th the discharge from the WWTFs was not to the receiving environment, but was to the PWSP, a lined and engineered containment pond. In the spring, after melt, the effluent will be resampled and re-treated if necessary prior to discharge to the receiving environment. The RBC was in an upset condition due in part to the fluctuating loadings received during the commissioning of the new sewage treatment plant (MS-01). As of February 14th, effluent from MS-01 is being discharged to Location #1. The RBC was taken offline as of February 24th.
***Note: MS-0101 is a field duplicate of MS-01.*

MILNE PORT						
1090474	*MP-01*	*4-Mar-14*	*Biochemical Oxygen Demand*	3	*mg/L*	*Exova*
1090476	*MP-01*	*4-Mar-14*	*Faecal Coliforms*	10	*ct/100mL*	*Exova*
1090474	*MP-01*	*4-Mar-14*	*Total Kjeldahl Nitrogen*	0.92	*mg/L*	*Exova*
1090474	*MP-01*	*4-Mar-14*	*N-NH3 (Ammonia)*	0.3	*mg/L*	*Exova*
1090474	*MP-01*	*4-Mar-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1090474	*MP-01*	*4-Mar-14*	*Total Suspended Solids*	2	*mg/L*	*Exova*
1090474	*MP-01*	*4-Mar-14*	*pH*	8.16	*pH units*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1091983	*MP-01*	*12-Mar-14*	*Faecal Coliforms*	0	*ct/100mL*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*Total Kjeldahl Nitrogen*	1.52	*mg/L*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*N-NH3 (Ammonia)*	0.21	*mg/L*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*Total Suspended Solids*	5	*mg/L*	*Exova*
1091981	*MP-01*	*12-Mar-14*	*pH*	7.63	*pH units*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1093122	*MP-01*	*18-Mar-14*	*Faecal Coliforms*	1	*ct/100mL*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*Total Kjeldahl Nitrogen*	2.19	*mg/L*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*N-NH3 (Ammonia)*	0.32	*mg/L*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*Total Suspended Solids*	10	*mg/L*	*Exova*
1093120	*MP-01*	*18-Mar-14*	*pH*	7.86	*pH units*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*Biochemical Oxygen Demand*	*6*	*mg/L*	*Exova*
*	*MP-01*	*25-Mar-14*	*Faecal Coliforms*	*	*ct/100mL*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*Total Kjeldahl Nitrogen*	1.29	*mg/L*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*N-NH3 (Ammonia)*	0.26	*mg/L*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*Oil & Grease - Total*	2	*mg/L*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*Total Suspended Solids*	10	*mg/L*	*Exova*
1094288	*MP-01*	*25-Mar-14*	*pH*	7.88	*pH units*	*Exova*
MARY RIVER MINE SITE						
1090481	*MS-01*	*4-Mar-14*	*Biochemical Oxygen Demand*	2	*mg/L*	*Exova*
1090487	*MS-01*	*4-Mar-14*	*Faecal Coliforms*	3	*ct/100mL*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*Total Kjeldahl Nitrogen*	0.94	*mg/L*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*N-NH3 (Ammonia)*	0.14	*mg/L*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*Oil & Grease - Total*	<1	*mg/L*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*Total Phosphorus*	0.2	*mg/L*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*Total Suspended Solids*	5	*mg/L*	*Exova*
1090481	*MS-01*	*4-Mar-14*	*pH*	7.86	*pH units*	*Exova*
1090484	*MS-0101*	*4-Mar-14*	*Biochemical Oxygen Demand*	1	*mg/L*	*Exova*
1090489	*MS-0101*	*4-Mar-14*	*Faecal Coliforms*	1	*ct/100mL*	*Exova*
1090484	*MS-0101*	*4-Mar-14*	*Total Kjeldahl Nitrogen*	1.95	*mg/L*	*Exova*

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1090484	MS-0101	4-Mar-14	N-NH3 (Ammonia)	1.68	mg/L	Exova
1090484	MS-0101	4-Mar-14	Oil & Grease - Total	<1	mg/L	Exova
1090484	MS-0101	4-Mar-14	Total Phosphorus	0.24	mg/L	Exova
1090484	MS-0101	4-Mar-14	Total Suspended Solids	4	mg/L	Exova
1090484	MS-0101	4-Mar-14	pH	7.09	pH units	Exova
1090485	MS-0102	4-Mar-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1090490	MS-0102	4-Mar-14	Faecal Coliforms	0	ct/100mL	Exova
1090485	MS-0102	4-Mar-14	Total Kjeldahl Nitrogen	0.27	mg/L	Exova
1090485	MS-0102	4-Mar-14	N-NH3 (Ammonia)	0.17	mg/L	Exova
1090485	MS-0102	4-Mar-14	Oil & Grease - Total	<1	mg/L	Exova
1090485	MS-0102	4-Mar-14	Total Phosphorus	<0.01	mg/L	Exova
1090485	MS-0102	4-Mar-14	Total Suspended Solids	<2	mg/L	Exova
1090485	MS-0102	4-Mar-14	pH	5.5	pH units	Exova
1090486	MS-0103	4-Mar-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1090491	MS-0103	4-Mar-14	Faecal Coliforms	0	ct/100mL	Exova
1090486	MS-0103	4-Mar-14	Total Kjeldahl Nitrogen	0.29	mg/L	Exova
1090486	MS-0103	4-Mar-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1090486	MS-0103	4-Mar-14	Oil & Grease - Total	<1	mg/L	Exova
1090486	MS-0103	4-Mar-14	Total Phosphorus	<0.01	mg/L	Exova
1090486	MS-0103	4-Mar-14	Total Suspended Solids	<2	mg/L	Exova
1090486	MS-0103	4-Mar-14	pH	5.56	pH units	Exova
1091971	MS-01	12-Mar-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1091973	MS-01	12-Mar-14	Faecal Coliforms	0	ct/100mL	Exova
1091971	MS-01	12-Mar-14	Total Kjeldahl Nitrogen	0.14	mg/L	Exova
1091971	MS-01	12-Mar-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1091971	MS-01	12-Mar-14	Oil & Grease - Total	3	mg/L	Exova
1091971	MS-01	12-Mar-14	Total Phosphorus	0.54	mg/L	Exova
1091971	MS-01	12-Mar-14	Total Suspended Solids	4	mg/L	Exova
1091971	MS-01	12-Mar-14	pH	7.85	pH units	Exova
1093124	MS-01	18-Mar-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1093147	MS-01	18-Mar-14	Faecal Coliforms	1	ct/100mL	Exova
1093124	MS-01	18-Mar-14	Total Kjeldahl Nitrogen	0.64	mg/L	Exova
1093124	MS-01	18-Mar-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1093124	MS-01	18-Mar-14	Oil & Grease - Total	<1	mg/L	Exova
1093124	MS-01	18-Mar-14	Total Phosphorus	0.45	mg/L	Exova
1093124	MS-01	18-Mar-14	Total Suspended Solids	5	mg/L	Exova
1093124	MS-01	18-Mar-14	pH	7.31	pH units	Exova
1094294	MS-01	25-Mar-14	Biochemical Oxygen Demand	1	mg/L	Exova
*	MS-01	25-Mar-14	Faecal Coliforms	*	ct/100mL	Exova
1094294	MS-01	25-Mar-14	Total Kjeldahl Nitrogen	0.58	mg/L	Exova
1094294	MS-01	25-Mar-14	N-NH3 (Ammonia)	0.26	mg/L	Exova
1094294	MS-01	25-Mar-14	Oil & Grease - Total	<1	mg/L	Exova
1094294	MS-01	25-Mar-14	Total Phosphorus	0.44	mg/L	Exova
1094294	MS-01	25-Mar-14	Total Suspended Solids	2	mg/L	Exova
1094294	MS-01	25-Mar-14	pH	7.59	pH units	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
**Note: April 25 samples were misdirected in shipment and the microbiological samples expired.*						
MILNE PORT						
1101699	MP-01	6-May-14	Biochemical Oxygen Demand	5	mg/L	Exova
1101702	MP-01	6-May-14	Faecal Coliforms	2	ct/100mL	Exova
1101699	MP-01	6-May-14	Total Kjeldahl Nitrogen	1.54	mg/L	Exova
1101699	MP-01	6-May-14	N-NH3 (Ammonia)	0.22	mg/L	Exova
1101699	MP-01	6-May-14	Oil & Grease - Total	<1	mg/L	Exova
1101699	MP-01	6-May-14	Total Suspended Solids	3	mg/L	Exova
1101699	MP-01	6-May-14	pH	7.88	pH units	Exova
1103490	MP-01	13-May-14	Biochemical Oxygen Demand	4	mg/L	Exova
1103492	MP-01	13-May-14	Faecal Coliforms	1	ct/100mL	Exova
1103490	MP-01	13-May-14	Total Kjeldahl Nitrogen	0.14	mg/L	Exova
1103490	MP-01	13-May-14	N-NH3 (Ammonia)	0.18	mg/L	Exova
1103490	MP-01	13-May-14	Oil & Grease - Total	<1	mg/L	Exova
1103490	MP-01	13-May-14	Total Suspended Solids	3	mg/L	Exova
1103490	MP-01	13-May-14	pH	7.92	pH units	Exova
1104706	MP-01	20-May-14	Biochemical Oxygen Demand	2	mg/L	Exova
1104709	MP-01	20-May-14	Faecal Coliforms	0	ct/100mL	Exova
1104706	MP-01	20-May-14	Total Kjeldahl Nitrogen	1.08	mg/L	Exova
1104706	MP-01	20-May-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1104706	MP-01	20-May-14	Oil & Grease - Total	<1	mg/L	Exova
1104706	MP-01	20-May-14	Total Suspended Solids	<2	mg/L	Exova
1104706	MP-01	20-May-14	pH	7.85	pH units	Exova
1106547	MP-01	27-May-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1106549	MP-01	27-May-14	Faecal Coliforms	300	ct/100mL	Exova
1106547	MP-01	27-May-14	Total Kjeldahl Nitrogen	1.47	mg/L	Exova
1106547	MP-01	27-May-14	N-NH3 (Ammonia)	0.28	mg/L	Exova
1106547	MP-01	27-May-14	Oil & Grease - Total	1	mg/L	Exova
1106547	MP-01	27-May-14	Total Suspended Solids	2	mg/L	Exova
1106547	MP-01	27-May-14	pH	7.76	pH units	Exova
MARY RIVER MINE SITE						
1101712	MS-01	6-May-14	Biochemical Oxygen Demand	2	mg/L	Exova
1101715	MS-01	6-May-14	Faecal Coliforms	0	ct/100mL	Exova
1101712	MS-01	6-May-14	Total Kjeldahl Nitrogen	0.91	mg/L	Exova
1101712	MS-01	6-May-14	N-NH3 (Ammonia)	0.27	mg/L	Exova
1101712	MS-01	6-May-14	Oil & Grease - Total	3	mg/L	Exova
1101712	MS-01	6-May-14	Total Phosphorus	0.24	mg/L	Exova
1101712	MS-01	6-May-14	Total Suspended Solids	4	mg/L	Exova
1101712	MS-01	6-May-14	pH	7.62	pH units	Exova
1103484	MS-01	13-May-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1103486	MS-01	13-May-14	Faecal Coliforms	0	ct/100mL	Exova
1103484	MS-01	13-May-14	Total Kjeldahl Nitrogen	0.92	mg/L	Exova
1103484	MS-01	13-May-14	N-NH3 (Ammonia)	0.31	mg/L	Exova
1103484	MS-01	13-May-14	Oil & Grease - Total	<1	mg/L	Exova
1103484	MS-01	13-May-14	Total Phosphorus	0.32	mg/L	Exova
1103484	MS-01	13-May-14	Total Suspended Solids	2	mg/L	Exova
1103484	MS-01	13-May-14	pH	7.60	pH units	Exova
1104712	MS-01	20-May-14	Biochemical Oxygen Demand	1	mg/L	Exova
1104714	MS-01	20-May-14	Faecal Coliforms	0	ct/100mL	Exova
1104712	MS-01	20-May-14	Total Kjeldahl Nitrogen	0.89	mg/L	Exova
1104712	MS-01	20-May-14	N-NH3 (Ammonia)	0.28	mg/L	Exova
1104712	MS-01	20-May-14	Oil & Grease - Total	<1	mg/L	Exova
1104712	MS-01	20-May-14	Total Phosphorus	0.21	mg/L	Exova
1104712	MS-01	20-May-14	Total Suspended Solids	2	mg/L	Exova
1104712	MS-01	20-May-14	pH	7.40	pH units	Exova
1106528	MS-01	27-May-14	Biochemical Oxygen Demand	1	mg/L	Exova
1106545	MS-01	27-May-14	Faecal Coliforms	3	ct/100mL	Exova
1106528	MS-01	27-May-14	Total Kjeldahl Nitrogen	0.52	mg/L	Exova
1106528	MS-01	27-May-14	N-NH3 (Ammonia)	0.38	mg/L	Exova
1106528	MS-01	27-May-14	Oil & Grease - Total	1	mg/L	Exova
1106528	MS-01	27-May-14	Total Phosphorus	0.37	mg/L	Exova
1106528	MS-01	27-May-14	Total Suspended Solids	10	mg/L	Exova
1106528	MS-01	27-May-14	pH	7.94	pH units	Exova
1108364	MQ-C-B	31-May-14	Conductivity	113	mg/L	Exova
1108364	MQ-C-B	31-May-14	N-NO3	0.1	ct/100mL	Exova
1108364	MQ-C-B	31-May-14	pH	7.59	mg/L	Exova
1108364	MQ-C-B	31-May-14	Total Suspended Solids	13	mg/L	Exova
1108364	MQ-C-B	31-May-14	Turbidity	8.8	mg/L	Exova
1108364	MQ-C-B	31-May-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1108365	MQ-C-D	31-May-14	Conductivity	113	mg/L	Exova
1108365	MQ-C-D	31-May-14	N-NO3	<0.10	ct/100mL	Exova
1108365	MQ-C-D	31-May-14	pH	7.61	mg/L	Exova
1108365	MQ-C-D	31-May-14	Total Suspended Solids	10	mg/L	Exova
1108365	MQ-C-D	31-May-14	Turbidity	13.6	mg/L	Exova
1108365	MQ-C-D	31-May-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1108366	MS-C-E	31-May-14	Conductivity	218	mg/L	Exova
1108366	MS-C-E	31-May-14	N-NO3	7.7	ct/100mL	Exova
1108366	MS-C-E	31-May-14	pH	7.7	mg/L	Exova
1108366	MS-C-E	31-May-14	Total Suspended Solids	101*	mg/L	Exova
1108366	MS-C-E	31-May-14	Turbidity	14.1	mg/L	Exova
1108366	MS-C-E	31-May-14	N-NH3 (Ammonia)	0.91	mg/L	Exova
1108367	MS-C-D	31-May-14	Conductivity	217	mg/L	Exova
1108367	MS-C-D	31-May-14	N-NO3	8.45	ct/100mL	Exova
1108367	MS-C-D	31-May-14	pH	7.65	mg/L	Exova
1108367	MS-C-D	31-May-14	Total Suspended Solids	11	mg/L	Exova
1108367	MS-C-D	31-May-14	Turbidity	20.5	mg/L	Exova
1108367	MS-C-D	31-May-14	N-NH3 (Ammonia)	1.22	mg/L	Exova

Notes: *Yellow shading denotes exceedance of Water Licence criteria.*

** MS-C-E results for May 31 indicated a marginal exceedance of TSS, though to be the result of minor siltation from the camp pad area. Installation of silt fences and riprap installation were used to reduce silt at this location. See attached map showing water monitoring locations.*

MILNE PORT						
1108314	MP-01	3-Jun-14	Biochemical Oxygen Demand	3	mg/L	Exova
1108316	MP-01	3-Jun-14	Faecal Coliforms	2	ct/100mL	Exova
1108314	MP-01	3-Jun-14	Total Kjeldahl Nitrogen	1.12	mg/L	Exova
1108314	MP-01	3-Jun-14	N-NH3 (Ammonia)	0.33	mg/L	Exova
1108314	MP-01	3-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1108314	MP-01	3-Jun-14	Total Suspended Solids	8	mg/L	Exova
1108314	MP-01	3-Jun-14	pH	7.78	pH units	Exova
1111938	MP-01	17-Jun-14	Biochemical Oxygen Demand	2	mg/L	Exova
1111941	MP-01	17-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1111938	MP-01	17-Jun-14	Total Kjeldahl Nitrogen	0.63	mg/L	Exova
1111938	MP-01	17-Jun-14	N-NH3 (Ammonia)	0.33	mg/L	Exova
1111938	MP-01	17-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1111938	MP-01	17-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1111938	MP-01	17-Jun-14	pH	7.80	pH units	Exova
1114119	MP-01	24-Jun-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1114128	MP-01	24-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1114119	MP-01	24-Jun-14	Total Kjeldahl Nitrogen	1.55	mg/L	Exova
1114119	MP-01	24-Jun-14	N-NH3 (Ammonia)	0.39	mg/L	Exova
1114119	MP-01	24-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114119	MP-01	24-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114119	MP-01	24-Jun-14	pH	7.67	pH units	Exova
1114148	MP-Q1-01	23-Jun-14	Conductivity	104	uS/cm	Exova
1114148	MP-Q1-01	23-Jun-14	N-NO3	0.4	mg/L	Exova
1114148	MP-Q1-01	23-Jun-14	pH	7.75	pH units	Exova
1114148	MP-Q1-01	23-Jun-14	Total Suspended Solids	9	mg/L	Exova
1114148	MP-Q1-01	23-Jun-14	Oil & Grease - Total	1	mg/L	Exova
1114148	MP-Q1-01	23-Jun-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1115662	MP-Q1-01	30-Jun-14	Conductivity	128	uS/cm	Exova
1115662	MP-Q1-01	30-Jun-14	N-NO3	0.16	mg/L	Exova
1115662	MP-Q1-01	30-Jun-14	pH	7.94	pH units	Exova
1115662	MP-Q1-01	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115662	MP-Q1-01	30-Jun-14	Oil & Grease - Total	6	mg/L	Exova
1115662	MP-Q1-01	30-Jun-14	N-NH3 (Ammonia)	<0.02	mg/L	Exova

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1115663	MP-Q1-0101	30-Jun-14	Conductivity	128	uS/cm	Exova
1115663	MP-Q1-0101	30-Jun-14	N-NO3	0.12	mg/L	Exova
1115663	MP-Q1-0101	30-Jun-14	pH	7.94	pH units	Exova
1115663	MP-Q1-0101	30-Jun-14	Total Suspended Solids	2	mg/L	Exova
1115663	MP-Q1-0101	30-Jun-14	Oil & Grease - Total	<0.02	mg/L	Exova
1115663	MP-Q1-0101	30-Jun-14	N-NH3 (Ammonia)	3	mg/L	Exova
1114149	MP-Q1-02	23-Jun-14	Conductivity	203	uS/cm	Exova
1114149	MP-Q1-02	23-Jun-14	N-NO3	0.4	mg/L	Exova
1114149	MP-Q1-02	23-Jun-14	pH	7.97	pH units	Exova
1114149	MP-Q1-02	23-Jun-14	Total Suspended Solids	18	mg/L	Exova
1114149	MP-Q1-02	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114149	MP-Q1-02	23-Jun-14	N-NH3 (Ammonia)	0.92	mg/L	Exova
1115664	MP-Q1-02	30-Jun-14	Conductivity	391	uS/cm	Exova
1115664	MP-Q1-02	30-Jun-14	N-NO3	13.2	mg/L	Exova
1115664	MP-Q1-02	30-Jun-14	pH	7.92	pH units	Exova
1115664	MP-Q1-02	30-Jun-14	Total Suspended Solids	290	mg/L	Exova
1115664	MP-Q1-02	30-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1115664	MP-Q1-02	30-Jun-14	N-NH3 (Ammonia)	3.76	mg/L	Exova
1114150	MP-C-A	23-Jun-14	Conductivity	490	uS/cm	Exova
1114150	MP-C-A	23-Jun-14	N-NO3	0.54	mg/L	Exova
1114150	MP-C-A	23-Jun-14	pH	8.35	pH units	Exova
1114150	MP-C-A	23-Jun-14	Total Suspended Solids	5	mg/L	Exova
1114150	MP-C-A	23-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1114150	MP-C-A	23-Jun-14	N-NH3 (Ammonia)	0.17	mg/L	Exova
1115665	MP-C-A	30-Jun-14	Conductivity	1960	uS/cm	Exova
1115665	MP-C-A	30-Jun-14	N-NO3	12.2	mg/L	Exova
1115665	MP-C-A	30-Jun-14	pH	8.02	pH units	Exova
1115665	MP-C-A	30-Jun-14	Total Suspended Solids	6	mg/L	Exova
1115665	MP-C-A	30-Jun-14	Oil & Grease - Total	1	mg/L	Exova
1115665	MP-C-A	30-Jun-14	N-NH3 (Ammonia)	1.17	mg/L	Exova
1114151	MP-C-B	23-Jun-14	Conductivity	244	uS/cm	Exova
1114151	MP-C-B	23-Jun-14	N-NO3	0.36	mg/L	Exova
1114151	MP-C-B	23-Jun-14	pH	8.3	pH units	Exova
1114151	MP-C-B	23-Jun-14	Total Suspended Solids	5	mg/L	Exova
1114151	MP-C-B	23-Jun-14	Oil & Grease - Total	3	mg/L	Exova
1114151	MP-C-B	23-Jun-14	N-NH3 (Ammonia)	0.1	mg/L	Exova
1115666	MP-C-B	30-Jun-14	Conductivity	200	uS/cm	Exova
1115666	MP-C-B	30-Jun-14	N-NO3	0.36	mg/L	Exova
1115666	MP-C-B	30-Jun-14	pH	8.37	pH units	Exova
1115666	MP-C-B	30-Jun-14	Total Suspended Solids	4	mg/L	Exova
1115666	MP-C-B	30-Jun-14	Oil & Grease - Total	1	mg/L	Exova
1115666	MP-C-B	30-Jun-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1114152	MP-C-B01	23-Jun-14	Conductivity	184	uS/cm	Exova
1114152	MP-C-B01	23-Jun-14	N-NO3	0.55	mg/L	Exova
1114152	MP-C-B01	23-Jun-14	pH	8.22	pH units	Exova
1114152	MP-C-B01	23-Jun-14	Total Suspended Solids	11	mg/L	Exova
1114152	MP-C-B01	23-Jun-14	Oil & Grease - Total	1	mg/L	Exova
1114152	MP-C-B01	23-Jun-14	N-NH3 (Ammonia)	0.1	mg/L	Exova
1114153	MP-C-B0101	23-Jun-14	Conductivity	183	uS/cm	Exova
1114153	MP-C-B0101	23-Jun-14	N-NO3	0.56	mg/L	Exova
1114153	MP-C-B0101	23-Jun-14	pH	8.21	pH units	Exova
1114153	MP-C-B0101	23-Jun-14	Total Suspended Solids	6	mg/L	Exova
1114153	MP-C-B0101	23-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1114153	MP-C-B0101	23-Jun-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1115667	MP-C-B01	30-Jun-14	Conductivity	184	uS/cm	Exova
1115667	MP-C-B01	30-Jun-14	N-NO3	0.39	mg/L	Exova
1115667	MP-C-B01	30-Jun-14	pH	8.36	pH units	Exova
1115667	MP-C-B01	30-Jun-14	Total Suspended Solids	3	mg/L	Exova
1115667	MP-C-B01	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115667	MP-C-B01	30-Jun-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1115683	MP-C-B01	30-Jun-14	Toxicity*	Non Lethal	mortality %	Exova
1115669	MP-C-F	30-Jun-14	Conductivity	855	uS/cm	Exova
1115669	MP-C-F	30-Jun-14	N-NO3	6.64	mg/L	Exova
1115669	MP-C-F	30-Jun-14	pH	8.04	pH units	Exova
1115669	MP-C-F	30-Jun-14	Total Suspended Solids	38	mg/L	Exova
1115669	MP-C-F	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115669	MP-C-F	30-Jun-14	N-NH3 (Ammonia)	1.37	mg/L	Exova
1114154	MP-C-H	23-Jun-14	Conductivity	111	uS/cm	Exova
1114154	MP-C-H	23-Jun-14	N-NO3	<0.1	mg/L	Exova
1114154	MP-C-H	23-Jun-14	pH	7.99	pH units	Exova
1114154	MP-C-H	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114154	MP-C-H	23-Jun-14	Oil & Grease - Total	3	mg/L	Exova
1114154	MP-C-H	23-Jun-14	N-NH3 (Ammonia)	0.07	mg/L	Exova
1115668	MP-C-H	30-Jun-14	Conductivity	120	uS/cm	Exova
1115668	MP-C-H	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115668	MP-C-H	30-Jun-14	pH	8.00	pH units	Exova
1115668	MP-C-H	30-Jun-14	Total Suspended Solids	2	mg/L	Exova
1115668	MP-C-H	30-Jun-14	Oil & Grease - Total	22 (no sheen)	mg/L	Exova
1115668	MP-C-H	30-Jun-14	N-NH3 (Ammonia)	<0.02	mg/L	Exova
MARY RIVER MINE SITE						
1108608	MS-01	3-Jun-14	Biochemical Oxygen Demand	1	mg/L	Exova
1108606	MS-01	3-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1108608	MS-01	3-Jun-14	Total Kjeldahl Nitrogen	1.36	mg/L	Exova
1108608	MS-01	3-Jun-14	N-NH3 (Ammonia)	0.31	mg/L	Exova
1108608	MS-01	3-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1108608	MS-01	3-Jun-14	Total Phosphorus	0.64	mg/L	Exova
1108608	MS-01	3-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1108608	MS-01	3-Jun-14	pH	7.63	pH units	Exova
1110164	MS-01	10-Jun-14	Biochemical Oxygen Demand	2	mg/L	Exova
1110137	MS-01	10-Jun-14	Faecal Coliforms	1	ct/100mL	Exova
1110164	MS-01	10-Jun-14	Total Kjeldahl Nitrogen	0.28	mg/L	Exova
1110164	MS-01	10-Jun-14	N-NH3 (Ammonia)	0.26	mg/L	Exova
1110164	MS-01	10-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1110164	MS-01	10-Jun-14	Total Phosphorus	0.14	mg/L	Exova
1110164	MS-01	10-Jun-14	Total Suspended Solids	2	mg/L	Exova
1110164	MS-01	10-Jun-14	pH	7.60	pH units	Exova
1111938	MS-01	17-Jun-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1111941	MS-01	17-Jun-14	Faecal Coliforms	2	ct/100mL	Exova
1111938	MS-01	17-Jun-14	Total Kjeldahl Nitrogen	0.57	mg/L	Exova
1111938	MS-01	17-Jun-14	N-NH3 (Ammonia)	0.33	mg/L	Exova
1111938	MS-01	17-Jun-14	Oil & Grease - Total	1	mg/L	Exova
1111938	MS-01	17-Jun-14	Total Phosphorus	0.82	mg/L	Exova
1111938	MS-01	17-Jun-14	Total Suspended Solids	6	mg/L	Exova
1111938	MS-01	17-Jun-14	pH	7.82	pH units	Exova
1114121	MS-01	24-Jun-14	Biochemical Oxygen Demand	2	mg/L	Exova
1114129	MS-01	24-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1114121	MS-01	24-Jun-14	Total Kjeldahl Nitrogen	2.59	mg/L	Exova
1114121	MS-01	24-Jun-14	N-NH3 (Ammonia)	0.67	mg/L	Exova
1114121	MS-01	24-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114121	MS-01	24-Jun-14	Total Phosphorus	1.78	mg/L	Exova
1114121	MS-01	24-Jun-14	Total Suspended Solids	20	mg/L	Exova
1114121	MS-01	24-Jun-14	pH	7.64	pH units	Exova
1110159	MS-MRY-4C	10-Jun-14	Biochemical Oxygen Demand	3	mg/L	Exova
1110145	MS-MRY-4C	10-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1110159	MS-MRY-4C	10-Jun-14	Total Kjeldahl Nitrogen	1.45	mg/L	Exova
1110159	MS-MRY-4C	10-Jun-14	N-NH3 (Ammonia)	0.43	mg/L	Exova
1110159	MS-MRY-4C	10-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1110159	MS-MRY-4C	10-Jun-14	Total Phosphorus	0.081	mg/L	Exova
1110159	MS-MRY-4C	10-Jun-14	Total Suspended Solids	7	mg/L	Exova
1110159	MS-MRY-4C	10-Jun-14	pH	7.36	pH units	Exova
1110131	MS-MRY-4C	10-Jun-14	Toxicity*	Non lethal	mortality %	Exova
1110160	MS-MRY-4C	10-Jun-14	Biochemical Oxygen Demand	4	mg/L	Exova
1110146	MS-MRY-4C	10-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1110160	MS-MRY-4C	10-Jun-14	Total Kjeldahl Nitrogen	1.37	mg/L	Exova
1110160	MS-MRY-4C	10-Jun-14	N-NH3 (Ammonia)	0.41	mg/L	Exova
1110160	MS-MRY-4C	10-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1110160	MS-MRY-4C	10-Jun-14	Total Phosphorus	0.148	mg/L	Exova

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TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1110160	MS-MRY-4C	10-Jun-14	Total Suspended Solids	6	mg/L	Exova
1110160	MS-MRY-4C	10-Jun-14	pH	7.23	pH units	Exova
1110161	MS-MRY-4C	10-Jun-14	Biochemical Oxygen Demand	4	mg/L	Exova
1110147	MS-MRY-4C	10-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1110161	MS-MRY-4C	10-Jun-14	Total Kjeldahl Nitrogen	1.38	mg/L	Exova
1110161	MS-MRY-4C	10-Jun-14	N-NH3 (Ammonia)	0.41	mg/L	Exova
1110161	MS-MRY-4C	10-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1110161	MS-MRY-4C	10-Jun-14	Total Phosphorus	0.159	mg/L	Exova
1110161	MS-MRY-4C	10-Jun-14	Total Suspended Solids	5	mg/L	Exova
1110161	MS-MRY-4C	10-Jun-14	pH	7.21	pH units	Exova
1112814	MS-MRY-4C	18-Jun-14	Biochemical Oxygen Demand	6	mg/L	Exova
1112817	MS-MRY-4C	18-Jun-14	Faecal Coliforms	0	ct/100mL	Exova
1112814	MS-MRY-4C	18-Jun-14	Total Kjeldahl Nitrogen	1.76	mg/L	Exova
1112814	MS-MRY-4C	18-Jun-14	N-NH3 (Ammonia)	0.34	mg/L	Exova
1112814	MS-MRY-4C	18-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1112814	MS-MRY-4C	18-Jun-14	Total Phosphorus	0.158	mg/L	Exova
1112814	MS-MRY-4C	18-Jun-14	Total Suspended Solids	12	mg/L	Exova
1112814	MS-MRY-4C	18-Jun-14	pH	7.23	pH units	Exova
1114117	MS-MRY-4C	19-Jun-14	Total Phosphorus	0.12	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	Biochemical Oxygen Demand	11	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	Total Kjeldahl Nitrogen	3.64	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	N-NH3 (Ammonia)	0.34	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	Total Phosphorus	0.121	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	Total Suspended Solids	22	mg/L	Exova
1114115	MS-MRY-4C	21-Jun-14	pH	7.3	pH units	Exova
1114116	MS-MRY-4C	21-Jun-14	Biochemical Oxygen Demand	13	mg/L	Exova
1114116	MS-MRY-4C	21-Jun-14	Total Kjeldahl Nitrogen	2.54	mg/L	Exova
1114116	MS-MRY-4C	21-Jun-14	N-NH3 (Ammonia)	0.34	mg/L	Exova
1114116	MS-MRY-4C	21-Jun-14	Total Phosphorus	0.184	mg/L	Exova
1114116	MS-MRY-4C	21-Jun-14	Total Suspended Solids	16	mg/L	Exova
1114116	MS-MRY-4C	21-Jun-14	pH	7.2	pH units	Exova
1111979	MS-MRY-6	16-Jun-14	Benzene	<0.5	ug/L	Exova
1111979	MS-MRY-6	16-Jun-14	Ethylbenzene	<0.5	ug/L	Exova
1111979	MS-MRY-6	16-Jun-14	Toluene	<0.5	ug/L	Exova
1111979	MS-MRY-6	16-Jun-14	Total Lead	0.011	mg/L	Exova
1111979	MS-MRY-6	16-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1111981	MS-MRY-6	17-Jun-14	Total Suspended Solids	2	mg/L	Exova
1111981	MS-MRY-6	17-Jun-14	pH	8.85	pH units	Exova
1114721	MS-MRY-6	24-Jun-14	Benzene	<0.5	ug/L	Exova
1114721	MS-MRY-6	24-Jun-14	Ethylbenzene	<0.5	ug/L	Exova
1114721	MS-MRY-6	24-Jun-14	Toluene	<0.5	ug/L	Exova
1114721	MS-MRY-6	24-Jun-14	Total Lead	0.004	mg/L	Exova
1114721	MS-MRY-6	24-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115656	MS-MRY-6	30-Jun-14	Benzene	<0.5	ug/L	Exova
1115656	MS-MRY-6	30-Jun-14	Ethylbenzene	<0.5	ug/L	Exova
1115656	MS-MRY-6	30-Jun-14	Toluene	<0.5	ug/L	Exova
1115656	MS-MRY-6	30-Jun-14	Total Lead	<0.001	mg/L	Exova
1115656	MS-MRY-6	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	pH	7.53	pH units	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Arsenic	0.14	µg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Copper	2.05	µg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Lead	0.25	µg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Nickel	4.8	µg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Zinc	3.5	µg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1112820	MS-MRY-13A	18-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114220	MS-MRY-13A	23-Jun-14	pH	7.78	pH units	Exova
1114222	MS-MRY-13A	23-Jun-14	Total Arsenic	0.15	µg/L	Exova
1114222	MS-MRY-13A	23-Jun-14	Total Copper	2.43	µg/L	Exova
1114222	MS-MRY-13A	23-Jun-14	Total Lead	0.09	µg/L	Exova
1114222	MS-MRY-13A	23-Jun-14	Total Nickel	6.39	µg/L	Exova
1114222	MS-MRY-13A	23-Jun-14	Total Zinc	4.6	µg/L	Exova
1114220	MS-MRY-13A	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114220	MS-MRY-13A	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115777	MS-MRY-13A	30-Jun-14	pH	-	pH units	Exova
1115779	MS-MRY-13A	30-Jun-14	Total Arsenic	0.15	µg/L	Exova
1115779	MS-MRY-13A	30-Jun-14	Total Copper	1.69	µg/L	Exova
1115779	MS-MRY-13A	30-Jun-14	Total Lead	<0.05	µg/L	Exova
1115779	MS-MRY-13A	30-Jun-14	Total Nickel	8.66	µg/L	Exova
1115779	MS-MRY-13A	30-Jun-14	Total Zinc	4.9	µg/L	Exova
1115777	MS-MRY-13A	30-Jun-14	Total Suspended Solids	-	mg/L	Exova
1115777	MS-MRY-13A	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	pH	7.60	pH units	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Arsenic	0.16	µg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Copper	2.93	µg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Lead	0.56	µg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Nickel	4.25	µg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Zinc	5.6	µg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1112821	MS-MRY-13B	18-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114221	MS-MRY-13B	23-Jun-14	pH	7.90	pH units	Exova
1114223	MS-MRY-13B	23-Jun-14	Total Arsenic	0.13	µg/L	Exova
1114223	MS-MRY-13B	23-Jun-14	Total Copper	1.76	µg/L	Exova
1114223	MS-MRY-13B	23-Jun-14	Total Lead	<.05	µg/L	Exova
1114223	MS-MRY-13B	23-Jun-14	Total Nickel	5.92	µg/L	Exova
1114223	MS-MRY-13B	23-Jun-14	Total Zinc	<3.0	µg/L	Exova
1114221	MS-MRY-13B	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114221	MS-MRY-13B	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115778	MS-MRY-13B	30-Jun-14	pH	7.98	pH units	Exova
1115780	MS-MRY-13B	30-Jun-14	Total Arsenic	0.14	µg/L	Exova
1115780	MS-MRY-13B	30-Jun-14	Total Copper	1.67	µg/L	Exova
1115780	MS-MRY-13B	30-Jun-14	Total Lead	<0.05	µg/L	Exova
1115780	MS-MRY-13B	30-Jun-14	Total Nickel	6.77	µg/L	Exova
1115780	MS-MRY-13B	30-Jun-14	Total Zinc	<3.0	µg/L	Exova
1115778	MS-MRY-13B	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115778	MS-MRY-13B	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114171	MQ-C-A	23-Jun-14	Conductivity	115	uS/cm	Exova
1114171	MQ-C-A	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114171	MQ-C-A	23-Jun-14	pH	7.91	pH units	Exova
1114171	MQ-C-A	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114171	MQ-C-A	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114171	MQ-C-A	23-Jun-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1115672	MQ-C-A	30-Jun-14	Conductivity	97	uS/cm	Exova
1115672	MQ-C-A	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115672	MQ-C-A	30-Jun-14	pH	7.9	pH units	Exova
1115672	MQ-C-A	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115672	MQ-C-A	30-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1115672	MQ-C-A	30-Jun-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1114169	MQ-C-B	23-Jun-14	Conductivity	92	uS/cm	Exova
1114169	MQ-C-B	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114169	MQ-C-B	23-Jun-14	pH	7.71	pH units	Exova
1114169	MQ-C-B	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114169	MQ-C-B	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114169	MQ-C-B	23-Jun-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1115670	MQ-C-B	30-Jun-14	Conductivity	121	uS/cm	Exova
1115670	MQ-C-B	30-Jun-14	N-NO3	0.1	mg/L	Exova
1115670	MQ-C-B	30-Jun-14	pH	7.92	pH units	Exova
1115670	MQ-C-B	30-Jun-14	Total Suspended Solids	3	mg/L	Exova
1115670	MQ-C-B	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115670	MQ-C-B	30-Jun-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1115680	MQ-C-B	1-Jul-14	Toxicity*	Non Lethal	mortality %	Exova
1114170	MQ-C-D	23-Jun-14	Conductivity	105	uS/cm	Exova
1114170	MQ-C-D	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114170	MQ-C-D	23-Jun-14	pH	7.83	pH units	Exova
1114170	MQ-C-D	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114170	MQ-C-D	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114170	MQ-C-D	23-Jun-14	N-NH3 (Ammonia)	0.03	mg/L	Exova

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TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1115671	MQ-C-D	30-Jun-14	Conductivity	104	uS/cm	Exova
1115671	MQ-C-D	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115671	MQ-C-D	30-Jun-14	pH	7.84	pH units	Exova
1115671	MQ-C-D	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115671	MQ-C-D	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115671	MQ-C-D	30-Jun-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1114177	MS-C-A	23-Jun-14	Conductivity	69	uS/cm	Exova
1114177	MS-C-A	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114177	MS-C-A	23-Jun-14	pH	7.73	pH units	Exova
1114177	MS-C-A	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114177	MS-C-A	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114177	MS-C-A	23-Jun-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1115678	MS-C-A	30-Jun-14	Conductivity	86	uS/cm	Exova
1115678	MS-C-A	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115678	MS-C-A	30-Jun-14	pH	7.77	pH units	Exova
1115678	MS-C-A	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115678	MS-C-A	30-Jun-14	Oil & Grease - Total	2	mg/L	Exova
1115678	MS-C-A	30-Jun-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1114176	MS-C-B	23-Jun-14	Conductivity	80	uS/cm	Exova
1114176	MS-C-B	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114176	MS-C-B	23-Jun-14	pH	7.76	pH units	Exova
1114176	MS-C-B	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114176	MS-C-B	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114176	MS-C-B	23-Jun-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1115677	MS-C-B	30-Jun-14	Conductivity	91	uS/cm	Exova
1115677	MS-C-B	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115677	MS-C-B	30-Jun-14	pH	7.77	pH units	Exova
1115677	MS-C-B	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115677	MS-C-B	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115677	MS-C-B	30-Jun-14	N-NH3 (Ammonia)	0.1	mg/L	Exova
1114175	MS-C-C	23-Jun-14	Conductivity	543	uS/cm	Exova
1114175	MS-C-C	23-Jun-14	N-NO3	15.9	mg/L	Exova
1114175	MS-C-C	23-Jun-14	pH	7.88	pH units	Exova
1114175	MS-C-C	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114175	MS-C-C	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114175	MS-C-C	23-Jun-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1114174	MS-C-D	23-Jun-14	Conductivity	207	uS/cm	Exova
1114174	MS-C-D	23-Jun-14	N-NO3	4.29	mg/L	Exova
1114174	MS-C-D	23-Jun-14	pH	7.93	pH units	Exova
1114174	MS-C-D	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114174	MS-C-D	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114174	MS-C-D	23-Jun-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1115675	MS-C-D	30-Jun-14	Conductivity	318	uS/cm	Exova
1115675	MS-C-D	30-Jun-14	N-NO3	4.65	mg/L	Exova
1115675	MS-C-D	30-Jun-14	pH	8.4	pH units	Exova
1115675	MS-C-D	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115675	MS-C-D	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115675	MS-C-D	30-Jun-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1114172	MS-C-E	23-Jun-14	Conductivity	117	uS/cm	Exova
1114172	MS-C-E	23-Jun-14	N-NO3	0.32	mg/L	Exova
1114172	MS-C-E	23-Jun-14	pH	7.92	pH units	Exova
1114172	MS-C-E	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114172	MS-C-E	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114172	MS-C-E	23-Jun-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1114173	MS-C-E-DS	23-Jun-14	Conductivity	83	uS/cm	Exova
1114173	MS-C-E-DS	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114173	MS-C-E-DS	23-Jun-14	pH	7.81	pH units	Exova
1114173	MS-C-E-DS	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114173	MS-C-E-DS	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114173	MS-C-E-DS	23-Jun-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1115673	MS-C-E	30-Jun-14	Conductivity	204	uS/cm	Exova
1115673	MS-C-E	30-Jun-14	N-NO3	0.6	mg/L	Exova
1115673	MS-C-E	30-Jun-14	pH	8.04	pH units	Exova
1115673	MS-C-E	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115673	MS-C-E	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115673	MS-C-E	30-Jun-14	N-NH3 (Ammonia)	0.06	mg/L	Exova
1114178	MS-C-F	23-Jun-14	Conductivity	71	uS/cm	Exova
1114178	MS-C-F	23-Jun-14	N-NO3	<0.10	mg/L	Exova
1114178	MS-C-F	23-Jun-14	pH	7.70	pH units	Exova
1114178	MS-C-F	23-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1114178	MS-C-F	23-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1114178	MS-C-F	23-Jun-14	N-NH3 (Ammonia)	0.1	mg/L	Exova
1115674	MS-C-F	30-Jun-14	Conductivity	90	uS/cm	Exova
1115674	MS-C-F	30-Jun-14	N-NO3	<0.10	mg/L	Exova
1115674	MS-C-F	30-Jun-14	pH	7.76	pH units	Exova
1115674	MS-C-F	30-Jun-14	Total Suspended Solids	<2	mg/L	Exova
1115674	MS-C-F	30-Jun-14	Oil & Grease - Total	<1	mg/L	Exova
1115674	MS-C-F	30-Jun-14	N-NH3 (Ammonia)	0.1	mg/L	Exova

Note: Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Area of Water Quality Exceedance:
Sample Station MP-Q1-02 (Milne Port quarry runoff) showed an exceedance for total suspended solids on June 30, 2014 (290 mg/L). Silt fences were erected and upstream work was completed to minimize impacts. Subsequent sampling of this location on July 7, 2014 resulted in a

MILNE PORT						
1115644	MP-01	1-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1115646	MP-01	1-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1115644	MP-01	1-Jul-14	Total Kjeldahl Nitrogen	0.82	mg/L	Exova
1115644	MP-01	1-Jul-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1115644	MP-01	1-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1115644	MP-01	1-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1115644	MP-01	1-Jul-14	pH	7.67	pH units	Exova
1117762	MP-01	8-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1117764	MP-01	8-Jul-14	Faecal Coliforms	1	ct/100mL	Exova
1117762	MP-01	8-Jul-14	Total Kjeldahl Nitrogen	0.71	mg/L	Exova
1117762	MP-01	8-Jul-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1117762	MP-01	8-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117762	MP-01	8-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117762	MP-01	8-Jul-14	pH	7.77	pH units	Exova
1119638	MP-01	15-Jul-14	Biochemical Oxygen Demand	4	mg/L	Exova
1119640	MP-01	15-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1119638	MP-01	15-Jul-14	Total Kjeldahl Nitrogen	0.96	mg/L	Exova
1119638	MP-01	15-Jul-14	N-NH3 (Ammonia)	0.18	mg/L	Exova
1119638	MP-01	15-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119638	MP-01	15-Jul-14	Total Suspended Solids	5	mg/L	Exova
1119638	MP-01	15-Jul-14	pH	7.68	pH units	Exova
1121265	MP-01	22-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1121268	MP-01	22-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1121265	MP-01	22-Jul-14	Total Kjeldahl Nitrogen	1.69	mg/L	Exova
1121265	MP-01	22-Jul-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1121265	MP-01	22-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121265	MP-01	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121265	MP-01	22-Jul-14	pH	7.93	pH units	Exova
1123435	MP-01	30-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1123438	MP-01	30-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1123435	MP-01	30-Jul-14	Total Kjeldahl Nitrogen	0.9	mg/L	Exova
1123435	MP-01	30-Jul-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1123435	MP-01	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1123435	MP-01	30-Jul-14	Total Suspended Solids	2	mg/L	Exova
1123435	MP-01	30-Jul-14	pH	7.83	pH units	Exova
1119764	MP-01A	14-Jul-14	Toxicity*	non-lethal	mortality %	Exova
1123286	MP-01A	27-Jul-14	Biochemical Oxygen Demand	37	mg/L	Exova
1123286	MP-01A	27-Jul-14	Total Kjeldahl Nitrogen	12.8	mg/L	Exova
1123286	MP-01A	27-Jul-14	N-NH3 (Ammonia)	1.59	mg/L	Exova
1123286	MP-01A	27-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1123286	MP-01A	27-Jul-14	Total Suspended Solids	68	mg/L	Exova
1123286	MP-01A	27-Jul-14	pH	7.83	pH units	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1118597	MP-03	9-Jul-14	Benzene	<0.5	ug/L	Exova
1118597	MP-03	9-Jul-14	Ethylbenzene	<0.5	ug/L	Exova
1118597	MP-03	9-Jul-14	Toluene	<0.5	ug/L	Exova
1118597	MP-03	9-Jul-14	Total Lead	<0.001	mg/L	Exova
1118597	MP-03	9-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119808	MP-03	14-Jul-14	Benzene	<0.5	ug/L	Exova
1119808	MP-03	14-Jul-14	Ethylbenzene	<0.5	ug/L	Exova
1119808	MP-03	14-Jul-14	Toluene	<0.5	ug/L	Exova
1119808	MP-03	14-Jul-14	Total Lead	0.001	mg/L	Exova
1119808	MP-03	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117741	MP-Q1-01	7-Jul-14	pH	7.99	pH units	Exova
1117741	MP-Q1-01	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117741	MP-Q1-01	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117742	MP-Q1-0101	7-Jul-14	pH	8.04	pH units	Exova
1117742	MP-Q1-0101	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117742	MP-Q1-0101	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119802	MP-Q1-01	14-Jul-14	Conductivity	208	uS/cm	Exova
1119802	MP-Q1-01	14-Jul-14	N-NO3	0.18	mg/L	Exova
1119802	MP-Q1-01	14-Jul-14	pH	7.94	pH units	Exova
1119802	MP-Q1-01	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119802	MP-Q1-01	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119802	MP-Q1-01	14-Jul-14	N-NH3 (Ammonia)	0.23	mg/L	Exova
1121696	MP-Q1-01	22-Jul-14	pH	8.07	pH units	Exova
1121696	MP-Q1-01	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121696	MP-Q1-01	22-Jul-14	Oil & Grease - Total	2	mg/L	Exova
1121697	MP-Q1-0101	22-Jul-14	pH	8.1	pH units	Exova
1121697	MP-Q1-0101	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121697	MP-Q1-0101	22-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1123768	MP-Q1-01	30-Jul-14	pH	8.11	pH units	Exova
1123768	MP-Q1-01	30-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1123768	MP-Q1-01	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117743	MP-Q1-02	7-Jul-14	pH	7.97	pH units	Exova
1117743	MP-Q1-02	7-Jul-14	Total Suspended Solids	2	mg/L	Exova
1117743	MP-Q1-02	7-Jul-14	Oil & Grease - Total	5	mg/L	Exova
1119803	MP-Q1-02	14-Jul-14	Conductivity	514	uS/cm	Exova
1119803	MP-Q1-02	14-Jul-14	N-NO3	15.3	mg/L	Exova
1119803	MP-Q1-02	14-Jul-14	pH	7.95	pH units	Exova
1119803	MP-Q1-02	14-Jul-14	Total Suspended Solids	38	mg/L	Exova
1119803	MP-Q1-02	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119803	MP-Q1-02	14-Jul-14	N-NH3 (Ammonia)	8.23	mg/L	Exova
1121698	MP-Q1-02	22-Jul-14	pH	8.01	pH units	Exova
1121698	MP-Q1-02	22-Jul-14	Total Suspended Solids	13	mg/L	Exova
1121698	MP-Q1-02	22-Jul-14	Oil & Grease - Total	5	mg/L	Exova
1123769	MP-Q1-02	30-Jul-14	pH	8	pH units	Exova
1123769	MP-Q1-02	30-Jul-14	Total Suspended Solids	3	mg/L	Exova
1123769	MP-Q1-02	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117747	MP-C-A	7-Jul-14	pH	8.05	pH units	Exova
1117747	MP-C-A	7-Jul-14	Total Suspended Solids	154	mg/L	Exova
1117747	MP-C-A	7-Jul-14	Oil & Grease - Total	3	mg/L	Exova
1119807	MP-C-A	14-Jul-14	Conductivity	1300	uS/cm	Exova
1119807	MP-C-A	14-Jul-14	N-NO3	17.8	mg/L	Exova
1119807	MP-C-A	14-Jul-14	pH	7.98	pH units	Exova
1119807	MP-C-A	14-Jul-14	Total Suspended Solids	5	mg/L	Exova
1119807	MP-C-A	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119807	MP-C-A	14-Jul-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1117744	MP-C-B	7-Jul-14	pH	8.36	pH units	Exova
1117744	MP-C-B	7-Jul-14	Total Suspended Solids	2	mg/L	Exova
1117744	MP-C-B	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119804	MP-C-B	14-Jul-14	Conductivity	274	uS/cm	Exova
1119804	MP-C-B	14-Jul-14	N-NO3	1.21	mg/L	Exova
1119804	MP-C-B	14-Jul-14	pH	8.07	pH units	Exova
1119804	MP-C-B	14-Jul-14	Total Suspended Solids	25	mg/L	Exova
1119804	MP-C-B	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119804	MP-C-B	14-Jul-14	N-NH3 (Ammonia)	0.23	mg/L	Exova
1121699	MP-C-B	22-Jul-14	pH	8.41	pH units	Exova
1121699	MP-C-B	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121699	MP-C-B	22-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1123770	MP-C-B	30-Jul-14	pH	8.39	pH units	Exova
1123770	MP-C-B	30-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1123770	MP-C-B	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117745	MP-C-B01	7-Jul-14	pH	8.42	pH units	Exova
1117745	MP-C-B01	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117745	MP-C-B01	7-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1119805	MP-C-B01	14-Jul-14	Conductivity	248	uS/cm	Exova
1119805	MP-C-B01	14-Jul-14	N-NO3	1.44	mg/L	Exova
1119805	MP-C-B01	14-Jul-14	pH	8.4	pH units	Exova
1119805	MP-C-B01	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119805	MP-C-B01	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119805	MP-C-B01	14-Jul-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1121700	MP-C-B01	22-Jul-14	pH	8.36	pH units	Exova
1121700	MP-C-B01	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121700	MP-C-B01	22-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1121575	MP-C-B01	22-Jul-14	Toxicity*	non-lethal	mortality %	Exova
1123771	MP-C-B01	30-Jul-14	pH	8.31	pH units	Exova
1123771	MP-C-B01	30-Jul-14	Total Suspended Solids	2	mg/L	Exova
1123771	MP-C-B01	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1117746	MP-C-H	7-Jul-14	pH	8.09	pH units	Exova
1117746	MP-C-H	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117746	MP-C-H	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119806	MP-C-H	14-Jul-14	Conductivity	190	uS/cm	Exova
1119806	MP-C-H	14-Jul-14	N-NO3	<0.10	mg/L	Exova
1119806	MP-C-H	14-Jul-14	pH	8.18	pH units	Exova
1119806	MP-C-H	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119806	MP-C-H	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119806	MP-C-H	14-Jul-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1121701	MP-C-H	22-Jul-14	pH	8.26	pH units	Exova
1121701	MP-C-H	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121701	MP-C-H	22-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1123772	MP-C-H	30-Jul-14	pH	8.29	pH units	Exova
1123772	MP-C-H	30-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1123772	MP-C-H	30-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
MARY RIVER MINE SITE						
1115650	MS-01	1-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1115653	MS-01	1-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1115650	MS-01	1-Jul-14	Total Kjeldahl Nitrogen	0.77	mg/L	Exova
1115650	MS-01	1-Jul-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1115650	MS-01	1-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1115650	MS-01	1-Jul-14	Total Phosphorus	1.02	mg/L	Exova
1115650	MS-01	1-Jul-14	Total Suspended Solids	3	mg/L	Exova
1115650	MS-01	1-Jul-14	pH	7.63	pH units	Exova
1117749	MS-01	8-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1117751	MS-01	8-Jul-14	Faecal Coliforms	2	ct/100mL	Exova
1117749	MS-01	8-Jul-14	Total Kjeldahl Nitrogen	0.58	mg/L	Exova
1117749	MS-01	8-Jul-14	N-NH3 (Ammonia)	0.2	mg/L	Exova
1117749	MS-01	8-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1117749	MS-01	8-Jul-14	Total Phosphorus	0.73	mg/L	Exova
1117749	MS-01	8-Jul-14	Total Suspended Solids	4	mg/L	Exova
1117749	MS-01	8-Jul-14	pH	7.82	pH units	Exova
1119796	MS-01	15-Jul-14	Biochemical Oxygen Demand	5	mg/L	Exova
1119798	MS-01	15-Jul-14	Faecal Coliforms	31	ct/100mL	Exova
1119796	MS-01	15-Jul-14	Total Kjeldahl Nitrogen	1.86	mg/L	Exova
1119796	MS-01	15-Jul-14	N-NH3 (Ammonia)	0.75	mg/L	Exova
1119796	MS-01	15-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119796	MS-01	15-Jul-14	Total Phosphorus	1.08	mg/L	Exova
1119796	MS-01	15-Jul-14	Total Suspended Solids	29	mg/L	Exova
1119796	MS-01	15-Jul-14	pH	7.66	pH units	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1121270	MS-01	22-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1121272	MS-01	22-Jul-14	Faecal Coliforms	210	ct/100mL	Exova
1121270	MS-01	22-Jul-14	Total Kjeldahl Nitrogen	0.89	mg/L	Exova
1121270	MS-01	22-Jul-14	N-NH3 (Ammonia)	0.51	mg/L	Exova
1121270	MS-01	22-Jul-14	Oil & Grease - Total	2	mg/L	Exova
1121270	MS-01	22-Jul-14	Total Phosphorus	0.31	mg/L	Exova
1121270	MS-01	22-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121270	MS-01	22-Jul-14	pH	7.68	pH units	Exova
1123287	MS-01	29-Jul-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1123289	MS-01	29-Jul-14	Faecal Coliforms	0	ct/100mL	Exova
1123287	MS-01	29-Jul-14	Total Kjeldahl Nitrogen	0.91	mg/L	Exova
1123287	MS-01	29-Jul-14	N-NH3 (Ammonia)	0.19	mg/L	Exova
1123287	MS-01	29-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1123287	MS-01	29-Jul-14	Total Phosphorus	0.36	mg/L	Exova
1123287	MS-01	29-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1123287	MS-01	29-Jul-14	pH	7.03	pH units	Exova
1122836	MS-MRY-09	28-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1122836	MS-MRY-09	28-Jul-14	Total Copper	0.7	ug/L	Exova
1122836	MS-MRY-09	28-Jul-14	Total Lead	0.08	ug/L	Exova
1122836	MS-MRY-09	28-Jul-14	Total Nickel	<0.5	ug/L	Exova
1122836	MS-MRY-09	28-Jul-14	Total Zinc	<3	ug/L	Exova
1122834	MS-MRY-09	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122834	MS-MRY-09	28-Jul-14	pH	7.30	pH units	Exova
1122823	MS-MRY-09	28-Jul-14	Toxicity*	non-lethal	mortality %	Exova
1118147	MS-MRY-10	8-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1118147	MS-MRY-10	8-Jul-14	Total Copper	0.7	ug/L	Exova
1118147	MS-MRY-10	8-Jul-14	Total Lead	0.21	ug/L	Exova
1118147	MS-MRY-10	8-Jul-14	Total Nickel	0.8	ug/L	Exova
1118147	MS-MRY-10	8-Jul-14	Total Zinc	<3	ug/L	Exova
1118146	MS-MRY-10	8-Jul-14	Total Suspended Solids	4	mg/L	Exova
1118146	MS-MRY-10	8-Jul-14	pH	7.07	pH units	Exova
1119833	MS-MRY-10	14-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1119833	MS-MRY-10	14-Jul-14	Total Copper	0.6	ug/L	Exova
1119833	MS-MRY-10	14-Jul-14	Total Lead	0.09	ug/L	Exova
1119833	MS-MRY-10	14-Jul-14	Total Nickel	<0.5	ug/L	Exova
1119833	MS-MRY-10	14-Jul-14	Total Zinc	<3	ug/L	Exova
1119832	MS-MRY-10	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119832	MS-MRY-10	14-Jul-14	pH	7.32	pH units	Exova
1122837	MS-MRY-10	28-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1122837	MS-MRY-10	28-Jul-14	Total Copper	1.5	ug/L	Exova
1122837	MS-MRY-10	28-Jul-14	Total Lead	<0.05	ug/L	Exova
1122837	MS-MRY-10	28-Jul-14	Total Nickel	0.6	ug/L	Exova
1122837	MS-MRY-10	28-Jul-14	Total Zinc	<3	ug/L	Exova
1122835	MS-MRY-10	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122835	MS-MRY-10	28-Jul-14	pH	8.17	pH units	Exova
1117819	MS-MRY-13A	7-Jul-14	pH	8.03	pH units	Exova
1117821	MS-MRY-13A	7-Jul-14	Total Arsenic	0.1	ug/L	Exova
1117821	MS-MRY-13A	7-Jul-14	Total Copper	1.3	ug/L	Exova
1117821	MS-MRY-13A	7-Jul-14	Total Lead	0.09	ug/L	Exova
1117821	MS-MRY-13A	7-Jul-14	Total Nickel	11	ug/L	Exova
1117821	MS-MRY-13A	7-Jul-14	Total Zinc	5	ug/L	Exova
1117819	MS-MRY-13A	7-Jul-14	Total Suspended Solids	4	mg/L	Exova
1117819	MS-MRY-13A	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119814	MS-MRY-13A	14-Jul-14	pH	7.95	pH units	Exova
1119817	MS-MRY-13A	14-Jul-14	Total Arsenic	0.2	ug/L	Exova
1119817	MS-MRY-13A	14-Jul-14	Total Copper	1.4	ug/L	Exova
1119817	MS-MRY-13A	14-Jul-14	Total Lead	<0.05	ug/L	Exova
1119817	MS-MRY-13A	14-Jul-14	Total Nickel	10.7	ug/L	Exova
1119817	MS-MRY-13A	14-Jul-14	Total Zinc	3	ug/L	Exova
1119814	MS-MRY-13A	14-Jul-14	Total Suspended Solids	24	mg/L	Exova
1119814	MS-MRY-13A	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121328	MS-MRY-13A	21-Jul-14	pH	7.86	pH units	Exova
1121330	MS-MRY-13A	21-Jul-14	Total Arsenic	0.1	ug/L	Exova
1121330	MS-MRY-13A	21-Jul-14	Total Copper	1.1	ug/L	Exova
1121330	MS-MRY-13A	21-Jul-14	Total Lead	<0.05	ug/L	Exova
1121330	MS-MRY-13A	21-Jul-14	Total Nickel	9.2	ug/L	Exova
1121330	MS-MRY-13A	21-Jul-14	Total Zinc	<3	ug/L	Exova
1121328	MS-MRY-13A	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121328	MS-MRY-13A	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122842	MS-MRY-13A	28-Jul-14	pH	8.03	pH units	Exova
1122844	MS-MRY-13A	28-Jul-14	Total Arsenic	0.1	ug/L	Exova
1122844	MS-MRY-13A	28-Jul-14	Total Copper	1.7	ug/L	Exova
1122844	MS-MRY-13A	28-Jul-14	Total Lead	0.06	ug/L	Exova
1122844	MS-MRY-13A	28-Jul-14	Total Nickel	11.2	ug/L	Exova
1122844	MS-MRY-13A	28-Jul-14	Total Zinc	8	ug/L	Exova
1122842	MS-MRY-13A	28-Jul-14	Total Suspended Solids	3	mg/L	Exova
1117820	MS-MRY-13B	7-Jul-14	pH	8.30	pH units	Exova
1117822	MS-MRY-13B	7-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1117822	MS-MRY-13B	7-Jul-14	Total Copper	1.2	ug/L	Exova
1117822	MS-MRY-13B	7-Jul-14	Total Lead	<0.05	ug/L	Exova
1117822	MS-MRY-13B	7-Jul-14	Total Nickel	3.6	ug/L	Exova
1117822	MS-MRY-13B	7-Jul-14	Total Zinc	<3	ug/L	Exova
1117820	MS-MRY-13B	7-Jul-14	Total Suspended Solids	2	mg/L	Exova
1117820	MS-MRY-13B	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119815	MS-MRY-13B	14-Jul-14	pH	8.17	pH units	Exova
1119818	MS-MRY-13B	14-Jul-14	Total Arsenic	0.1	ug/L	Exova
1119818	MS-MRY-13B	14-Jul-14	Total Copper	1.6	ug/L	Exova
1119818	MS-MRY-13B	14-Jul-14	Total Lead	<0.05	ug/L	Exova
1119818	MS-MRY-13B	14-Jul-14	Total Nickel	8	ug/L	Exova
1119818	MS-MRY-13B	14-Jul-14	Total Zinc	<3	ug/L	Exova
1119815	MS-MRY-13B	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119815	MS-MRY-13B	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121329	MS-MRY-13B	21-Jul-14	pH	8.04	pH units	Exova
1121331	MS-MRY-13B	21-Jul-14	Total Arsenic	<0.1	ug/L	Exova
1121331	MS-MRY-13B	21-Jul-14	Total Copper	1.2	ug/L	Exova
1121331	MS-MRY-13B	21-Jul-14	Total Lead	<0.05	ug/L	Exova
1121331	MS-MRY-13B	21-Jul-14	Total Nickel	7.2	ug/L	Exova
1121331	MS-MRY-13B	21-Jul-14	Total Zinc	<3	ug/L	Exova
1121329	MS-MRY-13B	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121329	MS-MRY-13B	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122843	MS-MRY-13B	28-Jul-14	pH	8.21	pH units	Exova
1122845	MS-MRY-13B	28-Jul-14	Total Arsenic	0.1	ug/L	Exova
1122845	MS-MRY-13B	28-Jul-14	Total Copper	1.6	ug/L	Exova
1122845	MS-MRY-13B	28-Jul-14	Total Lead	<0.05	ug/L	Exova
1122845	MS-MRY-13B	28-Jul-14	Total Nickel	8.2	ug/L	Exova
1122845	MS-MRY-13B	28-Jul-14	Total Zinc	<3	ug/L	Exova
1122843	MS-MRY-13B	28-Jul-14	Total Suspended Solids	2	mg/L	Exova
1117818	MQ-C-A	7-Jul-14	pH	7.98	pH units	Exova
1117818	MQ-C-A	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117818	MQ-C-A	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119780	MQ-C-A	14-Jul-14	Conductivity	162	uS/cm	Exova
1119780	MQ-C-A	14-Jul-14	N-NO3	<0.10	mg/L	Exova
1119780	MQ-C-A	14-Jul-14	pH	8.03	pH units	Exova
1119780	MQ-C-A	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119780	MQ-C-A	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119780	MQ-C-A	14-Jul-14	N-NH3 (Ammonia)	0.06	mg/L	Exova
1121349	MQ-C-A	21-Jul-14	Conductivity	233	uS/cm	Exova
1121349	MQ-C-A	21-Jul-14	N-NO3	<0.10	mg/L	Exova
1121349	MQ-C-A	21-Jul-14	pH	8.15	pH units	Exova
1121349	MQ-C-A	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121349	MQ-C-A	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121349	MQ-C-A	21-Jul-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1121338	MQ-C-A-01	21-Jul-14	Conductivity	234	uS/cm	Exova
1121338	MQ-C-A-01	21-Jul-14	N-NO3	<0.10	mg/L	Exova
1121338	MQ-C-A-01	21-Jul-14	pH	8.09	pH units	Exova
1121338	MQ-C-A-01	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121338	MQ-C-A-01	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121338	MQ-C-A-01	21-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1121339	MQ-C-A-02	21-Jul-14	Conductivity	<5	uS/cm	Exova
1121339	MQ-C-A-02	21-Jul-14	N-NO3	<0.10	mg/L	Exova
1121339	MQ-C-A-02	21-Jul-14	pH	5.68	pH units	Exova
1121339	MQ-C-A-02	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121339	MQ-C-A-02	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121339	MQ-C-A-02	21-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1121340	MQ-C-A-03	21-Jul-14	Conductivity	<5	uS/cm	Exova
1121340	MQ-C-A-03	21-Jul-14	N-NO3	<0.10	mg/L	Exova
1121340	MQ-C-A-03	21-Jul-14	pH	5.60	pH units	Exova
1121340	MQ-C-A-03	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121340	MQ-C-A-03	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121340	MQ-C-A-03	21-Jul-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1122832	MQ-C-A	28-Jul-14	Conductivity	249	uS/cm	Exova
1122832	MQ-C-A	28-Jul-14	N-NO3	<0.10	mg/L	Exova
1122832	MQ-C-A	28-Jul-14	pH	8.23	pH units	Exova
1122832	MQ-C-A	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122832	MQ-C-A	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122832	MQ-C-A	28-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1122833	MQ-C-A-01	28-Jul-14	Conductivity	249	uS/cm	Exova
1122833	MQ-C-A-01	28-Jul-14	N-NO3	<0.10	mg/L	Exova
1122833	MQ-C-A-01	28-Jul-14	pH	8.25	pH units	Exova
1122833	MQ-C-A-01	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122833	MQ-C-A-01	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122833	MQ-C-A-01	28-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1117816	MQ-C-B	7-Jul-14	pH	8.03	pH units	Exova
1117816	MQ-C-B	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117816	MQ-C-B	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119778	MQ-C-B	14-Jul-14	Conductivity	662	uS/cm	Exova
1119778	MQ-C-B	14-Jul-14	N-NO3	5.29	mg/L	Exova
1119778	MQ-C-B	14-Jul-14	pH	8.01	pH units	Exova
1119778	MQ-C-B	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119778	MQ-C-B	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119778	MQ-C-B	14-Jul-14	N-NH3 (Ammonia)	0.98	mg/L	Exova
1121347	MQ-C-B	21-Jul-14	Conductivity	372	uS/cm	Exova
1121347	MQ-C-B	21-Jul-14	N-NO3	1.94	mg/L	Exova
1121347	MQ-C-B	21-Jul-14	pH	8.09	pH units	Exova
1121347	MQ-C-B	21-Jul-14	Total Suspended Solids	10	mg/L	Exova
1121347	MQ-C-B	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121347	MQ-C-B	21-Jul-14	N-NH3 (Ammonia)	0.6	mg/L	Exova
1121562	MQ-C-B	21-Jul-14	Toxicity*	non-lethal	mortality %	Exova
1122830	MQ-C-B	28-Jul-14	Conductivity	575	uS/cm	Exova
1122830	MQ-C-B	28-Jul-14	N-NO3	3.24	mg/L	Exova
1122830	MQ-C-B	28-Jul-14	pH	8.18	pH units	Exova
1122830	MQ-C-B	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122830	MQ-C-B	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122830	MQ-C-B	28-Jul-14	N-NH3 (Ammonia)	0.91	mg/L	Exova
1122822	MQ-C-B	28-Jul-14	Toxicity*	non-lethal	mortality %	Exova
1117817	MQ-C-D	7-Jul-14	pH	8.02	pH units	Exova
1117817	MQ-C-D	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117817	MQ-C-D	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119779	MQ-C-D	14-Jul-14	Conductivity	171	uS/cm	Exova
1119779	MQ-C-D	14-Jul-14	N-NO3	0.22	mg/L	Exova
1119779	MQ-C-D	14-Jul-14	pH	8.02	pH units	Exova
1119779	MQ-C-D	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119779	MQ-C-D	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119779	MQ-C-D	14-Jul-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1121348	MQ-C-D	21-Jul-14	Conductivity	225	uS/cm	Exova
1121348	MQ-C-D	21-Jul-14	N-NO3	0.75	mg/L	Exova
1121348	MQ-C-D	21-Jul-14	pH	8.07	pH units	Exova
1121348	MQ-C-D	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121348	MQ-C-D	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121348	MQ-C-D	21-Jul-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1122831	MQ-C-D	28-Jul-14	Conductivity	297	uS/cm	Exova
1122831	MQ-C-D	28-Jul-14	N-NO3	0.83	mg/L	Exova
1122831	MQ-C-D	28-Jul-14	pH	8.13	pH units	Exova
1122831	MQ-C-D	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122831	MQ-C-D	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122831	MQ-C-D	28-Jul-14	N-NH3 (Ammonia)	0.26	mg/L	Exova
1117812	MS-C-A	7-Jul-14	pH	7.85	pH units	Exova
1117812	MS-C-A	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117812	MS-C-A	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119774	MS-C-A	14-Jul-14	Conductivity	126	uS/cm	Exova
1119774	MS-C-A	14-Jul-14	N-NO3	0.14	mg/L	Exova
1119774	MS-C-A	14-Jul-14	pH	7.75	pH units	Exova
1119774	MS-C-A	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119774	MS-C-A	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119774	MS-C-A	14-Jul-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1121343	MS-C-A	21-Jul-14	Conductivity	140	uS/cm	Exova
1121343	MS-C-A	21-Jul-14	N-NO3	0.20	mg/L	Exova
1121343	MS-C-A	21-Jul-14	pH	7.91	pH units	Exova
1121343	MS-C-A	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121343	MS-C-A	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121343	MS-C-A	21-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1122826	MS-C-A	28-Jul-14	Conductivity	165	uS/cm	Exova
1122826	MS-C-A	28-Jul-14	N-NO3	0.27	mg/L	Exova
1122826	MS-C-A	28-Jul-14	pH	7.98	pH units	Exova
1122826	MS-C-A	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122826	MS-C-A	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122826	MS-C-A	28-Jul-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1117811	MS-C-B	7-Jul-14	pH	7.77	pH units	Exova
1117811	MS-C-B	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117811	MS-C-B	7-Jul-14	Oil & Grease - Total	1	mg/L	Exova
1119773	MS-C-B	14-Jul-14	Conductivity	126	uS/cm	Exova
1119773	MS-C-B	14-Jul-14	N-NO3	0.15	mg/L	Exova
1119773	MS-C-B	14-Jul-14	pH	7.84	pH units	Exova
1119773	MS-C-B	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119773	MS-C-B	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119773	MS-C-B	14-Jul-14	N-NH3 (Ammonia)	0.07	mg/L	Exova
1121342	MS-C-B	21-Jul-14	Conductivity	140	uS/cm	Exova
1121342	MS-C-B	21-Jul-14	N-NO3	0.22	mg/L	Exova
1121342	MS-C-B	21-Jul-14	pH	7.87	pH units	Exova
1121342	MS-C-B	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121342	MS-C-B	21-Jul-14	Oil & Grease - Total	2	mg/L	Exova
1121342	MS-C-B	21-Jul-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1122825	MS-C-B	28-Jul-14	Conductivity	168	uS/cm	Exova
1122825	MS-C-B	28-Jul-14	N-NO3	0.36	mg/L	Exova
1122825	MS-C-B	28-Jul-14	pH	7.95	pH units	Exova
1122825	MS-C-B	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122825	MS-C-B	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122825	MS-C-B	28-Jul-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1117815	MS-C-C	7-Jul-14	pH	7.97	pH units	Exova
1117815	MS-C-C	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117815	MS-C-C	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119777	MS-C-C	14-Jul-14	Conductivity	704	uS/cm	Exova
1119777	MS-C-C	14-Jul-14	N-NO3	15.8	mg/L	Exova
1119777	MS-C-C	14-Jul-14	pH	7.96	pH units	Exova
1119777	MS-C-C	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119777	MS-C-C	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119777	MS-C-C	14-Jul-14	N-NH3 (Ammonia)	0.17	mg/L	Exova
1121346	MS-C-C	21-Jul-14	Conductivity	666	uS/cm	Exova
1121346	MS-C-C	21-Jul-14	N-NO3	14.60	mg/L	Exova
1121346	MS-C-C	21-Jul-14	pH	8.06	pH units	Exova
1121346	MS-C-C	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121346	MS-C-C	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121346	MS-C-C	21-Jul-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1122829	MS-C-C	28-Jul-14	Conductivity	639	uS/cm	Exova
1122829	MS-C-C	28-Jul-14	N-NO3	7.98	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1122829	MS-C-C	28-Jul-14	pH	8.14	pH units	Exova
1122829	MS-C-C	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122829	MS-C-C	28-Jul-14	Oil & Grease - Total	2	mg/L	Exova
1122829	MS-C-C	28-Jul-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1117814	MS-C-D	7-Jul-14	pH	8.61	pH units	Exova
1117814	MS-C-D	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117814	MS-C-D	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119776	MS-C-D	14-Jul-14	Conductivity	465	uS/cm	Exova
1119776	MS-C-D	14-Jul-14	N-NO3	6.99	mg/L	Exova
1119776	MS-C-D	14-Jul-14	pH	8.56	pH units	Exova
1119776	MS-C-D	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119776	MS-C-D	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119776	MS-C-D	14-Jul-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1121345	MS-C-D	21-Jul-14	Conductivity	625	uS/cm	Exova
1121345	MS-C-D	21-Jul-14	N-NO3	13.90	mg/L	Exova
1121345	MS-C-D	21-Jul-14	pH	8.24	pH units	Exova
1121345	MS-C-D	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121345	MS-C-D	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121345	MS-C-D	21-Jul-14	N-NH3 (Ammonia)	0.06	mg/L	Exova
1122828	MS-C-D	28-Jul-14	Conductivity	620	uS/cm	Exova
1122828	MS-C-D	28-Jul-14	N-NO3	9.95	mg/L	Exova
1122828	MS-C-D	28-Jul-14	pH	8.35	pH units	Exova
1122828	MS-C-D	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122828	MS-C-D	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122828	MS-C-D	28-Jul-14	N-NH3 (Ammonia)	0.07	mg/L	Exova
1117813	MS-C-E	7-Jul-14	pH	8.2	pH units	Exova
1117813	MS-C-E	7-Jul-14	Total Suspended Solids	5	mg/L	Exova
1117813	MS-C-E	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119775	MS-C-E	14-Jul-14	Conductivity	341	uS/cm	Exova
1119775	MS-C-E	14-Jul-14	N-NO3	2.27	mg/L	Exova
1119775	MS-C-E	14-Jul-14	pH	8.18	pH units	Exova
1119775	MS-C-E	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119775	MS-C-E	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119775	MS-C-E	14-Jul-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1121344	MS-C-E	21-Jul-14	Conductivity	304	uS/cm	Exova
1121344	MS-C-E	21-Jul-14	N-NO3	2.46	mg/L	Exova
1121344	MS-C-E	21-Jul-14	pH	8.17	pH units	Exova
1121344	MS-C-E	21-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1121344	MS-C-E	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121344	MS-C-E	21-Jul-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1122827	MS-C-E	28-Jul-14	Conductivity	361	uS/cm	Exova
1122827	MS-C-E	28-Jul-14	N-NO3	2.37	mg/L	Exova
1122827	MS-C-E	28-Jul-14	pH	8.18	pH units	Exova
1122827	MS-C-E	28-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1122827	MS-C-E	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122827	MS-C-E	28-Jul-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1117810	MS-C-F	7-Jul-14	pH	7.83	pH units	Exova
1117810	MS-C-F	7-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1117810	MS-C-F	7-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119772	MS-C-F	14-Jul-14	Conductivity	136	uS/cm	Exova
1119772	MS-C-F	14-Jul-14	N-NO3	0.17	mg/L	Exova
1119772	MS-C-F	14-Jul-14	pH	7.9	pH units	Exova
1119772	MS-C-F	14-Jul-14	Total Suspended Solids	<2	mg/L	Exova
1119772	MS-C-F	14-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1119772	MS-C-F	14-Jul-14	N-NH3 (Ammonia)	0.22	mg/L	Exova
1121341	MS-C-F	21-Jul-14	Conductivity	167	uS/cm	Exova
1121341	MS-C-F	21-Jul-14	N-NO3	0.43	mg/L	Exova
1121341	MS-C-F	21-Jul-14	pH	7.85	pH units	Exova
1121341	MS-C-F	21-Jul-14	Total Suspended Solids	2	mg/L	Exova
1121341	MS-C-F	21-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1121341	MS-C-F	21-Jul-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1122824	MS-C-F	28-Jul-14	Conductivity	176	uS/cm	Exova
1122824	MS-C-F	28-Jul-14	N-NO3	0.36	mg/L	Exova
1122824	MS-C-F	28-Jul-14	pH	7.99	pH units	Exova
1122824	MS-C-F	28-Jul-14	Total Suspended Solids	2	mg/L	Exova
1122824	MS-C-F	28-Jul-14	Oil & Grease - Total	<1	mg/L	Exova
1122824	MS-C-F	28-Jul-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
Note: *Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*						
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)						
Area of Non-Compliance *:*						
Sample Station MP-C-A (Surface discharge downstream of construction area at Milne Port) showed an exceedance for total suspended solids on July 7, 2014 (154 mg/L). Subsequent sampling of this location on July 14, 2014 resulted in a TSS value of 5 mg/L. Construction has						
Sample Station MS-MRY-13A (Non-Hazardous Waste Landfill - Downstream surface water drainage) showed a non-compliance for total suspended solids on July 14, 2014 (24 mg/L). Subsequent sampling of this location on July 21, 2014 resulted in a TSS value of <2 mg/L.MS-MRY-						
MILNE PORT						
1124259	MP-01	5-Aug-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1124261	MP-01	5-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1124259	MP-01	5-Aug-14	Total Kjeldahl Nitrogen	0.91	mg/L	Exova
1124259	MP-01	5-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1124259	MP-01	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124259	MP-01	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124259	MP-01	5-Aug-14	pH	7.90	pH units	Exova
1126109	MP-01	12-Aug-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1126111	MP-01	12-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1126109	MP-01	12-Aug-14	Total Kjeldahl Nitrogen	0.65	mg/L	Exova
1126109	MP-01	12-Aug-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1126109	MP-01	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126109	MP-01	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126109	MP-01	12-Aug-14	pH	7.70	pH units	Exova
1128273	MP-01	20-Aug-14	Biochemical Oxygen Demand	4	mg/L	Exova
1128275	MP-01	20-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1128273	MP-01	20-Aug-14	Total Kjeldahl Nitrogen	1.75	mg/L	Exova
1128273	MP-01	20-Aug-14	N-NH3 (Ammonia)	0.24	mg/L	Exova
1128273	MP-01	20-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1128273	MP-01	20-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1128273	MP-01	20-Aug-14	pH	7.91	pH units	Exova
1129497	MP-01	27-Aug-14	Biochemical Oxygen Demand	4	mg/L	Exova
1129502	MP-01	27-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1129497	MP-01	27-Aug-14	Total Kjeldahl Nitrogen	1.45	mg/L	Exova
1129497	MP-01	27-Aug-14	N-NH3 (Ammonia)	0.45	mg/L	Exova
1129497	MP-01	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129497	MP-01	27-Aug-14	Total Suspended Solids	3	mg/L	Exova
1129497	MP-01	27-Aug-14	pH	7.79	pH units	Exova
1214828	MP-Q1-01	5-Aug-14	pH	8.27	pH units	Exova
1214828	MP-Q1-01	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1214828	MP-Q1-01	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126112	MP-Q1-01	11-Aug-14	Conductivity	280	uS/cm	Exova
1126112	MP-Q1-01	11-Aug-14	N-NO3	0.10	mg/L	Exova
1126112	MP-Q1-01	11-Aug-14	pH	8.01	pH units	Exova
1126112	MP-Q1-01	11-Aug-14	Total Suspended Solids	2	mg/L	Exova
1126112	MP-Q1-01	11-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126112	MP-Q1-01	11-Aug-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1127596	MP-Q1-01	18-Aug-14	pH	8.02	pH units	Exova
1127596	MP-Q1-01	18-Aug-14	Total Suspended Solids	4	mg/L	Exova
1127596	MP-Q1-01	18-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1129116	MP-Q1-01	25-Aug-14	Conductivity	320	uS/cm	Exova
1129116	MP-Q1-01	25-Aug-14	N-NO3	0.11	mg/L	Exova
1129116	MP-Q1-01	25-Aug-14	pH	8.10	pH units	Exova
1129116	MP-Q1-01	25-Aug-14	Total Suspended Solids	2	mg/L	Exova
1129116	MP-Q1-01	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129116	MP-Q1-01	25-Aug-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1124829	MP-Q1-02	5-Aug-14	pH	8.17	pH units	Exova
1124829	MP-Q1-02	5-Aug-14	Total Suspended Solids	2	mg/L	Exova
1124829	MP-Q1-02	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126113	MP-Q1-02	11-Aug-14	Conductivity	663	uS/cm	Exova
1126113	MP-Q1-02	11-Aug-14	N-NO3	15.7	mg/L	Exova
1126113	MP-Q1-02	11-Aug-14	pH	8.04	pH units	Exova
1126113	MP-Q1-02	11-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126113	MP-Q1-02	11-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126113	MP-Q1-02	11-Aug-14	N-NH3 (Ammonia)	5.50	mg/L	Exova

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1127597	MP-Q1-02	18-Aug-14	pH	8.01	pH units	Exova
1127597	MP-Q1-02	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127597	MP-Q1-02	18-Aug-14	Oil & Grease - Total	2	mg/L	Exova
LH14-041-08	MP-Q1-02	18-Aug-14	Toxicity	non-lethal*	mg/L	Exova
1129117	MP-Q1-02	25-Aug-14	Conductivity	608	uS/cm	Exova
1129117	MP-Q1-02	25-Aug-14	N-NO3	16.3	mg/L	Exova
1129117	MP-Q1-02	25-Aug-14	pH	8.07	pH units	Exova
1129117	MP-Q1-02	25-Aug-14	Total Suspended Solids	4	mg/L	Exova
1129117	MP-Q1-02	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129117	MP-Q1-02	25-Aug-14	N-NH3 (Ammonia)	3.03	mg/L	Exova
1124830	MP-C-B	5-Aug-14	pH	8.43	pH units	Exova
1124830	MP-C-B	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124830	MP-C-B	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126115	MP-C-B	11-Aug-14	Conductivity	468	uS/cm	Exova
1126115	MP-C-B	11-Aug-14	N-NO3	1.37	mg/L	Exova
1126115	MP-C-B	11-Aug-14	pH	8.27	pH units	Exova
1126115	MP-C-B	11-Aug-14	Total Suspended Solids	10	mg/L	Exova
1126115	MP-C-B	11-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126115	MP-C-B	11-Aug-14	N-NH3 (Ammonia)	0.20	mg/L	Exova
LH14-041-06	MP-C-B	11-Aug-14	Toxicity	non-lethal*	mg/L	Exova
1127598	MP-C-B	18-Aug-14	pH	8.28	pH units	Exova
1127598	MP-C-B	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127598	MP-C-B	18-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1129118	MP-C-B	25-Aug-14	Conductivity	466	uS/cm	Exova
1129118	MP-C-B	25-Aug-14	N-NO3	1.10	mg/L	Exova
1129118	MP-C-B	25-Aug-14	pH	8.32	pH units	Exova
1129118	MP-C-B	25-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129118	MP-C-B	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129118	MP-C-B	25-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1124831	MP-C-B01	5-Aug-14	pH	8.43	pH units	Exova
1124831	MP-C-B01	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124831	MP-C-B01	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126116	MP-C-B01	11-Aug-14	Conductivity	460	uS/cm	Exova
1126116	MP-C-B01	11-Aug-14	N-NO3	1.78	mg/L	Exova
1126116	MP-C-B01	11-Aug-14	pH	8.29	pH units	Exova
1126116	MP-C-B01	11-Aug-14	Total Suspended Solids	8	mg/L	Exova
1126116	MP-C-B01	11-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126116	MP-C-B01	11-Aug-14	N-NH3 (Ammonia)	0.23	mg/L	Exova
1127599	MP-C-B01	18-Aug-14	pH	8.31	pH units	Exova
1127599	MP-C-B01	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127599	MP-C-B01	18-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1129119	MP-C-B01	25-Aug-14	Conductivity	457	uS/cm	Exova
1129119	MP-C-B01	25-Aug-14	N-NO3	1.41	mg/L	Exova
1129119	MP-C-B01	25-Aug-14	pH	8.32	pH units	Exova
1129119	MP-C-B01	25-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129119	MP-C-B01	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129119	MP-C-B01	25-Aug-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1124832	MP-C-H	5-Aug-14	pH	8.39	pH units	Exova
1124832	MP-C-H	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124832	MP-C-H	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126114	MP-C-H	11-Aug-14	Conductivity	302	uS/cm	Exova
1126114	MP-C-H	11-Aug-14	N-NO3	0.50	mg/L	Exova
1126114	MP-C-H	11-Aug-14	pH	8.27	pH units	Exova
1126114	MP-C-H	11-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126114	MP-C-H	11-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126114	MP-C-H	11-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1127600	MP-C-H	18-Aug-14	pH	8.25	pH units	Exova
1127600	MP-C-H	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127600	MP-C-H	18-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1129120	MP-C-H	25-Aug-14	Conductivity	337	uS/cm	Exova
1129120	MP-C-H	25-Aug-14	N-NO3	0.16	mg/L	Exova
1129120	MP-C-H	25-Aug-14	pH	8.30	pH units	Exova
1129120	MP-C-H	25-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129120	MP-C-H	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129120	MP-C-H	25-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
MARY RIVER MINE SITE						
1124255	MS-01	5-Aug-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1124257	MS-01	5-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1124255	MS-01	5-Aug-14	Total Kjeldahl Nitrogen	0.75	mg/L	Exova
1124255	MS-01	5-Aug-14	N-NH3 (Ammonia)	0.37	mg/L	Exova
1124255	MS-01	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124255	MS-01	5-Aug-14	Total Phosphorus	0.27	mg/L	Exova
1124255	MS-01	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124255	MS-01	5-Aug-14	pH	7.50	pH units	Exova
1126104	MS-01	12-Aug-14	Biochemical Oxygen Demand	2	mg/L	Exova
1126106	MS-01	12-Aug-14	Faecal Coliforms	9300	ct/100mL	Exova
1126104	MS-01	12-Aug-14	Total Kjeldahl Nitrogen	0.27	mg/L	Exova
1126104	MS-01	12-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1126104	MS-01	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126104	MS-01	12-Aug-14	Total Phosphorus	0.53	mg/L	Exova
1126104	MS-01	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126104	MS-01	12-Aug-14	pH	7.69	pH units	Exova
1127593	MS-01	19-Aug-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1127591	MS-01	19-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1127593	MS-01	19-Aug-14	Total Kjeldahl Nitrogen	0.30	mg/L	Exova
1127593	MS-01	19-Aug-14	N-NH3 (Ammonia)	0.21	mg/L	Exova
1127593	MS-01	19-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127593	MS-01	19-Aug-14	Total Phosphorus	0.57	mg/L	Exova
1127593	MS-01	19-Aug-14	Total Suspended Solids	3	mg/L	Exova
1127593	MS-01	19-Aug-14	pH	7.42	pH units	Exova
1129113	MS-01	26-Aug-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1129115	MS-01	26-Aug-14	Faecal Coliforms	68	ct/100mL	Exova
1129113	MS-01	26-Aug-14	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova
1129113	MS-01	26-Aug-14	N-NH3 (Ammonia)	0.23	mg/L	Exova
1129113	MS-01	26-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129113	MS-01	26-Aug-14	Total Phosphorus	0.79	mg/L	Exova
1129113	MS-01	26-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129113	MS-01	26-Aug-14	pH	7.69	pH units	Exova
1129111	MS-03	25-Aug-14	Benzene	<0.5	ug/L	Exova
1129111	MS-03	25-Aug-14	Ethylbenzene	<0.5	ug/L	Exova
1129111	MS-03	25-Aug-14	Toluene	<0.5	ug/L	Exova
1129111	MS-03	25-Aug-14	Total Lead	0.001	mg/L	Exova
1129111	MS-03	25-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	Biochemical Oxygen Demand	4	mg/L	Exova
1126865	MS-MRY-04b	14-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1126863	MS-MRY-04b	14-Aug-14	Total Kjeldahl Nitrogen	1.70	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	Total Phosphorus	0.15	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	Total Suspended Solids	25	mg/L	Exova
1126863	MS-MRY-04b	14-Aug-14	pH	7.22	pH units	Exova
1126864	MS-MRY-04b	14-Aug-14	Biochemical Oxygen Demand	6	mg/L	Exova
1126866	MS-MRY-04b	14-Aug-14	Faecal Coliforms	0	ct/100mL	Exova
1126864	MS-MRY-04b	14-Aug-14	Total Kjeldahl Nitrogen	1.61	mg/L	Exova
1126864	MS-MRY-04b	14-Aug-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1126864	MS-MRY-04b	14-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126864	MS-MRY-04b	14-Aug-14	Total Phosphorus	0.16	mg/L	Exova
1126864	MS-MRY-04b	14-Aug-14	Total Suspended Solids	24	mg/L	Exova
1126864	MS-MRY-04b	14-Aug-14	pH	7.31	pH units	Exova
1126740	MS-MRY-11-TP1	13-Aug-14	pH	8.01	pH units	Exova
1126744	MS-MRY-11-TP1	13-Aug-14	Total Arsenic	0.2	ug/L	Exova
1126744	MS-MRY-11-TP1	13-Aug-14	Total Copper	1.8	ug/L	Exova
1126744	MS-MRY-11-TP1	13-Aug-14	Total Lead	0.54	ug/L	Exova
1126744	MS-MRY-11-TP1	13-Aug-14	Total Nickel	2.2	ug/L	Exova
1126744	MS-MRY-11-TP1	13-Aug-14	Total Zinc	<3	ug/L	Exova
1126740	MS-MRY-11-TP1	13-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126740	MS-MRY-11-TP1	13-Aug-14	Oil & Grease - Total	<1	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1124844	MS-MRY-13A	5-Aug-14	pH	8.10	pH units	Exova
1124848	MS-MRY-13A	5-Aug-14	Total Arsenic	0.1	ug/L	Exova
1124848	MS-MRY-13A	5-Aug-14	Total Copper	1.1	ug/L	Exova
1124848	MS-MRY-13A	5-Aug-14	Total Lead	<0.05	ug/L	Exova
1124848	MS-MRY-13A	5-Aug-14	Total Nickel	8.5	ug/L	Exova
1124848	MS-MRY-13A	5-Aug-14	Total Zinc	<3	ug/L	Exova
1124844	MS-MRY-13A	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124844	MS-MRY-13A	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126735	MS-MRY-13A	12-Aug-14	pH	8.04	pH units	Exova
1126737	MS-MRY-13A	12-Aug-14	Total Arsenic	0.1	ug/L	Exova
1126737	MS-MRY-13A	12-Aug-14	Total Copper	1.6	ug/L	Exova
1126737	MS-MRY-13A	12-Aug-14	Total Lead	0.05	ug/L	Exova
1126737	MS-MRY-13A	12-Aug-14	Total Nickel	10.0	ug/L	Exova
1126737	MS-MRY-13A	12-Aug-14	Total Zinc	<3	ug/L	Exova
1126735	MS-MRY-13A	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126735	MS-MRY-13A	12-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1127629	MS-MRY-13A	18-Aug-14	pH	8.05	pH units	Exova
1126731	MS-MRY-13A	18-Aug-14	Total Arsenic	<0.1	ug/L	Exova
1126731	MS-MRY-13A	18-Aug-14	Total Copper	1.6	ug/L	Exova
1126731	MS-MRY-13A	18-Aug-14	Total Lead	0.06	ug/L	Exova
1126731	MS-MRY-13A	18-Aug-14	Total Nickel	10.2	ug/L	Exova
1126731	MS-MRY-13A	18-Aug-14	Total Zinc	<3	ug/L	Exova
1127629	MS-MRY-13A	18-Aug-14	Total Suspended Solids	2	mg/L	Exova
1127629	MS-MRY-13A	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129709	MS-MRY-13A	27-Aug-14	pH	8.20	pH units	Exova
1129712	MS-MRY-13A	27-Aug-14	Total Arsenic	0.2	ug/L	Exova
1129712	MS-MRY-13A	27-Aug-14	Total Copper	1.8	ug/L	Exova
1129712	MS-MRY-13A	27-Aug-14	Total Lead	0.12	ug/L	Exova
1129712	MS-MRY-13A	27-Aug-14	Total Nickel	11.0	ug/L	Exova
1129712	MS-MRY-13A	27-Aug-14	Total Zinc	4	ug/L	Exova
1129709	MS-MRY-13A	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129709	MS-MRY-13A	27-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1124845	MS-MRY-13B	5-Aug-14	pH	8.25	pH units	Exova
1124849	MS-MRY-13B	5-Aug-14	Total Arsenic	<0.1	ug/L	Exova
1124849	MS-MRY-13B	5-Aug-14	Total Copper	1.2	ug/L	Exova
1124849	MS-MRY-13B	5-Aug-14	Total Lead	<0.05	ug/L	Exova
1124849	MS-MRY-13B	5-Aug-14	Total Nickel	6.4	ug/L	Exova
1124849	MS-MRY-13B	5-Aug-14	Total Zinc	<3	ug/L	Exova
1124845	MS-MRY-13B	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124845	MS-MRY-13B	5-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1126736	MS-MRY-13B	12-Aug-14	pH	8.04	pH units	Exova
1126738	MS-MRY-13B	12-Aug-14	Total Arsenic	<0.01	ug/L	Exova
1126738	MS-MRY-13B	12-Aug-14	Total Copper	1.6	ug/L	Exova
1126738	MS-MRY-13B	12-Aug-14	Total Lead	<0.05	ug/L	Exova
1126738	MS-MRY-13B	12-Aug-14	Total Nickel	7.1	ug/L	Exova
1126738	MS-MRY-13B	12-Aug-14	Total Zinc	<3	ug/L	Exova
1126736	MS-MRY-13B	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126736	MS-MRY-13B	12-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1127630	MS-MRY-13B	18-Aug-14	pH	8.11	pH units	Exova
1126732	MS-MRY-13B	18-Aug-14	Total Arsenic	<0.1	ug/L	Exova
1126732	MS-MRY-13B	18-Aug-14	Total Copper	1.5	ug/L	Exova
1126732	MS-MRY-13B	18-Aug-14	Total Lead	<0.05	ug/L	Exova
1126732	MS-MRY-13B	18-Aug-14	Total Nickel	7.4	ug/L	Exova
1126732	MS-MRY-13B	18-Aug-14	Total Zinc	<3	ug/L	Exova
1127630	MS-MRY-13B	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127630	MS-MRY-13B	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129710	MS-MRY-13B	27-Aug-14	pH	8.24	pH units	Exova
1129713	MS-MRY-13B	27-Aug-14	Total Arsenic	<0.01	ug/L	Exova
1129713	MS-MRY-13B	27-Aug-14	Total Copper	1.3	ug/L	Exova
1129713	MS-MRY-13B	27-Aug-14	Total Lead	<0.05	ug/L	Exova
1129713	MS-MRY-13B	27-Aug-14	Total Nickel	6.5	ug/L	Exova
1129713	MS-MRY-13B	27-Aug-14	Total Zinc	<3	ug/L	Exova
1129710	MS-MRY-13B	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129710	MS-MRY-13B	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124841	MQ-C-A	5-Aug-14	Conductivity	298	uS/cm	Exova
1124841	MQ-C-A	5-Aug-14	N-NO3	<0.10	mg/L	Exova
1124841	MQ-C-A	5-Aug-14	pH	8.36	pH units	Exova
1124841	MQ-C-A	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124841	MQ-C-A	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124841	MQ-C-A	5-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1126312	MQ-C-A	12-Aug-14	Conductivity	268	uS/cm	Exova
1126312	MQ-C-A	12-Aug-14	N-NO3	<0.10	mg/L	Exova
1126312	MQ-C-A	12-Aug-14	pH	7.58	pH units	Exova
1126312	MQ-C-A	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126312	MQ-C-A	12-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1126312	MQ-C-A	12-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1127609	MQ-C-A	18-Aug-14	Conductivity	285	uS/cm	Exova
1127609	MQ-C-A	18-Aug-14	N-NO3	<0.10	mg/L	Exova
1127609	MQ-C-A	18-Aug-14	pH	8.17	pH units	Exova
1127609	MQ-C-A	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127609	MQ-C-A	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127609	MQ-C-A	18-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1129706	MQ-C-A	27-Aug-14	Conductivity	291	uS/cm	Exova
1129706	MQ-C-A	27-Aug-14	N-NO3	<0.10	mg/L	Exova
1129706	MQ-C-A	27-Aug-14	pH	8.31	pH units	Exova
1129706	MQ-C-A	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129706	MQ-C-A	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129706	MQ-C-A	27-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1127612	MQ-C-A-01	18-Aug-14	Conductivity	284	uS/cm	Exova
1127612	MQ-C-A-01	18-Aug-14	N-NO3	<0.10	mg/L	Exova
1127612	MQ-C-A-01	18-Aug-14	pH	8.12	pH units	Exova
1127612	MQ-C-A-01	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127612	MQ-C-A-01	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127612	MQ-C-A-01	18-Aug-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1124839	MQ-C-B	5-Aug-14	Conductivity	487	uS/cm	Exova
1124839	MQ-C-B	5-Aug-14	N-NO3	1.80	mg/L	Exova
1124839	MQ-C-B	5-Aug-14	pH	8.30	pH units	Exova
1124839	MQ-C-B	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124839	MQ-C-B	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124839	MQ-C-B	5-Aug-14	N-NH3 (Ammonia)	0.53	mg/L	Exova
1126313	MQ-C-B	12-Aug-14	Conductivity	501	uS/cm	Exova
1126313	MQ-C-B	12-Aug-14	N-NO3	2.12	mg/L	Exova
1126313	MQ-C-B	12-Aug-14	pH	7.53	pH units	Exova
1126313	MQ-C-B	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126313	MQ-C-B	12-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1126313	MQ-C-B	12-Aug-14	N-NH3 (Ammonia)	0.65	mg/L	Exova
LH14-041-07	MQ-C-B	12-Aug-14	Toxicity	non-lethal*	mg/L	Exova
1127607	MQ-C-B	18-Aug-14	Conductivity	470	uS/cm	Exova
1127607	MQ-C-B	18-Aug-14	N-NO3	1.61	mg/L	Exova
1127607	MQ-C-B	18-Aug-14	pH	8.19	pH units	Exova
1127607	MQ-C-B	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127607	MQ-C-B	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127607	MQ-C-B	18-Aug-14	N-NH3 (Ammonia)	0.40	mg/L	Exova
1129705	MQ-C-B	27-Aug-14	Conductivity	543	uS/cm	Exova
1129705	MQ-C-B	27-Aug-14	N-NO3	1.91	mg/L	Exova
1129705	MQ-C-B	27-Aug-14	pH	8.19	pH units	Exova
1129705	MQ-C-B	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129705	MQ-C-B	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129705	MQ-C-B	27-Aug-14	N-NH3 (Ammonia)	0.60	mg/L	Exova
LH14-041-09	MQ-C-B	28-Aug-14	Toxicity	non-lethal*	mg/L	Exova
1124840	MQ-C-D	5-Aug-14	Conductivity	339	uS/cm	Exova
1124840	MQ-C-D	5-Aug-14	N-NO3	1.16	mg/L	Exova
1124840	MQ-C-D	5-Aug-14	pH	8.22	pH units	Exova
1124840	MQ-C-D	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124840	MQ-C-D	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124840	MQ-C-D	5-Aug-14	N-NH3 (Ammonia)	0.37	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1126311	MQ-C-D	12-Aug-14	Conductivity	382	uS/cm	Exova
1126311	MQ-C-D	12-Aug-14	N-NO3	1.39	mg/L	Exova
1126311	MQ-C-D	12-Aug-14	pH	7.56	pH units	Exova
1126311	MQ-C-D	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126311	MQ-C-D	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126311	MQ-C-D	12-Aug-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1127608	MQ-C-D	18-Aug-14	Conductivity	402	uS/cm	Exova
1127608	MQ-C-D	18-Aug-14	N-NO3	1.45	mg/L	Exova
1127608	MQ-C-D	18-Aug-14	pH	8.15	pH units	Exova
1127608	MQ-C-D	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127608	MQ-C-D	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127608	MQ-C-D	18-Aug-14	N-NH3 (Ammonia)	0.34	mg/L	Exova
1129707	MQ-C-D	27-Aug-14	Conductivity	409	uS/cm	Exova
1129707	MQ-C-D	27-Aug-14	N-NO3	1.38	mg/L	Exova
1129707	MQ-C-D	27-Aug-14	pH	8.22	pH units	Exova
1129707	MQ-C-D	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129707	MQ-C-D	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129707	MQ-C-D	27-Aug-14	N-NH3 (Ammonia)	0.33	mg/L	Exova
1124834	MS-C-A	5-Aug-14	Conductivity	181	uS/cm	Exova
1124834	MS-C-A	5-Aug-14	N-NO3	0.32	mg/L	Exova
1124834	MS-C-A	5-Aug-14	pH	8.07	pH units	Exova
1124834	MS-C-A	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124834	MS-C-A	5-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1124834	MS-C-A	5-Aug-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1126305	MS-C-A	12-Aug-14	Conductivity	153	uS/cm	Exova
1126305	MS-C-A	12-Aug-14	N-NO3	0.17	mg/L	Exova
1126305	MS-C-A	12-Aug-14	pH	7.36	pH units	Exova
1126305	MS-C-A	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126305	MS-C-A	12-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1126305	MS-C-A	12-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1126310	MS-C-A-01	12-Aug-14	Conductivity	154	uS/cm	Exova
1126310	MS-C-A-01	12-Aug-14	N-NO3	0.17	mg/L	Exova
1126310	MS-C-A-01	12-Aug-14	pH	7.38	pH units	Exova
1126310	MS-C-A-01	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126310	MS-C-A-01	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126310	MS-C-A-01	12-Aug-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1127603	MS-C-A	18-Aug-14	Conductivity	166	uS/cm	Exova
1127603	MS-C-A	18-Aug-14	N-NO3	0.18	mg/L	Exova
1127603	MS-C-A	18-Aug-14	pH	7.96	pH units	Exova
1127603	MS-C-A	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127603	MS-C-A	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127603	MS-C-A	18-Aug-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1129687	MS-C-A	27-Aug-14	Conductivity	171	uS/cm	Exova
1129687	MS-C-A	27-Aug-14	N-NO3	19	mg/L	Exova
1129687	MS-C-A	27-Aug-14	pH	8.04	pH units	Exova
1129687	MS-C-A	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129687	MS-C-A	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129687	MS-C-A	27-Aug-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1124833	MS-C-B	5-Aug-14	Conductivity	188	uS/cm	Exova
1124833	MS-C-B	5-Aug-14	N-NO3	0.43	mg/L	Exova
1124833	MS-C-B	5-Aug-14	pH	7.95	pH units	Exova
1124833	MS-C-B	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124833	MS-C-B	5-Aug-14	Oil & Grease - Total	3	mg/L	Exova
1124833	MS-C-B	5-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1126304	MS-C-B	12-Aug-14	Conductivity	155	uS/cm	Exova
1126304	MS-C-B	12-Aug-14	N-NO3	0.21	mg/L	Exova
1126304	MS-C-B	12-Aug-14	pH	7.36	pH units	Exova
1126304	MS-C-B	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126304	MS-C-B	12-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1126304	MS-C-B	12-Aug-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1127602	MS-C-B	18-Aug-14	Conductivity	168	uS/cm	Exova
1127602	MS-C-B	18-Aug-14	N-NO3	0.21	mg/L	Exova
1127602	MS-C-B	18-Aug-14	pH	7.96	pH units	Exova
1127602	MS-C-B	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127602	MS-C-B	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127602	MS-C-B	18-Aug-14	N-NH3 (Ammonia)	0.18	mg/L	Exova
1129688	MS-C-B	27-Aug-14	Conductivity	171	uS/cm	Exova
1129688	MS-C-B	27-Aug-14	N-NO3	0.21	mg/L	Exova
1129688	MS-C-B	27-Aug-14	pH	8.05	pH units	Exova
1129688	MS-C-B	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129688	MS-C-B	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129688	MS-C-B	27-Aug-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1129695	MS-C-B-01	27-Aug-14	Conductivity	174	uS/cm	Exova
1129695	MS-C-B-01	27-Aug-14	N-NO3	0.20	mg/L	Exova
1129695	MS-C-B-01	27-Aug-14	pH	8.07	pH units	Exova
1129695	MS-C-B-01	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129695	MS-C-B-01	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129695	MS-C-B-01	27-Aug-14	N-NH3 (Ammonia)	0.02	mg/L	Exova
1129701	MS-C-B-02	27-Aug-14	Conductivity	<5	uS/cm	Exova
1129701	MS-C-B-02	27-Aug-14	N-NO3	<0.10	mg/L	Exova
1129701	MS-C-B-02	27-Aug-14	pH	6.03	pH units	Exova
1129701	MS-C-B-02	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129701	MS-C-B-02	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129701	MS-C-B-02	27-Aug-14	N-NH3 (Ammonia)	0.08	mg/L	Exova
1129702	MS-C-B-03	27-Aug-14	Conductivity	<5	uS/cm	Exova
1129702	MS-C-B-03	27-Aug-14	N-NO3	<0.10	mg/L	Exova
1129702	MS-C-B-03	27-Aug-14	pH	6.07	pH units	Exova
1129702	MS-C-B-03	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129702	MS-C-B-03	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129702	MS-C-B-03	27-Aug-14	N-NH3 (Ammonia)	0.02	mg/L	Exova
1124838	MS-C-C	5-Aug-14	Conductivity	561	uS/cm	Exova
1124838	MS-C-C	5-Aug-14	N-NO3	7.17	mg/L	Exova
1124838	MS-C-C	5-Aug-14	pH	8.28	pH units	Exova
1124838	MS-C-C	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124838	MS-C-C	5-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1124838	MS-C-C	5-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova
1126309	MS-C-C	12-Aug-14	Conductivity	599	uS/cm	Exova
1126309	MS-C-C	12-Aug-14	N-NO3	7.8	mg/L	Exova
1126309	MS-C-C	12-Aug-14	pH	7.51	pH units	Exova
1126309	MS-C-C	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126309	MS-C-C	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126309	MS-C-C	12-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1127606	MS-C-C	18-Aug-14	Conductivity	616	uS/cm	Exova
1127606	MS-C-C	18-Aug-14	N-NO3	7.52	mg/L	Exova
1127606	MS-C-C	18-Aug-14	pH	8.09	pH units	Exova
1127606	MS-C-C	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127606	MS-C-C	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127606	MS-C-C	18-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1127610	MS-C-C-03	18-Aug-14	Conductivity	<5	uS/cm	Exova
1127610	MS-C-C-03	18-Aug-14	N-NO3	<0.10	mg/L	Exova
1127610	MS-C-C-03	18-Aug-14	pH	5.95	pH units	Exova
1127610	MS-C-C-03	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127610	MS-C-C-03	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127610	MS-C-C-03	18-Aug-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1129689	MS-C-C	27-Aug-14	Conductivity	694	uS/cm	Exova
1129689	MS-C-C	27-Aug-14	N-NO3	11.6	mg/L	Exova
1129689	MS-C-C	27-Aug-14	pH	8.16	pH units	Exova
1129689	MS-C-C	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129689	MS-C-C	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129689	MS-C-C	27-Aug-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1124837	MS-C-D	5-Aug-14	Conductivity	575	uS/cm	Exova
1124837	MS-C-D	5-Aug-14	N-NO3	8.36	mg/L	Exova
1124837	MS-C-D	5-Aug-14	pH	8.40	pH units	Exova
1124837	MS-C-D	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124837	MS-C-D	5-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1124837	MS-C-D	5-Aug-14	N-NH3 (Ammonia)	0.14	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1126308	MS-C-D	12-Aug-14	Conductivity	632	uS/cm	Exova
1126308	MS-C-D	12-Aug-14	N-NO3	11.2	mg/L	Exova
1126308	MS-C-D	12-Aug-14	pH	7.66	pH units	Exova
1126308	MS-C-D	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126308	MS-C-D	12-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1126308	MS-C-D	12-Aug-14	N-NH3 (Ammonia)	0.25	mg/L	Exova
1127605	MS-C-D	18-Aug-14	Conductivity	615	uS/cm	Exova
1127605	MS-C-D	18-Aug-14	N-NO3	9.17	mg/L	Exova
1127605	MS-C-D	18-Aug-14	pH	8.29	pH units	Exova
1127605	MS-C-D	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127605	MS-C-D	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127605	MS-C-D	18-Aug-14	N-NH3 (Ammonia)	0.06	mg/L	Exova
1129690	MS-C-D	27-Aug-14	Conductivity	619	uS/cm	Exova
1129690	MS-C-D	27-Aug-14	N-NO3	9.39	mg/L	Exova
1129690	MS-C-D	27-Aug-14	pH	8.35	pH units	Exova
1129690	MS-C-D	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129690	MS-C-D	27-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1129690	MS-C-D	27-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1124836	MS-C-E	5-Aug-14	Conductivity	334	uS/cm	Exova
1124836	MS-C-E	5-Aug-14	N-NO3	1.66	mg/L	Exova
1124836	MS-C-E	5-Aug-14	pH	8.32	pH units	Exova
1124836	MS-C-E	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124836	MS-C-E	5-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1124836	MS-C-E	5-Aug-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1126307	MS-C-E	12-Aug-14	Conductivity	314	uS/cm	Exova
1126307	MS-C-E	12-Aug-14	N-NO3	1.69	mg/L	Exova
1126307	MS-C-E	12-Aug-14	pH	7.61	pH units	Exova
1126307	MS-C-E	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126307	MS-C-E	12-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1126307	MS-C-E	12-Aug-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1127604	MS-C-E	18-Aug-14	Conductivity	358	uS/cm	Exova
1127604	MS-C-E	18-Aug-14	N-NO3	2.25	mg/L	Exova
1127604	MS-C-E	18-Aug-14	pH	8.18	pH units	Exova
1127604	MS-C-E	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127604	MS-C-E	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127604	MS-C-E	18-Aug-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
1129691	MS-C-E	27-Aug-14	Conductivity	371	uS/cm	Exova
1129691	MS-C-E	27-Aug-14	N-NO3	2.79	mg/L	Exova
1129691	MS-C-E	27-Aug-14	pH	8.30	pH units	Exova
1129691	MS-C-E	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129691	MS-C-E	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129691	MS-C-E	27-Aug-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1124835	MS-C-F	5-Aug-14	Conductivity	197	uS/cm	Exova
1124835	MS-C-F	5-Aug-14	N-NO3	0.40	mg/L	Exova
1124835	MS-C-F	5-Aug-14	pH	8.15	pH units	Exova
1124835	MS-C-F	5-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1124835	MS-C-F	5-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1124835	MS-C-F	5-Aug-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1126306	MS-C-F	12-Aug-14	Conductivity	157	uS/cm	Exova
1126306	MS-C-F	12-Aug-14	N-NO3	0.18	mg/L	Exova
1126306	MS-C-F	12-Aug-14	pH	7.37	pH units	Exova
1126306	MS-C-F	12-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1126306	MS-C-F	12-Aug-14	Oil & Grease - Total	4	mg/L	Exova
1126306	MS-C-F	12-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1127601	MS-C-F	18-Aug-14	Conductivity	167	uS/cm	Exova
1127601	MS-C-F	18-Aug-14	N-NO3	0.18	mg/L	Exova
1127601	MS-C-F	18-Aug-14	pH	8.06	pH units	Exova
1127601	MS-C-F	18-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1127601	MS-C-F	18-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1127601	MS-C-F	18-Aug-14	N-NH3 (Ammonia)	0.13	mg/L	Exova
1129692	MS-C-F	27-Aug-14	Conductivity	182	uS/cm	Exova
1129692	MS-C-F	27-Aug-14	N-NO3	0.27	mg/L	Exova
1129692	MS-C-F	27-Aug-14	pH	8.13	pH units	Exova
1129692	MS-C-F	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129692	MS-C-F	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129692	MS-C-F	27-Aug-14	N-NH3 (Ammonia)	0.15	mg/L	Exova
1129693	MS-C-G	27-Aug-14	Conductivity	173	uS/cm	Exova
1129693	MS-C-G	27-Aug-14	N-NO3	<0.10	mg/L	Exova
1129693	MS-C-G	27-Aug-14	pH	8.12	pH units	Exova
1129693	MS-C-G	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129693	MS-C-G	27-Aug-14	Oil & Grease - Total	1	mg/L	Exova
1129693	MS-C-G	27-Aug-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1129694	MS-C-H	27-Aug-14	Conductivity	220	uS/cm	Exova
1129694	MS-C-H	27-Aug-14	N-NO3	<0.10	mg/L	Exova
1129694	MS-C-H	27-Aug-14	pH	8.26	pH units	Exova
1129694	MS-C-H	27-Aug-14	Total Suspended Solids	<2	mg/L	Exova
1129694	MS-C-H	27-Aug-14	Oil & Grease - Total	2	mg/L	Exova
1129694	MS-C-H	27-Aug-14	N-NH3 (Ammonia)	0.10	mg/L	Exova

Note: *Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Area of Non-Compliance *:*

Sample Station MS-01 (Mine Site Sewage Treatment Facility) showed an exceedance for faecal coliform on August 12, 2014 (9300 ct/100mL). This result is thought to be anomalous and is likely a result of sampling error as the prior and subsequent sampling of this location on August 5 and August 19 respectively resulted in a faecal coliform value of 0 ct/100mL. Also, there were no upset conditions reported by the Water Treatment Operator during this period.

MILNE PORT						
1130371	MP-01	2-Sep-14	Biochemical Oxygen Demand	3	mg/L	Exova
1130366	MP-01	2-Sep-14	Faecal Coliforms	7	ct/100mL	Exova
1130371	MP-01	2-Sep-14	Total Kjeldahl Nitrogen	2.3	mg/L	Exova
1130371	MP-01	2-Sep-14	N-NH3 (Ammonia)	0.56	mg/L	Exova
1130371	MP-01	2-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130371	MP-01	2-Sep-14	Total Suspended Solids	5	mg/L	Exova
1130371	MP-01	2-Sep-14	pH	7.31	pH units	Exova
1132591	MP-01	9-Sep-14	Biochemical Oxygen Demand	1	mg/L	Exova
1132587	MP-01	9-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1132591	MP-01	9-Sep-14	Total Kjeldahl Nitrogen	5.34	mg/L	Exova
1132591	MP-01	9-Sep-14	N-NH3 (Ammonia)	3.90	mg/L	Exova
1132591	MP-01	9-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132591	MP-01	9-Sep-14	Total Suspended Solids	2	mg/L	Exova
1132591	MP-01	9-Sep-14	pH	7.86	pH units	Exova
1134123	MP-01	16-Sep-14	Biochemical Oxygen Demand	4	mg/L	Exova
1134120	MP-01	16-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1134123	MP-01	16-Sep-14	Total Kjeldahl Nitrogen	0.83	mg/L	Exova
1134123	MP-01	16-Sep-14	N-NH3 (Ammonia)	0.38	mg/L	Exova
1134123	MP-01	16-Sep-14	Oil & Grease - Total	3	mg/L	Exova
1134123	MP-01	16-Sep-14	Total Suspended Solids	4	mg/L	Exova
1134123	MP-01	16-Sep-14	pH	7.55	pH units	Exova
1135624	MP-01	23-Sep-14	Biochemical Oxygen Demand	5	mg/L	Exova
1135626	MP-01	23-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1135624	MP-01	23-Sep-14	Total Kjeldahl Nitrogen	1.13	mg/L	Exova
1135624	MP-01	23-Sep-14	N-NH3 (Ammonia)	0.27	mg/L	Exova
1135624	MP-01	23-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1135624	MP-01	23-Sep-14	Total Suspended Solids	4	mg/L	Exova
1135624	MP-01	23-Sep-14	pH	7.71	pH units	Exova
1137193	MP-01	30-Sep-14	Biochemical Oxygen Demand	1	mg/L	Exova
1137190	MP-01	30-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1137193	MP-01	30-Sep-14	Total Kjeldahl Nitrogen	1.45	mg/L	Exova
1137193	MP-01	30-Sep-14	N-NH3 (Ammonia)	0.21	mg/L	Exova
1137193	MP-01	30-Sep-14	Oil & Grease - Total	1	mg/L	Exova
1137193	MP-01	30-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1137193	MP-01	30-Sep-14	pH	7.83	pH units	Exova
1132592	MP-0101	9-Sep-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1132588	MP-0101	9-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1132592	MP-0101	9-Sep-14	Total Kjeldahl Nitrogen	5.70	mg/L	Exova
1132592	MP-0101	9-Sep-14	N-NH3 (Ammonia)	4.02	mg/L	Exova
1132592	MP-0101	9-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132592	MP-0101	9-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132592	MP-0101	9-Sep-14	pH	7.83	pH units	Exova

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1134124	MP-0102	16-Sep-14	Biochemical Oxygen Demand	<2	mg/L	Exova
1134121	MP-0102	16-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1134124	MP-0102	16-Sep-14	Total Kjeldahl Nitrogen	0.14	mg/L	Exova
1134124	MP-0102	16-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1134124	MP-0102	16-Sep-14	Oil & Grease - Total	2	mg/L	Exova
1134124	MP-0102	16-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1134124	MP-0102	16-Sep-14	pH	6.04	pH units	Exova
1132593	MP-0103	9-Sep-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1132589	MP-0103	9-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1132593	MP-0103	9-Sep-14	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova
1132593	MP-0103	9-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1132593	MP-0103	9-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132593	MP-0103	9-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132593	MP-0103	9-Sep-14	pH	6.10	pH units	Exova
1129680	MP-01a	27-Aug-14	Biochemical Oxygen Demand	82	mg/L	Exova
1129680	MP-01a	27-Aug-14	Total Kjeldahl Nitrogen	19.5	mg/L	Exova
1129680	MP-01a	27-Aug-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1129680	MP-01a	27-Aug-14	Oil & Grease - Total	<1	mg/L	Exova
1129680	MP-01a	27-Aug-14	Total Suspended Solids	104	mg/L	Exova
1132599	MP-01a	7-Sep-14	Biochemical Oxygen Demand	36	mg/L	Exova
1132598	MP-01a	7-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1132599	MP-01a	7-Sep-14	Total Kjeldahl Nitrogen	20.2	mg/L	Exova
1132599	MP-01a	7-Sep-14	N-NH3 (Ammonia)	0.41	mg/L	Exova
1132599	MP-01a	7-Sep-14	Oil & Grease - Total	2	mg/L	Exova
1132599	MP-01a	7-Sep-14	Total Suspended Solids	112	mg/L	Exova
1132599	MP-01a	7-Sep-14	pH	9.37	pH units	Exova
1130466	MP-Q1-01	1-Sep-14	pH	8.1	pH units	Exova
1130466	MP-Q1-01	1-Sep-14	Total Suspended Solids	2	mg/L	Exova
1130466	MP-Q1-01	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132568	MP-Q1-01	8-Sep-14	Conductivity	352	uS/cm	Exova
1132568	MP-Q1-01	8-Sep-14	N-NO3	0.62	mg/L	Exova
1132568	MP-Q1-01	8-Sep-14	pH	8.15	pH units	Exova
1132568	MP-Q1-01	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132568	MP-Q1-01	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132568	MP-Q1-01	8-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1130467	MP-Q1-02	1-Sep-14	pH	8.06	pH units	Exova
1130467	MP-Q1-02	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130467	MP-Q1-02	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132569	MP-Q1-02	8-Sep-14	Conductivity	513	uS/cm	Exova
1132569	MP-Q1-02	8-Sep-14	N-NO3	11.4	mg/L	Exova
1132569	MP-Q1-02	8-Sep-14	pH	8.09	pH units	Exova
1132569	MP-Q1-02	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132569	MP-Q1-02	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132569	MP-Q1-02	8-Sep-14	N-NH3 (Ammonia)	0.81	mg/L	Exova
1130468	MP-C-B	1-Sep-14	pH	8.29	pH units	Exova
1130468	MP-C-B	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130468	MP-C-B	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132571	MP-C-B	8-Sep-14	Conductivity	485	uS/cm	Exova
1132571	MP-C-B	8-Sep-14	N-NO3	0.98	mg/L	Exova
1132571	MP-C-B	8-Sep-14	pH	8.27	pH units	Exova
1132571	MP-C-B	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132571	MP-C-B	8-Sep-14	Oil & Grease - Total	4	mg/L	Exova
1132571	MP-C-B	8-Sep-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
LH14-041-12	MP-C-B	8-Sep-14	Toxicity	non-lethal*	mg/L	Exova
1130469	MP-C-B01	1-Sep-14	pH	8.30	pH units	Exova
1130469	MP-C-B01	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130469	MP-C-B01	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130470	MP-C-B0101	1-Sep-14	pH	8.3	pH units	Exova
1130470	MP-C-B0101	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130470	MP-C-B0101	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132572	MP-C-B01	8-Sep-14	Conductivity	452	uS/cm	Exova
1132572	MP-C-B01	8-Sep-14	N-NO3	1.38	mg/L	Exova
1132572	MP-C-B01	8-Sep-14	pH	8.29	pH units	Exova
1132572	MP-C-B01	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132572	MP-C-B01	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132572	MP-C-B01	8-Sep-14	N-NH3 (Ammonia)	0.05	mg/L	Exova
1130471	MP-C-H	1-Sep-14	pH	8.31	pH units	Exova
1130471	MP-C-H	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130471	MP-C-H	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1126114	MP-C-H	8-Sep-14	Conductivity	301	uS/cm	Exova
1126114	MP-C-H	8-Sep-14	N-NO3	0.15	mg/L	Exova
1126114	MP-C-H	8-Sep-14	pH	8.24	pH units	Exova
1126114	MP-C-H	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1126114	MP-C-H	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1126114	MP-C-H	8-Sep-14	N-NH3 (Ammonia)	0.03	mg/L	Exova
MARY RIVER MINE SITE						
1130382	MS-01	2-Sep-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1130380	MS-01	2-Sep-14	Faecal Coliforms	1	ct/100mL	Exova
1130382	MS-01	2-Sep-14	Total Kjeldahl Nitrogen	0.99	mg/L	Exova
1130382	MS-01	2-Sep-14	N-NH3 (Ammonia)	0.35	mg/L	Exova
1130382	MS-01	2-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130382	MS-01	2-Sep-14	Total Phosphorus	0.71	mg/L	Exova
1130382	MS-01	2-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130382	MS-01	2-Sep-14	pH	7.58	pH units	Exova
1134115	MS-01	16-Sep-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1134113	MS-01	16-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1134115	MS-01	16-Sep-14	Total Kjeldahl Nitrogen	2.12	mg/L	Exova
1134115	MS-01	16-Sep-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1134115	MS-01	16-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1134115	MS-01	16-Sep-14	Total Phosphorus	0.88	mg/L	Exova
1134115	MS-01	16-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1134115	MS-01	16-Sep-14	pH	7.23	pH units	Exova
1135584	MS-01	23-Sep-14	Biochemical Oxygen Demand	1	mg/L	Exova
1135586	MS-01	23-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1135584	MS-01	23-Sep-14	Total Kjeldahl Nitrogen	0.50	mg/L	Exova
1135584	MS-01	23-Sep-14	N-NH3 (Ammonia)	0.27	mg/L	Exova
1135584	MS-01	23-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1135584	MS-01	23-Sep-14	Total Phosphorus	0.29	mg/L	Exova
1135584	MS-01	23-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1135584	MS-01	23-Sep-14	pH	7.50	pH units	Exova
1137188	MS-01	30-Sep-14	Biochemical Oxygen Demand	2	mg/L	Exova
1137184	MS-01	30-Sep-14	Faecal Coliforms	0	ct/100mL	Exova
1137188	MS-01	30-Sep-14	Total Kjeldahl Nitrogen	1.33	mg/L	Exova
1137188	MS-01	30-Sep-14	N-NH3 (Ammonia)	0.36	mg/L	Exova
1137188	MS-01	30-Sep-14	Oil & Grease - Total	1	mg/L	Exova
1137188	MS-01	30-Sep-14	Total Phosphorus	0.31	mg/L	Exova
1137188	MS-01	30-Sep-14	Total Suspended Solids	5	mg/L	Exova
1137188	MS-01	30-Sep-14	pH	7.59	pH units	Exova
1130530	MS-MRY-9	1-Sep-14	pH	7.46	pH units	Exova
1130579	MS-MRY-9	1-Sep-14	Total Arsenic	<0.1	ug/L	Exova
1130579	MS-MRY-9	1-Sep-14	Total Copper	0.6	ug/L	Exova
1130579	MS-MRY-9	1-Sep-14	Total Lead	0.16	ug/L	Exova
1130579	MS-MRY-9	1-Sep-14	Total Nickel	<0.5	ug/L	Exova
1130579	MS-MRY-9	1-Sep-14	Total Zinc	3	ug/L	Exova
1130530	MS-MRY-9	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130530	MS-MRY-9	1-Sep-14	Oil & Grease - Total	-	mg/L	Exova
1130531	MS-MRY-10	1-Sep-14	pH	8.06	pH units	Exova
1130580	MS-MRY-10	1-Sep-14	Total Arsenic	<0.1	ug/L	Exova
1130580	MS-MRY-10	1-Sep-14	Total Copper	0.8	ug/L	Exova
1130580	MS-MRY-10	1-Sep-14	Total Lead	0.06	ug/L	Exova
1130580	MS-MRY-10	1-Sep-14	Total Nickel	<0.5	ug/L	Exova
1130580	MS-MRY-10	1-Sep-14	Total Zinc	5	ug/L	Exova
1130531	MS-MRY-10	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130531	MS-MRY-10	1-Sep-14	Oil & Grease - Total	-	mg/L	Exova
1130534	MS-MRY-11-TP3	1-Sep-14	pH	8.20	pH units	Exova
1130583	MS-MRY-11-TP3	1-Sep-14	Total Arsenic	<0.1	ug/L	Exova
1130583	MS-MRY-11-TP3	1-Sep-14	Total Copper	1	ug/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1130583	MS-MRY-11-TP3	1-Sep-14	Total Lead	<0.05	ug/L	Exova
1130583	MS-MRY-11-TP3	1-Sep-14	Total Nickel	0.9	ug/L	Exova
1130583	MS-MRY-11-TP3	1-Sep-14	Total Zinc	<3	ug/L	Exova
1130534	MS-MRY-11-TP3	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130534	MS-MRY-11-TP3	1-Sep-14	Oil & Grease - Total	-	mg/L	Exova
LH14-041-11	MS-MRY-11-TP3	1-Sep-14	Toxicity	non-lethal*	mg/L	Exova
1130514	MS-MRY-13A	1-Sep-14	pH	8.24	pH units	Exova
1130520	MS-MRY-13A	1-Sep-14	Total Arsenic	0.2	ug/L	Exova
1130520	MS-MRY-13A	1-Sep-14	Total Copper	2.2	ug/L	Exova
1130520	MS-MRY-13A	1-Sep-14	Total Lead	0.15	ug/L	Exova
1130520	MS-MRY-13A	1-Sep-14	Total Nickel	11.4	ug/L	Exova
1130520	MS-MRY-13A	1-Sep-14	Total Zinc	3	ug/L	Exova
1130514	MS-MRY-13A	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130514	MS-MRY-13A	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130515	MS-MRY-13B	1-Sep-14	pH	8.27	pH units	Exova
1130521	MS-MRY-13B	1-Sep-14	Total Arsenic	<0.1	ug/L	Exova
1130521	MS-MRY-13B	1-Sep-14	Total Copper	1.4	ug/L	Exova
1130521	MS-MRY-13B	1-Sep-14	Total Lead	<0.05	ug/L	Exova
1130521	MS-MRY-13B	1-Sep-14	Total Nickel	6.3	ug/L	Exova
1130521	MS-MRY-13B	1-Sep-14	Total Zinc	<3	ug/L	Exova
1130515	MS-MRY-13B	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130515	MS-MRY-13B	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130357	MQ-C-A	1-Sep-14	pH	7.45	pH units	Exova
1130357	MQ-C-A	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130357	MQ-C-A	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132583	MQ-C-A	8-Sep-14	Conductivity	310	uS/cm	Exova
1132583	MQ-C-A	8-Sep-14	N-NO3	<0.10	mg/L	Exova
1132583	MQ-C-A	8-Sep-14	pH	8.22	pH units	Exova
1132583	MQ-C-A	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132583	MQ-C-A	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132583	MQ-C-A	8-Sep-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1130358	MQ-C-B	1-Sep-14	pH	8.02	pH units	Exova
1130358	MQ-C-B	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130358	MQ-C-B	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
LH14-041-10	MQ-C-B	1-Sep-14	Toxicity	non-lethal*	mg/L	Exova
1132584	MQ-C-B	8-Sep-14	Conductivity	507	uS/cm	Exova
1132584	MQ-C-B	8-Sep-14	N-NO3	1.31	mg/L	Exova
1132584	MQ-C-B	8-Sep-14	pH	8.15	pH units	Exova
1132584	MQ-C-B	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132584	MQ-C-B	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132584	MQ-C-B	8-Sep-14	N-NH3 (Ammonia)	0.48	mg/L	Exova
1130359	MQ-C-D	1-Sep-14	pH	8.09	pH units	Exova
1130359	MQ-C-D	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130359	MQ-C-D	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132585	MQ-C-D	8-Sep-14	Conductivity	429	uS/cm	Exova
1132585	MQ-C-D	8-Sep-14	N-NO3	1.19	mg/L	Exova
1132585	MQ-C-D	8-Sep-14	pH	8.18	pH units	Exova
1132585	MQ-C-D	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132585	MQ-C-D	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132585	MQ-C-D	8-Sep-14	N-NH3 (Ammonia)	0.56	mg/L	Exova
1130450	MS-C-A	1-Sep-14	pH	8.18	pH units	Exova
1130450	MS-C-A	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130450	MS-C-A	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132574	MS-C-A	8-Sep-14	Conductivity	175	uS/cm	Exova
1132574	MS-C-A	8-Sep-14	N-NO3	0.18	mg/L	Exova
1132574	MS-C-A	8-Sep-14	pH	7.95	pH units	Exova
1132574	MS-C-A	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132574	MS-C-A	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132574	MS-C-A	8-Sep-14	N-NH3 (Ammonia)	0.12	mg/L	Exova
1130451	MS-C-B	1-Sep-14	pH	7.96	pH units	Exova
1130451	MS-C-B	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130451	MS-C-B	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132575	MS-C-B	8-Sep-14	Conductivity	189	uS/cm	Exova
1132575	MS-C-B	8-Sep-14	N-NO3	0.4	mg/L	Exova
1132575	MS-C-B	8-Sep-14	pH	7.90	pH units	Exova
1132575	MS-C-B	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132575	MS-C-B	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132575	MS-C-B	8-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1130452	MS-C-C	1-Sep-14	pH	8.11	pH units	Exova
1130452	MS-C-C	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130452	MS-C-C	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132576	MS-C-C	8-Sep-14	Conductivity	625	uS/cm	Exova
1132576	MS-C-C	8-Sep-14	N-NO3	7.98	mg/L	Exova
1132576	MS-C-C	8-Sep-14	pH	8.06	pH units	Exova
1132576	MS-C-C	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132576	MS-C-C	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132576	MS-C-C	8-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1130453	MS-C-D	1-Sep-14	pH	8.39	pH units	Exova
1130453	MS-C-D	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130453	MS-C-D	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132577	MS-C-D	8-Sep-14	Conductivity	642	uS/cm	Exova
1132577	MS-C-D	8-Sep-14	N-NO3	10.1	mg/L	Exova
1132577	MS-C-D	8-Sep-14	pH	8.30	pH units	Exova
1132577	MS-C-D	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132577	MS-C-D	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132577	MS-C-D	8-Sep-14	N-NH3 (Ammonia)	0.07	mg/L	Exova
1130454	MS-C-E	1-Sep-14	pH	8.22	pH units	Exova
1130454	MS-C-E	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130454	MS-C-E	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132578	MS-C-E	8-Sep-14	Conductivity	419	uS/cm	Exova
1132578	MS-C-E	8-Sep-14	N-NO3	3.55	mg/L	Exova
1132578	MS-C-E	8-Sep-14	pH	8.15	pH units	Exova
1132578	MS-C-E	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132578	MS-C-E	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132578	MS-C-E	8-Sep-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1134106	MS-C-E	15-Sep-14	pH	7.90	pH units	Exova
1134106	MS-C-E	15-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1134106	MS-C-E	15-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1130455	MS-C-F	1-Sep-14	pH	8.13	pH units	Exova
1130455	MS-C-F	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130455	MS-C-F	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132579	MS-C-F	8-Sep-14	Conductivity	189	uS/cm	Exova
1132579	MS-C-F	8-Sep-14	N-NO3	0.2	mg/L	Exova
1132579	MS-C-F	8-Sep-14	pH	8.09	pH units	Exova
1132579	MS-C-F	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132579	MS-C-F	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132579	MS-C-F	8-Sep-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1130458	MS-C-F-01	1-Sep-14	pH	8.08	pH units	Exova
1130458	MS-C-F-01	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130458	MS-C-F-01	1-Sep-14	Oil & Grease - Total	3	mg/L	Exova
1130456	MS-C-G	1-Sep-14	pH	7.94	pH units	Exova
1130456	MS-C-G	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130456	MS-C-G	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132580	MS-C-G	8-Sep-14	Conductivity	191	uS/cm	Exova
1132580	MS-C-G	8-Sep-14	N-NO3	0.11	mg/L	Exova
1132580	MS-C-G	8-Sep-14	pH	7.97	pH units	Exova
1132580	MS-C-G	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132580	MS-C-G	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132580	MS-C-G	8-Sep-14	N-NH3 (Ammonia)	0.16	mg/L	Exova
1134107	MS-C-G	15-Sep-14	pH	7.88	pH units	Exova
1134107	MS-C-G	15-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1134107	MS-C-G	15-Sep-14	Oil & Grease - Total	2	mg/L	Exova
1132582	MS-C-G-01	8-Sep-14	Conductivity	189	uS/cm	Exova
1132582	MS-C-G-01	8-Sep-14	N-NO3	<0.10	mg/L	Exova
1132582	MS-C-G-01	8-Sep-14	pH	8.08	pH units	Exova
1132582	MS-C-G-01	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
1132582	MS-C-G-01	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132582	MS-C-G-01	8-Sep-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1130457	MS-C-H	1-Sep-14	pH	8.22	pH units	Exova
1130457	MS-C-H	1-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1130457	MS-C-H	1-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132581	MS-C-H	8-Sep-14	Conductivity	232	uS/cm	Exova
1132581	MS-C-H	8-Sep-14	N-NO3	<0.10	mg/L	Exova
1132581	MS-C-H	8-Sep-14	pH	8.16	pH units	Exova
1132581	MS-C-H	8-Sep-14	Total Suspended Solids	<2	mg/L	Exova
1132581	MS-C-H	8-Sep-14	Oil & Grease - Total	<1	mg/L	Exova
1132581	MS-C-H	8-Sep-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
Note: *Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*						
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)						
MILNE PORT						
1138805	MP-01	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138807	MP-01	7-Oct-14	pH	7.41	pH units	Exova
1138807	MP-01	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138807	MP-01	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138807	MP-01	7-Oct-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1138807	MP-01	7-Oct-14	Total Kjeldahl Nitrogen	1.57	mg/L	Exova
1138807	MP-01	7-Oct-14	Total Phosphorus	7.43	mg/L	Exova
1138807	MP-01	7-Oct-14	Oil & Grease - Total	1	mg/L	Exova
1139978	MP-01	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139980	MP-01	14-Oct-14	pH	7.62	pH units	Exova
1139980	MP-01	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139980	MP-01	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139980	MP-01	14-Oct-14	N-NH3 (Ammonia)	0.26	mg/L	Exova
1139980	MP-01	14-Oct-14	Total Kjeldahl Nitrogen	1.49	mg/L	Exova
1139980	MP-01	14-Oct-14	Total Phosphorus	11.6	mg/L	Exova
1139980	MP-01	14-Oct-14	Oil & Grease - Total	1	mg/L	Exova
L1536059-1	MP-01	21-Oct-14	pH	7.36	pH units	ALS
L1536059-1	MP-01	21-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	N-NH3 (Ammonia)	0.323	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Total Kjeldahl Nitrogen	0.39	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Total Phosphorus	13.7	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Faecal Coliforms	-	ct/100mL	ALS
L1536059-1	MP-01	21-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1536059-1	MP-01	21-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	pH	7.59	pH units	ALS
L1538778-1	MP-01	28-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	N-NH3 (Ammonia)	0.072	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Total Kjeldahl Nitrogen	0.29	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Total Phosphorus	16.5	mg/L	ALS
L1538778-3	MP-01	28-Oct-14	Faecal Coliforms	0	ct/100mL	ALS
L1538778-1	MP-01	28-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1538778-1	MP-01	28-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
1138818	MS-01	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138812	MS-01	7-Oct-14	pH	7.27	pH units	Exova
1138812	MS-01	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138812	MS-01	7-Oct-14	Biochemical Oxygen Demand	1	mg/L	Exova
1138812	MS-01	7-Oct-14	N-NH3 (Ammonia)	0.52	mg/L	Exova
1138812	MS-01	7-Oct-14	Total Kjeldahl Nitrogen	0.82	mg/L	Exova
1138812	MS-01	7-Oct-14	Total Phosphorus	0.21	mg/L	Exova
1138812	MS-01	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139965	MS-01	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139970	MS-01	14-Oct-14	pH	7.48	pH units	Exova
1139970	MS-01	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139970	MS-01	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139970	MS-01	14-Oct-14	N-NH3 (Ammonia)	0.38	mg/L	Exova
1139970	MS-01	14-Oct-14	Total Kjeldahl Nitrogen	1.2	mg/L	Exova
1139970	MS-01	14-Oct-14	Total Phosphorus	0	mg/L	Exova
1139970	MS-01	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
L1536029-1	MS-01	21-Oct-14	pH	7.09	pH units	ALS
L1536029-1	MS-01	21-Oct-14	Total Suspended Solids	3	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	N-NH3 (Ammonia)	0.31	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Total Kjeldahl Nitrogen	0.73	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Total Phosphorus	0.434	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Faecal Coliforms	0	ct/100mL	ALS
L1536029-1	MS-01	21-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1536029-1	MS-01	21-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	pH	7.26	pH units	ALS
L1538741-1	MS-01	29-Oct-14	Total Suspended Solids	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	N-NH3 (Ammonia)	0.556	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Total Kjeldahl Nitrogen	1.33	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Total Phosphorus	0.66	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Faecal Coliforms	1	ct/100mL	ALS
L1538741-1	MS-01	29-Oct-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1538741-1	MS-01	29-Oct-14	Oil & Grease - Total	<2.0	mg/L	ALS
1138820	MS-0101	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138815	MS-0101	7-Oct-14	pH	7.18	pH units	Exova
1138815	MS-0101	7-Oct-14	Total Suspended Solids	2.00	mg/L	Exova
1138815	MS-0101	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138815	MS-0101	7-Oct-14	N-NH3 (Ammonia)	0.46	mg/L	Exova
1138815	MS-0101	7-Oct-14	Total Kjeldahl Nitrogen	0.98	mg/L	Exova
1138815	MS-0101	7-Oct-14	Total Phosphorus	0.22	mg/L	Exova
1138815	MS-0101	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139967	MS-0101	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139972	MS-0101	14-Oct-14	pH	7.35	pH units	Exova
1139972	MS-0101	14-Oct-14	Total Suspended Solids	2.00	mg/L	Exova
1139972	MS-0101	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139972	MS-0101	14-Oct-14	N-NH3 (Ammonia)	0.32	mg/L	Exova
1139972	MS-0101	14-Oct-14	Total Kjeldahl Nitrogen	1.6	mg/L	Exova
1139972	MS-0101	14-Oct-14	Total Phosphorus	0.42	mg/L	Exova
1139972	MS-0101	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1138821	MS-0102	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138816	MS-0102	7-Oct-14	pH	6.00	pH units	Exova
1138816	MS-0102	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138816	MS-0102	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138816	MS-0102	7-Oct-14	N-NH3 (Ammonia)	0.09	mg/L	Exova
1138816	MS-0102	7-Oct-14	Total Kjeldahl Nitrogen	0.25	mg/L	Exova
1138816	MS-0102	7-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1138816	MS-0102	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139968	MS-0102	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139973	MS-0102	14-Oct-14	pH	6.00	pH units	Exova
1139973	MS-0102	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139973	MS-0102	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139973	MS-0102	14-Oct-14	N-NH3 (Ammonia)	0.04	mg/L	Exova
1139973	MS-0102	14-Oct-14	Total Kjeldahl Nitrogen	<0.10	mg/L	Exova
1139973	MS-0102	14-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1139973	MS-0102	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1138822	MS-0103	7-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1138817	MS-0103	7-Oct-14	pH	5.77	pH units	Exova
1138817	MS-0103	7-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1138817	MS-0103	7-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1138817	MS-0103	7-Oct-14	N-NH3 (Ammonia)	0.11	mg/L	Exova
1138817	MS-0103	7-Oct-14	Total Kjeldahl Nitrogen	0.22	mg/L	Exova
1138817	MS-0103	7-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1138817	MS-0103	7-Oct-14	Oil & Grease - Total	<1	mg/L	Exova
1139969	MS-0103	14-Oct-14	Faecal Coliforms	0	ct/100mL	Exova
1139974	MS-0103	14-Oct-14	pH	5.87	pH units	Exova
1139974	MS-0103	14-Oct-14	Total Suspended Solids	<2	mg/L	Exova
1139974	MS-0103	14-Oct-14	Biochemical Oxygen Demand	<1	mg/L	Exova
1139974	MS-0103	14-Oct-14	N-NH3 (Ammonia)	0.14	mg/L	Exova
1139974	MS-0103	14-Oct-14	Total Kjeldahl Nitrogen	0.12	mg/L	Exova
1139974	MS-0103	14-Oct-14	Total Phosphorus	<0.003	mg/L	Exova
1139974	MS-0103	14-Oct-14	Oil & Grease - Total	<1	mg/L	Exova

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
Note: *Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*						
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)						
MILNE PORT						
L1542580-3	*MP-01*	*5-Nov-14*	*pH*	6.76	*ct/100mL*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Total Suspended Solids*	<2.0	*pH units*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*N-NH3 (Ammonia)*	0.455	*mg/L*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Total Kjeldahl Nitrogen*	1.73	*mg/L*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Total Phosphorus*	12.2	*mg/L*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1542580-3	*MP-01*	*5-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*pH*	7.25	*ct/100mL*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Total Suspended Solids*	<2.0	*pH units*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*N-NH3 (Ammonia)*	1.22	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Total Kjeldahl Nitrogen*	2.75	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Total Phosphorus*	13.4	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Faecal Coliforms*	1	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1545257-1	*MP-01*	*12-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1548269-1	*MP-01*	*19-Nov-14*	*pH*	7.26	*pH units*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Total Suspended Solids*	<2.0	*mg/L*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*N-NH3 (Ammonia)*	0.069	*mg/L*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Total Kjeldahl Nitrogen*	0.26	*mg/L*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Total Phosphorus*	16	*mg/L*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Faecal Coliforms*	2	*ct/100mL*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*ALS*
L1548269-1	*MP-01*	*19-Nov-14*	*Oil & Grease - Total*	4.6	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*pH*	7.25	*pH units*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Total Suspended Solids*	2.40	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*N-NH3 (Ammonia)*	0.061	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Total Kjeldahl Nitrogen*	<0.15	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Total Phosphorus*	12.2	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Faecal Coliforms*	2	*ct/100mL*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*ALS*
L1550941-1	*MP-01*	*26-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*
MARY RIVER MINE SITE						
L1542536-1	*MS-01*	*5-Nov-14*	*pH*	7.48	*ct/100mL*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Total Suspended Solids*	2.8	*pH units*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*N-NH3 (Ammonia)*	0.38	*mg/L*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Total Kjeldahl Nitrogen*	0.73	*mg/L*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Total Phosphorus*	0.83	*mg/L*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1542536-1	*MS-01*	*5-Nov-14*	*Oil & Grease - Total*	2.80	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*pH*	7.23	*ct/100mL*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Total Suspended Solids*	<2.0	*pH units*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*N-NH3 (Ammonia)*	0.37	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Total Kjeldahl Nitrogen*	0.82	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Total Phosphorus*	0.839	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1542536-3	*MS-0101*	*5-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1542536-4	*MS-0102*	*5-Nov-14*	*pH*	5.98	*pH units*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Total Suspended Solids*	<2.0	*mg/L*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*N-NH3 (Ammonia)*	0.06	*mg/L*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Total Kjeldahl Nitrogen*	<0.15	*mg/L*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Total Phosphorus*	0.0038	*mg/L*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Faecal Coliforms*	0	*ct/100mL*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*ALS*
L1542536-4	*MS-0102*	*5-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*pH*	5.62	*pH units*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Total Suspended Solids*	<2.0	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*N-NH3 (Ammonia)*	<0.050	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Total Kjeldahl Nitrogen*	<0.15	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Total Phosphorus*	<0.0030	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Faecal Coliforms*	0	*ct/100mL*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*ALS*
L1542536-5	*MS-0103*	*5-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*
L1545200-1	*MS-01*	*12-Nov-14*	*pH*	7.2	*ct/100mL*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Total Suspended Solids*	2.4	*pH units*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*N-NH3 (Ammonia)*	0.57	*mg/L*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Total Kjeldahl Nitrogen*	1.12	*mg/L*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Total Phosphorus*	0.485	*mg/L*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1545200-1	*MS-01*	*12-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*pH*	7.22	*ct/100mL*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Total Suspended Solids*	2	*pH units*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*N-NH3 (Ammonia)*	0.43	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Total Kjeldahl Nitrogen*	1.22	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Total Phosphorus*	0.573	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1545200-3	*MS-0101*	*12-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*pH*	5.72	*ct/100mL*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Total Suspended Solids*	<2.0	*pH units*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*N-NH3 (Ammonia)*	<0.050	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Total Kjeldahl Nitrogen*	<0.15	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Total Phosphorus*	<0.0030	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1545200-4	*MS-0102*	*12-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*pH*	5.63	*ct/100mL*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Total Suspended Solids*	<2.0	*pH units*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*N-NH3 (Ammonia)*	<0.050	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Total Kjeldahl Nitrogen*	<0.15	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Total Phosphorus*	<0.0030	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1545200-5	*MS-0103*	*12-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*pH*	7.10	*ct/100mL*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Total Suspended Solids*	4.40	*pH units*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*N-NH3 (Ammonia)*	0.38	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Total Kjeldahl Nitrogen*	1.09	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Total Phosphorus*	0.775	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1548249-1	*MS-01*	*19-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*pH*	7.25	*ct/100mL*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Total Suspended Solids*	3.6	*pH units*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*N-NH3 (Ammonia)*	0.47	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Total Kjeldahl Nitrogen*	1.1	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Total Phosphorus*	0.356	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Faecal Coliforms*	0	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1550927-1	*MS-01*	*26-Nov-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*
MILNE PORT SITE						
L1553754-1	*MP-01*	*3-Dec-14*	*pH*	7.33	*pH units*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Total Suspended Solids*	<2.0	*mg/L*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*N-NH3 (Ammonia)*	0.262	*mg/L*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Total Kjeldahl Nitrogen*	1.8	*mg/L*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Total Phosphorus*	16.5	*mg/L*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Faecal Coliforms*	10	*ct/100mL*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Biochemical Oxygen Demand*	<2.0	*mg/L*	*Exova*
L1553754-1	*MP-01*	*3-Dec-14*	*Oil & Grease - Total*	<2.0	*mg/L*	*Exova*

Baffinland

TABLE 2.8

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1557624-5	MP-01	11-Dec-14	pH	7.20	pH units	Exova
L1557624-5	MP-01	11-Dec-14	Total Suspended Solids	<2.0	mg/L	Exova
L1557624-5	MP-01	11-Dec-14	N-NH3 (Ammonia)	0.404	mg/L	Exova
L1557624-5	MP-01	11-Dec-14	Total Kjeldahl Nitrogen	<0.15	mg/L	Exova
L1557624-5	MP-01	11-Dec-14	Total Phosphorus	15.1	mg/L	Exova
L1557624-5	MP-01	11-Dec-14	Faecal Coliforms	2	ct/100mL	Exova
L1557624-5	MP-01	11-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	Exova
L1557624-5	MP-01	11-Dec-14	Oil & Grease - Total	<2.0	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	pH	7.34	pH units	Exova
L1559303-1	MP-01	17-Dec-14	Total Suspended Solids	4.8	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	N-NH3 (Ammonia)	0.221	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	Total Kjeldahl Nitrogen	<0.15	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	Total Phosphorus	14.3	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	Faecal Coliforms	0	ct/100mL	Exova
L1559303-1	MP-01	17-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	Exova
L1559303-1	MP-01	17-Dec-14	Oil & Grease - Total	<6.0	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	pH	7.63	pH units	Exova
L1562250-1	MP-01	25-Dec-14	Total Suspended Solids	<2.0	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	N-NH3 (Ammonia)	0.344	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	Total Kjeldahl Nitrogen	1.38	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	Total Phosphorus	13.5	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	Faecal Coliforms	0	ct/100mL	Exova
L1562250-1	MP-01	25-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	Exova
L1562250-1	MP-01	25-Dec-14	Oil & Grease - Total	<2.0	mg/L	Exova
MARY RIVER MINE SITE						
L1553733-1	MS-01	3-Dec-14	pH	7.42	pH units	ALS
L1553733-1	MS-01	3-Dec-14	Total Suspended Solids	<2.0	mg/L	ALS
L1553733-1	MS-01	3-Dec-14	N-NH3 (Ammonia)	0.45	mg/L	ALS
L1553733-1	MS-01	3-Dec-14	Total Kjeldahl Nitrogen	1.55	mg/L	ALS
L1553733-1	MS-01	3-Dec-14	Total Phosphorus	0.872	mg/L	ALS
L1553733-1	MS-01	3-Dec-14	Faecal Coliforms	0	ct/100mL	ALS
L1553733-1	MS-01	3-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1553733-1	MS-01	3-Dec-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	pH	7.04	pH units	ALS
L1557168-1	MS-01	11-Dec-14	Total Suspended Solids	4.8	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	N-NH3 (Ammonia)	0.33	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	Total Kjeldahl Nitrogen	0.29	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	Total Phosphorus	0.812	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	Faecal Coliforms	0	ct/100mL	ALS
L1557168-1	MS-01	11-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1557168-1	MS-01	11-Dec-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	pH	7.28	pH units	ALS
L1559251-1	MS-01	17-Dec-14	Total Suspended Solids	2.4	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	N-NH3 (Ammonia)	0.32	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	Total Phosphorus	0.222	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	Faecal Coliforms	0	ct/100mL	ALS
L1559251-1	MS-01	17-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1559251-1	MS-01	17-Dec-14	Oil & Grease - Total	<2.0	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	pH	7.51	pH units	ALS
L1562249-1	MS-01	25-Dec-14	Total Suspended Solids	2.4	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	N-NH3 (Ammonia)	0.42	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	Total Kjeldahl Nitrogen	0.93	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	Total Phosphorus	0.151	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	Faecal Coliforms	0	ct/100mL	ALS
L1562249-1	MS-01	25-Dec-14	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1562249-1	MS-01	25-Dec-14	Oil & Grease - Total	<6.0	mg/L	ALS

Note: *Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*
Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

ATTACHMENT 3

2015 QIA-NWB Annual Report

- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

Baffinland

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude	Status in 2015
		Easting (m)	Northing (m)			
Milne Port Site						
MP-MRY-2	Fresh Water Intake at Philips Creek (Summer)	514,503	7,964,579	71° 46’ 52" N	80° 35’ 4" W	Active
MP-MRY-3	Fresh Water Intake from Km 32 Lake (Winter)	521,547	7,953,735	71° 41’ 00" N	80° 23’ 09" W	Active
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	503,209	7,976,485	71° 53’ 18" N	80° 54’ 27" W	Active
MP-01a	Milne Port Waste Stabilisation Pond (PWSP)	503,625	7,976,015	71° 53’ 03" N	80° 53’ 44" W	Active
MP-02	Milne Port Maintenance Shop Oily Water (WWTF)	503,754	7,976,209	71° 53’ 09" N	80° 53’ 30" W	Inactive (not yet constructed)
MP-03	Milne Port Bulk Fuel Storage Facility Stormwater	503,638	7,976,272	71° 52’ 11" N	80° 53’ 43" W	Active
MP-04	Milne Port Landfarm Facility Storm Water	503,710	7,975,574	71° 52’ 49" N	80° 53’ 35" W	Active
MP-MRY-04	Milne Exploration Phase Sewage Treatment Facilities	503,462	7,975,764	71° 52’ 55" N	80° 54" 01" W	Inactive (Decommissioned)
MP-MRY-04a	Milne Exploration Phase Sewage PWSP	503,344	7,976,118	71° 53’ 06" N	80° 54’ 13" W	Inactive (Decommissioned)
MP-05	Milne Port Ore Stockpile Sedimentation Pond (East)	503,469	7,976,383	71° 53’ 15" N	80° 54’ 00" W	Active but no discharge
MP-06	Milne Port Ore Stockpile Sedimentation Pond (West)	503,125	7,976,364	71° 53’ 14" N	80° 54’ 36" W	Active but no discharge
MP-MRY-7	Milne Exploration Phase Bladder Farm Fuel Storage Facility Storm water	503,309	7,976,097	71° 53’ 06" N	80° 54’ 17" W	Inactive (Decommissioned)
MP-MRY-12	Bulk Sample Stockpile Area Seepage	503,357	7,976,453	71° 53’ 17" N	80° 54’ 11" W	Inactive (Location
MP-C-A	Surface discharge downstream of construction area at Milne Port	503,214	7,976,483	71° 53’ 18" N	80° 54’ 27" W	Inactive
MP-C-B		503,191	7,975,396	71° 52’ 43" N	80° 54’ 29" W	Active
MP-C-C		503,436	7,975,427	71° 52’ 44" N	80° 54’ 04" W	No flow
MP-C-D		503,651	7,976,363	71° 53’ 14" N	80° 53’ 41" W	No flow
MP-C-E		503,736	7,976,346	71° 53’ 14" N	80° 53’ 32" W	No flow
MP-C-F		503,922	7,976,304	71° 53’ 12" N	80° 53’ 13" W	Active
MP-C-G		502,939	7,976,238	71° 53’ 10" N	80° 54’ 55" W	No flow
MP-C-H		504,113	7,976,509	71° 53’ 19" N	80° 52’ 53" W	Active
MP-Q1-01	Surface Runoff and/or Discharge Quarries	503,828	7,975,062	71° 52’ 32" N	80° 53’ 23" W	Active
MP-Q1-02		503,811	7,975,272	71° 52’ 39" N	80° 53’ 25" W	Active
Mary River Mine Site						
MS-MRY-1	Fresh Water Intake from Camp Lake	557,793	7,914,684	71° 19’ 38.6" N	79° 22’ 57" W	Active
MS-01	Mine Site Sewage Treatment Facilities	561,322	7,913,257	71° 18’ 49.4" N	79° 17’ 5.6" W	Active
MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)	TBD	TBD	TBD	TBD	Active
MS-02	Mine Site Maintenance Shop Oily Water WWTF (Truck Wash)	561,638	7,913,222	71° 18’ 48" N	79° 16’ 34" W	Inactive (not yet commissioned)
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater	561,258	7,913,304	71° 18’ 51" N	79° 17’ 12" W	Active but no discharge
MS-MRY-4	Exploration Camp Sewage Treaatment Facility (used as holding tank for Weatherhaven Camp)	558,141	7,914,427	71° 19’ 30" N	79° 22’ 22.6" W	Inactive (used as holding tank)
MS-MRY-4a	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	558,470	7,914,237	71° 19’ 23.6" N	79° 21’ 50" W	Active but no discharge.

Baffinland

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83) Easting (m)	UTM Coordinates (NAD83) Northing (m)	Latitude	Longitude	Status in 2015
MS-MRY-6	Exploration Camp Bulk Fuel Storage Facility (Bladder Farm) Stormwater	558,186	7,914,780	71° 19' 41" N	79° 22' 17" W	Active (in process of being decommissioned)
MS-06+	Ore Stockpile Pond Stormwater (Crusher Pad)	561,475	7,913,000	71° 18' 41" N	79° 16' 51" W	Active but no discharge
MS-08	Waste Rock Stockpile West Pond	563,492	7,916,273	71° 20' 25" N	79° 13' 18" W	Active
MS-MRY-9	Bulk Sample Open Pit - Suface water drainage (to become inactive in future)	563,246	7,914,632	71° 19' 32" N	79° 13' 48" W	Inactive (no flow)
MS-MRY-10	Bulk Sample Weathered Ore Stockpile - Downstream surface water drainage (to become inactive in the future)	563,488	7,915,197	71° 19' 50" N	79° 13' 22" W	Inactive (no flow)
MS-MRY-10A	Surface discharge downstream of km 107 on Haul Road	564,531	7,913,652	71° 18' 59" N	79° 11' 42" W	Active
MS-MRY-11	Bulk Sample Processing - Downstream surface water discharge (to become inactive in the future)	560,690	7,913,350	71° 18' 53" N	79° 18' 09" W	Inactive (no flow)
MS-MRY-13a & MS-MRY-13b	Non-Hazarous Landfill Facility - Downstream surface water drainage	13a: 560,754 13b: 560,642	13a: 7,912,484 13b: 7,912,527	13a: 71° 18' 25" N 13b: 71° 18'26.5" N	13a: 79° 18' 5" W 13b: 79° 18' 16.1" W	Active
MS-C-A	Surface discharge downstream of construction area at Mine Site	561,263	7,913,571	71° 19' 00" N	79° 17' 11" W	Active
MS-C-B		561,454	7,913,537	71° 18' 58" N	79° 16' 52" W	Active
MS-C-C		561,110	7,913,199	71° 18' 48" N	79° 17' 27" W	Active
MS-C-D		561,008	7,913,280	71° 18' 50" N	79° 17' 37" W	Active
MS-C-E	Surface discharge downstream of construction area at Mine Site	560,980	7,913,388	71° 18' 54" N	79° 17' 40" W	Active
MS-C-F		561,797	7,913,278	71° 18' 49" N	79° 16' 17" W	Active
MS-C-G		561,813	7,911,830	71° 18' 03" N	79° 16' 20" W	Active
MS-C-H		561,162	7,912,067	71° 18" 11" N	79° 17' 25" W	Active
MQ-C-A	Surface Runoff and/or Discharge Quarries	559,489	7,914,408	71° 19' 28" N	79° 20' 07" W	Active
MQ-C-B		560,076	7,913,888	71° 19' 11" N	79° 19' 09" W	Active
MQ-C-D		559,422	7,914,223	71° 19' 23" N	79° 20' 14" W	Active
MQ-C-E		563,351	7,912,902	71° 18' 36" N	79° 13' 42" W	Active

Notes:

Monitoring Station names beginning with MP-Q and MQ-C correspond to QIA Quarry Lease and Quarry Management Plans

The locations of the following Monitoring Stations have not been established at this stage of construction:

MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)
MS-04	Mine Site Fuel Unloading Station Stormwater
MS-05	Mine Site Landfarm Facility Stormwater
MS-07	Run of Mine Ore Stockpile Pond Stormwater
MS-09	Waste Rock Stockpile East pond

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
MILNE PORT						
L1563394-1	MP-01	1-Jan-15	pH	7.65	pH units	ALS
L1563394-1	MP-01	1-Jan-15	Total Suspended Solids	2.4	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	N-NH3 (Ammonia)	0.321	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Total Kjeldahl Nitrogen	1.62	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Total Phosphorus	9.99	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1563394-1	MP-01	1-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1563394-1	MP-01	1-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	pH	7.66	pH units	ALS
L1566671-1	MP-01	14-Jan-15	Total Suspended Solids	6.8	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	N-NH3 (Ammonia)	1.79	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Total Kjeldahl Nitrogen	1.61	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Total Phosphorus	11.3	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1566671-1	MP-01	14-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1566671-1	MP-01	14-Jan-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	pH	7.49	pH units	ALS
L1571635-1	MP-01	28-Jan-15	Total Suspended Solids	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	N-NH3 (Ammonia)	0.244	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Total Kjeldahl Nitrogen	0.57	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Total Phosphorus	12.3	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1571635-1	MP-01	28-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1571635-1	MP-01	28-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
MINE SITE						
L1563393-1	MS-01	1-Jan-15	pH	7.33	pH units	ALS
L1563393-1	MS-01	1-Jan-15	Total Suspended Solids	5.2	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	N-NH3 (Ammonia)	0.38	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Total Kjeldahl Nitrogen	1.93	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Total Phosphorus	0.376	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Faecal Coliforms	8	CFU/100 mL	ALS
L1563393-1	MS-01	1-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1563393-1	MS-01	1-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	pH	7.18	pH units	ALS
L1566627-1	MS-01	14-Jan-15	Total Suspended Solids	12.4	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	N-NH3 (Ammonia)	0.66	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Total Kjeldahl Nitrogen	2.18	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Total Phosphorus	0.737	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Faecal Coliforms	1	CFU/100 mL	ALS
L1566627-1	MS-01	14-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1566627-1	MS-01	14-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	pH	6.77	pH units	ALS
L1571631-1	MS-01	28-Jan-15	Total Suspended Solids	2.8	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	N-NH3 (Ammonia)	0.13	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Total Kjeldahl Nitrogen	1.21	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Total Phosphorus	0.212	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1571631-1	MS-01	28-Jan-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1571631-1	MS-01	28-Jan-15	Oil & Grease - Total	<6.0	mg/L	ALS
MILNE PORT						
L1576497-1	MP-01	11-Feb-15	pH	7.73	pH units	ALS
L1576497-1	MP-01	11-Feb-15	Total Suspended Solids	<2.0	mg/L	ALS
L1576497-1	MP-01	11-Feb-15	N-NH3 (Ammonia)	0.05	mg/L	ALS
L1576497-1	MP-01	11-Feb-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1576497-1	MP-01	11-Feb-15	Total Phosphorus	10.5	mg/L	ALS
L1576497-3	MP-01	11-Feb-15	Faecal Coliforms	3	CFU/100 mL	ALS
L1576497-1	MP-01	11-Feb-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1576497-1	MP-01	11-Feb-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	pH	7.69	pH units	ALS
L1581061-1	MP-01	25-Feb-15	Total Suspended Solids	2.8	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	N-NH3 (Ammonia)	0.055	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	Total Kjeldahl Nitrogen	0.98	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	Total Phosphorus	11.5	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1581061-1	MP-01	25-Feb-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1581061-1	MP-01	25-Feb-15	Oil & Grease - Total	<6.0	mg/L	ALS
MINE SITE						
L1576452-1	MS-01	11-Feb-15	pH	7.22	pH units	ALS
L1576452-1	MS-01	11-Feb-15	Total Suspended Solids	<2.0	mg/L	ALS
L1576452-1	MS-01	11-Feb-15	N-NH3 (Ammonia)	0.17	mg/L	ALS
L1576452-1	MS-01	11-Feb-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1576452-1	MS-01	11-Feb-15	Total Phosphorus	0.243	mg/L	ALS
L1576452-3	MS-01	11-Feb-15	Faecal Coliforms	57	CFU/100 mL	ALS
L1576452-1	MS-01	11-Feb-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1576452-1	MS-01	11-Feb-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	pH	7.13	pH units	ALS
L1581015-1	MS-01	25-Feb-15	Total Suspended Solids	<2.0	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	N-NH3 (Ammonia)	0.178	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	Total Phosphorus	0.248	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1581015-1	MS-01	25-Feb-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1581015-1	MS-01	25-Feb-15	Oil & Grease - Total	<6.0	mg/L	ALS
MILNE PORT						
L1586005-1	MP-01	11-Mar-15	pH	-	pH units	ALS
L1586005-1	MP-01	11-Mar-15	Total Suspended Solids	2.8	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Total Phosphorus	11.5	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Faecal Coliforms	14	CFU/100 mL	ALS
L1586005-1	MP-01	11-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1586005-1	MP-01	11-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	pH	7.76	pH units	ALS
L1591514-1	MP-01	25-Mar-15	Total Suspended Solids	3	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	N-NH3 (Ammonia)	0.113	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Total Kjeldahl Nitrogen	0.69	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Total Phosphorus	15.1	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Faecal Coliforms	4	CFU/100 mL	ALS
L1591514-1	MP-01	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591514-1	MP-01	25-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	pH	7.61	pH units	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Total Suspended Solids	5.5	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	N-NH3 (Ammonia)	0.061	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Total Kjeldahl Nitrogen	0.2	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Total Phosphorus	14.1	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Faecal Coliforms	5	CFU/100 mL	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591514-3	MP-01 (Duplicate)	25-Mar-15	Oil & Grease - Total	<4.0	mg/L	ALS
MINE SITE						
L1586000-1	MS-01	11-Mar-15	pH	7.2	pH units	ALS
L1586000-1	MS-01	11-Mar-15	Total Suspended Solids	2.8	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	N-NH3 (Ammonia)	0.25	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Total Kjeldahl Nitrogen	5.81	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Total Phosphorus	0.517	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1586000-1	MS-01	11-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1586000-1	MS-01	11-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	pH	7.23	pH units	ALS
L1591181-1	MS-01	25-Mar-15	Total Suspended Solids	4.5	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	N-NH3 (Ammonia)	0.312	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Total Kjeldahl Nitrogen	1.08	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Total Phosphorus	0.16	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1591181-1	MS-01	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591181-1	MS-01	25-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	pH	7.41	pH units	ALS

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TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Total Suspended Solids	<2.0	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	N-NH3 (Ammonia)	0.329	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Total Kjeldahl Nitrogen	0.6	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Total Phosphorus	0.169	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1591181-3	MS-01 (Duplicate)	25-Mar-15	Oil & Grease - Total	<6.0	mg/L	ALS
MILNE PORT						
L1596168-1	MP-01	8-Apr-15	pH	7.68	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	Total Suspended Solids	28.4	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	N-NH3 (Ammonia)	0.648	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	Total Kjeldahl Nitrogen	3.12	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	Total Phosphorus	16.7	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1596168-1	MP-01	8-Apr-15	Biochemical Oxygen Demand	2.6	mg/L	ALS
L1596168-1	MP-01	8-Apr-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	pH	7.86	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	Total Suspended Solids	<2.0	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	Total Kjeldahl Nitrogen	1.59	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	Total Phosphorus	11.5	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1601711-1	MP-01	22-Apr-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1601711-1	MP-01	22-Apr-15	Oil & Grease - Total	<6.0	mg/L	ALS
MINE SITE						
L1596130-1	MS-01	8-Apr-15	pH	7.41	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	Total Suspended Solids	<2.0	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	N-NH3 (Ammonia)	0.255	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	Total Kjeldahl Nitrogen	0.31	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	Total Phosphorus	0.513	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1596130-1	MS-01	8-Apr-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1596130-1	MS-01	8-Apr-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	pH	7.52	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	Total Suspended Solids	8.8	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	N-NH3 (Ammonia)	0.297	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	Total Kjeldahl Nitrogen	0.98	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	Total Phosphorus	0.811	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1601692-1	MS-01	22-Apr-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1601692-1	MS-01	22-Apr-15	Oil & Grease - Total	<6.0	mg/L	ALS
MILNE PORT						
L1608003-1	MP-01	6-May-15	pH	7.36	mg/L	ALS
L1608003-1	MP-01	6-May-15	Total Suspended Solids	<2.0	mg/L	ALS
L1608003-1	MP-01	6-May-15	N-NH3 (Ammonia)	0.057	mg/L	ALS
L1608003-1	MP-01	6-May-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1608003-1	MP-01	6-May-15	Total Phosphorus	13.3	mg/L	ALS
L1608003-1	MP-01	6-May-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1608003-1	MP-01	6-May-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1608003-1	MP-01	6-May-15	Oil & Grease - Total	<4.0	mg/L	ALS
L1614440-1	MP-01	20-May-15	pH	7.53	mg/L	ALS
L1614440-1	MP-01	20-May-15	Total Suspended Solids	<2.0	mg/L	ALS
L1614440-1	MP-01	20-May-15	N-NH3 (Ammonia)	0.052	mg/L	ALS
L1614440-1	MP-01	20-May-15	Total Kjeldahl Nitrogen	1.16	mg/L	ALS
L1614440-1	MP-01	20-May-15	Total Phosphorus	14.2	mg/L	ALS
L1614440-1	MP-01	20-May-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1614440-1	MP-01	20-May-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1614440-1	MP-01	20-May-15	Oil & Grease - Total	<6.0	mg/L	ALS
MINE SITE						
L1607559-1	MS-01	6-May-15	pH	7.20	mg/L	ALS
L1607559-1	MS-01	6-May-15	Total Suspended Solids	<2.0	mg/L	ALS
L1607559-1	MS-01	6-May-15	N-NH3 (Ammonia)	0.228	mg/L	ALS
L1607559-1	MS-01	6-May-15	Total Kjeldahl Nitrogen	0.41	mg/L	ALS
L1607559-1	MS-01	6-May-15	Total Phosphorus	0.826	mg/L	ALS
L1607559-1	MS-01	6-May-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1607559-1	MS-01	6-May-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1607559-1	MS-01	6-May-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1614435-1	MS-01	20-May-15	pH	7.13	mg/L	ALS
L1614435-1	MS-01	20-May-15	Total Suspended Solids	<2.0	mg/L	ALS
L1614435-1	MS-01	20-May-15	N-NH3 (Ammonia)	0.361	mg/L	ALS
L1614435-1	MS-01	20-May-15	Total Kjeldahl Nitrogen	1.41	mg/L	ALS
L1614435-1	MS-01	20-May-15	Total Phosphorus	0.277	mg/L	ALS
L1614435-1	MS-01	20-May-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1614435-1	MS-01	20-May-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1614435-1	MS-01	20-May-15	Oil & Grease - Total	<6.0	mg/L	ALS
MILNE PORT						
L1620460-1	MP-01	3-Jun-15	pH	7.50	pH units	ALS
L1620460-1	MP-01	3-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1620460-1	MP-01	3-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1620460-1	MP-01	3-Jun-15	Total Kjeldahl Nitrogen	1.38	mg/L	ALS
L1620460-1	MP-01	3-Jun-15	Total Phosphorus	15.5	mg/L	ALS
L1620460-1	MP-01	3-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1620460-1	MP-01	3-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1620460-1	MP-01	3-Jun-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	pH	7.56	pH units	ALS
L1627921-1	MP-01	17-Jun-15	Total Suspended Solids	4	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	N-NH3 (Ammonia)	0.199	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	Total Kjeldahl Nitrogen	3.1	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	Total Phosphorus	16.2	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	Faecal Coliforms	6	CFU/100 mL	ALS
L1627921-1	MP-01	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627921-1	MP-01	17-Jun-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	pH	5.87	pH units	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Total Phosphorus	<0.003	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627921-3	MP-01 (Field Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	pH	5.81	pH units	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Total Phosphorus	0.0049	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627921-4	MP-01 (Travel Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1631050-1	MP-03	*22-Jun-15*	*Benzene*	<0.50	*ug/L*	*ALS*
L1631050-1	MP-03	*22-Jun-15*	*Ethylbenzene*	<0.50	*ug/L*	*ALS*
L1631050-1	MP-03	*22-Jun-15*	*Toluene*	<0.50	*ug/L*	*ALS*
L1631050-1	MP-03	*22-Jun-15*	*Total Lead*	<0.00050	*mg/L*	*ALS*
L1631050-1	MP-03	*22-Jun-15*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*
L1631050-2	MP-04	*22-Jun-15*	pH	8.2	pH units	*ALS*
L1631050-2	MP-04	*22-Jun-15*	Total Suspended Solids	15.2	mg/L	*ALS*
L1631050-2	MP-04	*22-Jun-15*	*Benzene*	<0.50	*ug/L*	*ALS*
L1631050-2	MP-04	*22-Jun-15*	*Ethylbenzene*	<0.50	*ug/L*	*ALS*
L1631050-2	MP-04	*22-Jun-15*	*Toluene*	<0.50	*ug/L*	*ALS*
L1631050-2	MP-04	*22-Jun-15*	*Total Lead*	0.00104	*mg/L*	*ALS*
L1631050-2	MP-04	*22-Jun-15*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	pH	8.21	pH units	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	Total Suspended Solids	16.4	mg/L	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	*Benzene*	<0.50	*ug/L*	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	*Ethylbenzene*	<0.50	*ug/L*	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	*Toluene*	<0.50	*ug/L*	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	*Total Lead*	0.00059	*mg/L*	*ALS*
L1631050-3	MP-04 (Duplicate)	*22-Jun-15*	*Oil & Grease - Total*	<2.0	*mg/L*	*ALS*

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TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1621567-1	MP-Q1-01	3-Jun-15	Conductivity	89.8	uS/cm	ALS
L1621567-1	MP-Q1-01	3-Jun-15	pH	8.01	pH units	ALS
L1621567-1	MP-Q1-01	3-Jun-15	Total Suspended Solids	113*	mg/L	ALS
L1621567-1	MP-Q1-01	3-Jun-15	N-NH3 (Ammonia)	0.095	mg/L	ALS
L1621567-1	MP-Q1-01	3-Jun-15	N-NO3 (Nitrate)	0.171	mg/L	ALS
L1621567-1	MP-Q1-01	3-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1625952-1	MP-Q1-01	10-Jun-15	Conductivity	185	uS/cm	ALS
L1625952-1	MP-Q1-01	10-Jun-15	pH	8	pH units	ALS
L1625952-1	MP-Q1-01	10-Jun-15	Total Suspended Solids	93.5	mg/L	ALS
L1626915-1	MP-Q1-01	15-Jun-15	pH	7.87	pH units	ALS
L1626915-1	MP-Q1-01	15-Jun-15	Total Suspended Solids	12	mg/L	ALS
L1629645-1	MP-Q1-01	17-Jun-15	Conductivity	116	uS/cm	ALS
L1629645-1	MP-Q1-01	17-Jun-15	pH	7.83	pH units	ALS
L1629645-1	MP-Q1-01	17-Jun-15	Total Suspended Solids	3.6	mg/L	ALS
L1629645-1	MP-Q1-01	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629645-1	MP-Q1-01	17-Jun-15	N-NO3 (Nitrate)	0.041	mg/L	ALS
L1629645-1	MP-Q1-01	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
44420	MP-Q1-01	17-Jun-15	Toxicity*	non-lethal	mortality %	Aquatox
L1631647-1	MP-Q1-01	23-Jun-15	pH	7.73	pH units	ALS
L1631647-1	MP-Q1-01	23-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621567-2	MP-Q1-02	3-Jun-15	Conductivity	180	uS/cm	ALS
L1671567-2	MP-Q1-02	3-Jun-15	pH	8.03	pH units	ALS
L1671567-2	MP-Q1-02	3-Jun-15	Total Suspended Solids	203*	mg/L	ALS
L1671567-2	MP-Q1-02	3-Jun-15	N-NH3 (Ammonia)	0.086	mg/L	ALS
L1671567-2	MP-Q1-02	3-Jun-15	N-NO3 (Nitrate)	0.13	mg/L	ALS
L1671567-2	MP-Q1-02	3-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1621567-3	MP-Q1-02 (Duplicate)	3-Jun-15	Conductivity	181	uS/cm	ALS
L1671567-3	MP-Q1-02 (Duplicate)	3-Jun-15	pH	8.06	pH units	ALS
L1671567-3	MP-Q1-02 (Duplicate)	3-Jun-15	Total Suspended Solids	213	mg/L	ALS
L1671567-3	MP-Q1-02 (Duplicate)	3-Jun-15	N-NH3 (Ammonia)	0.095	mg/L	ALS
L1671567-3	MP-Q1-02 (Duplicate)	3-Jun-15	N-NO3 (Nitrate)	0.133	mg/L	ALS
L1671567-3	MP-Q1-02 (Duplicate)	3-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1625952-2	MP-Q1-02	10-Jun-15	Conductivity	193	uS/cm	ALS
L1625952-2	MP-Q1-02	10-Jun-15	pH	7.98	pH units	ALS
L1625952-2	MP-Q1-02	10-Jun-15	Total Suspended Solids	57.6	mg/L	ALS
L1626915-2	MP-Q1-02	15-Jun-15	pH	7.85	pH units	ALS
L1626915-2	MP-Q1-02	15-Jun-15	Total Suspended Solids	21.5	mg/L	ALS
L1629645-2	MP-Q1-02	17-Jun-15	Conductivity	363	uS/cm	ALS
L1629645-2	MP-Q1-02	17-Jun-15	pH	8.08	pH units	ALS
L1629645-2	MP-Q1-02	17-Jun-15	Total Suspended Solids	6.6	mg/L	ALS
L1629645-2	MP-Q1-02	17-Jun-15	N-NH3 (Ammonia)	1.91	mg/L	ALS
L1629645-2	MP-Q1-02	17-Jun-15	N-NO3 (Nitrate)	7.78	mg/L	ALS
L1629645-2	MP-Q1-02	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1631647-2	MP-Q1-02	23-Jun-15	pH	7.88	pH units	ALS
L1631647-2	MP-Q1-02	23-Jun-15	Total Suspended Solids	2.4	mg/L	ALS
L1621567-4	MP-C-B	3-Jun-15	Conductivity	282	uS/cm	ALS
L1671567-4	MP-C-B	3-Jun-15	pH	8.01	pH units	ALS
L1671567-4	MP-C-B	3-Jun-15	Total Suspended Solids	14.4	mg/L	ALS
L1671567-4	MP-C-B	3-Jun-15	N-NH3 (Ammonia)	0.258	mg/L	ALS
L1671567-4	MP-C-B	3-Jun-15	N-NO3 (Nitrate)	0.287	mg/L	ALS
L1671567-4	MP-C-B	3-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1625952-3	MP-C-B	10-Jun-15	Conductivity	357	uS/cm	ALS
L1625952-3	MP-C-B	10-Jun-15	pH	8.22	pH units	ALS
L1625952-3	MP-C-B	10-Jun-15	Total Suspended Solids	2.5	mg/L	ALS
L1625952-4	MP-C-B (Duplicate)	10-Jun-15	Conductivity	358	uS/cm	ALS
L1625952-4	MP-C-B (Duplicate)	10-Jun-15	pH	8.24	pH units	ALS
L1625952-4	MP-C-B (Duplicate)	10-Jun-15	Total Suspended Solids	3.4	mg/L	ALS
L1629645-4	MP-C-B	17-Jun-15	Conductivity	194	uS/cm	ALS
L1629645-4	MP-C-B	17-Jun-15	pH	8.24	pH units	ALS
L1629645-4	MP-C-B	17-Jun-15	Total Suspended Solids	2.9	mg/L	ALS
L1629645-4	MP-C-B	17-Jun-15	N-NH3 (Ammonia)	0.078	mg/L	ALS
L1629645-4	MP-C-B	17-Jun-15	N-NO3 (Nitrate)	0.491	mg/L	ALS
L1629645-4	MP-C-B	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1631647-3	MP-C-B	23-Jun-15	pH	8.13	pH units	ALS
L1631647-3	MP-C-B	23-Jun-15	Total Suspended Solids	2.9	mg/L	ALS
L1621567-5	MP-C-B01	3-Jun-15	Conductivity	261	uS/cm	ALS
L1671567-5	MP-C-B01	3-Jun-15	pH	7.97	pH units	ALS
L1671567-5	MP-C-B01	3-Jun-15	Total Suspended Solids	22	mg/L	ALS
L1671567-5	MP-C-B01	3-Jun-15	N-NH3 (Ammonia)	0.203	mg/L	ALS
L1671567-5	MP-C-B01	3-Jun-15	N-NO3 (Nitrate)	0.324	mg/L	ALS
L1671567-5	MP-C-B01	3-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1625952-5	MP-C-B01	10-Jun-15	Conductivity	342	uS/cm	ALS
L1625952-5	MP-C-B01	10-Jun-15	pH	8.22	pH units	ALS
L1625952-5	MP-C-B01	10-Jun-15	Total Suspended Solids	2.5	mg/L	ALS
L1629645-5	MP-C-B01	17-Jun-15	Conductivity	192	uS/cm	ALS
L1629645-5	MP-C-B01	17-Jun-15	pH	8.21	pH units	ALS
L1629645-5	MP-C-B01	17-Jun-15	Total Suspended Solids	2.9	mg/L	ALS
L1629645-5	MP-C-B01	17-Jun-15	N-NH3 (Ammonia)	0.103	mg/L	ALS
L1629645-5	MP-C-B01	17-Jun-15	N-NO3 (Nitrate)	0.51	mg/L	ALS
L1629645-5	MP-C-B01	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1631647-4	MP-C-B01	23-Jun-15	pH	8.16	pH units	ALS
L1631647-4	MP-C-B01	23-Jun-15	Total Suspended Solids	11.6	mg/L	ALS
L1631647-5	MP-C-F	23-Jun-15	pH	7.98	pH units	ALS
L1631647-5	MP-C-F	23-Jun-15	Total Suspended Solids	2	mg/L	ALS
L1625952-6	MP-C-H	10-Jun-15	Conductivity	419	uS/cm	ALS
L1625952-6	MP-C-H	10-Jun-15	pH	8.08	pH units	ALS
L1625952-6	MP-C-H	10-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629645-3	MP-C-H	17-Jun-15	Conductivity	118	uS/cm	ALS
L1629645-3	MP-C-H	17-Jun-15	pH	8.03	pH units	ALS
L1629645-3	MP-C-H	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629645-3	MP-C-H	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629645-3	MP-C-H	17-Jun-15	N-NO3 (Nitrate)	0.027	mg/L	ALS
L1629645-3	MP-C-H	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1631647-6	MP-C-H	23-Jun-15	pH	8	pH units	ALS
L1631647-6	MP-C-H	23-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
MINE SITE						
L1620458-1	MS-01	3-Jun-15	pH	7.29	pH units	ALS
L1620458-1	MS-01	3-Jun-15	Total Suspended Solids	3.2	mg/L	ALS
L1620458-1	MS-01	3-Jun-15	N-NH3 (Ammonia)	0.285	mg/L	ALS
L1620458-1	MS-01	3-Jun-15	Total Kjeldahl Nitrogen	0.5	mg/L	ALS
L1620458-1	MS-01	3-Jun-15	Total Phosphorus	1.17	mg/L	ALS
L1620458-1	MS-01	3-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1620458-1	MS-01	3-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1620458-1	MS-01	3-Jun-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	pH	7.11	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	Total Suspended Solids	3.8	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	N-NH3 (Ammonia)	0.446	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	Total Kjeldahl Nitrogen	1.12	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	Total Phosphorus	0.678	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1627907-1	MS-01	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627907-1	MS-01	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	pH	7.10	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	N-NH3 (Ammonia)	0.638	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Total Kjeldahl Nitrogen	2.21	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Total Phosphorus	0.714	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627907-2	MS-01 (Duplicate)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	pH	5.96	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Total Phosphorus	<0.003	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627907-3	MS-01 (Field Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	pH	5.88	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Total Kjeldahl Nitrogen	0.15	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Total Phosphorus	<0.003	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1627907-4	MS-01 (Travel Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1621306-8	MQ-C-A	3-Jun-15	Total Suspended Solids	2.4	mg/L	ALS
L1622729-3	MQ-C-A	5-Jun-15	Conductivity	76.9	uS/cm	ALS
L1622729-3	MQ-C-A	5-Jun-15	pH	7.63	pH units	ALS
L1622729-3	MQ-C-A	5-Jun-15	Total Suspended Solids	3.6	mg/L	ALS
L1622729-3	MQ-C-A	5-Jun-15	N-NH3 (Ammonia)	<.0.05	mg/L	ALS
L1622729-3	MQ-C-A	5-Jun-15	N-NO3 (Nitrate)	0.058	mg/L	ALS
L1622729-3	MQ-C-A	5-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-3	MQ-C-A	9-Jun-15	pH	7.9	pH units	ALS
L1624083-3	MQ-C-A	9-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-1	MQ-C-A	17-Jun-15	Conductivity	104	uS/cm	ALS
L1629640-1	MQ-C-A	17-Jun-15	pH	8.01	pH units	ALS
L1629640-1	MQ-C-A	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-1	MQ-C-A	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-1	MQ-C-A	17-Jun-15	N-NO3 (Nitrate)	0.059	mg/L	ALS
L1629640-1	MQ-C-A	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	Conductivity	103	uS/cm	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	pH	7.99	pH units	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	N-NO3 (Nitrate)	0.06	mg/L	ALS
L1629640-8	MQ-C-A (Duplicate)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-3	MQ-C-A	24-Jun-15	pH	7.92	pH units	ALS
L1632438-3	MQ-C-A	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-10	MQ-C-B	3-Jun-15	Total Suspended Solids	42.8	mg/L	ALS
L1622729-1	MQ-C-B	5-Jun-15	Conductivity	430	uS/cm	ALS
L1622729-1	MQ-C-B	5-Jun-15	pH	7.64	pH units	ALS
L1622729-1	MQ-C-B	5-Jun-15	Total Suspended Solids	74	mg/L	ALS
L1622729-1	MQ-C-B	5-Jun-15	N-NH3 (Ammonia)	3.16	mg/L	ALS
L1622729-1	MQ-C-B	5-Jun-15	N-NO3 (Nitrate)	6.62	mg/L	ALS
L1622729-1	MQ-C-B	5-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-1	MQ-C-B	9-Jun-15	pH	7.69	pH units	ALS
L1624083-1	MQ-C-B	9-Jun-15	Total Suspended Solids	4.4	mg/L	ALS
L1629640-2	MQ-C-B	17-Jun-15	Conductivity	275	uS/cm	ALS
L1629640-2	MQ-C-B	17-Jun-15	pH	7.69	pH units	ALS
L1629640-2	MQ-C-B	17-Jun-15	Total Suspended Solids	2.6	mg/L	ALS
L1629640-2	MQ-C-B	17-Jun-15	N-NH3 (Ammonia)	0.748	mg/L	ALS
L1629640-2	MQ-C-B	17-Jun-15	N-NO3 (Nitrate)	1.9	mg/L	ALS
L1629640-2	MQ-C-B	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
44419	MQ-C-B	17-Jun-15	Toxicity*	non-lethal	mortality %	Aquatox
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	Conductivity	<3.0	uS/cm	ALS
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	pH	6.57	pH units	ALS
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	N-NO3 (Nitrate)	<0.02	mg/L	ALS
L1629640-7	MQ-C-B (Travel Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-1	MQ-C-B	24-Jun-15	pH	7.89	pH units	ALS
L1632438-1	MQ-C-B	24-Jun-15	Total Suspended Solids	9.2	mg/L	ALS
L1632438-2	MQ-C-B (Duplicate)	24-Jun-15	pH	7.92	pH units	ALS
L1632438-2	MQ-C-B (Duplicate)	24-Jun-15	Total Suspended Solids	2	mg/L	ALS
L1621306-11	MQ-C-D	3-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1622729-2	MQ-C-D	5-Jun-15	Conductivity	123	uS/cm	ALS
L1622729-2	MQ-C-D	5-Jun-15	pH	7.66	pH units	ALS
L1622729-2	MQ-C-D	5-Jun-15	Total Suspended Solids	8.4	mg/L	ALS
L1622729-2	MQ-C-D	5-Jun-15	N-NH3 (Ammonia)	0.262	mg/L	ALS
L1622729-2	MQ-C-D	5-Jun-15	N-NO3 (Nitrate)	0.579	mg/L	ALS
L1622729-2	MQ-C-D	5-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-2	MQ-C-D	9-Jun-15	pH	7.85	pH units	ALS
L1624083-2	MQ-C-D	9-Jun-15	Total Suspended Solids	6.4	mg/L	ALS
L1629640-3	MQ-C-D	17-Jun-15	Conductivity	164	uS/cm	ALS
L1629640-3	MQ-C-D	17-Jun-15	pH	8.02	pH units	ALS
L1629640-3	MQ-C-D	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-3	MQ-C-D	17-Jun-15	N-NH3 (Ammonia)	0.094	mg/L	ALS
L1629640-3	MQ-C-D	17-Jun-15	N-NO3 (Nitrate)	0.446	mg/L	ALS
L1629640-3	MQ-C-D	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-4	MQ-C-D	24-Jun-15	pH	8.02	pH units	ALS
L1632438-4	MQ-C-D	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-10	MQ-C-E	17-Jun-15	Conductivity	212	uS/cm	ALS
L1629640-10	MQ-C-E	17-Jun-15	pH	8.24	pH units	ALS
L1629640-10	MQ-C-E	17-Jun-15	Total Suspended Solids	4.8	mg/L	ALS
L1629640-10	MQ-C-E	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-10	MQ-C-E	17-Jun-15	N-NO3 (Nitrate)	0.392	mg/L	ALS
L1629640-10	MQ-C-E	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-5	MQ-C-E	24-Jun-15	pH	8.1	pH units	ALS
L1632438-5	MQ-C-E	24-Jun-15	Total Suspended Solids	4.4	mg/L	ALS
L1621306-5	MS-C-A	3-Jun-15	Total Suspended Solids	5.60	mg/L	ALS
L1622861-3	MS-C-A	6-Jun-15	Conductivity	99.7	uS/cm	ALS
L1622861-3	MS-C-A	6-Jun-15	pH	7.68	pH units	ALS
L1622861-3	MS-C-A	6-Jun-15	Total Suspended Solids	4.4	mg/L	ALS
L1622861-3	MS-C-A	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-3	MS-C-A	6-Jun-15	N-NO3 (Nitrate)	0.361	mg/L	ALS
L1622861-3	MS-C-A	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-5	MS-C-A	9-Jun-15	pH	7.76	pH units	ALS
L1624083-5	MS-C-A	9-Jun-15	Total Suspended Solids	3.2	mg/L	ALS
L1629640-11	MS-C-A	17-Jun-15	Conductivity	90.4	uS/cm	ALS
L1629640-11	MS-C-A	17-Jun-15	pH	7.84	pH units	ALS
L1629640-11	MS-C-A	17-Jun-15	Total Suspended Solids	2.1	mg/L	ALS
L1629640-11	MS-C-A	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-11	MS-C-A	17-Jun-15	N-NO3 (Nitrate)	0.134	mg/L	ALS
L1629640-11	MS-C-A	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	Conductivity	<3.0	uS/cm	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	pH	6.24	pH units	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	N-NO3 (Nitrate)	<0.02	mg/L	ALS
L1629640-13	MS-C-A (Field Blank)	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-7	MS-C-A	24-Jun-15	pH	7.69	pH units	ALS
L1632438-7	MS-C-A	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-7	MS-C-B	3-Jun-15	Total Suspended Solids	3.6	mg/L	ALS
L1622861-5	MS-C-B	6-Jun-15	Conductivity	98.3	uS/cm	ALS
L1622861-5	MS-C-B	6-Jun-15	pH	7.62	pH units	ALS
L1622861-5	MS-C-B	6-Jun-15	Total Suspended Solids	8	mg/L	ALS
L1622861-5	MS-C-B	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-5	MS-C-B	6-Jun-15	N-NO3 (Nitrate)	0.383	mg/L	ALS
L1622861-5	MS-C-B	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-6	MS-C-B	9-Jun-15	pH	7.39	pH units	ALS
L1624083-6	MS-C-B	9-Jun-15	Total Suspended Solids	9.2	mg/L	ALS
L1629640-12	MS-C-B	17-Jun-15	Conductivity	93.9	uS/cm	ALS
L1629640-12	MS-C-B	17-Jun-15	pH	7.86	pH units	ALS
L1629640-12	MS-C-B	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-12	MS-C-B	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-12	MS-C-B	17-Jun-15	N-NO3 (Nitrate)	0.128	mg/L	ALS
L1629640-12	MS-C-B	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-10	MS-C-B	24-Jun-15	pH	7.6	pH units	ALS
L1632438-10	MS-C-B	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-1	MS-C-C	3-Jun-15	Total Suspended Solids	18.8	mg/L	ALS
L1632438-9	MS-C-C	24-Jun-15	pH	7.83	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1632438-9	MS-C-C	24-Jun-15	Total Suspended Solids	2.4	mg/L	ALS
L1621306-2	MS-C-D	3-Jun-15	Total Suspended Solids	9.2	mg/L	ALS
L1622861-6	MS-C-D	6-Jun-15	Conductivity	108	uS/cm	ALS
L1622861-6	MS-C-D	6-Jun-15	pH	7.9	pH units	ALS
L1622861-6	MS-C-D	6-Jun-15	Total Suspended Solids	6.4	mg/L	ALS
L1622861-6	MS-C-D	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-6	MS-C-D	6-Jun-15	N-NO3 (Nitrate)	0.224	mg/L	ALS
L1622861-6	MS-C-D	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-8	MS-C-D	9-Jun-15	pH	7.87	pH units	ALS
L1624083-8	MS-C-D	9-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1624083-7	MS-C-D (Duplicate)	9-Jun-15	pH	7.83	pH units	ALS
L1624083-7	MS-C-D (Duplicate)	9-Jun-15	Total Suspended Solids	5.6	mg/L	ALS
L1621306-3	MS-C-E	3-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1622861-7	MS-C-E	6-Jun-15	Conductivity	163	uS/cm	ALS
L1622861-7	MS-C-E	6-Jun-15	pH	8.06	pH units	ALS
L1622861-7	MS-C-E	6-Jun-15	Total Suspended Solids	2	mg/L	ALS
L1622861-7	MS-C-E	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-7	MS-C-E	6-Jun-15	N-NO3 (Nitrate)	0.076	mg/L	ALS
L1622861-7	MS-C-E	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	Conductivity	164	uS/cm	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	pH	8.04	pH units	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	Total Suspended Solids	4.8	mg/L	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	N-NO3 (Nitrate)	0.065	mg/L	ALS
L1622861-8	MS-C-E (Duplicate)	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-9	MS-C-E	9-Jun-15	pH	8.19	pH units	ALS
L1624083-9	MS-C-E	9-Jun-15	Total Suspended Solids	2	mg/L	ALS
L1629640-6	MS-C-E	17-Jun-15	Conductivity	261	uS/cm	ALS
L1629640-6	MS-C-E	17-Jun-15	pH	8.37	pH units	ALS
L1629640-6	MS-C-E	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-6	MS-C-E	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-6	MS-C-E	17-Jun-15	N-NO3 (Nitrate)	0.041	mg/L	ALS
L1629640-6	MS-C-E	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-8	MS-C-E	24-Jun-15	pH	8.04	pH units	ALS
L1632438-8	MS-C-E	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-6	MS-C-F	3-Jun-15	Total Suspended Solids	13.6	mg/L	ALS
L1622861-2	MS-C-F	6-Jun-15	Conductivity	93.7	uS/cm	ALS
L1622861-2	MS-C-F	6-Jun-15	pH	7.63	pH units	ALS
L1622861-2	MS-C-F	6-Jun-15	Total Suspended Solids	9.6	mg/L	ALS
L1622861-2	MS-C-F	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-2	MS-C-F	6-Jun-15	N-NO3 (Nitrate)	0.255	mg/L	ALS
L1622861-2	MS-C-F	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-10	MS-C-F	9-Jun-15	pH	7.69	pH units	ALS
L1624083-10	MS-C-F	9-Jun-15	Total Suspended Solids	16	mg/L	ALS
L1629640-4	MS-C-F	17-Jun-15	Conductivity	90.6	uS/cm	ALS
L1629640-4	MS-C-F	17-Jun-15	pH	7.87	pH units	ALS
L1629640-4	MS-C-F	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-4	MS-C-F	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-4	MS-C-F	17-Jun-15	N-NO3 (Nitrate)	0.11	mg/L	ALS
L1629640-4	MS-C-F	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-6	MS-C-F	24-Jun-15	pH	7.88	pH units	ALS
L1632438-6	MS-C-F	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-4	MS-C-G	3-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1622861-1	MS-C-G	6-Jun-15	Conductivity	44.3	uS/cm	ALS
L1622861-1	MS-C-G	6-Jun-15	pH	7.48	pH units	ALS
L1622861-1	MS-C-G	6-Jun-15	Total Suspended Solids	2.4	mg/L	ALS
L1622861-1	MS-C-G	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-1	MS-C-G	6-Jun-15	N-NO3 (Nitrate)	0.166	mg/L	ALS
L1622861-1	MS-C-G	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-11	MS-C-G	9-Jun-15	pH	7.56	pH units	ALS
L1624083-11	MS-C-G	9-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-5	MS-C-G	17-Jun-15	Conductivity	43.5	uS/cm	ALS
L1629640-5	MS-C-G	17-Jun-15	pH	7.66	pH units	ALS
L1629640-5	MS-C-G	17-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1629640-5	MS-C-G	17-Jun-15	N-NH3 (Ammonia)	<0.05	mg/L	ALS
L1629640-5	MS-C-G	17-Jun-15	N-NO3 (Nitrate)	0.039	mg/L	ALS
L1629640-5	MS-C-G	17-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1632438-12	MS-C-G	24-Jun-15	pH	7.68	pH units	ALS
L1632438-12	MS-C-G	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1622861-4	MS-C-H	6-Jun-15	Conductivity	72.4	uS/cm	ALS
L1622861-4	MS-C-H	6-Jun-15	pH	7.68	pH units	ALS
L1622861-4	MS-C-H	6-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1622861-4	MS-C-H	6-Jun-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1622861-4	MS-C-H	6-Jun-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1622861-4	MS-C-H	6-Jun-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1624083-12	MS-C-H	9-Jun-15	pH	7.69	pH units	ALS
L1624083-12	MS-C-H	9-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1632438-11	MS-C-H	24-Jun-15	pH	7.68	pH units	ALS
L1632438-11	MS-C-H	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1621306-12	MS-MRY-13A	3-Jun-15	Total Suspended Solids	2.0	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*pH*	7.87	pH units	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Arsenic*	<0.0010	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Copper*	0.0017	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Lead*	<0.00050	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Nickel*	0.0122	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Zinc*	0.0046	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Total Suspended Solids*	<2.0	mg/L	ALS
L1622862-1	MS-MRY-13A	6-Jun-15	*Oil & Grease - Total*	<2.0	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*pH*	8.26	pH units	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Arsenic*	0.00021	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Copper*	0.0017	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Lead*	<0.00005	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Nickel*	0.0139	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Zinc*	<0.003	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Total Suspended Solids*	<2.0	mg/L	ALS
L1629640-9	MS-MRY-13A	17-Jun-15	*Oil & Grease - Total*	<2.0	mg/L	ALS
L1632438-13	MS-MRY-13A	24-Jun-15	pH	7.86	pH units	ALS
L1632438-13	MS-MRY-13A	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*pH*	8.29	pH units	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Arsenic*	0.00025	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Copper*	0.0017	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Lead*	<0.00005	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Nickel*	0.0134	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Zinc*	<0.003	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Total Suspended Solids*	<2.0	mg/L	ALS
L1635547-1	MS-MRY-13A	29-Jun-15	*Oil & Grease - Total*	<2.0	mg/L	ALS
L1621306-13	MS-MRY-13B	3-Jun-15	Total Suspended Solids	2.4	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*pH*	8.08	pH units	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Arsenic*	<0.0010	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Copper*	0.0016	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Lead*	<0.00050	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Nickel*	0.0085	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Zinc*	<0.0030	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Total Suspended Solids*	21.2	mg/L	ALS
L1622862-2	MS-MRY-13B	6-Jun-15	*Oil & Grease - Total*	<2.0	mg/L	ALS
L1632438-14	MS-MRY-13B	24-Jun-15	pH	8.02	pH units	ALS
L1632438-14	MS-MRY-13B	24-Jun-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*pH*	8.02	pH units	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Arsenic*	0.0001	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Copper*	0.0015	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Lead*	0.000067	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Nickel*	0.0057	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Zinc*	<0.003	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Total Suspended Solids*	4	mg/L	ALS
L1635547-2	MS-MRY-13B	29-Jun-15	*Oil & Grease - Total*	<2.0	mg/L	ALS

Note: **Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab

**Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)*
Bold and yellow highlight indicates exceedance of Water Licence water quality criteria.
** Exceedance of Water Licence Criteria of 100 mg/L for TSS on June 3 for MP-Q1-01 and MP-Q1-02 caused by rapid melt of drainage that had entrainded sediments in snow.*
High TSS levels were short term and managed by means of excavation and silt fences.

MILNE PORT						
L1635413-1	MP-01	1-Jul-15	pH	7.40	pH units	ALS
L1635413-1	MP-01	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635413-1	MP-01	1-Jul-15	N-NH3 (Ammonia)	0.063	mg/L	ALS
L1635413-1	MP-01	1-Jul-15	Total Kjeldahl Nitrogen	0.21	mg/L	ALS
L1635413-1	MP-01	1-Jul-15	Total Phosphorus	15.8	mg/L	ALS
L1635413-1	MP-01	1-Jul-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1635413-1	MP-01	1-Jul-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1635413-1	MP-01	1-Jul-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	pH	7.80	pH units	ALS
L1645830-1	MP-01	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	N-NH3 (Ammonia)	1.48	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	Total Kjeldahl Nitrogen	3.16	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	Total Phosphorus	10.8	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1645830-1	MP-01	22-Jul-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1645830-1	MP-01	22-Jul-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	pH	9.87*	pH units	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Total Suspended Solids	71	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Alkalinity, Total (as CaCO3)	30	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	N-NH3 (Ammonia)	1.34	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Total Kjeldahl Nitrogen	23	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Total Phosphorus	2.9	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Faecal Coliforms	<10	CFU/100 mL	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Biochemical Oxygen Demand	67	mg/L	ALS
L1649794-6	MP-01A (pre-discharge)	28-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	pH	8.5	pH units	ALS
L1646834-1	MP-03	20-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Phosphorus	0.0032	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Arsenic	<0.0010	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Copper	<0.0010	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Lead	<0.00050	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Nickel	<0.0010	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Zinc	<0.0030	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Oil & Grease Total	<2.0	mg/L	ALS
L1646834-1	MP-03	20-Jul-15	Benzene	<0.50	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	Toluene	<100	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	F2 (C10-C16)	<250	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	F3 (C16-C34)	<250	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	F4 (C34-C50)	<380	ug/L	ALS
L1646834-1	MP-03	20-Jul-15	Total Hydrocarbons (C6-C50)	660	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	pH	8.49	pH units	ALS
L1646834-2	MP-04	20-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1646834-2	MP-04	20-Jul-15	Total Lead	<0.00050	mg/L	ALS
L1646834-2	MP-04	20-Jul-15	Oil & Grease Total	<2.0	mg/L	ALS
L1646834-2	MP-04	20-Jul-15	Benzene	<0.50	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	Toluene	<0.50	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	F2 (C10-C16)	160	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	F3 (C16-C34)	<250	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1646834-2	MP-04	20-Jul-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	pH	8.39	pH units	ALS
L1649794-4	MP-04	28-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1649794-4	MP-04	28-Jul-15	Total Lead	<0.00050	mg/L	ALS
L1649794-4	MP-04	28-Jul-15	Oil & Grease Total	<2.0	mg/L	ALS
L1649794-4	MP-04	28-Jul-15	Benzene	<0.50	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	Toluene	<0.50	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	F2 (C10-C16)	170	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	F3 (C16-C34)	<250	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1649794-4	MP-04	28-Jul-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1635665-1	MP-Q1-01	1-Jul-15	Conductivity	165	uS/cm	ALS
L1635665-1	MP-Q1-01	1-Jul-15	pH	7.94	pH units	ALS
L1635665-1	MP-Q1-01	1-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1635665-1	MP-Q1-01	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635665-1	MP-Q1-01	1-Jul-15	N-NO3 (Nitrate)	0.059	mg/L	ALS
L1635665-1	MP-Q1-01	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	Conductivity	165	uS/cm	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	pH	7.98	pH units	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	N-NO3 (Nitrate)	0.057	mg/L	ALS
L1635665-2	MP-Q1-01 (Duplicate)	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639480-1	MP-Q1-01	8-Jul-15	pH	8.02	pH units	ALS
L1639480-1	MP-Q1-01	8-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1642217-1	MP-Q1-01	14-Jul-15	Conductivity	268	uS/cm	ALS
L1642217-1	MP-Q1-01	14-Jul-15	pH	8.11	pH units	ALS
L1642217-1	MP-Q1-01	14-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1642217-1	MP-Q1-01	14-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1642217-1	MP-Q1-01	14-Jul-15	N-NO3 (Nitrate)	0.336	mg/L	ALS
L1642217-1	MP-Q1-01	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	Conductivity	268	uS/cm	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	pH	8.09	pH units	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	N-NH3 (Ammonia)	0.06	mg/L	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	N-NO3 (Nitrate)	0.335	mg/L	ALS
L1642217-2	MP-Q1-01 (Duplicate)	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	Conductivity	<3.0	uS/cm	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	pH	5.98	pH units	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1642217-3	MP-Q1-01 (Field Blank)	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	Conductivity	<3.0	uS/cm	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	pH	5.85	pH units	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1642217-4	MP-Q1-01 (Travel Blank)	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647370-1	MP-Q1-01	22-Jul-15	pH	8.18	pH units	ALS
L1647370-1	MP-Q1-01	22-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1649794-1	MP-Q1-01	28-Jul-15	Conductivity	369	uS/cm	ALS
L1649794-1	MP-Q1-01	28-Jul-15	pH	8.08	pH units	ALS
L1649794-1	MP-Q1-01	28-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1649794-1	MP-Q1-01	28-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1649794-1	MP-Q1-01	28-Jul-15	N-NO3 (Nitrate)	0.766	mg/L	ALS
L1649794-1	MP-Q1-01	28-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635665-3	MP-Q1-02	1-Jul-15	Conductivity	647	uS/cm	ALS
L1635665-3	MP-Q1-02	1-Jul-15	pH	7.94	pH units	ALS
L1635665-3	MP-Q1-02	1-Jul-15	Total Suspended Solids	9.6	mg/L	ALS
L1635665-3	MP-Q1-02	1-Jul-15	N-NH3 (Ammonia)	2.96	mg/L	ALS
L1635665-3	MP-Q1-02	1-Jul-15	N-NO3 (Nitrate)	7.78	mg/L	ALS
L1635665-3	MP-Q1-02	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639480-2	MP-Q1-02	8-Jul-15	pH	7.93	pH units	ALS
L1639480-2	MP-Q1-02	8-Jul-15	Total Suspended Solids	28	mg/L	ALS
L1639480-3	MP-Q1-02 (Duplicate)	8-Jul-15	pH	7.94	pH units	ALS
L1639480-3	MP-Q1-02 (Duplicate)	8-Jul-15	Total Suspended Solids	28	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1642217-5	MP-Q1-02	14-Jul-15	Conductivity	786	uS/cm	ALS
L1642217-5	MP-Q1-02	14-Jul-15	pH	7.93	pH units	ALS
L1642217-5	MP-Q1-02	14-Jul-15	Total Suspended Solids	12.4	mg/L	ALS
L1642217-5	MP-Q1-02	14-Jul-15	N-NH3 (Ammonia)	2.81	mg/L	ALS
L1642217-5	MP-Q1-02	14-Jul-15	N-NO3 (Nitrate)	12.9	mg/L	ALS
L1642217-5	MP-Q1-02	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647370-2	MP-Q1-02	22-Jul-15	pH	8.1	pH units	ALS
L1647370-2	MP-Q1-02	22-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1649794-2	MP-Q1-02	28-Jul-15	Conductivity	723	uS/cm	ALS
L1649794-2	MP-Q1-02	28-Jul-15	pH	8.07	pH units	ALS
L1649794-2	MP-Q1-02	28-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1649794-2	MP-Q1-02	28-Jul-15	N-NH3 (Ammonia)	0.578	mg/L	ALS
L1649794-2	MP-Q1-02	28-Jul-15	N-NO3 (Nitrate)	18	mg/L	ALS
L1649794-2	MP-Q1-02	28-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
44850	MP-Q1-02	28-Jul-15	Toxicity*	non-lethal	mortality %	Aquatox
L1635665-5	MP-C-B	1-Jul-15	Conductivity	371	uS/cm	ALS
L1635665-5	MP-C-B	1-Jul-15	pH	8.29	pH units	ALS
L1635665-5	MP-C-B	1-Jul-15	Total Suspended Solids	5.2	mg/L	ALS
L1635665-5	MP-C-B	1-Jul-15	N-NH3 (Ammonia)	0.229	mg/L	ALS
L1635665-5	MP-C-B	1-Jul-15	N-NO3 (Nitrate)	0.999	mg/L	ALS
L1635665-5	MP-C-B	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639480-4	MP-C-B	8-Jul-15	pH	8.28	pH units	ALS
L1639480-4	MP-C-B	8-Jul-15	Total Suspended Solids	4.4	mg/L	ALS
L1642217-6	MP-C-B	14-Jul-15	Conductivity	475	uS/cm	ALS
L1642217-6	MP-C-B	14-Jul-15	pH	8.39	pH units	ALS
L1642217-6	MP-C-B	14-Jul-15	Total Suspended Solids	3.6	mg/L	ALS
L1642217-6	MP-C-B	14-Jul-15	N-NH3 (Ammonia)	0.149	mg/L	ALS
L1642217-6	MP-C-B	14-Jul-15	N-NO3 (Nitrate)	1.33	mg/L	ALS
L1642217-6	MP-C-B	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647370-3	MP-C-B	22-Jul-15	pH	8.34	pH units	ALS
L1647370-3	MP-C-B	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635665-6	MP-C-B01	1-Jul-15	Conductivity	350	uS/cm	ALS
L1635665-6	MP-C-B01	1-Jul-15	pH	8.35	pH units	ALS
L1635665-6	MP-C-B01	1-Jul-15	Total Suspended Solids	6.4	mg/L	ALS
L1635665-6	MP-C-B01	1-Jul-15	N-NH3 (Ammonia)	0.219	mg/L	ALS
L1635665-6	MP-C-B01	1-Jul-15	N-NO3 (Nitrate)	1.63	mg/L	ALS
L1635665-6	MP-C-B01	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639480-5	MP-C-B01	8-Jul-15	pH	8.33	pH units	ALS
L1639480-5	MP-C-B01	8-Jul-15	Total Suspended Solids	6	mg/L	ALS
L1642217-7	MP-C-B01	14-Jul-15	Conductivity	470	uS/cm	ALS
L1642217-7	MP-C-B01	14-Jul-15	pH	8.37	pH units	ALS
L1642217-7	MP-C-B01	14-Jul-15	Total Suspended Solids	4	mg/L	ALS
L1642217-7	MP-C-B01	14-Jul-15	N-NH3 (Ammonia)	0.155	mg/L	ALS
L1642217-7	MP-C-B01	14-Jul-15	N-NO3 (Nitrate)	2.48	mg/L	ALS
L1642217-7	MP-C-B01	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635665-4	MP-C-H	1-Jul-15	Conductivity	146	uS/cm	ALS
L1635665-4	MP-C-H	1-Jul-15	pH	8.06	pH units	ALS
L1635665-4	MP-C-H	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635665-4	MP-C-H	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635665-4	MP-C-H	1-Jul-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1635665-4	MP-C-H	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639480-7	MP-C-H	8-Jul-15	pH	8.19	pH units	ALS
L1639480-7	MP-C-H	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1642217-8	MP-C-H	14-Jul-15	Conductivity	217	uS/cm	ALS
L1642217-8	MP-C-H	14-Jul-15	pH	8.24	pH units	ALS
L1642217-8	MP-C-H	14-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1642217-8	MP-C-H	14-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1642217-8	MP-C-H	14-Jul-15	N-NO3 (Nitrate)	0.052	mg/L	ALS
L1642217-8	MP-C-H	14-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647370-4	MP-C-H	22-Jul-15	pH	8.43	pH units	ALS
L1647370-4	MP-C-H	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1649794-3	MP-C-H	28-Jul-15	Conductivity	283	uS/cm	ALS
L1649794-3	MP-C-H	28-Jul-15	pH	8.3	pH units	ALS
L1649794-3	MP-C-H	28-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1649794-3	MP-C-H	28-Jul-15	N-NH3 (Ammonia)	0.133	mg/L	ALS
L1649794-3	MP-C-H	28-Jul-15	N-NO3 (Nitrate)	0.328	mg/L	ALS
L1649794-3	MP-C-H	28-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
MINE SITE						
L1635412-1	MS-01	1-Jul-15	pH	7.37	pH units	ALS
L1635412-1	MS-01	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635412-1	MS-01	1-Jul-15	N-NH3 (Ammonia)	0.204	mg/L	ALS
L1635412-1	MS-01	1-Jul-15	Total Kjeldahl Nitrogen	1.71	mg/L	ALS
L1635412-1	MS-01	1-Jul-15	Total Phosphorus	1.13	mg/L	ALS
L1635412-1	MS-01	1-Jul-15	Faecal Coliforms	1	CFU/100 mL	ALS
L1635412-1	MS-01	1-Jul-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1635412-1	MS-01	1-Jul-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	pH	6.95	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	N-NH3 (Ammonia)	0.25	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	Total Kjeldahl Nitrogen	1.52	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	Total Phosphorus	0.398	mg/L	ALS
L1643986-1	MS-01	16-Jul-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1642328-1	MS-01	15-Jul-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1642328-1	MS-01	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	pH	7.12	pH units	ALS
L1649326-1	MS-01	29-Jul-15	Total Suspended Solids	5.6	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	N-NH3 (Ammonia)	0.355	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	Total Kjeldahl Nitrogen	1.54	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	Total Phosphorus	0.526	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	Faecal Coliforms	2	CFU/100 mL	ALS
L1649326-1	MS-01	29-Jul-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1649326-1	MS-01	29-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	pH	7.82	mg/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Total Suspended Solids	8.8	mg/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Total Lead	<0.0050	mg/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Oil and Grease, Total	23.3*	mg/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Benzene	<0.50	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Toluene	<0.50	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	F2 (C10-C16)	800	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	F3 (C16-C34)	630	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1641594-1	MS-03 (Pre-Discharge)	13-Jul-15	Total Hydrocarbons (C6-C50)	1420	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	Benzene	<0.50	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	Toluene	<0.50	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	F2 (C10-C16)	250	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	F3 (C16-C34)	270	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1635673-1	MS-MRY-6 @12:15	1-Jul-15	Total Hydrocarbons (C6-C50)	520	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	Benzene	<0.50	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	Toluene	<0.50	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	F2 (C10-C16)	260	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	F3 (C16-C34)	400	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1635673-2	MS-MRY-6 @16:15	1-Jul-15	Total Hydrocarbons (C6-C50)	660	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	Benzene	<0.50	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	Toluene	<0.50	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	F1 (C6-C10)	<100	ug/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	F2 (C10-C16)	280	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	F3 (C16-C34)	320	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1635673-6	MS-MRY-6 @ 20:25	1-Jul-15	Total Hydrocarbons (C6-C50)	600	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	pH	7.53	mg/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Total Suspended Solids	12	mg/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Total Lead	<0.00050	mg/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Benzene	<0.50	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Ethylbenzene	<0.50	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Toluene	<0.50	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	F1 (C6-C10)	<100	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	F2 (C10-C16)	110	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	F3 (C16-C34)	250	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	F4 (C34-C50)	<250	ug/L	ALS
L1642742-1	MS-MRY-6	15-Jul-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1640384-1	MS-08	9-Jul-15	Hardness (as CaCO3)	223	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	pH	7.13	pH units	ALS
L1640384-1	MS-08	9-Jul-15	Total Suspended Solids	26.8	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Total Dissolved Solids	290	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Turbidity	21.9	NTU	ALS
L1640384-1	MS-08	9-Jul-15	Alkalinity, Total (as CaCO3)	18	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Ammonia, Total (as N)	0.364	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Chloride (Cl)	12.8	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Fluoride (F)	0.031	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Nitrate (as N)	1.94	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Total Kjeldahl Nitrogen	0.8	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Total Phosphorus	0.0062	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Sulfate (SO4)	207	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Dissolved Organic Carbon	1.2	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Total Organic Carbon	1	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Aluminum (Al)-Total	0.804	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Arsenic (As)-Total	0.00016	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Cadmium (Cd)-Total	0.000049	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Calcium (Ca)-Total	30.9	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Copper (Cu)-Total	0.002	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Iron (Fe)-Total	1.12	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Lead (Pb)-Total	0.00082	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Magnesium (Mg)-Total	41	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Manganese (Mn)-Total	3.06	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Molybdenum (Mo)-Total	0.000086	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Nickel (Ni)-Total	0.0103	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Potassium (K)-Total	1.22	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Selenium (Se)-Total	0.000708	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Sodium (Na)-Total	1.22	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Thallium (Tl)-Total	0.00004	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Uranium (U)-Total	0.000135	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Zinc (Zn)-Total	0.0051	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Aluminum (Al)-Dissolved	<0.0050	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Cadmium (Cd)-Dissolved	0.00005	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Calcium (Ca)-Dissolved	29	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Copper (Cu)-Dissolved	0.00069	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Iron (Fe)-Dissolved	0.053	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Magnesium (Mg)-Dissolved	36.5	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Manganese (Mn)-Dissolved	2.95	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Molybdenum (Mo)-Dissolved	0.000075	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Nickel (Ni)-Dissolved	0.00794	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Potassium (K)-Dissolved	0.791	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Selenium (Se)-Dissolved	0.000669	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Sodium (Na)-Dissolved	1.13	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Thallium (Tl)-Dissolved	0.000018	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Uranium (U)-Dissolved	0.000032	mg/L	ALS
L1640384-1	MS-08	9-Jul-15	Zinc (Zn)-Dissolved	0.0019	mg/L	ALS
44651	MS-08	9-Jul-15	Acute Toxicity*	non-lethal	mortality %	Aquatox
Field	MS-08	9-Jul-15	pH (field)	7.74	pH units	Field
Field	MS-08	9-Jul-15	Temperature (field)	5.3	°C	Field
Field	MS-08	9-Jul-15	Turbidity (field)	26.4	NTU	Field
Field	MS-08	9-Jul-15	Specific Conductance (field)	551	(µs/cm)	Field
L1651471-1	MS-08	30-Jul-15	Hardness (as CaCO3)	678	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	pH	7.9	pH units	ALS
L1651471-1	MS-08	30-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Total Dissolved Solids	934	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Turbidity	3.93	NTU	ALS
L1651471-1	MS-08	30-Jul-15	Alkalinity, Total (as CaCO3)	45	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Ammonia, Total (as N)	0.383	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Chloride (Cl)	25.7	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Fluoride (F)	0.044	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Nitrate (as N)	5.52	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Total Kjeldahl Nitrogen	0.39	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Total Phosphorus	<0.030	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Sulfate (SO4)	585	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Total Organic Carbon	<1.0	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Aluminum (Al)-Total	0.067	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Arsenic (As)-Total	<0.0010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Cadmium (Cd)-Total	<0.000090	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Calcium (Ca)-Total	83.2	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Copper (Cu)-Total	<0.0010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Iron (Fe)-Total	0.138	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Lead (Pb)-Total	<0.00050	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Magnesium (Mg)-Total	111	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Manganese (Mn)-Total	4.57	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Nickel (Ni)-Total	0.0126	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Potassium (K)-Total	1.9	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Selenium (Se)-Total	0.00209	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Sodium (Na)-Total	2.47	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Thallium (Tl)-Total	<0.00030	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Uranium (U)-Total	<0.0010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Aluminum (Al)-Dissolved	<0.0050	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Cadmium (Cd)-Dissolved	0.000069	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Calcium (Ca)-Dissolved	84.6	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Copper (Cu)-Dissolved	0.00068	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Magnesium (Mg)-Dissolved	113	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Manganese (Mn)-Dissolved	4.64	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Molybdenum (Mo)-Dissolved	0.000423	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Nickel (Ni)-Dissolved	0.0115	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Potassium (K)-Dissolved	1.9	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Selenium (Se)-Dissolved	0.00189	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Sodium (Na)-Dissolved	2.38	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Thallium (Tl)-Dissolved	0.000036	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Uranium (U)-Dissolved	0.000673	mg/L	ALS
L1651471-1	MS-08	30-Jul-15	Zinc (Zn)-Dissolved	0.0015	mg/L	ALS
Field	MS-08	30-Jul-15	pH (field)	7.47	pH units	Field
Field	MS-08	30-Jul-15	Temperature (field)	11	°C	Field
Field	MS-08	30-Jul-15	Turbidity (field)	8.35	NTU	Field
Field	MS-08	30-Jul-15	Specific Conductance (field)	1081	(µs/cm)	Field
L1635675-1	MQ-C-A	1-Jul-15	Conductivity	162	uS/cm	ALS
L1635675-1	MQ-C-A	1-Jul-15	pH	8.13	pH units	ALS
L1635675-1	MQ-C-A	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1635675-1	MQ-C-A	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-1	MQ-C-A	1-Jul-15	N-NO3 (Nitrate)	0.043	mg/L	ALS
L1635675-1	MQ-C-A	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-3	MQ-C-A	8-Jul-15	pH	8.17	pH units	ALS
L1639329-3	MQ-C-A	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-8	MQ-C-A	30-Jul-15	Conductivity	266	uS/cm	ALS
L1651459-8	MQ-C-A	30-Jul-15	pH	8.37	pH units	ALS
L1651459-8	MQ-C-A	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-8	MQ-C-A	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-8	MQ-C-A	30-Jul-15	N-NO3 (Nitrate)	0.021	mg/L	ALS
L1651459-8	MQ-C-A	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	Conductivity	266	uS/cm	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	pH	8.36	pH units	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	N-NO3 (Nitrate)	0.025	mg/L	ALS
L1651459-13	MQ-C-A (Duplicate)	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-3	MQ-C-B	1-Jul-15	Conductivity	624	uS/cm	ALS
L1635675-3	MQ-C-B	1-Jul-15	pH	7.85	pH units	ALS
L1635675-3	MQ-C-B	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-3	MQ-C-B	1-Jul-15	N-NH3 (Ammonia)	1.56	mg/L	ALS
L1635675-3	MQ-C-B	1-Jul-15	N-NO3 (Nitrate)	4.69	mg/L	ALS
L1635675-3	MQ-C-B	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
44549	MQ-C-B	1-Jul-15	Toxicity*	non-lethal	mortality %	Aquatox
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	Conductivity	642	uS/cm	ALS
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	pH	7.86	pH units	ALS
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	N-NH3 (Ammonia)	1.63	mg/L	ALS
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	N-NO3 (Nitrate)	4.72	mg/L	ALS
L1635675-4	MQ-C-B (Duplicate)	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-6	MQ-C-B	8-Jul-15	pH	7.93	pH units	ALS
L1639329-6	MQ-C-B	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-1	MQ-C-B	15-Jul-15	Conductivity	886	uS/cm	ALS
L1643829-1	MQ-C-B	15-Jul-15	pH	7.85	pH units	ALS
L1643829-1	MQ-C-B	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-1	MQ-C-B	15-Jul-15	N-NH3 (Ammonia)	1.29	mg/L	ALS
L1643829-1	MQ-C-B	15-Jul-15	N-NO3 (Nitrate)	5.41	mg/L	ALS
L1643829-1	MQ-C-B	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
44740	MQ-C-B	15-Jul-15	Toxicity*	non-lethal	mortality %	Aquatox
L1647517-1	MQ-C-B	22-Jul-15	pH	7.86	pH units	ALS
L1647517-1	MQ-C-B	22-Jul-15	Total Suspended Solids	3.6	mg/L	ALS
L1651459-9	MQ-C-B	30-Jul-15	Conductivity	952	uS/cm	ALS
L1651459-9	MQ-C-B	30-Jul-15	pH	8.13	pH units	ALS
L1651459-9	MQ-C-B	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-9	MQ-C-B	30-Jul-15	N-NH3 (Ammonia)	0.777	mg/L	ALS
L1651459-9	MQ-C-B	30-Jul-15	N-NO3 (Nitrate)	4.33	mg/L	ALS
L1651459-9	MQ-C-B	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
44858	MQ-C-B	30-Jul-15	Toxicity*	non-lethal	mortality %	Aquatox
L1635675-2	MQ-C-D	1-Jul-15	Conductivity	437	uS/cm	ALS
L1635675-2	MQ-C-D	1-Jul-15	pH	8.05	pH units	ALS
L1635675-2	MQ-C-D	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-2	MQ-C-D	1-Jul-15	N-NH3 (Ammonia)	0.108	mg/L	ALS
L1635675-2	MQ-C-D	1-Jul-15	N-NO3 (Nitrate)	0.599	mg/L	ALS
L1635675-2	MQ-C-D	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-4	MQ-C-D	8-Jul-15	pH	8.20	pH units	ALS
L1639329-4	MQ-C-D	8-Jul-15	Total Suspended Solids	3.6	mg/L	ALS
L1639329-5	MQ-C-D (Duplicate)	8-Jul-15	pH	8.18	pH units	ALS
L1639329-5	MQ-C-D (Duplicate)	8-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1643829-2	MQ-C-D	15-Jul-15	Conductivity	445	uS/cm	ALS
L1643829-2	MQ-C-D	15-Jul-15	pH	8.01	pH units	ALS
L1643829-2	MQ-C-D	15-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1643829-2	MQ-C-D	15-Jul-15	N-NH3 (Ammonia)	0.066	mg/L	ALS
L1643829-2	MQ-C-D	15-Jul-15	N-NO3 (Nitrate)	0.36	mg/L	ALS
L1643829-2	MQ-C-D	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-2	MQ-C-D	22-Jul-15	pH	8.59	pH units	ALS
L1647517-2	MQ-C-D	22-Jul-15	Total Suspended Solids	4	mg/L	ALS
L1651459-10	MQ-C-D	30-Jul-15	Conductivity	480	uS/cm	ALS
L1651459-10	MQ-C-D	30-Jul-15	pH	8.49	pH units	ALS
L1651459-10	MQ-C-D	30-Jul-15	Total Suspended Solids	3.3	mg/L	ALS
L1651459-10	MQ-C-D	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-10	MQ-C-D	30-Jul-15	N-NO3 (Nitrate)	0.225	mg/L	ALS
L1651459-10	MQ-C-D	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1643829-3	MQ-C-E	15-Jul-15	Conductivity	336	uS/cm	ALS
L1643829-3	MQ-C-E	15-Jul-15	pH	8.22	pH units	ALS
L1643829-3	MQ-C-E	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-3	MQ-C-E	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-3	MQ-C-E	15-Jul-15	N-NO3 (Nitrate)	2.06	mg/L	ALS
L1643829-3	MQ-C-E	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-3	MQ-C-E	22-Jul-15	pH	8.12	pH units	ALS
L1647517-3	MQ-C-E	22-Jul-15	Total Suspended Solids	89.6	mg/L	ALS
L1651459-11	MQ-C-E	30-Jul-15	Conductivity	385	uS/cm	ALS
L1651459-11	MQ-C-E	30-Jul-15	pH	8.27	pH units	ALS
L1651459-11	MQ-C-E	30-Jul-15	Total Suspended Solids	49.5	mg/L	ALS
L1651459-11	MQ-C-E	30-Jul-15	N-NH3 (Ammonia)	0.084	mg/L	ALS
L1651459-11	MQ-C-E	30-Jul-15	N-NO3 (Nitrate)	7.12	mg/L	ALS
L1651459-11	MQ-C-E	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
44859	MQ-C-E	30-Jul-15	Toxicity*	non-lethal	mortality %	Aquatox
L1635675-8	MS-C-A	1-Jul-15	Conductivity	156	uS/cm	ALS
L1635675-8	MS-C-A	1-Jul-15	pH	7.68	pH units	ALS
L1635675-8	MS-C-A	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-8	MS-C-A	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-8	MS-C-A	1-Jul-15	N-NO3 (Nitrate)	0.269	mg/L	ALS
L1635675-8	MS-C-A	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-8	MS-C-A	8-Jul-15	pH	7.83	pH units	ALS
L1639329-8	MS-C-A	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-4	MS-C-A	15-Jul-15	Conductivity	147	uS/cm	ALS
L1643829-4	MS-C-A	15-Jul-15	pH	7.85	pH units	ALS
L1643829-4	MS-C-A	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-4	MS-C-A	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-4	MS-C-A	15-Jul-15	N-NO3 (Nitrate)	0.161	mg/L	ALS
L1643829-4	MS-C-A	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-4	MS-C-A	22-Jul-15	pH	7.89	pH units	ALS
L1647517-4	MS-C-A	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-1	MS-C-A	30-Jul-15	Conductivity	195	uS/cm	ALS
L1651459-1	MS-C-A	30-Jul-15	pH	8.08	pH units	ALS
L1651459-1	MS-C-A	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-1	MS-C-A	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-1	MS-C-A	30-Jul-15	N-NO3 (Nitrate)	0.23	mg/L	ALS
L1651459-1	MS-C-A	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-9	MS-C-B	1-Jul-15	Conductivity	159	uS/cm	ALS
L1635675-9	MS-C-B	1-Jul-15	pH	7.7	pH units	ALS
L1635675-9	MS-C-B	1-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1635675-9	MS-C-B	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-9	MS-C-B	1-Jul-15	N-NO3 (Nitrate)	0.289	mg/L	ALS
L1635675-9	MS-C-B	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-9	MS-C-B	8-Jul-15	pH	7.76	pH units	ALS
L1639329-9	MS-C-B	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1639329-10	MS-C-B (Field Blank)	8-Jul-15	pH	6.13	pH units	ALS
L1639329-10	MS-C-B (Field Blank)	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-5	MS-C-B	15-Jul-15	Conductivity	154	uS/cm	ALS
L1643829-5	MS-C-B	15-Jul-15	pH	7.63	pH units	ALS
L1643829-5	MS-C-B	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-5	MS-C-B	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-5	MS-C-B	15-Jul-15	N-NO3 (Nitrate)	0.243	mg/L	ALS
L1643829-5	MS-C-B	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-5	MS-C-B	22-Jul-15	pH	7.78	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1647517-5	MS-C-B	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-2	MS-C-B	30-Jul-15	Conductivity	191	uS/cm	ALS
L1651459-2	MS-C-B	30-Jul-15	pH	8.11	pH units	ALS
L1651459-2	MS-C-B	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-2	MS-C-B	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-2	MS-C-B	30-Jul-15	N-NO3 (Nitrate)	0.243	mg/L	ALS
L1651459-2	MS-C-B	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1643829-7	MS-C-D	15-Jul-15	Conductivity	606	uS/cm	ALS
L1643829-7	MS-C-D	15-Jul-15	pH	8.58	pH units	ALS
L1643829-7	MS-C-D	15-Jul-15	Total Suspended Solids	2.4	mg/L	ALS
L1643829-7	MS-C-D	15-Jul-15	N-NH3 (Ammonia)	0.07	mg/L	ALS
L1643829-7	MS-C-D	15-Jul-15	N-NO3 (Nitrate)	5.14	mg/L	ALS
L1643829-7	MS-C-D	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1651459-3	MS-C-D	30-Jul-15	Conductivity	735	uS/cm	ALS
L1651459-3	MS-C-D	30-Jul-15	pH	8.48	pH units	ALS
L1651459-3	MS-C-D	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-3	MS-C-D	30-Jul-15	N-NH3 (Ammonia)	0.072	mg/L	ALS
L1651459-3	MS-C-D	30-Jul-15	N-NO3 (Nitrate)	6.11	mg/L	ALS
L1651459-3	MS-C-D	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-5	MS-C-E	1-Jul-15	Conductivity	333	uS/cm	ALS
L1635675-5	MS-C-E	1-Jul-15	pH	8.27	pH units	ALS
L1635675-5	MS-C-E	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-5	MS-C-E	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-5	MS-C-E	1-Jul-15	N-NO3 (Nitrate)	0.201	mg/L	ALS
L1635675-5	MS-C-E	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-7	MS-C-E	8-Jul-15	pH	8.17	pH units	ALS
L1639329-7	MS-C-E	8-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-8	MS-C-E	15-Jul-15	Conductivity	489	uS/cm	ALS
L1643829-8	MS-C-E	15-Jul-15	pH	8.22	pH units	ALS
L1643829-8	MS-C-E	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-8	MS-C-E	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-8	MS-C-E	15-Jul-15	N-NO3 (Nitrate)	2.46	mg/L	ALS
L1643829-8	MS-C-E	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-6	MS-C-E	22-Jul-15	pH	8.21	pH units	ALS
L1647517-6	MS-C-E	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-4	MS-C-E	30-Jul-15	Conductivity	570	uS/cm	ALS
L1651459-4	MS-C-E	30-Jul-15	pH	8.37	pH units	ALS
L1651459-4	MS-C-E	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-4	MS-C-E	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-4	MS-C-E	30-Jul-15	N-NO3 (Nitrate)	2.71	mg/L	ALS
L1651459-4	MS-C-E	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-10	MS-C-F	1-Jul-15	Conductivity	177	uS/cm	ALS
L1635675-10	MS-C-F	1-Jul-15	pH	7.92	pH units	ALS
L1635675-10	MS-C-F	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-10	MS-C-F	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-10	MS-C-F	1-Jul-15	N-NO3 (Nitrate)	0.374	mg/L	ALS
L1635675-10	MS-C-F	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-11	MS-C-F	8-Jul-15	pH	7.81	pH units	ALS
L1639329-11	MS-C-F	8-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1643829-9	MS-C-F	15-Jul-15	Conductivity	147	uS/cm	ALS
L1643829-9	MS-C-F	15-Jul-15	pH	8.15	pH units	ALS
L1643829-9	MS-C-F	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-9	MS-C-F	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-9	MS-C-F	15-Jul-15	N-NO3 (Nitrate)	0.121	mg/L	ALS
L1643829-9	MS-C-F	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-7	MS-C-F	22-Jul-15	pH	8.21	pH units	ALS
L1647517-7	MS-C-F	22-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1651459-5	MS-C-F	30-Jul-15	Conductivity	226	uS/cm	ALS
L1651459-5	MS-C-F	30-Jul-15	pH	8.26	pH units	ALS
L1651459-5	MS-C-F	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-5	MS-C-F	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-5	MS-C-F	30-Jul-15	N-NO3 (Nitrate)	0.241	mg/L	ALS
L1651459-5	MS-C-F	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-6	MS-C-G	1-Jul-15	Conductivity	162	uS/cm	ALS
L1635675-6	MS-C-G	1-Jul-15	pH	8.27	pH units	ALS
L1635675-6	MS-C-G	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-6	MS-C-G	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-6	MS-C-G	1-Jul-15	N-NO3 (Nitrate)	0.051	mg/L	ALS
L1635675-6	MS-C-G	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	Conductivity	<3.0	uS/cm	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	pH	5.7	pH units	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1635675-7	MS-C-G (Field Blank)	1-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-1	MS-C-G	8-Jul-15	pH	7.88	pH units	ALS
L1639329-1	MS-C-G	8-Jul-15	Total Suspended Solids	2	mg/L	ALS
L1643829-10	MS-C-G	15-Jul-15	Conductivity	184	uS/cm	ALS
L1643829-10	MS-C-G	15-Jul-15	pH	7.6	pH units	ALS
L1643829-10	MS-C-G	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-10	MS-C-G	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-10	MS-C-G	15-Jul-15	N-NO3 (Nitrate)	0.126	mg/L	ALS
L1643829-10	MS-C-G	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	Conductivity	184	uS/cm	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	pH	7.64	pH units	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	N-NO3 (Nitrate)	0.125	mg/L	ALS
L1643829-6	MS-C-G (Duplicate)	15-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1647517-8	MS-C-G	22-Jul-15	pH	7.78	pH units	ALS
L1647517-8	MS-C-G	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-6	MS-C-G	30-Jul-15	Conductivity	207	uS/cm	ALS
L1651459-6	MS-C-G	30-Jul-15	pH	8.08	pH units	ALS
L1651459-6	MS-C-G	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-6	MS-C-G	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-6	MS-C-G	30-Jul-15	N-NO3 (Nitrate)	0.127	mg/L	ALS
L1651459-6	MS-C-G	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1639329-2	MS-C-H	8-Jul-15	pH	7.84	pH units	ALS
L1639329-2	MS-C-H	8-Jul-15	Total Suspended Solids	3.2	mg/L	ALS
L1647517-9	MS-C-H	22-Jul-15	pH	7.95	pH units	ALS
L1647517-9	MS-C-H	22-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-7	MS-C-H	30-Jul-15	Conductivity	266	uS/cm	ALS
L1651459-7	MS-C-H	30-Jul-15	pH	8.27	pH units	ALS
L1651459-7	MS-C-H	30-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1651459-7	MS-C-H	30-Jul-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1651459-7	MS-C-H	30-Jul-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1651459-7	MS-C-H	30-Jul-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1637519-1	MS-MRY-13A	6-Jul-15	pH	8.02	pH units	ALS
L1637519-1	MS-MRY-13A	6-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
L1637519-2	MS-MRY-13B	6-Jul-15	pH	8.30	pH units	ALS
L1637519-2	MS-MRY-13B	6-Jul-15	Total Suspended Solids	<2.0	mg/L	ALS
MILNE PORT						
L1656069-1	MP-01	12-Aug-15	pH	7.32	pH units	ALS
L1656069-1	MP-01	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656069-1	MP-01	12-Aug-15	N-NH3 (Ammonia)	0.132	mg/L	ALS
L1656069-1	MP-01	12-Aug-15	Total Kjeldahl Nitrogen	0.57	mg/L	ALS
L1656069-1	MP-01	12-Aug-15	Total Phosphorus	16.2	mg/L	ALS
L1656069-1	MP-01	12-Aug-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1656069-1	MP-01	12-Aug-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS

Note: **Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*

**Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)*

Bold and yellow highlight indicate exceedance of Water Licence water quality criteria.

** Exceedances of Water Licence Criteria;*

The pH for MP-01A on July 13 was 9.87. This was a pre-discharge characterisation sample, no discharge to the receiving environment was performed for this facility in July 2015.

On July 28, The Total Oil & Grease for a pre-discharge characterization sample of MS-03 was 23.3 mg/L. The treatment process was developed utilizing sulphuric acid/polymers. No discharge to the receiving environment was performed for this facility in July 2015.

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1656069-1	MP-01	12-Aug-15	Oil & Grease - Total	<4.0	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	pH	7.63	pH units	ALS
L1662986-1	MP-01	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	N-NH3 (Ammonia)	0.142	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	Total Kjeldahl Nitrogen	2.08	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	Total Phosphorus	11.3	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1662986-1	MP-01	26-Aug-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1662986-1	MP-01	26-Aug-15	Oil & Grease - Total	<6.0	mg/L	ALS
44921	MP-01A (pre-discharge)	4-Aug-15	Toxicity*	non-lethal	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	pH	10.19*	pH units	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Total Suspended Solids	90	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	N-NH3 (Ammonia)	1.01	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Total Kjeldahl Nitrogen	23.7	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Total Phosphorus	2.67	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Faecal Coliforms	<10	CFU/100 mL	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Biochemical Oxygen Demand	49	mg/L	ALS
L1662535-1	MP-01A-RUN3 (pre-discharge)	24-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1661677-1	MP-04	2-Aug-15	pH	8.32	pH units	ALS
L1661677-1	MP-04	2-Aug-15	Total Suspended Solids	4	mg/L	ALS
L1661677-1	MP-04	2-Aug-15	Total Lead	0.00025	mg/L	ALS
L1661677-1	MP-04	2-Aug-15	Oil & Grease Total	<2.0	mg/L	ALS
L1661677-1	MP-04	2-Aug-15	Benzene	<0.50	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	Ethylbenzene	<0.50	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	Toluene	<0.50	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	F1 (C6-C10)	<100	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	F2 (C10-C16)	220	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	F3 (C16-C34)	420	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	F4 (C34-C50)	<250	ug/L	ALS
L1661677-1	MP-04	2-Aug-15	Total Hydrocarbons (C6-C50)	640	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	pH	8.25	pH units	ALS
L1662540-1	MP-04	24-Aug-15	Total Suspended Solids	2.4	mg/L	ALS
L1662540-1	MP-04	24-Aug-15	Total Lead	0.00051	mg/L	ALS
L1662540-1	MP-04	24-Aug-15	Oil & Grease Total	<2.0	mg/L	ALS
L1662540-1	MP-04	24-Aug-15	Benzene	<0.50	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	Ethylbenzene	<0.50	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	Toluene	<0.50	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	F1 (C6-C10)	<100	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	F2 (C10-C16)	<100	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	F3 (C16-C34)	2080	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	F4 (C34-C50)	870	ug/L	ALS
L1662540-1	MP-04	24-Aug-15	Total Hydrocarbons (C6-C50)	2940	ug/L	ALS
L1653493-1	MP-Q1-01	4-Aug-15	pH	8.29	pH units	ALS
L1653493-1	MP-Q1-01	4-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-1	MP-Q1-01	10-Aug-15	Conductivity	368	uS/cm	ALS
L1656285-1	MP-Q1-01	10-Aug-15	pH	8.27	pH units	ALS
L1656285-1	MP-Q1-01	10-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-1	MP-Q1-01	10-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656285-1	MP-Q1-01	10-Aug-15	N-NO3 (Nitrate)	0.883	mg/L	ALS
L1656285-1	MP-Q1-01	10-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1659754-1	MP-Q1-01	17-Aug-15	pH	8.15	pH units	ALS
L1659754-1	MP-Q1-01	17-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1653493-2	MP-Q1-02	4-Aug-15	pH	8.28	pH units	ALS
L1653493-2	MP-Q1-02	4-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-2	MP-Q1-02	10-Aug-15	Conductivity	639	uS/cm	ALS
L1656285-2	MP-Q1-02	10-Aug-15	pH	8.26	pH units	ALS
L1656285-2	MP-Q1-02	10-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-2	MP-Q1-02	10-Aug-15	N-NH3 (Ammonia)	0.119	mg/L	ALS
L1656285-2	MP-Q1-02	10-Aug-15	N-NO3 (Nitrate)	17.3	mg/L	ALS
L1656285-2	MP-Q1-02	10-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1659754-2	MP-Q1-02	17-Aug-15	pH	8.05	pH units	ALS
L1659754-2	MP-Q1-02	17-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664518-1	MP-Q1-02	26-Aug-15	Conductivity	756	uS/cm	ALS
L1664518-1	MP-Q1-02	26-Aug-15	pH	7.62	pH units	ALS
L1664518-1	MP-Q1-02	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664518-1	MP-Q1-02	26-Aug-15	N-NH3 (Ammonia)	0.07	mg/L	ALS
L1664518-1	MP-Q1-02	26-Aug-15	N-NO3 (Nitrate)	15.4	mg/L	ALS
L1664518-1	MP-Q1-02	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
45124	MP-Q1-02	26-Aug-15	Toxicity*	non-lethal	mortality %	Aquatox
L1659754-5	MP-C-B	17-Aug-15	Conductivity	722	uS/cm	ALS
L1659754-5	MP-C-B	17-Aug-15	pH	8.16	pH units	ALS
L1659754-5	MP-C-B	17-Aug-15	Total Suspended Solids	5.2	mg/L	ALS
L1659754-5	MP-C-B	17-Aug-15	N-NH3 (Ammonia)	0.086	mg/L	ALS
L1659754-5	MP-C-B	17-Aug-15	N-NO3 (Nitrate)	1.61	mg/L	ALS
L1659754-5	MP-C-B	17-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1659754-4	MP-C-B01	17-Aug-15	Conductivity	582	uS/cm	ALS
L1659754-4	MP-C-B01	17-Aug-15	pH	8.24	pH units	ALS
L1659754-4	MP-C-B01	17-Aug-15	Total Suspended Solids	2	mg/L	ALS
L1659754-4	MP-C-B01	17-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1659754-4	MP-C-B01	17-Aug-15	N-NO3 (Nitrate)	0.802	mg/L	ALS
L1659754-4	MP-C-B01	17-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1653493-3	MP-C-H	4-Aug-15	pH	8.38	pH units	ALS
L1653493-3	MP-C-H	4-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-3	MP-C-H	10-Aug-15	Conductivity	283	uS/cm	ALS
L1656285-3	MP-C-H	10-Aug-15	pH	8.39	pH units	ALS
L1656285-3	MP-C-H	10-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-3	MP-C-H	10-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656285-3	MP-C-H	10-Aug-15	N-NO3 (Nitrate)	0.293	mg/L	ALS
L1656285-3	MP-C-H	10-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	Conductivity	284	uS/cm	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	pH	8.38	pH units	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	N-NO3 (Nitrate)	0.292	mg/L	ALS
L1656285-4	MP-C-H (Duplicate)	10-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1659754-3	MP-C-H	17-Aug-15	pH	8.22	pH units	ALS
L1659754-3	MP-C-H	17-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664518-2	MP-C-H	26-Aug-15	Conductivity	274	uS/cm	ALS
L1664518-2	MP-C-H	26-Aug-15	pH	8.27	pH units	ALS
L1664518-2	MP-C-H	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664518-2	MP-C-H	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664518-2	MP-C-H	26-Aug-15	N-NO3 (Nitrate)	0.188	mg/L	ALS
L1664518-2	MP-C-H	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	Conductivity	273	uS/cm	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	pH	8.3	pH units	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	N-NO3 (Nitrate)	0.189	mg/L	ALS
L1664518-3	MP-C-H (Duplicate)	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
MINE SITE						
L1656068-1	MS-01	12-Aug-15	pH	7.28	pH units	ALS
L1656068-1	MS-01	12-Aug-15	Total Suspended Solids	4.8	mg/L	ALS
L1656068-1	MS-01	12-Aug-15	N-NH3 (Ammonia)	0.367	mg/L	ALS
L1656068-1	MS-01	12-Aug-15	Total Kjeldahl Nitrogen	0.47	mg/L	ALS
L1656068-1	MS-01	12-Aug-15	Total Phosphorus	0.532	mg/L	ALS
L1656068-1	MS-01	12-Aug-15	Faecal Coliforms	3	CFU/100 mL	ALS
L1656068-1	MS-01	12-Aug-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1656068-1	MS-01	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	pH	7.23	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	Total Suspended Solids	2	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	N-NH3 (Ammonia)	0.221	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	Total Kjeldahl Nitrogen	0.89	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	Total Phosphorus	0.866	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1663839-1	MS-01	26-Aug-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1663839-1	MS-01	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Hardness (as CaCO3)	780	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1656268-1	MS-08	11-Aug-15	pH	7.77	pH units	ALS
L1656268-1	MS-08	11-Aug-15	Total Suspended Solids	2.4	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Total Dissolved Solids	1030	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Turbidity	4.38	NTU	ALS
L1656268-1	MS-08	11-Aug-15	Alkalinity, Total (as CaCO3)	44	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Ammonia, Total (as N)	0.472	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Chloride (Cl)	26.4	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Fluoride (F)	0.049	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Nitrate (as N)	4.92	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Total Kjeldahl Nitrogen	0.68	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Total Phosphorus	<0.030	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Sulfate (SO4)	668	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Total Organic Carbon	<1.0	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Aluminum (Al)-Total	0.118	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Cadmium (Cd)-Total	0.000141	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Calcium (Ca)-Total	84.1	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Copper (Cu)-Total	0.0011	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Iron (Fe)-Total	0.178	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Lead (Pb)-Total	0.00015	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Magnesium (Mg)-Total	135	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Manganese (Mn)-Total	7.53	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Nickel (Ni)-Total	0.0206	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Potassium (K)-Total	1.84	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Selenium (Se)-Total	0.00266	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Sodium (Na)-Total	2.62	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Thallium (Tl)-Total	0.000037	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Uranium (U)-Total	0.000685	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Zinc (Zn)-Total	0.0031	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Aluminum (Al)-Dissolved	<0.0050	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Cadmium (Cd)-Dissolved	0.00013	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Calcium (Ca)-Dissolved	84.7	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Copper (Cu)-Dissolved	0.00063	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Magnesium (Mg)-Dissolved	138	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Manganese (Mn)-Dissolved	7.6	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Molybdenum (Mo)-Dissolved	0.000158	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Nickel (Ni)-Dissolved	0.0192	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Potassium (K)-Dissolved	1.77	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Selenium (Se)-Dissolved	0.0025	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Sodium (Na)-Dissolved	2.55	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Thallium (Tl)-Dissolved	0.000033	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Uranium (U)-Dissolved	0.000638	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Zinc (Zn)-Dissolved	0.002	mg/L	ALS
L1656268-1	MS-08	11-Aug-15	Ra-226	0.016	Bq/L	ALS
44966	MS-08	11-Aug-15	Acute Toxicity*	non-lethal	mortality %	Aquatox
Field	MS-08	11-Aug-15	pH (field)	7.78	pH units	Field
Field	MS-08	11-Aug-15	Temperature (Field)	10.9	°C	Field
Field	MS-08	11-Aug-15	Turbidity (Field)	4	NTU	Field
Field	MS-08	11-Aug-15	Specific Conductance (Field)	173.4	(µs/cm)	Field
L1654086-1	MQ-C-A	6-Aug-15	pH	8.09	pH units	ALS
L1654086-1	MQ-C-A	6-Aug-15	Total Suspended Solids	2.8	mg/L	ALS
L1654086-2	MQ-C-A (Duplicate)	6-Aug-15	pH	8.15	pH units	ALS
L1654086-2	MQ-C-A (Duplicate)	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-1	MQ-C-A	12-Aug-15	Conductivity	292	uS/cm	ALS
L1656929-1	MQ-C-A	12-Aug-15	pH	8.14	pH units	ALS
L1656929-1	MQ-C-A	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-1	MQ-C-A	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-1	MQ-C-A	12-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1656929-1	MQ-C-A	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-1	MQ-C-A	19-Aug-15	pH	8.18	pH units	ALS
L1660606-1	MQ-C-A	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-3	MQ-C-A	26-Aug-15	Conductivity	316	uS/cm	ALS
L1664658-3	MQ-C-A	26-Aug-15	pH	8.38	pH units	ALS
L1664658-3	MQ-C-A	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-3	MQ-C-A	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-3	MQ-C-A	26-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1664658-3	MQ-C-A	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-3	MQ-C-B	6-Aug-15	pH	8.11	pH units	ALS
L1654086-3	MQ-C-B	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-3	MQ-C-B	12-Aug-15	Conductivity	641	uS/cm	ALS
L1656929-3	MQ-C-B	12-Aug-15	pH	8.09	pH units	ALS
L1656929-3	MQ-C-B	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-3	MQ-C-B	12-Aug-15	N-NH3 (Ammonia)	0.754	mg/L	ALS
L1656929-3	MQ-C-B	12-Aug-15	N-NO3 (Nitrate)	4.44	mg/L	ALS
L1656929-3	MQ-C-B	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	Conductivity	<3.0	uS/cm	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	pH	6.15	pH units	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1656929-15	MQ-C-B (Field Blank)	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-3	MQ-C-B	19-Aug-15	pH	8.1	pH units	ALS
L1660606-3	MQ-C-B	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
45065	MQ-C-B	19-Aug-15	*Toxicity**	non-lethal	mortality %	Aquatox
L1660606-13	MQ-C-B (Duplicate)	19-Aug-15	pH	8.13	pH units	ALS
L1660606-13	MQ-C-B (Duplicate)	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-4	MQ-C-B	26-Aug-15	Conductivity	545	uS/cm	ALS
L1664658-4	MQ-C-B	26-Aug-15	pH	8.33	pH units	ALS
L1664658-4	MQ-C-B	26-Aug-15	Total Suspended Solids	2.5	mg/L	ALS
L1664658-4	MQ-C-B	26-Aug-15	N-NH3 (Ammonia)	0.561	mg/L	ALS
L1664658-4	MQ-C-B	26-Aug-15	N-NO3 (Nitrate)	3.39	mg/L	ALS
L1664658-4	MQ-C-B	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	Conductivity	545	uS/cm	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	pH	8.35	pH units	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	N-NH3 (Ammonia)	0.594	mg/L	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	N-NO3 (Nitrate)	3.4	mg/L	ALS
L1664658-5	MQ-C-B (Duplicate)	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-4	MQ-C-D	6-Aug-15	pH	8.2	pH units	ALS
L1654086-4	MQ-C-D	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-4	MQ-C-D	12-Aug-15	Conductivity	498	uS/cm	ALS
L1656929-4	MQ-C-D	12-Aug-15	pH	8.29	pH units	ALS
L1656929-4	MQ-C-D	12-Aug-15	Total Suspended Solids	6.4	mg/L	ALS
L1656929-4	MQ-C-D	12-Aug-15	N-NH3 (Ammonia)	0.141	mg/L	ALS
L1656929-4	MQ-C-D	12-Aug-15	N-NO3 (Nitrate)	1.04	mg/L	ALS
L1656929-4	MQ-C-D	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-4	MQ-C-D	19-Aug-15	pH	8.22	pH units	ALS
L1660606-4	MQ-C-D	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-6	MQ-C-D	26-Aug-15	Conductivity	495	uS/cm	ALS
L1664658-6	MQ-C-D	26-Aug-15	pH	8.21	pH units	ALS
L1664658-6	MQ-C-D	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-6	MQ-C-D	26-Aug-15	N-NH3 (Ammonia)	0.203	mg/L	ALS
L1664658-6	MQ-C-D	26-Aug-15	N-NO3 (Nitrate)	1.08	mg/L	ALS
L1664658-6	MQ-C-D	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656929-13	MQ-C-E	12-Aug-15	Conductivity	264	uS/cm	ALS
L1656929-13	MQ-C-E	12-Aug-15	pH	8.03	pH units	ALS
L1656929-13	MQ-C-E	12-Aug-15	Total Suspended Solids	13.6	mg/L	ALS
L1656929-13	MQ-C-E	12-Aug-15	N-NH3 (Ammonia)	0.174	mg/L	ALS
L1656929-13	MQ-C-E	12-Aug-15	N-NO3 (Nitrate)	3.77	mg/L	ALS
L1656929-13	MQ-C-E	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-2	MQ-C-E	19-Aug-15	pH	8	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1660606-2	MQ-C-E	19-Aug-15	Total Suspended Solids	10	mg/L	ALS
45064	MQ-C-E	19-Aug-15	*Toxicity**	non-lethal	mortality %	Aquatox
L1664658-13	MQ-C-E	26-Aug-15	Conductivity	306	uS/cm	ALS
L1664658-13	MQ-C-E	26-Aug-15	pH	8.23	pH units	ALS
L1664658-13	MQ-C-E	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-13	MQ-C-E	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-13	MQ-C-E	26-Aug-15	N-NO3 (Nitrate)	3.24	mg/L	ALS
L1664658-13	MQ-C-E	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-5	MS-C-A	6-Aug-15	pH	7.83	pH units	ALS
L1654086-5	MS-C-A	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-5	MS-C-A	12-Aug-15	Conductivity	218	uS/cm	ALS
L1656929-5	MS-C-A	12-Aug-15	pH	7.97	pH units	ALS
L1656929-5	MS-C-A	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-5	MS-C-A	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-5	MS-C-A	12-Aug-15	N-NO3 (Nitrate)	0.333	mg/L	ALS
L1656929-5	MS-C-A	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	Conductivity	<3.0	uS/cm	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	pH	5.78	pH units	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1656929-16	MS-C-A (Travel Blank)	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-5	MS-C-A	19-Aug-15	pH	7.92	pH units	ALS
L1660606-5	MS-C-A	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-2	MS-C-A	26-Aug-15	Conductivity	222	uS/cm	ALS
L1664658-2	MS-C-A	26-Aug-15	pH	8.18	pH units	ALS
L1664658-2	MS-C-A	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-2	MS-C-A	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-2	MS-C-A	26-Aug-15	N-NO3 (Nitrate)	0.296	mg/L	ALS
L1664658-2	MS-C-A	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-6	MS-C-B	6-Aug-15	pH	7.77	pH units	ALS
L1654086-6	MS-C-B	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-6	MS-C-B	12-Aug-15	Conductivity	217	uS/cm	ALS
L1656929-6	MS-C-B	12-Aug-15	pH	7.92	pH units	ALS
L1656929-6	MS-C-B	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-6	MS-C-B	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-6	MS-C-B	12-Aug-15	N-NO3 (Nitrate)	0.353	mg/L	ALS
L1656929-6	MS-C-B	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-6	MS-C-B	19-Aug-15	pH	7.86	pH units	ALS
L1660606-6	MS-C-B	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-10	MS-C-B	26-Aug-15	Conductivity	230	uS/cm	ALS
L1664658-10	MS-C-B	26-Aug-15	pH	8.18	pH units	ALS
L1664658-10	MS-C-B	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-10	MS-C-B	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-10	MS-C-B	26-Aug-15	N-NO3 (Nitrate)	0.575	mg/L	ALS
L1664658-10	MS-C-B	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-7	MS-C-C	6-Aug-15	pH	7.98	pH units	ALS
L1654086-7	MS-C-C	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-7	MS-C-C	12-Aug-15	Conductivity	729	uS/cm	ALS
L1656929-7	MS-C-C	12-Aug-15	pH	8.05	pH units	ALS
L1656929-7	MS-C-C	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-7	MS-C-C	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-7	MS-C-C	12-Aug-15	N-NO3 (Nitrate)	6.47	mg/L	ALS
L1656929-7	MS-C-C	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-7	MS-C-C	19-Aug-15	pH	7.95	pH units	ALS
L1660606-7	MS-C-C	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1654086-8	MS-C-D	6-Aug-15	pH	8.36	pH units	ALS
L1654086-8	MS-C-D	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-8	MS-C-D	12-Aug-15	Conductivity	722	uS/cm	ALS
L1656929-8	MS-C-D	12-Aug-15	pH	8.34	pH units	ALS
L1656929-8	MS-C-D	12-Aug-15	Total Suspended Solids	2	mg/L	ALS
L1656929-8	MS-C-D	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-8	MS-C-D	12-Aug-15	N-NO3 (Nitrate)	6.92	mg/L	ALS
L1656929-8	MS-C-D	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-8	MS-C-D	19-Aug-15	pH	8.36	pH units	ALS
L1660606-8	MS-C-D	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-9	MS-C-D	26-Aug-15	Conductivity	732	uS/cm	ALS
L1664658-9	MS-C-D	26-Aug-15	pH	8.41	pH units	ALS
L1664658-9	MS-C-D	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-9	MS-C-D	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-9	MS-C-D	26-Aug-15	N-NO3 (Nitrate)	7.29	mg/L	ALS
L1664658-9	MS-C-D	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-9	MS-C-E	6-Aug-15	pH	8.13	pH units	ALS
L1654086-9	MS-C-E	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-9	MS-C-E	12-Aug-15	Conductivity	531	uS/cm	ALS
L1656929-9	MS-C-E	12-Aug-15	pH	8.16	pH units	ALS
L1656929-9	MS-C-E	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-9	MS-C-E	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-9	MS-C-E	12-Aug-15	N-NO3 (Nitrate)	2.940	mg/L	ALS
L1656929-9	MS-C-E	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-9	MS-C-E	19-Aug-15	pH	8.16	pH units	ALS
L1660606-9	MS-C-E	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-11	MS-C-E	26-Aug-15	Conductivity	543	uS/cm	ALS
L1664658-11	MS-C-E	26-Aug-15	pH	8.32	pH units	ALS
L1664658-11	MS-C-E	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-11	MS-C-E	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-11	MS-C-E	26-Aug-15	N-NO3 (Nitrate)	3.37	mg/L	ALS
L1664658-11	MS-C-E	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-10	MS-C-F	6-Aug-15	pH	7.96	pH units	ALS
L1654086-10	MS-C-F	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-10	MS-C-F	12-Aug-15	Conductivity	247	uS/cm	ALS
L1656929-10	MS-C-F	12-Aug-15	pH	8.08	pH units	ALS
L1656929-10	MS-C-F	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-10	MS-C-F	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-10	MS-C-F	12-Aug-15	N-NO3 (Nitrate)	0.426	mg/L	ALS
L1656929-10	MS-C-F	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	Conductivity	246	uS/cm	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	pH	8.02	pH units	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	N-NO3 (Nitrate)	0.429	mg/L	ALS
L1656929-2	MS-C-F (Duplicate)	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-10	MS-C-F	19-Aug-15	pH	8.01	pH units	ALS
L1660606-10	MS-C-F	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-12	MS-C-F	26-Aug-15	Conductivity	246	uS/cm	ALS
L1664658-12	MS-C-F	26-Aug-15	pH	8.25	pH units	ALS
L1664658-12	MS-C-F	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-12	MS-C-F	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-12	MS-C-F	26-Aug-15	N-NO3 (Nitrate)	0.315	mg/L	ALS
L1664658-12	MS-C-F	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-11	MS-C-G	6-Aug-15	pH	7.79	pH units	ALS
L1654086-11	MS-C-G	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-11	MS-C-G	12-Aug-15	Conductivity	199	uS/cm	ALS
L1656929-11	MS-C-G	12-Aug-15	pH	7.85	pH units	ALS
L1656929-11	MS-C-G	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-11	MS-C-G	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-11	MS-C-G	12-Aug-15	N-NO3 (Nitrate)	0.087	mg/L	ALS
L1656929-11	MS-C-G	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-11	MS-C-G	19-Aug-15	pH	7.83	pH units	ALS
L1660606-11	MS-C-G	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-7	MS-C-G	26-Aug-15	Conductivity	210	uS/cm	ALS
L1664658-7	MS-C-G	26-Aug-15	pH	8.12	pH units	ALS
L1664658-7	MS-C-G	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-7	MS-C-G	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-7	MS-C-G	26-Aug-15	N-NO3 (Nitrate)	0.196	mg/L	ALS
L1664658-7	MS-C-G	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1654086-12	MS-C-H	6-Aug-15	pH	8.14	pH units	ALS
L1654086-12	MS-C-H	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-12	MS-C-H	12-Aug-15	Conductivity	257	uS/cm	ALS
L1656929-12	MS-C-H	12-Aug-15	pH	8.22	pH units	ALS
L1656929-12	MS-C-H	12-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656929-12	MS-C-H	12-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1656929-12	MS-C-H	12-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1656929-12	MS-C-H	12-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1660606-12	MS-C-H	19-Aug-15	pH	8.14	pH units	ALS
L1660606-12	MS-C-H	19-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-8	MS-C-H	26-Aug-15	Conductivity	252	uS/cm	ALS
L1664658-8	MS-C-H	26-Aug-15	pH	8.34	pH units	ALS
L1664658-8	MS-C-H	26-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1664658-8	MS-C-H	26-Aug-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1664658-8	MS-C-H	26-Aug-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1664658-8	MS-C-H	26-Aug-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1654086-13	MS-MRY-13A	6-Aug-15	pH	7.97	pH units	ALS
L1654086-13	MS-MRY-13A	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1654086-14	MS-MRY-13B	6-Aug-15	pH	8.22	pH units	ALS
L1654086-14	MS-MRY-13B	6-Aug-15	Total Suspended Solids	<2.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Conductivity	493	umhos/cm	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	pH	8.4	pH units	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Total Suspended Solids	3.2	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Total Dissolved Solids	256	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Alkalinity, Total (as CaCO3)	180.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Dissolved Organic Carbon	3.8	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Total Organic Carbon	3.7	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Aluminum (Al)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Antimony (Sb)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Barium (Ba)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Cadmium (Cd)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Cobalt (Co)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Copper (Cu)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Iron (Fe)-Total	<0.030	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Lithium (Li)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Manganese (Mn)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Molybdenum (Mo)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Nickel (Ni)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Strontium (Sr)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Uranium (U)-Total	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Phenols (4AAP)	0.0	mg/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	F1 (C6-C10)	<100	ug/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	F2 (C10-C16)	<100	ug/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	F3 (C16-C34)	<250	ug/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	F4 (C34-C50)	<250	ug/L	ALS
L1656280-1	MS-MRY-13B	10-Aug-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1660606-14	MS-MRY-13B	19-Aug-15	pH	8.31	pH units	ALS
L1660606-14	MS-MRY-13B	19-Aug-15	Total Suspended Solids	3.2	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Conductivity	503	umhos/cm	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	pH	8.18	pH units	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Total Suspended Solids	2.3	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Total Dissolved Solids	285	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Alkalinity, Total (as CaCO3)	175.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Dissolved Organic Carbon	5.5	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Total Organic Carbon	4.7	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Aluminum (Al)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Barium (Ba)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Copper (Cu)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Iron (Fe)-Total	<0.030	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Lithium (Li)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Manganese (Mn)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Molybdenum (Mo)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Nickel (Ni)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Strontium (Sr)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Uranium (U)-Total	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Phenols (4AAP)	0.0	mg/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	F1 (C6-C10)	<100	ug/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	F2 (C10-C16)	<100	ug/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	F3 (C16-C34)	<250	ug/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	F4 (C34-C50)	<250	ug/L	ALS
L1664171-1	MS-MRY-13B	24-Aug-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS

Note: **Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*
**Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)*

Bold and yellow highlight indicate exceedance of Water Licence water quality criteria.
** Exceedances of Water Licence Criteria;*
The pH for MP-01A-RUN3 on August 24 was 10.19. This was a pre-discharge characterisation sample. The pH was subsequently adjusted during the treatment process resulting in pH values during discharge ranging from 6.54 to 8.18, as determined by field sample analysis.

MILNE PORT						
L1671369-1	MP-01	10-Sep-15	pH	7.74	pH units	ALS
L1671369-1	MP-01	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671369-1	MP-01	10-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1671369-1	MP-01	10-Sep-15	Total Kjeldahl Nitrogen	0.84	mg/L	ALS
L1671369-1	MP-01	10-Sep-15	Total Phosphorus	11.8	mg/L	ALS
L1671369-1	MP-01	10-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1671369-1	MP-01	10-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1671369-1	MP-01	10-Sep-15	Oil & Grease - Total	<6.0	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	pH	7.52	pH units	ALS
L1676967-1	MP-01	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	N-NH3 (Ammonia)	0.09	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	Total Kjeldahl Nitrogen	1.23	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	Total Phosphorus	14.9	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676967-1	MP-01	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676967-1	MP-01	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	pH	6.08	pH units	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	N-NH3 (Ammonia)	0.135	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Total Phosphorus	<0.0030	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676967-3	MP-01 (Field Blank)	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	pH	6.01	pH units	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Total Phosphorus	<0.0030	mg/L	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676967-4	MP-01 (Travel Blank)	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668085-1	MP-Q1-02	2-Sep-15	pH	8.11	pH units	ALS
L1668085-1	MP-Q1-02	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668085-2	MP-Q1-02 (Duplicate)	2-Sep-15	pH	8.15	pH units	ALS
L1668085-2	MP-Q1-02 (Duplicate)	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671368-1	MP-Q1-02	9-Sep-15	Conductivity	1090	uS/cm	ALS
L1671368-1	MP-Q1-02	9-Sep-15	pH	8.13	pH units	ALS
L1671368-1	MP-Q1-02	9-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671368-1	MP-Q1-02	9-Sep-15	N-NH3 (Ammonia)	0.134	mg/L	ALS
L1671368-1	MP-Q1-02	9-Sep-15	N-NO3 (Nitrate)	17	mg/L	ALS
L1671368-1	MP-Q1-02	9-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668085-3	MP-C-H	2-Sep-15	pH	8.32	pH units	ALS
L1668085-3	MP-C-H	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671368-2	MP-C-H	9-Sep-15	Conductivity	329	uS/cm	ALS
L1671368-2	MP-C-H	9-Sep-15	pH	8.34	pH units	ALS
L1671368-2	MP-C-H	9-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671368-2	MP-C-H	9-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1671368-2	MP-C-H	9-Sep-15	N-NO3 (Nitrate)	0.287	mg/L	ALS
L1671368-2	MP-C-H	9-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	Conductivity	329	uS/cm	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	pH	8.35	pH units	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	N-NO3 (Nitrate)	0.286	mg/L	ALS
L1671368-3	MP-C-H (Duplicate)	9-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
MINE SITE						
L1671357-1	MS-01	10-Sep-15	pH	7.68	pH units	ALS
L1671357-1	MS-01	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671357-1	MS-01	10-Sep-15	N-NH3 (Ammonia)	0.193	mg/L	ALS
L1671357-1	MS-01	10-Sep-15	Total Kjeldahl Nitrogen	1.01	mg/L	ALS
L1671357-1	MS-01	10-Sep-15	Total Phosphorus	0.364	mg/L	ALS
L1671357-1	MS-01	10-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1671357-1	MS-01	10-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1671357-1	MS-01	10-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	pH	7.02	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	N-NH3 (Ammonia)	0.126	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	Total Kjeldahl Nitrogen	0.53	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	Total Phosphorus	0.282	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676964-1	MS-01	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676964-1	MS-01	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	pH	6.25	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Total Phosphorus	<0.0030	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676964-2	MS-01 (Field Blank)	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	pH	6.01	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Total Phosphorus	<0.0030	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1676964-3	MS-01 (Travel Blank)	23-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668093-3	MQ-C-A	2-Sep-15	Conductivity	328	uS/cm	ALS
L1668093-3	MQ-C-A	2-Sep-15	pH	8.38	pH units	ALS
L1668093-3	MQ-C-A	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-3	MQ-C-A	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-3	MQ-C-A	2-Sep-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1668093-3	MQ-C-A	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-8	MQ-C-A	10-Sep-15	pH	8.24	pH units	ALS
L1671149-8	MQ-C-A	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-2	MQ-C-B	2-Sep-15	Conductivity	695	uS/cm	ALS
L1668093-2	MQ-C-B	2-Sep-15	pH	8.25	pH units	ALS
L1668093-2	MQ-C-B	2-Sep-15	Total Suspended Solids	2.5	mg/L	ALS
L1668093-2	MQ-C-B	2-Sep-15	N-NH3 (Ammonia)	0.932	mg/L	ALS
L1668093-2	MQ-C-B	2-Sep-15	N-NO3 (Nitrate)	5.88	mg/L	ALS
L1668093-2	MQ-C-B	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
45192	MQ-C-B	2-Sep-15	Toxicity*	non-lethal	mortality %	Aquatox
L1671149-9	MQ-C-B	10-Sep-15	pH	8.09	pH units	ALS
L1671149-9	MQ-C-B	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-15	MQ-C-D	2-Sep-15	Conductivity	497	uS/cm	ALS
L1668093-15	MQ-C-D	2-Sep-15	pH	8.39	pH units	ALS
L1668093-15	MQ-C-D	2-Sep-15	Total Suspended Solids	2.3	mg/L	ALS
L1668093-15	MQ-C-D	2-Sep-15	N-NH3 (Ammonia)	0.182	mg/L	ALS
L1668093-15	MQ-C-D	2-Sep-15	N-NO3 (Nitrate)	1.19	mg/L	ALS
L1668093-15	MQ-C-D	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-10	MQ-C-D	10-Sep-15	pH	8.13	pH units	ALS
L1671149-10	MQ-C-D	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671149-13	MQ-C-D	10-Sep-15	pH	8.14	pH units	ALS
L1671149-13	MQ-C-D	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-8	MQ-C-E	2-Sep-15	Conductivity	340	uS/cm	ALS
L1668093-8	MQ-C-E	2-Sep-15	pH	8.19	pH units	ALS
L1668093-8	MQ-C-E	2-Sep-15	Total Suspended Solids	8	mg/L	ALS
L1668093-8	MQ-C-E	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-8	MQ-C-E	2-Sep-15	N-NO3 (Nitrate)	3.57	mg/L	ALS
L1668093-8	MQ-C-E	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
45191	MQ-C-E	2-Sep-15	Toxicity*	non-lethal	mortality %	Aquatox
L1671149-11	MQ-C-E	10-Sep-15	pH	8.23	pH units	ALS
L1671149-11	MQ-C-E	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-14	MS-C-A	2-Sep-15	Conductivity	227	uS/cm	ALS
L1668093-14	MS-C-A	2-Sep-15	pH	8.18	pH units	ALS
L1668093-14	MS-C-A	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-14	MS-C-A	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-14	MS-C-A	2-Sep-15	N-NO3 (Nitrate)	0.315	mg/L	ALS
L1668093-14	MS-C-A	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-1	MS-C-A	10-Sep-15	pH	7.91	pH units	ALS
L1671149-1	MS-C-A	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-1	MS-C-B	2-Sep-15	Conductivity	225	uS/cm	ALS
L1668093-1	MS-C-B	2-Sep-15	pH	8.16	pH units	ALS
L1668093-1	MS-C-B	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-1	MS-C-B	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-1	MS-C-B	2-Sep-15	N-NO3 (Nitrate)	0.330	mg/L	ALS
L1668093-1	MS-C-B	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-2	MS-C-B	10-Sep-15	pH	7.77	pH units	ALS
L1671149-2	MS-C-B	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1671149-3	MS-C-C	10-Sep-15	pH	7.83	pH units	ALS
L1671149-3	MS-C-C	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-11	MS-C-D	2-Sep-15	Conductivity	742	uS/cm	ALS
L1668093-11	MS-C-D	2-Sep-15	pH	8.4	pH units	ALS
L1668093-11	MS-C-D	2-Sep-15	Total Suspended Solids	3.5	mg/L	ALS
L1668093-11	MS-C-D	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-11	MS-C-D	2-Sep-15	N-NO3 (Nitrate)	8.01	mg/L	ALS
L1668093-11	MS-C-D	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	Conductivity	<3.0	uS/cm	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	pH	7.01	pH units	ALS
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1668093-13	MS-C-D (Travel Blank)	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-4	MS-C-D	10-Sep-15	pH	8.32	pH units	ALS
L1671149-4	MS-C-D	10-Sep-15	Total Suspended Solids	2.4	mg/L	ALS
L1668093-6	MS-C-E	2-Sep-15	Conductivity	578	uS/cm	ALS
L1668093-6	MS-C-E	2-Sep-15	pH	8.3	pH units	ALS
L1668093-6	MS-C-E	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-6	MS-C-E	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-6	MS-C-E	2-Sep-15	N-NO3 (Nitrate)	4.010	mg/L	ALS
L1668093-6	MS-C-E	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	Conductivity	<3.0	uS/cm	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	pH	7.09	pH units	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1668093-7	MS-C-E (Field Blank)	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-5	MS-C-E	10-Sep-15	pH	7.99	pH units	ALS
L1671149-5	MS-C-E	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-10	MS-C-F	2-Sep-15	Conductivity	245	uS/cm	ALS
L1668093-10	MS-C-F	2-Sep-15	pH	8.23	pH units	ALS
L1668093-10	MS-C-F	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-10	MS-C-F	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-10	MS-C-F	2-Sep-15	N-NO3 (Nitrate)	0.292	mg/L	ALS
L1668093-10	MS-C-F	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-6	MS-C-F	10-Sep-15	pH	8.16	pH units	ALS
L1671149-6	MS-C-F	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-4	MS-C-G	2-Sep-15	Conductivity	215	uS/cm	ALS
L1668093-4	MS-C-G	2-Sep-15	pH	8.16	pH units	ALS
L1668093-4	MS-C-G	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-4	MS-C-G	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-4	MS-C-G	2-Sep-15	N-NO3 (Nitrate)	0.280	mg/L	ALS
L1668093-4	MS-C-G	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	Conductivity	215	uS/cm	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	pH	8.15	pH units	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	N-NO3 (Nitrate)	0.281	mg/L	ALS
L1668093-5	MS-C-G (Duplicate)	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1671149-7	MS-C-G	10-Sep-15	pH	7.77	pH units	ALS
L1671149-7	MS-C-G	10-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-16	MS-C-H	2-Sep-15	Conductivity	254	uS/cm	ALS
L1668093-16	MS-C-H	2-Sep-15	pH	8.36	pH units	ALS
L1668093-16	MS-C-H	2-Sep-15	Total Suspended Solids	<2.0	mg/L	ALS
L1668093-16	MS-C-H	2-Sep-15	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1668093-16	MS-C-H	2-Sep-15	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1668093-16	MS-C-H	2-Sep-15	Oil & Grease - Total	<2.0	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Conductivity	509	umhos/cm	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	pH	8.37	pH units	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Total Suspended Solids	2.7	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Total Dissolved Solids	241	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Alkalinity, Total (as CaCO3)	173	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Dissolved Organic Carbon	4.1	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Total Organic Carbon	3.8	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Aluminum (Al)-Total	0.0126	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Arsenic (As)-Total	0.0001	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Barium (Ba)-Total	0.0274	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Copper (Cu)-Total	0.00127	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Iron (Fe)-Total	<0.030	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Lithium (Li)-Total	0.0016	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Manganese (Mn)-Total	0.000817	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Molybdenum (Mo)-Total	0.000171	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Nickel (Ni)-Total	0.00665	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Strontium (Sr)-Total	0.0214	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Uranium (U)-Total	0.0007	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Oil and Grease, Total	<2.0	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Phenols (4AAP)	<0.0010	mg/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	F1 (C6-C10)	<100	ug/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	F2 (C10-C16)	<100	ug/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	F3 (C16-C34)	<250	ug/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	F4 (C34-C50)	<250	ug/L	ALS
L1668093-13	MS-MRY-13B	2-Sep-15	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS

Note: **Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)*
**Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)*

MILNE PORT						
L1684211-1	MP-01	7-Oct-15	pH	7.42	pH units	ALS
L1684211-1	MP-01	7-Oct-15	Total Suspended Solids	<2.0	mg/L	ALS
L1684211-1	MP-01	7-Oct-15	N-NH3 (Ammonia)	0.068	mg/L	ALS
L1684211-1	MP-01	7-Oct-15	Total Kjeldahl Nitrogen	0.83	mg/L	ALS
L1684211-1	MP-01	7-Oct-15	Total Phosphorus	15.4	mg/L	ALS
L1684211-1	MP-01	7-Oct-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1684211-1	MP-01	7-Oct-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1684211-1	MP-01	7-Oct-15	Oil & Grease - Total	<6.0	mg/L	ALS
MINE SITE						
L1684193-1	MS-01	7-Oct-15	pH	7.37	pH units	ALS
L1684193-1	MS-01	7-Oct-15	Total Suspended Solids	<2.0	mg/L	ALS
L1684193-1	MS-01	7-Oct-15	N-NH3 (Ammonia)	0.256	mg/L	ALS
L1684193-1	MS-01	7-Oct-15	Total Kjeldahl Nitrogen	0.47	mg/L	ALS
L1684193-1	MS-01	7-Oct-15	Total Phosphorus	0.383	mg/L	ALS
L1684193-1	MS-01	7-Oct-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1684193-1	MS-01	7-Oct-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1684193-1	MS-01	7-Oct-15	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT						
L1697167-1	MP-01	3-Nov-15	pH	7.67	pH units	ALS
L1697167-1	MP-01	3-Nov-15	Total Suspended Solids	2	mg/L	ALS
L1697167-1	MP-01	3-Nov-15	N-NH3 (Ammonia)	0.171	mg/L	ALS
L1697167-1	MP-01	3-Nov-15	Total Kjeldahl Nitrogen	1.38	mg/L	ALS
L1697167-1	MP-01	3-Nov-15	Total Phosphorus	13.4	mg/L	ALS
L1697167-1	MP-01	3-Nov-15	Faecal Coliforms	0	CFU/100 mL	ALS
L1697167-1	MP-01	3-Nov-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1697167-1	MP-01	3-Nov-15	Oil & Grease - Total	<2.0	mg/L	ALS
45866	MP-01	3-Nov-15	Toxicity*	non-lethal	mortality %	Aquatox
MINE SITE						
L1697161-1	MS-01	3-Nov-15	pH	7.44	pH units	ALS
L1697161-1	MS-01	3-Nov-15	Total Suspended Solids	<2.0	mg/L	ALS
L1697161-1	MS-01	3-Nov-15	N-NH3 (Ammonia)	0.12	mg/L	ALS
L1697161-1	MS-01	3-Nov-15	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1697161-1	MS-01	3-Nov-15	Total Phosphorus	0.552	mg/L	ALS
L1697161-1	MS-01	3-Nov-15	Faecal Coliforms	310	CFU/100 mL	ALS
L1697161-1	MS-01	3-Nov-15	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1697161-1	MS-01	3-Nov-15	Oil & Grease - Total	<2.0	mg/L	ALS
45865	MS-01	3-Nov-15	Toxicity*	non-lethal	mortality %	Aquatox

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2015 ANNUAL REPORT TO THE NUNAVUT WATER BOARD
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
MILNE PORT						
L1714349-1	MP-01	15-Dec-16	pH	7.67	pH units	ALS
L1714349-1	MP-01	15-Dec-16	Total Suspended Solids	2	mg/L	ALS
L1714349-1	MP-01	15-Dec-16	N-NH3 (Ammonia)	0.171	mg/L	ALS
L1714349-1	MP-01	15-Dec-16	Total Kjeldahl Nitrogen	1.38	mg/L	ALS
L1714349-1	MP-01	15-Dec-16	Total Phosphorus	13.4	mg/L	ALS
L1714349-1	MP-01	15-Dec-16	Faecal Coliforms	0	CFU/100 mL	ALS
L1714349-1	MP-01	15-Dec-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1714349-1	MP-01	15-Dec-16	Oil & Grease - Total	<2.0	mg/L	ALS
MINE SITE						
L1714347-1	MS-01	15-Dec-16	pH	7.24	pH units	ALS
L1714347-1	MS-01	15-Dec-16	Total Suspended Solids	27.2	mg/L	ALS
L1714347-1	MS-01	15-Dec-16	N-NH3 (Ammonia)	0.105	mg/L	ALS
L1714347-1	MS-01	15-Dec-16	Total Kjeldahl Nitrogen	1.23	mg/L	ALS
L1714347-1	MS-01	15-Dec-16	Total Phosphorus	18.5	mg/L	ALS
L1714347-1	MS-01	15-Dec-16	Faecal Coliforms	0	CFU/100 mL	ALS
L1714347-1	MS-01	15-Dec-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1714347-1	MS-01	15-Dec-16	Oil & Grease - Total	<2.0	mg/L	ALS

ATTACHMENT 4

2016 QIA-NWB Annual Report for Operations

- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude	Status in 2016
		Easting (m)	Northing (m)			
Milne Port Site						
MP-MRY-2	Fresh Water Intake at Philips Creek (Summer)	514,503	7,964,579	71° 46' 52" N	80° 35' 4" W	Active
MP-MRY-3	Fresh Water Intake from Km 32 Lake (Winter)	521,547	7,953,735	71° 41' 00" N	80° 23' 09" W	Active
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	503,209	7,976,485	71° 53' 18" N	80° 54' 27" W	Active
MP-01a	Milne Port Waste Stabilisation Pond (PWSP)	503,625	7,976,015	71° 53' 03" N	80° 53' 44" W	Active
MP-03	Milne Port Bulk Fuel Storage Facility Stormwater	503,638	7,976,272	71° 52' 11" N	80° 53' 43" W	Active
MP-04	Milne Port Landfarm Facility Storm Water	503,710	7,975,574	71° 52' 49" N	80° 53' 35" W	Active
MP-MRY-04	Milne Exploration Phase Sewage Treatment Facilities	503,462	7,975,764	71° 52' 55" N	80° 54" 01" W	Inactive (Decommissioned)
MP-MRY-04a	Milne Exploration Phase Sewage PWSP	503,344	7,976,118	71° 53' 06" N	80° 54' 13" W	Inactive (Decommissioned)
MP-05	Milne Port Ore Stockpile Sedimentation Pond (East)	503,469	7,976,383	71° 53' 15" N	80° 54' 00" W	Active
MP-06	Milne Port Ore Stockpile Sedimentation Pond (West)	503,125	7,976,364	71° 53' 14" N	80° 54' 36" W	Active
MP-MRY-7	Milne Exploration Phase Bladder Farm Fuel Storage Facility Storm water	503,309	7,976,097	71° 53' 06" N	80° 54' 17" W	Inactive (Decommissioned)
MP-MRY-12	Bulk Sample Stockpile Area Seepage	503,357	7,976,453	71° 53' 17" N	80° 54' 11" W	Inactive
MP-C-A	Surface discharge downstream of construction area at Milne Port	503,214	7,976,483	71° 53' 18" N	80° 54' 27" W	Inactive
MP-C-B		503,191	7,975,396	71° 52' 43" N	80° 54' 29" W	Active
MP-C-B01		503,242	7,975,558	71° 52' 48" N	80° 54' 24" W	Active
MP-C-C		503,436	7,975,427	71° 52' 44" N	80° 54' 04" W	Inactive
MP-C-D		503,651	7,976,363	71° 53' 14" N	80° 53' 41" W	Inactive
MP-C-E		503,736	7,976,346	71° 53' 14" N	80° 53' 32" W	Active
MP-C-F		503,922	7,976,304	71° 53' 12" N	80° 53' 13" W	Active
MP-C-G		502,939	7,976,238	71° 53' 10" N	80° 54' 55" W	Inactive
MP-C-H		504,113	7,976,509	71° 53' 19" N	80° 52' 53" W	Active
MP-Q1-01	Surface Runoff and/or Discharge Quarries	503,828	7,975,062	71° 52' 32" N	80° 53' 23" W	Active
MP-Q1-02		503,811	7,975,272	71° 52' 39" N	80° 53' 25" W	Active
Mary River Mine Site						
MS-MRY-1	Fresh Water Intake from Camp Lake	557,793	7,914,684	71° 19' 38.6" N	79° 22' 57" W	Active
MS-01	Mine Site Sewage Treatment Facilities	561,322	7,913,257	71° 18' 49.4" N	79° 17' 5.6" W	Active
MS-02	Mine Site Maintenance Shop Oily Water WWTF (Truck Wash)	561,638	7,913,222	71° 18' 48" N	79° 16' 34" W	Active (no discharge to receiving environment)
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater	561,258	7,913,304	71° 18' 51" N	79° 17' 12" W	Active (no discharge to receiving environment)
MS-MRY-4	Exploration Camp Sewage Treatment Facility (used as holding tank for Weatherhaven Camp)	558,141	7,914,427	71° 19' 30" N	79° 22' 22.6" W	Inactive (used as holding tank)

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude	Status in 2016
		Easting (m)	Northing (m)			
MS-MRY-4a	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	558,470	7,914,237	71° 19' 23.6" N	79° 21' 50" W	Active
MS-MRY-6	Exploration Camp Bulk Fuel Storage Facility (Bladder Farm) Stormwater	558,186	7,914,780	71° 19' 41" N	79° 22' 17" W	Active
MS-06	Ore Stockpile Pond Stormwater (Crusher Pad)	561,475	7,913,000	71° 18' 41" N	79° 16' 51" W	Active
MS-08	Waste Rock Stockpile West Pond	563,492	7,916,273	71° 20' 25" N	79° 13' 18" W	Active
MS-MRY-9	Bulk Sample Open Pit - Surface water drainage (to become inactive in future)	563,246	7,914,632	71° 19' 32" N	79° 13' 48" W	Inactive (no flow)
MS-MRY-10	Bulk Sample Weathered Ore Stockpile - Downstream surface water drainage (to become inactive in the future)	563,488	7,915,197	71° 19' 50" N	79° 13' 22" W	Inactive (no flow)
MS-MRY-11	Bulk Sample Processing - Downstream surface water discharge (to become inactive in the future)	560,690	7,913,350	71° 18' 53" N	79° 18' 09" W	Inactive (no flow)
MS-MRY-13a & MS-MRY-13b	Non-Hazardous Landfill Facility - Downstream surface water drainage	13a: 560,754 13b: 560,642	13a: 7,912,484 13b: 7,912,527	13a: 71° 18' 25" N 13b: 71° 18'26.5" N	13a: 79° 18' 5" W 13b: 79° 18' 16.1" W	Active
MS-C-A	Surface discharge downstream of construction area at Mine Site	561,263	7,913,571	71° 19' 00" N	79° 17' 11" W	Active
MS-C-B		561,454	7,913,537	71° 18' 58" N	79° 16' 52" W	Active
MS-C-C		561,110	7,913,199	71° 18' 48" N	79° 17' 27" W	Active
MS-C-D		561,008	7,913,280	71° 18' 50" N	79° 17' 37" W	Active
MS-C-E		560,980	7,913,388	71° 18' 54" N	79° 17' 40" W	Active
MS-C-F		561,797	7,913,278	71° 18' 49" N	79° 16' 17" W	Active
MS-C-G		561,813	7,911,830	71° 18' 03" N	79° 16' 20" W	Active
MS-C-H		561,162	7,912,067	71° 18" 11" N	79° 17' 25" W	Active
MQ-C-A	Surface Runoff and/or Discharge Quarries	559,489	7,914,408	71° 19' 28" N	79° 20' 07" W	Active
MQ-C-B		560,076	7,913,888	71° 19' 11" N	79° 19' 09" W	Active
MQ-C-D		559,422	7,914,223	71° 19' 23" N	79° 20' 14" W	Active
MQ-C-E		563,351	7,912,902	71° 18' 36" N	79° 13' 42" W	Active

Notes:

Monitoring Station names beginning with MP-Q and MQ-C correspond to QIA Quarry Lease and Quarry Management Plans

The locations of the following Monitoring Stations have not been established at this stage of construction:

MP-02	Milne Port Maintenance Shop Oily Water (WWTF)
MS-01a	Mine Site Polishing/Waste Stabilization Pond (PWSP)
MS-04	Mine Site Fuel Unloading Station Stormwater
MS-05	Mine Site Landfarm Facility Stormwater
MS-07	Run of Mine Ore Stockpile Pond Stormwater
MS-09	Waste Rock Stockpile East Pond

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
MILNE PORT SITE						
L1722585-1	MP-01	13-Jan-16	pH	7.34	pH units	ALS
L1722585-1	MP-01	13-Jan-16	Total Suspended Solids	<2.0	mg/L	ALS
L1722585-1	MP-01	13-Jan-16	N-NH3 (Ammonia)	<0.050	mg/L	ALS
L1722585-1	MP-01	13-Jan-16	Total Kjeldahl Nitrogen	0.77	mg/L	ALS
L1722585-1	MP-01	13-Jan-16	Total Phosphorus	17.1	mg/L	ALS
L1722585-1	MP-01	13-Jan-16	Faecal Coliforms	0	CFU/100 mL	ALS
L1722585-1	MP-01	13-Jan-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1722585-1	MP-01	13-Jan-16	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1722583-1	MS-01	13-Jan-16	pH	7.15	pH units	ALS
L1722583-1	MS-01	13-Jan-16	Total Suspended Solids	3.6	mg/L	ALS
L1722583-1	MS-01	13-Jan-16	N-NH3 (Ammonia)	0.084	mg/L	ALS
L1722583-1	MS-01	13-Jan-16	Total Kjeldahl Nitrogen	1.61	mg/L	ALS
L1722583-1	MS-01	13-Jan-16	Total Phosphorus	0.647	mg/L	ALS
L1722583-1	MS-01	13-Jan-16	Faecal Coliforms	4	CFU/100 mL	ALS
L1722583-1	MS-01	13-Jan-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1722583-1	MS-01	13-Jan-16	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT SITE						
L1737433-1	MP-01	23-Feb-16	pH	7.53	pH units	ALS
L1737433-1	MP-01	23-Feb-16	Total Suspended Solids	3	mg/L	ALS
L1737433-1	MP-01	23-Feb-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1737433-1	MP-01	23-Feb-16	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1737433-1	MP-01	23-Feb-16	Total Phosphorus	13.1	mg/L	ALS
L1737433-1	MP-01	23-Feb-16	Faecal Coliforms	0	CFU/100 mL	ALS
L1737433-1	MP-01	23-Feb-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1737433-1	MP-01	23-Feb-16	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1737431-1	MS-01	23-Feb-16	pH	7.87	pH units	ALS
L1737431-1	MS-01	23-Feb-16	Total Suspended Solids	<2.0	mg/L	ALS
L1737431-1	MS-01	23-Feb-16	N-NH3 (Ammonia)	0.148	mg/L	ALS
L1737431-1	MS-01	23-Feb-16	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1737431-1	MS-01	23-Feb-16	Total Phosphorus	0.303	mg/L	ALS
L1737431-1	MS-01 (see Note)	23-Feb-16	Faecal Coliforms	**1050**	CFU/100 mL	ALS
L1737431-1	MS-01	23-Feb-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1737431-1	MS-01	23-Feb-16	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT SITE						
L1740979-1	MP-01	1-Mar-16	pH	7.38	pH units	ALS
L1740979-1	MP-01	1-Mar-16	Total Suspended Solids	5.5	mg/L	ALS
L1740979-1	MP-01	1-Mar-16	N-NH3 (Ammonia)	0.114	mg/L	ALS
L1740979-1	MP-01	1-Mar-16	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1740979-1	MP-01	1-Mar-16	Total Phosphorus	8.95	mg/L	ALS
L1740979-1	MP-01	1-Mar-16	Faecal Coliforms	-	CFU/100 mL	ALS
L1740979-1	MP-01	1-Mar-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1740979-1	MP-01	1-Mar-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1745711-1	MP-01	15-Mar-16	Faecal Coliforms	0	CFU/100 mL	ALS
MARY RIVER MINE SITE						
L1740981-1	MS-01	1-Mar-16	pH	7.19	pH units	ALS
L1740981-1	MS-01	1-Mar-16	Total Suspended Solids	<2.0	mg/L	ALS
L1740981-1	MS-01	1-Mar-16	N-NH3 (Ammonia)	0.056	mg/L	ALS
L1740981-1	MS-01	1-Mar-16	Total Kjeldahl Nitrogen	1.68	mg/L	ALS
L1740981-1	MS-01	1-Mar-16	Total Phosphorus	0.426	mg/L	ALS
L1740981-1	MS-01	1-Mar-16	Faecal Coliforms	-	CFU/100 mL	ALS
L1740981-1	MS-01	1-Mar-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1740981-1	MS-01	1-Mar-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1742800-1	MP-01	8-Mar-16	Faecal Coliforms	1	CFU/100 mL	ALS
MILNE PORT SITE						
L1753081-1	MP-01	5-Apr-16	pH	7.58	pH units	ALS
L1753081-1	MP-01	5-Apr-16	Total Suspended Solids	4	mg/L	ALS
L1753081-1	MP-01	5-Apr-16	N-NH3 (Ammonia)	0.022	mg/L	ALS
L1753081-1	MP-01	5-Apr-16	Total Kjeldahl Nitrogen	0.3	mg/L	ALS
L1753081-1	MP-01	5-Apr-16	Total Phosphorus	9.89	mg/L	ALS
L1753081-1	MP-01	5-Apr-16	Faecal Coliforms	<1	MPN/100mL	ALS
L1753081-1	MP-01	5-Apr-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1753081-1	MP-01	5-Apr-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	pH	7.53	pH units	ALS
L1753081-3	MP-0101	5-Apr-16	Total Suspended Solids	5.2	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	N-NH3 (Ammonia)	0.034	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	Total Kjeldahl Nitrogen	2.35	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	Total Phosphorus	10	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	Faecal Coliforms	<1	MPN/100mL	ALS
L1753081-3	MP-0101	5-Apr-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1753081-3	MP-0101	5-Apr-16	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1753088-1	MS-01	5-Apr-16	pH	7.77	pH units	ALS
L1753088-1	MS-01	5-Apr-16	Total Suspended Solids	<2.0	mg/L	ALS
L1753088-1	MS-01	5-Apr-16	N-NH3 (Ammonia)	0.129	mg/L	ALS
L1753088-1	MS-01	5-Apr-16	Total Kjeldahl Nitrogen	1.24	mg/L	ALS
L1753088-1	MS-01	5-Apr-16	Total Phosphorus	0.505	mg/L	ALS
L1753088-1	MS-01	5-Apr-16	Faecal Coliforms	2	MPN/100mL	ALS
L1753088-1	MS-01	5-Apr-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1753088-1	MS-01	5-Apr-16	Oil & Grease - Total	2.5	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	pH	7.79	pH units	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Total Suspended Solids	2.8	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	N-NH3 (Ammonia)	0.126	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Total Kjeldahl Nitrogen	1.4	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Total Phosphorus	0.518	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Faecal Coliforms	3	MPN/100mL	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1753088-3	MS-01 DUPLICATE	5-Apr-16	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT SITE						
L1764355-1	MP-01	3-May-16	pH	7.69	pH units	ALS
L1764355-1	MP-01	3-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1764355-1	MP-01	3-May-16	N-NH3 (Ammonia)	0.049	mg/L	ALS
L1764355-1	MP-01	3-May-16	Total Kjeldahl Nitrogen	8	mg/L	ALS
L1764355-1	MP-01	3-May-16	Total Phosphorus	10.9	mg/L	ALS
L1764355-1	MP-01	3-May-16	Faecal Coliforms	4	MPN/100mL	ALS
L1764355-1	MP-01	3-May-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1764355-1	MP-01	3-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776289-1	MP-05	31-May-16	pH	7.98	pH units	ALS
L1776289-1	MP-05	31-May-16	Total Suspended Solids	14.5	mg/L	ALS
L1776289-1	MP-05	31-May-16	Total Dissolved Solids	462	mg/L	ALS
L1776289-1	MP-05	31-May-16	Alkalinity - Total (as CaCO3)	59	mg/L	ALS
L1776289-1	MP-05	31-May-16	Hardness (as CaCO3)	174	mg/L	ALS
L1776289-1	MP-05	31-May-16	Turbidity	31.7	NTU	ALS
L1776289-1	MP-05	31-May-16	Total Kjeldahl Nitrogen	0.97	mg/L	ALS
L1776289-1	MP-05	31-May-16	N-NH3 (Ammonia)	0.109	mg/L	ALS
L1776289-1	MP-05	31-May-16	N-NO3 (Nitrate)	1.09	mg/L	ALS
L1776289-1	MP-05	31-May-16	Dissolved Organic Carbon (DOC)	3.6	mg/L	ALS
L1776289-1	MP-05	31-May-16	Total Organic Carbon (TOC)	4.1	mg/L	ALS
L1776289-1	MP-05	31-May-16	Total Phosphorus	0.0280	mg/L	ALS
L1776289-1	MP-05	31-May-16	Sulphate	48.5	mg/L	ALS
L1776289-1	MP-05	31-May-16	Fluoride	0.064	mg/L	ALS
L1776289-1	MP-05	31-May-16	Chloride	199	mg/L	ALS
L1776289-1	MP-05	31-May-16	Aluminum (Total)	1.10	mg/L	ALS
L1776289-1	MP-05	31-May-16	Arsenic (Total)	0.00022	mg/L	ALS
L1776289-1	MP-05	31-May-16	Cadmium (Total)	0.000015	mg/L	ALS
L1776289-1	MP-05	31-May-16	Calcium (Total)	31.6	mg/L	ALS
L1776289-1	MP-05	31-May-16	Copper (Total)	0.0018	mg/L	ALS
L1776289-1	MP-05	31-May-16	Iron (Total)	0.968	mg/L	ALS
L1776289-1	MP-05	31-May-16	Lead (Total)	0.00064	mg/L	ALS
L1776289-1	MP-05	31-May-16	Magnesium (Total)	22.8	mg/L	ALS
L1776289-1	MP-05	31-May-16	Manganese (Total)	0.107	mg/L	ALS
L1776289-1	MP-05	31-May-16	Mercury (Total)	<0.000010	mg/L	ALS
L1776289-1	MP-05	31-May-16	Molybdenum (Total)	0.00394	mg/L	ALS
L1776289-1	MP-05	31-May-16	Nickel (Total)	0.0012	mg/L	ALS
L1776289-1	MP-05	31-May-16	Potassium (Total)	8.11	mg/L	ALS
L1776289-1	MP-05	31-May-16	Selenium (Total)	0.000216	mg/L	ALS
L1776289-1	MP-05	31-May-16	Sodium (Total)	85.6	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1776289-1	MP-05	31-May-16	Thallium (Total)	0.000020	mg/L	ALS
L1776289-1	MP-05	31-May-16	Uranium (Total)	0.00766	mg/L	ALS
L1776289-1	MP-05	31-May-16	Zinc (Total)	0.0043	mg/L	ALS
L1776289-1	MP-05	31-May-16	Aluminum (Dissolved)	0.0149	mg/L	ALS
L1776289-1	MP-05	31-May-16	Arsenic (Dissolved)	0.00013	mg/L	ALS
L1776289-1	MP-05	31-May-16	Cadmium (Dissolved)	<0.000010	mg/L	ALS
L1776289-1	MP-05	31-May-16	Calcium (Dissolved)	31.9	mg/L	ALS
L1776289-1	MP-05	31-May-16	Copper (Dissolved)	0.00090	mg/L	ALS
L1776289-1	MP-05	31-May-16	Iron (Dissolved)	<0.010	mg/L	ALS
L1776289-1	MP-05	31-May-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1776289-1	MP-05	31-May-16	Magnesium (Dissolved)	22.9	mg/L	ALS
L1776289-1	MP-05	31-May-16	Manganese (Dissolved)	0.0900	mg/L	ALS
L1776289-1	MP-05	31-May-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1776289-1	MP-05	31-May-16	Molybdenum (Dissolved)	0.00366	mg/L	ALS
L1776289-1	MP-05	31-May-16	Nickel (Dissolved)	<0.00050	mg/L	ALS
L1776289-1	MP-05	31-May-16	Potassium (Dissolved)	7.81	mg/L	ALS
L1776289-1	MP-05	31-May-16	Selenium (Dissolved)	0.000214	mg/L	ALS
L1776289-1	MP-05	31-May-16	Sodium (Dissolved)	89.4	mg/L	ALS
L1776289-1	MP-05	31-May-16	Thallium (Dissolved)	0.000010	mg/L	ALS
L1776289-1	MP-05	31-May-16	Uranium (Dissolved)	0.00749	mg/L	ALS
L1776289-1	MP-05	31-May-16	Zinc (Dissolved)	0.0013	mg/L	ALS
L1776289-2	MP-06	31-May-16	pH	7.70	pH units	ALS
L1776289-2	MP-06	31-May-16	Total Suspended Solids	9.2	mg/L	ALS
L1776289-2	MP-06	31-May-16	Total Dissolved Solids	120	mg/L	ALS
L1776289-2	MP-06	31-May-16	Alkalinity - Total (as CaCO3)	23	mg/L	ALS
L1776289-2	MP-06	31-May-16	Hardness (as CaCO3)	50	mg/L	ALS
L1776289-2	MP-06	31-May-16	Turbidity	51.2	NTU	ALS
L1776289-2	MP-06	31-May-16	Total Kjeldahl Nitrogen	0.25	mg/L	ALS
L1776289-2	MP-06	31-May-16	N-NH3 (Ammonia)	0.073	mg/L	ALS
L1776289-2	MP-06	31-May-16	N-NO3 (Nitrate)	0.164	mg/L	ALS
L1776289-2	MP-06	31-May-16	Dissolved Organic Carbon (DOC)	1.9	mg/L	ALS
L1776289-2	MP-06	31-May-16	Total Organic Carbon (TOC)	2.4	mg/L	ALS
L1776289-2	MP-06	31-May-16	Total Phosphorus	0.0220	mg/L	ALS
L1776289-2	MP-06	31-May-16	Sulphate	8.68	mg/L	ALS
L1776289-2	MP-06	31-May-16	Fluoride	0.022	mg/L	ALS
L1776289-2	MP-06	31-May-16	Chloride	50.2	mg/L	ALS
L1776289-2	MP-06	31-May-16	Aluminum (Total)	0.920	mg/L	ALS
L1776289-2	MP-06	31-May-16	Arsenic (Total)	0.00014	mg/L	ALS
L1776289-2	MP-06	31-May-16	Cadmium (Total)	0.000026	mg/L	ALS
L1776289-2	MP-06	31-May-16	Calcium (Total)	9.66	mg/L	ALS
L1776289-2	MP-06	31-May-16	Copper (Total)	0.0015	mg/L	ALS
L1776289-2	MP-06	31-May-16	Iron (Total)	1.51	mg/L	ALS
L1776289-2	MP-06	31-May-16	Lead (Total)	0.00053	mg/L	ALS
L1776289-2	MP-06	31-May-16	Magnesium (Total)	6.22	mg/L	ALS
L1776289-2	MP-06	31-May-16	Manganese (Total)	0.0383	mg/L	ALS
L1776289-2	MP-06	31-May-16	Mercury (Total)	<0.000010	mg/L	ALS
L1776289-2	MP-06	31-May-16	Molybdenum (Total)	0.00075	mg/L	ALS
L1776289-2	MP-06	31-May-16	Nickel (Total)	0.0017	mg/L	ALS
L1776289-2	MP-06	31-May-16	Potassium (Total)	2.03	mg/L	ALS
L1776289-2	MP-06	31-May-16	Selenium (Total)	0.000061	mg/L	ALS
L1776289-2	MP-06	31-May-16	Sodium (Total)	23.4	mg/L	ALS
L1776289-2	MP-06	31-May-16	Thallium (Total)	0.000014	mg/L	ALS
L1776289-2	MP-06	31-May-16	Uranium (Total)	0.00179	mg/L	ALS
L1776289-2	MP-06	31-May-16	Zinc (Total)	0.0048	mg/L	ALS
L1776289-2	MP-06	31-May-16	Aluminum (Dissolved)	0.0097	mg/L	ALS
L1776289-2	MP-06	31-May-16	Arsenic (Dissolved)	<0.00010	mg/L	ALS
L1776289-2	MP-06	31-May-16	Cadmium (Dissolved)	0.000019	mg/L	ALS
L1776289-2	MP-06	31-May-16	Calcium (Dissolved)	9.98	mg/L	ALS
L1776289-2	MP-06	31-May-16	Copper (Dissolved)	0.00042	mg/L	ALS
L1776289-2	MP-06	31-May-16	Iron (Dissolved)	<0.010	mg/L	ALS
L1776289-2	MP-06	31-May-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1776289-2	MP-06	31-May-16	Magnesium (Dissolved)	6.11	mg/L	ALS
L1776289-2	MP-06	31-May-16	Manganese (Dissolved)	<0.00050	mg/L	ALS
L1776289-2	MP-06	31-May-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1776289-2	MP-06	31-May-16	Molybdenum (Dissolved)	0.000694	mg/L	ALS
L1776289-2	MP-06	31-May-16	Nickel (Dissolved)	<0.00050	mg/L	ALS
L1776289-2	MP-06	31-May-16	Potassium (Dissolved)	1.83	mg/L	ALS
L1776289-2	MP-06	31-May-16	Selenium (Dissolved)	<0.000050	mg/L	ALS
L1776289-2	MP-06	31-May-16	Sodium (Dissolved)	24.4	mg/L	ALS
L1776289-2	MP-06	31-May-16	Thallium (Dissolved)	<0.000010	mg/L	ALS
L1776289-2	MP-06	31-May-16	Uranium (Dissolved)	0.00121	mg/L	ALS
L1776289-2	MP-06	31-May-16	Zinc (Dissolved)	0.0017	mg/L	ALS
L1776290-1	MP-06-TEMP	31-May-16	pH	8.05	pH units	ALS
L1776290-1	MP-06-TEMP	31-May-16	Total Suspended Solids	8.40	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	pH	8.17	pH units	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Total Suspended Solids	14.4	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Total Dissolved Solids	320	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Alkalinity - Total (as CaCO3)	96	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Hardness (as CaCO3)	153	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Turbidity	23.3	NTU	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Total Kjeldahl Nitrogen	2.21	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	N-NH3 (Ammonia)	0.775	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	N-NO3 (Nitrate)	0.392	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Dissolved Organic Carbon (DOC)	11.5	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Total Organic Carbon (TOC)	11.7	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Total Phosphorus	0.0300	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Sulphate	33.9	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Fluoride	0.059	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Chloride	84.7	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Aluminum (Total)	0.510	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Arsenic (Total)	0.00039	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Cadmium (Total)	0.000013	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Calcium (Total)	38.0	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Copper (Total)	0.0019	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Iron (Total)	0.686	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Lead (Total)	0.00034	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Magnesium (Total)	15.4	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Manganese (Total)	0.0282	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Mercury (Total)	<0.000010	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Molybdenum (Total)	0.00254	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Nickel (Total)	0.0012	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Potassium (Total)	5.34	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Selenium (Total)	0.000071	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Sodium (Total)	34.9	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Thallium (Total)	0.000013	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Uranium (Total)	0.0293	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Zinc (Total)	<0.0030	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Aluminum (Dissolved)	0.0077	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Arsenic (Dissolved)	0.00035	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Cadmium (Dissolved)	<0.000010	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Calcium (Dissolved)	36.6	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Copper (Dissolved)	0.00146	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Iron (Dissolved)	0.094	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Magnesium (Dissolved)	15.0	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Manganese (Dissolved)	0.00879	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Molybdenum (Dissolved)	0.00234	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Nickel (Dissolved)	<0.00050	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Potassium (Dissolved)	5.25	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Selenium (Dissolved)	0.000075	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Sodium (Dissolved)	34.3	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Thallium (Dissolved)	<0.000010	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Uranium (Dissolved)	0.0277	mg/L	ALS
L1772632-1	MP-06-TEMP1	23-May-16	Zinc (Dissolved)	0.0016	mg/L	ALS
L1776290-2	MP-06-TEMP1	31-May-16	pH	8.10	pH units	ALS
L1776920-2	MP-06-TEMP1	31-May-16	Total Suspended Solids	6.80	mg/L	ALS
L1776290-5	MP-C-B	31-May-16	Conductivity	709.0	uS/cm	ALS
L1776290-5	MP-C-B	31-May-16	pH	8.18	pH units	ALS
L1776290-5	MP-C-B	31-May-16	Total Suspended Solids	11.3	mg/L	ALS
L1776290-5	MP-C-B	31-May-16	N-NH3 (Ammonia)	0.071	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1776290-5	MP-C-B	31-May-16	N-NO3 (Nitrate)	0.240	mg/L	ALS
L1776290-5	MP-C-B	31-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772632-2	MP-C-B01	24-May-16	Conductivity	829	uS/cm	ALS
L1772632-2	MP-C-B01	24-May-16	pH	7.99	pH units	ALS
L1772632-2	MP-C-B01	24-May-16	Total Suspended Solids	28.2	mg/L	ALS
L1772632-2	MP-C-B01	24-May-16	N-NH3 (Ammonia)	0.258	mg/L	ALS
L1772632-2	MP-C-B01	24-May-16	N-NO3 (Nitrate)	0.544	mg/L	ALS
L1772632-2	MP-C-B01	24-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
47809	MP-C-B01	24-May-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1776290-3	MP-C-B01	31-May-16	pH	7.92	pH units	ALS
L1776920-3	MP-C-B01	31-May-16	Total Suspended Solids	12.8	mg/L	ALS
L1776290-4	MP-C-B01 (Duplicate)	31-May-16	pH	7.94	pH units	ALS
L1776920-4	MP-C-B01 (Duplicate)	31-May-16	Total Suspended Solids	11.2	mg/L	ALS
MARY RIVER MINE SITE						
L1764350-1	MS-01	3-May-16	pH	7.78	pH units	ALS
L1764350-1	MS-01	3-May-16	Total Suspended Solids	2.5	mg/L	ALS
L1764350-1	MS-01	3-May-16	N-NH3 (Ammonia)	0.251	mg/L	ALS
L1764350-1	MS-01	3-May-16	Total Kjeldahl Nitrogen	9.9	mg/L	ALS
L1764350-1	MS-01	3-May-16	Total Phosphorus	1.02	mg/L	ALS
L1764350-1	MS-01	3-May-16	Faecal Coliforms	2	MPN/100mL	ALS
L1764350-1	MS-01	3-May-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1764350-1	MS-01	3-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Hardness (as CaCO3)	64	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	pH	7.55	pH units	ALS
L1772651-1	MS-06 (Pre-Discharge) See Note	24-May-16	Total Suspended Solids	**35.1**	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Total Dissolved Solids	102	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Turbidity	57.1	NTU	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Ammonia, Total (as N)	0.275	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Chloride (Cl)	5.92	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Fluoride (F)	0.06	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Nitrate (as N)	1.01	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Total Kjeldahl Nitrogen	0.68	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Phosphorus, Total	0.0451	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Sulfate (SO4)	44.6	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Dissolved Organic Carbon	2.6	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Total Organic Carbon	2.2	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Aluminum (Al)-Total	1.8	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Arsenic (As)-Total	0.00019	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Cadmium (Cd)-Total	0.00005	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Calcium (Ca)-Total	11.1	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Copper (Cu)-Total	0.0032	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Iron (Fe)-Total	2.43	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Lead (Pb)-Total	0.00179	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Magnesium (Mg)-Total	10.3	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Manganese (Mn)-Total	0.183	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Molybdenum (Mo)-Total	0.00205	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Nickel (Ni)-Total	0.0035	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Potassium (K)-Total	5.17	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Selenium (Se)-Total	0.000176	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Sodium (Na)-Total	2.83	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Thallium (Tl)-Total	0.000026	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Uranium (U)-Total	0.00226	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Zinc (Zn)-Total	0.0051	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Aluminum (Al)-Dissolved	0.0102	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Calcium (Ca)-Dissolved	10.8	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Copper (Cu)-Dissolved	0.0004	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Magnesium (Mg)-Dissolved	9.07	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Manganese (Mn)-Dissolved	0.135	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Molybdenum (Mo)-Dissolved	0.00193	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Potassium (K)-Dissolved	4.72	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Selenium (Se)-Dissolved	0.000205	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Sodium (Na)-Dissolved	2.77	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Uranium (U)-Dissolved	0.00121	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Zinc (Zn)-Dissolved	<0.0010	mg/L	ALS
L1772651-1	MS-06 (Pre-Discharge)	24-May-16	Radium-226	0.0078	BQ/l	ALS
47808	MS-06 (Pre-Discharge)	24-May-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1772655-6	MS-MRY-13A	23-May-16	pH	7.52	pH units	ALS
L1772655-6	MS-MRY-13A	23-May-16	Alkalinity - Total (as CaCO3)	24	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Conductivity	56.5	uS/cm	ALS
L1772655-6	MS-MRY-13A	23-May-16	Total Suspended Solids	11.5	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Total Dissolved Solids	47	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Phenols (4AAP)	0.0017	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Total Petroleum Hydrocarbons (C6-C50)	<380	*ug/L*	ALS
L1772655-6	MS-MRY-13A	23-May-16	F1 (C6-C10)	<100	*ug/L*	ALS
L1772655-6	MS-MRY-13A	23-May-16	F2 (C10-C16)	<100	*ug/L*	ALS
L1772655-6	MS-MRY-13A	23-May-16	F3 (C16-C34)	<250	*ug/L*	ALS
L1772655-6	MS-MRY-13A	23-May-16	F4 (C34-C50)	<250	*ug/L*	ALS
L1772655-6	MS-MRY-13A	23-May-16	Total Organic Carbon (TOC)	3.9	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Dissolved Organic Carbon (DOC)	5.1	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Mercury (Hg) - Total	<0.000010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Aluminum (Al)-Total	0.0133	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Antimony (Sb)-Total	0.00011	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Barium (Ba)-Total	0.00322	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Copper (Cu)-Total	0.00089	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Iron (Fe)-Total	0.033	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Lithium (Li)-Total	<0.0010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Manganese (Mn)-Total	0.00531	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Molybdenum (Mo)-Total	0.000319	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Nickel (Ni)-Total	0.00177	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Strontium (Sr)-Total	0.00366	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Uranium (U)-Total	0.000151	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1772655-6	MS-MRY-13A	23-May-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1776291-7	MS-MRY-13A	31-May-16	pH	7.65	pH units	ALS
L1776291-7	MS-MRY-13A	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-7	MS-MRY-13A	31-May-16	Turbidity	1.05	NTU	ALS
L1766940-1	MS-C-A	10-May-16	Conductivity	63.0	uS/cm	ALS
L1766940-1	MS-C-A	10-May-16	pH	7.53	pH units	ALS
L1766940-1	MS-C-A	10-May-16	Total Suspended Solids	3.2	mg/L	ALS
L1766940-1	MS-C-A	10-May-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1766940-1	MS-C-A	10-May-16	N-NO3 (Nitrate)	0.319	mg/L	ALS
L1766940-1	MS-C-A	10-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772655-1	MS-C-A	23-May-16	Conductivity	41.0	uS/cm	ALS
L1772655-1	MS-C-A	23-May-16	pH	7.45	pH units	ALS
L1772655-1	MS-C-A	23-May-16	Total Suspended Solids	4.0	mg/L	ALS
L1772655-1	MS-C-A	23-May-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1772655-1	MS-C-A	23-May-16	N-NO3 (Nitrate)	0.115	mg/L	ALS
L1772655-1	MS-C-A	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-8	MS-C-A	31-May-16	pH	7.41	pH units	ALS
L1776291-8	MS-C-A	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-8	MS-C-A	31-May-16	Turbidity	11.4	NTU	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1766940-4	MS-C-B	10-May-16	Conductivity	63.0	uS/cm	ALS
L1766940-4	MS-C-B	10-May-16	pH	7.52	pH units	ALS
L1766940-4	MS-C-B	10-May-16	Total Suspended Solids	2.4	mg/L	ALS
L1766940-4	MS-C-B	10-May-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1766940-4	MS-C-B	10-May-16	N-NO3 (Nitrate)	0.328	mg/L	ALS
L1766940-4	MS-C-B	10-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772655-2	MS-C-B	23-May-16	Conductivity	41.4	uS/cm	ALS
L1772655-2	MS-C-B	23-May-16	pH	7.43	pH units	ALS
L1772655-2	MS-C-B	23-May-16	Total Suspended Solids	4.5	mg/L	ALS
L1772655-2	MS-C-B	23-May-16	N-NH3 (Ammonia)	0.025	mg/L	ALS
L1772655-2	MS-C-B	23-May-16	N-NO3 (Nitrate)	0.113	mg/L	ALS
L1772655-2	MS-C-B	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-9	MS-C-B	31-May-16	pH	7.38	pH units	ALS
L1776291-9	MS-C-B	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-9	MS-C-B	31-May-16	Turbidity	11.8	NTU	ALS
L1772655-3	MS-C-C	23-May-16	Conductivity	313.0	uS/cm	ALS
L1772655-3	MS-C-C	23-May-16	pH	7.88	pH units	ALS
L1772655-3	MS-C-C	23-May-16	Total Suspended Solids	5.2	mg/L	ALS
L1772655-3	MS-C-C	23-May-16	N-NH3 (Ammonia)	0.267	mg/L	ALS
L1772655-3	MS-C-C	23-May-16	N-NO3 (Nitrate)	0.957	mg/L	ALS
L1772655-3	MS-C-C	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-6	MS-C-C	31-May-16	pH	7.68	pH units	ALS
L1776291-6	MS-C-C	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-6	MS-C-C	31-May-16	Turbidity	0.86	NTU	ALS
L1766940-2	MS-C-D	10-May-16	Conductivity	281	uS/cm	ALS
L1766940-2	MS-C-D	10-May-16	pH	7.95	pH units	ALS
L1766940-2	MS-C-D (see Note)	10-May-16	Total Suspended Solids	**39.4**	mg/L	ALS
L1766940-2	MS-C-D	10-May-16	N-NH3 (Ammonia)	0.514	mg/L	ALS
L1766940-2	MS-C-D	10-May-16	N-NO3 (Nitrate)	2.08	mg/L	ALS
L1766940-2	MS-C-D	10-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1769290-1	MS-C-D	16-May-16	pH	7.61	pH units	ALS
L1769290-1	MS-C-D	16-May-16	Total Suspended Solids	12.8	mg/L	ALS
L1769290-1	MS-C-D	16-May-16	Total Dissolved Solids	40	mg/L	ALS
L1769290-1	MS-C-D	16-May-16	Turbidity	40	NTU	ALS
L1772655-4	MS-C-D	23-May-16	Conductivity	302.0	uS/cm	ALS
L1772655-4	MS-C-D	23-May-16	pH	7.94	pH units	ALS
L1772655-4	MS-C-D	23-May-16	Total Suspended Solids	7.0	mg/L	ALS
L1772655-4	MS-C-D	23-May-16	N-NH3 (Ammonia)	0.313	mg/L	ALS
L1772655-4	MS-C-D	23-May-16	N-NO3 (Nitrate)	0.938	mg/L	ALS
L1772655-4	MS-C-D	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-5	MS-C-D	31-May-16	pH	7.93	pH units	ALS
L1776291-5	MS-C-D	31-May-16	Total Suspended Solids	9.6	mg/L	ALS
L1776291-5	MS-C-D	31-May-16	Turbidity	30	NTU	ALS
L1766940-3	MS-C-E	10-May-16	Conductivity	149	uS/cm	ALS
L1766940-3	MS-C-E	10-May-16	pH	7.84	pH units	ALS
L1766940-3	MS-C-E	10-May-16	Total Suspended Solids	**66.0**	mg/L	ALS
L1766940-3	MS-C-E	10-May-16	N-NH3 (Ammonia)	0.134	mg/L	ALS
L1766940-3	MS-C-E	10-May-16	N-NO3 (Nitrate)	0.980	mg/L	ALS
L1766940-3	MS-C-E	10-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1769290-2	MS-C-E	16-May-16	pH	7.66	pH units	ALS
L1769290-2	MS-C-E	16-May-16	Total Suspended Solids	**16.0**	mg/L	ALS
L1769290-2	MS-C-E	16-May-16	Total Dissolved Solids	47	mg/L	ALS
L1769290-2	MS-C-E	16-May-16	Turbidity	50	NTU	ALS
L1772655-5	MS-C-E	23-May-16	Conductivity	162.0	uS/cm	ALS
L1772655-5	MS-C-E	23-May-16	pH	7.93	pH units	ALS
L1772655-5	MS-C-E	23-May-16	Total Suspended Solids	**23.8**	mg/L	ALS
L1772655-5	MS-C-E	23-May-16	N-NH3 (Ammonia)	0.109	mg/L	ALS
L1772655-5	MS-C-E	23-May-16	N-NO3 (Nitrate)	0.409	mg/L	ALS
L1772655-5	MS-C-E	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1766940-5	MS-C-H	10-May-16	Conductivity	62.3	uS/cm	ALS
L1766940-5	MS-C-H	10-May-16	pH	7.65	pH units	ALS
L1766940-5	MS-C-H	10-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1766940-5	MS-C-H	10-May-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1766940-5	MS-C-H	10-May-16	N-NO3 (Nitrate)	0.093	mg/L	ALS
L1766940-5	MS-C-H	10-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-10	MS-C-H	31-May-16	pH	7.68	pH units	ALS
L1776291-10	MS-C-H	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-10	MS-C-H	31-May-16	Turbidity	7.08	NTU	ALS
L1776291-2	MQ-C-A	31-May-16	Conductivity	65.2	uS/cm	ALS
L1776291-2	MQ-C-A	31-May-16	pH	7.72	pH units	ALS
L1776291-2	MQ-C-A	31-May-16	Total Suspended Solids	<2.0	mg/L	ALS
L1776291-2	MQ-C-A	31-May-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1776291-2	MQ-C-A	31-May-16	N-NO3 (Nitrate)	0.135	mg/L	ALS
L1776291-2	MQ-C-A	31-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772655-7	MQ-C-B	23-May-16	Conductivity	102.0	uS/cm	ALS
L1772655-7	MQ-C-B	23-May-16	pH	7.70	pH units	ALS
L1772655-7	MQ-C-B (see Note)	23-May-16	Total Suspended Solids	**42.9**	mg/L	ALS
L1772655-7	MQ-C-B	23-May-16	N-NH3 (Ammonia)	0.399	mg/L	ALS
L1772655-7	MQ-C-B	23-May-16	N-NO3 (Nitrate)	1.090	mg/L	ALS
L1772655-7	MQ-C-B	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
47807	MQ-C-B	23-May-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1775123-1	MQ-C-B	28-May-16	pH	7.6	pH units	ALS
L1775123-1	MQ-C-B (see Note)	28-May-16	Total Suspended Solids	**47.0**	mg/L	ALS
L1776291-3	MQ-C-B	31-May-16	pH	7.66	pH units	ALS
L1776291-3	MQ-C-B	31-May-16	Total Suspended Solids	22.8	mg/L	ALS
L1776291-3	MQ-C-B	31-May-16	Turbidity	47.1	NTU	ALS
L1776291-4	MQ-C-B (Duplicate)	31-May-16	pH	7.68	pH units	ALS
L1776291-4	MQ-C-B (Duplicate)	31-May-16	Total Suspended Solids	24	mg/L	ALS
L1776291-4	MQ-C-B (Duplicate)	31-May-16	Turbidity	48.5	NTU	ALS
L1772655-8	MQ-C-D	23-May-16	Conductivity	96.3	uS/cm	ALS
L1772655-8	MQ-C-D	23-May-16	pH	7.70	pH units	ALS
L1772655-8	MQ-C-D	23-May-16	Total Suspended Solids	9.2	mg/L	ALS
L1772655-8	MQ-C-D	23-May-16	N-NH3 (Ammonia)	0.158	mg/L	ALS
L1772655-8	MQ-C-D	23-May-16	N-NO3 (Nitrate)	0.341	mg/L	ALS
L1772655-8	MQ-C-D	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	Conductivity	95.5	uS/cm	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	pH	7.70	pH units	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	Total Suspended Solids	10.0	mg/L	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	N-NH3 (Ammonia)	0.147	mg/L	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	N-NO3 (Nitrate)	0.343	mg/L	ALS
L1772655-9	MQ-C-D (Duplicate)	23-May-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1776291-1	MQ-C-D	31-May-16	pH	7.9	pH units	ALS
L1776291-1	MQ-C-D	31-May-16	Total Suspended Solids	15.6	mg/L	ALS
L1776291-1	MQ-C-D	31-May-16	Turbidity	46	NTU	ALS
MILNE PORT SITE						
L1779755-1	MP-01	7-Jun-16	pH	7.57	pH units	ALS
L1779755-1	MP-01	7-Jun-16	Total Suspended Solids	7.3	mg/L	ALS
L1779755-1	MP-01	7-Jun-16	N-NH3 (Ammonia)	0.052	mg/L	ALS
L1779755-1	MP-01	7-Jun-16	Total Kjeldahl Nitrogen	9.1	mg/L	ALS
L1779755-1	MP-01	7-Jun-16	Total Phosphorus	10.9	mg/L	ALS
L1779755-1	MP-01	7-Jun-16	Faecal Coliforms	0	CFU/100mL	ALS
L1779755-1	MP-01	7-Jun-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1779755-1	MP-01	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	pH	8.24	pH units	ALS
L1791429-1	MP-03	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	N-NH3 (Ammonia)	0.084	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Phosphorus	<0.0030	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Arsenic	0.00015	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Copper	<0.0010	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Lead	<0.00010	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Nickel	<0.0010	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Zinc	<0.0030	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Oil & Grease Total	<2.0	mg/L	ALS
L1791429-1	MP-03	28-Jun-16	Benzene	<0.50	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	Ethylbenzene	<0.50	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	Toluene	<0.50	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	F1 (C6-C10)	<100	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	F2 (C10-C16)	<100	ug/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1791429-1	MP-03	28-Jun-16	F3 (C16-C34)	<250	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	F4 (C34-C50)	<250	ug/L	ALS
L1791429-1	MP-03	28-Jun-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1784066-7	MP-05	13-Jun-16	Hardness (as CaCO3)	235	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	pH	8.17	pH units	ALS
L1784066-7	MP-05	13-Jun-16	Total Suspended Solids **(see Note 1)**	20	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Total Dissolved Solids	549	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Turbidity	30.5	NTU	ALS
L1784066-7	MP-05	13-Jun-16	Alkalinity - Total (as CaCO3)	95	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	N-NH3 (Ammonia)	0.176	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Chloride	184	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Fluoride	0.06	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	N-NO3 (Nitrate)	2.03	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Total Kjeldahl Nitrogen	1.01	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Total Phosphorus	0.0432	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Sulphate	85.9	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Dissolved Organic Carbon (DOC)	5.4	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Total Organic Carbon (TOC)	5.6	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Aluminum (Total)	0.715	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Arsenic (Total)	0.00033	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Cadmium (Total)	<0.000010	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Calcium (Total)	45.2	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Copper (Total)	0.0017	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Iron (Total)	0.565	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Lead (Total)	0.00054	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Magnesium (Total)	27.4	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Manganese (Total)	0.178	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Mercury (Total)	<0.000010	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Molybdenum (Total)	0.00465	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Nickel (Total)	0.0012	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Potassium (Total)	8.44	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Selenium (Total)	0.000307	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Sodium (Total)	76.2	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Thallium (Total)	0.000019	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Uranium (Total)	0.0249	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Zinc (Total)	0.012	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Aluminum (Dissolved)	0.0143	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Arsenic (Dissolved)	0.00025	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Cadmium (Dissolved)	<0.000010	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Calcium (Dissolved)	47	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Copper (Dissolved)	0.00119	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Iron (Dissolved)	<0.010	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Magnesium (Dissolved)	28.5	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Manganese (Dissolved)	0.147	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Molybdenum (Dissolved)	0.00449	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Nickel (Dissolved)	0.00063	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Potassium (Dissolved)	8.62	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Selenium (Dissolved)	0.000375	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Sodium (Dissolved)	80.8	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Thallium (Dissolved)	0.000012	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Uranium (Dissolved)	0.0255	mg/L	ALS
L1784066-7	MP-05	13-Jun-16	Zinc (Dissolved)	0.007	mg/L	ALS
48040	MP-05	14-Jun-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1779754-7	MP-06	7-Jun-16	Hardness (as CaCO3)	74	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	pH	7.95	pH units	ALS
L1779754-7	MP-06	7-Jun-16	Total Suspended Solids	17.6	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Total Dissolved Solids	176	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Turbidity	71.1	NTU	ALS
L1779754-7	MP-06	7-Jun-16	Alkalinity - Total (as CaCO3)	43	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	N-NH3 (Ammonia)	0.044	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Chloride	59.8	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Fluoride	0.029	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	N-NO3 (Nitrate)	0.331	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Total Kjeldahl Nitrogen	0.31	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Total Phosphorus	0.039	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Sulphate	16.4	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Dissolved Organic Carbon (DOC)	2.9	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Total Organic Carbon (TOC)	3.1	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Aluminum (Total)	1	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Arsenic (Total)	0.00026	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Cadmium (Total)	<0.000010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Calcium (Total)	16.1	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Copper (Total)	0.0018	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Iron (Total)	1.29	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Lead (Total)	0.00063	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Magnesium (Total)	9.12	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Manganese (Total)	0.0356	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Mercury (Total)	<0.000010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Molybdenum (Total)	0.00129	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Nickel (Total)	0.0018	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Potassium (Total)	2.69	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Selenium (Total)	0.000075	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Sodium (Total)	29.6	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Thallium (Total)	0.000019	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Uranium (Total)	0.0021	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Zinc (Total)	0.0041	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Aluminum (Dissolved)	0.0133	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Arsenic (Dissolved)	0.0001	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Cadmium (Dissolved)	<0.000010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Calcium (Dissolved)	15.7	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Copper (Dissolved)	0.00053	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Iron (Dissolved)	<0.010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Magnesium (Dissolved)	8.54	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Manganese (Dissolved)	0.00532	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Molybdenum (Dissolved)	0.00144	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Nickel (Dissolved)	<0.00050	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Potassium (Dissolved)	2.22	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Selenium (Dissolved)	0.000074	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Sodium (Dissolved)	30	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Thallium (Dissolved)	<0.000010	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Uranium (Dissolved)	0.00161	mg/L	ALS
L1779754-7	MP-06	7-Jun-16	Zinc (Dissolved)	<0.0010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Hardness (as CaCO3)	85	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	pH	7.93	pH units	ALS
L1781993-1	MP-06	10-Jun-16	Total Suspended Solids	12.4	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Total Dissolved Solids	220	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Turbidity	64.7	NTU	ALS
L1781993-1	MP-06	10-Jun-16	Alkalinity - Total (as CaCO3)	351	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	N-NH3 (Ammonia)	0.051	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Chloride	65.6	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Fluoride	0.057	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	N-NO3 (Nitrate)	0.46	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Total Kjeldahl Nitrogen	0.21	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Total Phosphorus	0.0198	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Sulphate	22.7	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Dissolved Organic Carbon (DOC)	2.9	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Total Organic Carbon (TOC)	2.9	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Aluminum (Total)	0.967	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Arsenic (Total)	0.00025	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Cadmium (Total)	<0.000010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Calcium (Total)	18.3	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Copper (Total)	0.0015	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Iron (Total)	1.22	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Lead (Total)	0.0006	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Magnesium (Total)	9.37	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Manganese (Total)	0.0262	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Mercury (Total)	<0.000010	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

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WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1781993-1	MP-06	10-Jun-16	Molybdenum (Total)	0.00166	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Nickel (Total)	0.0016	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Potassium (Total)	2.78	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Selenium (Total)	0.000102	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Sodium (Total)	31.1	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Thallium (Total)	0.000015	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Uranium (Total)	0.00209	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Zinc (Total)	0.0044	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Aluminum (Dissolved)	0.0137	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Arsenic (Dissolved)	<0.00010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Cadmium (Dissolved)	<0.000010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Calcium (Dissolved)	18.6	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Copper (Dissolved)	0.0007	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Iron (Dissolved)	<0.010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Lead (Dissolved)	<0.000050	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Magnesium (Dissolved)	9.4	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Manganese (Dissolved)	0.00618	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Mercury (Dissolved)	<0.000010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Molybdenum (Dissolved)	0.00164	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Nickel (Dissolved)	<0.00050	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Potassium (Dissolved)	2.46	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Selenium (Dissolved)	0.000108	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Sodium (Dissolved)	32.6	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Thallium (Dissolved)	<0.000010	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Uranium (Dissolved)	0.00183	mg/L	ALS
L1781993-1	MP-06	10-Jun-16	Zinc (Dissolved)	0.0024	mg/L	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	Conductivity	528	uS/cm	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	pH	8.14	pH units	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	Total Suspended Solids	5	mg/L	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	N-NO3 (Nitrate)	0.226	mg/L	ALS
L1779754-1	MP-06 TEMP	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	Conductivity	394	uS/cm	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	pH	8.19	pH units	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	Total Suspended Solids	2	mg/L	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	N-NH3 (Ammonia)	0.045	mg/L	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	N-NO3 (Nitrate)	1.05	mg/L	ALS
L1787792-2	MP-06 TEMP	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	Conductivity	655	uS/cm	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	pH	8.24	pH units	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	Total Suspended Solids	5.4	mg/L	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	N-NH3 (Ammonia)	0.054	mg/L	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	N-NO3 (Nitrate)	0.275	mg/L	ALS
L1779754-2	MP-06 TEMP1	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779754-4	MP-C-B	7-Jun-16	Conductivity	438	uS/cm	ALS
L1779754-4	MP-C-B	7-Jun-16	pH	8.26	pH units	ALS
L1779754-4	MP-C-B	7-Jun-16	Total Suspended Solids **(see Note 2)**	15.6	mg/L	ALS
L1779754-4	MP-C-B	7-Jun-16	N-NH3 (Ammonia)	0.027	mg/L	ALS
L1779754-4	MP-C-B	7-Jun-16	N-NO3 (Nitrate)	0.162	mg/L	ALS
L1779754-4	MP-C-B	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	Conductivity	438	uS/cm	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	pH	8.26	pH units	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	Total Suspended Solids **(see Note 2)**	12.1	mg/L	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	N-NH3 (Ammonia)	0.028	mg/L	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	N-NO3 (Nitrate)	0.162	mg/L	ALS
L1779754-5	MP-C-B (Duplicate)	7-Jun-16	Oil & Grease - Total	<4.0	mg/L	ALS
L1779754-3	MP-C-B01	7-Jun-16	Conductivity	376	uS/cm	ALS
L1779754-3	MP-C-B01	7-Jun-16	pH	8.12	pH units	ALS
L1779754-3	MP-C-B01	7-Jun-16	Total Suspended Solids	26.4	mg/L	ALS
L1779754-3	MP-C-B01	7-Jun-16	N-NH3 (Ammonia)	0.143	mg/L	ALS
L1779754-3	MP-C-B01	7-Jun-16	N-NO3 (Nitrate)	0.22	mg/L	ALS
L1779754-3	MP-C-B01	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787792-3	MP-C-B01	20-Jun-16	Conductivity	392	uS/cm	ALS
L1787792-3	MP-C-B01	20-Jun-16	pH	8.12	pH units	ALS
L1787792-3	MP-C-B01	20-Jun-16	Total Suspended Solids	13.1	mg/L	ALS
L1787792-3	MP-C-B01	20-Jun-16	N-NH3 (Ammonia)	0.172	mg/L	ALS
L1787792-3	MP-C-B01	20-Jun-16	N-NO3 (Nitrate)	1.16	mg/L	ALS
L1787792-3	MP-C-B01	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	Conductivity	<3.0	uS/cm	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	pH	6.83	pH units	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1787792-8	MP-C-B01 (Travel Blank)	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1784066-4	MP-C-H	13-Jun-16	Conductivity	147	uS/cm	ALS
L1784066-4	MP-C-H	13-Jun-16	pH	7.92	pH units	ALS
L1784066-4	MP-C-H	13-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1784066-4	MP-C-H	13-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1784066-4	MP-C-H	13-Jun-16	N-NO3 (Nitrate)	0.041	mg/L	ALS
L1784066-4	MP-C-H	13-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787792-4	MP-C-H	21-Jun-16	Conductivity	128	uS/cm	ALS
L1787792-4	MP-C-H	21-Jun-16	pH	8.01	pH units	ALS
L1787792-4	MP-C-H	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787792-4	MP-C-H	21-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787792-4	MP-C-H	21-Jun-16	N-NO3 (Nitrate)	0.02	mg/L	ALS
L1787792-4	MP-C-H	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779754-6	MP-Q1-01	7-Jun-16	Conductivity	282	uS/cm	ALS
L1779754-6	MP-Q1-01	7-Jun-16	pH	7.93	pH units	ALS
L1779754-6	MP-Q1-01	7-Jun-16	Total Suspended Solids	48.5	mg/L	ALS
L1779754-6	MP-Q1-01	7-Jun-16	N-NH3 (Ammonia)	0.032	mg/L	ALS
L1779754-6	MP-Q1-01	7-Jun-16	N-NO3 (Nitrate)	0.309	mg/L	ALS
L1779754-6	MP-Q1-01	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1781992-3	MP-Q1-01	11-Jun-16	pH	7.58	pH units	ALS
L1781992-3	MP-Q1-01	11-Jun-16	Total Suspended Solids	38.4	mg/L	ALS
L1781992-3	MP-Q1-01	11-Jun-16	Total Dissolved Solids	96	mg/L	ALS
L1781992-3	MP-Q1-01	11-Jun-16	Turbidity	7.78	NTU	ALS
L1784066-1	MP-Q1-01	13-Jun-16	pH	7.98	pH units	ALS
L1784066-1	MP-Q1-01	13-Jun-16	Total Suspended Solids	21.2	mg/L	ALS
L1784066-1	MP-Q1-01	13-Jun-16	Total Dissolved Solids	76	mg/L	ALS
L1784066-1	MP-Q1-01	13-Jun-16	Turbidity	3.82	NTU	ALS
L1784066-6	MP-Q1-01	14-Jun-16	Conductivity	120	uS/cm	ALS
L1784066-6	MP-Q1-01	14-Jun-16	pH	8	pH units	ALS
L1784066-6	MP-Q1-01	14-Jun-16	Total Suspended Solids	13.6	mg/L	ALS
L1784066-6	MP-Q1-01	14-Jun-16	N-NH3 (Ammonia)	0.022	mg/L	ALS
L1784066-6	MP-Q1-01	14-Jun-16	N-NO3 (Nitrate)	0.089	mg/L	ALS
L1784066-6	MP-Q1-01	14-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
48039	MP-Q1-01	14-Jun-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1787792-1	MP-Q1-01	20-Jun-16	Conductivity	122	uS/cm	ALS
L1787792-1	MP-Q1-01	20-Jun-16	pH	8	pH units	ALS
L1787792-1	MP-Q1-01	20-Jun-16	Total Suspended Solids	12.8	mg/L	ALS
L1787792-1	MP-Q1-01	20-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787792-1	MP-Q1-01	20-Jun-16	N-NO3 (Nitrate)	0.047	mg/L	ALS
L1787792-1	MP-Q1-01	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	Conductivity	122	uS/cm	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	pH	7.99	pH units	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	Total Suspended Solids	5.2	mg/L	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	N-NO3 (Nitrate)	0.047	mg/L	ALS
L1787792-7	MP-Q1-01 (Duplicate)	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790508-3	MP-Q1-01	28-Jun-16	pH	7.97	pH units	ALS
L1790508-3	MP-Q1-01	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1784066-8	MP-Q1-02	13-Jun-16	Conductivity	713	uS/cm	ALS
L1784066-8	MP-Q1-02	13-Jun-16	pH	7.98	pH units	ALS
L1784066-8	MP-Q1-02 (See Note)	13-Jun-16	Total Suspended Solids	**249**	mg/L	ALS
L1784066-8	MP-Q1-02	13-Jun-16	N-NH3 (Ammonia)	1.38	mg/L	ALS
L1784066-8	MP-Q1-02	13-Jun-16	N-NO3 (Nitrate)	5.38	mg/L	ALS
L1784066-8	MP-Q1-02	13-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1785018-2	MP-Q1-02 (Downstream)	16-Jun-16	pH	7.91	pH units	ALS
L1785018-2	MP-Q1-02 (Downstream)	16-Jun-16	Total Suspended Solids	9.2	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

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WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1785018-2	MP-Q1-02 (Downstream)	16-Jun-16	Total Dissolved Solids	124	mg/L	ALS
L1785018-2	MP-Q1-02 (Downstream)	16-Jun-16	Turbidity	6.25	NTU	ALS
L1787792-6	MP-Q1-02	20-Jun-16	Conductivity	422	uS/cm	ALS
L1787792-6	MP-Q1-02	20-Jun-16	pH	7.94	pH units	ALS
L1787792-6	MP-Q1-02	20-Jun-16	Total Suspended Solids	20.4	mg/L	ALS
L1787792-6	MP-Q1-02	20-Jun-16	N-NH3 (Ammonia)	1.16	mg/L	ALS
L1787792-6	MP-Q1-02	20-Jun-16	N-NO3 (Nitrate)	4.2	mg/L	ALS
L1787792-6	MP-Q1-02	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790508-4	MP-Q1-02	28-Jun-16	pH	7.92	pH units	ALS
L1790508-4	MP-Q1-02	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790508-5	MP-Q1-02 (Duplicate)	28-Jun-16	pH	7.88	pH units	ALS
L1790508-5	MP-Q1-02 (Duplicate)	28-Jun-16	Total Suspended Solids	2	mg/L	ALS
MARY RIVER MINE SITE						
L1779761-1	MS-01	7-Jun-16	pH	7.59	pH units	ALS
L1779761-1	MS-01	7-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1779761-1	MS-01	7-Jun-16	N-NH3 (Ammonia)	0.153	mg/L	ALS
L1779761-1	MS-01	7-Jun-16	Total Kjeldahl Nitrogen	8.7	mg/L	ALS
L1779761-1	MS-01	7-Jun-16	Total Phosphorus	1	mg/L	ALS
L1779761-1	MS-01	7-Jun-16	Faecal Coliforms	0	CFU/100mL	ALS
L1779761-1	MS-01	7-Jun-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1779761-1	MS-01	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	pH	7.5	pH units	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Total Suspended Solids	10.3	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	N-NH3 (Ammonia)	0.413	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Total Kjeldahl Nitrogen	2.13	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Total Phosphorus	0.0505	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Faecal Coliforms	0	CFU/100mL	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Biochemical Oxygen Demand	7.2	mg/L	ALS
L1779757-1	MS-MRY-04C	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
47966	MS-MRY-04C	7-Jun-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1779760-1	MS-MRY-6	7-Jun-16	pH	8.02	pH units	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Total Suspended Solids	3.8	mg/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Total Lead	<0.00010	mg/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Benzene	<0.50	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Ethylbenzene	<0.50	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Toluene	<0.50	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	F1 (C6-C10)	<100	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	F2 (C10-C16)	<100	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	F3 (C16-C34)	<250	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	F4 (C34-C50)	<250	ug/L	ALS
L1779760-1	MS-MRY-6	7-Jun-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	pH	6.74	pH units	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Total Suspended Solids	13.8	mg/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Total Lead	<0.00010	mg/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Benzene	<0.50	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Ethylbenzene	<0.50	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Toluene	<0.50	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	F1 (C6-C10)	<100	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	F2 (C10-C16)	<100	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	F3 (C16-C34)	<100	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	F4 (C34-C50)	<100	ug/L	ALS
L1787617-1	MS-MRY-6	21-Jun-16	Total Hydrocarbons (C6-C50)	<100	ug/L	ALS
L1791445-2	MS-08	24-Jun-16	Hardness (as CaCO3)	20	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	pH	6.93	pH units	ALS
L1791445-2	MS-08	24-Jun-16	Total Suspended Solids	8.3	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Total Dissolved Solids	13	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Turbidity	27	NTU	ALS
L1791445-2	MS-08	24-Jun-16	Alkalinity, Total (as CaCO3)	<10	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Ammonia, Total (as N)	0.117	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Chloride (Cl)	3.37	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Fluoride (F)	<0.020	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Nitrate (as N)	0.24	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Phosphorus, Total	0.0252	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Sulfate (SO4)	15.7	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Total Organic Carbon	<1.0	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Aluminum (Al)-Total	1.35	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Arsenic (As)-Total	0.00015	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Calcium (Ca)-Total	1.82	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Copper (Cu)-Total	0.0019	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Iron (Fe)-Total	1.43	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Lead (Pb)-Total	0.00092	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Magnesium (Mg)-Total	4.28	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Manganese (Mn)-Total	0.132	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Nickel (Ni)-Total	0.0036	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Potassium (K)-Total	0.948	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Selenium (Se)-Total	0.00008	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Sodium (Na)-Total	0.52	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Thallium (Tl)-Total	0.000029	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Uranium (U)-Total	0.000254	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Aluminum (Al)-Dissolved	0.0092	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Calcium (Ca)-Dissolved	1.74	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Copper (Cu)-Dissolved	0.00024	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Iron (Fe)-Dissolved	0.015	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Magnesium (Mg)-Dissolved	3.69	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Manganese (Mn)-Dissolved	0.12	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Molybdenum (Mo)-Dissolved	0.000102	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Nickel (Ni)-Dissolved	0.00164	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Potassium (K)-Dissolved	0.369	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Selenium (Se)-Dissolved	0.000075	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Sodium (Na)-Dissolved	<0.50	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Uranium (U)-Dissolved	0.000024	mg/L	ALS
L1791445-2	MS-08	24-Jun-16	Zinc (Zn)-Dissolved	<0.0010	mg/L	ALS
48141	MS-08	28-Jun-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1779756-1	MS-MRY-13A	6-Jun-16	Conductivity	168	uS/cm	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	pH	7.89	pH units	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Total Dissolved Solids	93	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Alkalinity, Total (as CaCO3)	76	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Dissolved Organic Carbon	4.6	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Total Organic Carbon	4.8	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Aluminum (Al)-Total	0.0053	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Antimony (Sb)-Total	0.00014	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Arsenic (As)-Total	0.0002	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Barium (Ba)-Total	0.0149	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Copper (Cu)-Total	0.00116	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Lithium (Li)-Total	0.0011	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Manganese (Mn)-Total	0.00123	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Molybdenum (Mo)-Total	0.000318	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Nickel (Ni)-Total	0.00964	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Strontium (Sr)-Total	0.012	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1779756-1	MS-MRY-13A	6-Jun-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Uranium (U)-Total	0.000348	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Phenols (4AAP)	0.0019	mg/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	F1 (C6-C10)	<100	ug/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	F2 (C10-C16)	<100	ug/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	F3 (C16-C34)	<250	ug/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	F4 (C34-C50)	<250	ug/L	ALS
L1779756-1	MS-MRY-13A	6-Jun-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1782767-1	MS-MRY-13A	14-Jun-16	pH	7.71	pH units	ALS
L1782767-1	MS-MRY-13A	14-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782767-1	MS-MRY-13A	14-Jun-16	Turbidity	0.32	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Conductivity	468	uS/cm	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	pH	8.13	pH units	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Total Dissolved Solids	288	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Alkalinity, Total (as CaCO3)	152	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Dissolved Organic Carbon	4.4	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Total Organic Carbon	4.9	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Aluminum (Al)-Total	<0.0030	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Antimony (Sb)-Total	0.0001	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Arsenic (As)-Total	0.00018	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Barium (Ba)-Total	0.0274	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Copper (Cu)-Total	0.00118	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Lithium (Li)-Total	0.0016	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Manganese (Mn)-Total	0.00634	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Molybdenum (Mo)-Total	0.000208	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Nickel (Ni)-Total	0.0112	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Strontium (Sr)-Total	0.0199	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Uranium (U)-Total	0.000543	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Phenols (4AAP)	0.0015	mg/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	F1 (C6-C10)	<100	ug/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	F2 (C10-C16)	<100	ug/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	F3 (C16-C34)	<250	ug/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	F4 (C34-C50)	<250	ug/L	ALS
L1787809-8	MS-MRY-13A	21-Jun-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1790062-10	MS-MRY-13A	28-Jun-16	pH	8.15	pH units	ALS
L1790062-10	MS-MRY-13A	28-Jun-16	Total Suspended Solids	4.8	mg/L	ALS
L1790062-10	MS-MRY-13A	28-Jun-16	Turbidity	0.49	NTU	ALS
L1779756-6	MS-C-A	6-Jun-16	Conductivity	52.8	uS/cm	ALS
L1779756-6	MS-C-A	6-Jun-16	pH	7.64	pH units	ALS
L1779756-6	MS-C-A	6-Jun-16	Total Suspended Solids	2.9	mg/L	ALS
L1779756-6	MS-C-A	6-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1779756-6	MS-C-A	6-Jun-16	N-NO3 (Nitrate)	<0.020	mg/L	ALS
L1779756-6	MS-C-A	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-4	MS-C-A	13-Jun-16	pH	7.6	pH units	ALS
L1782817-4	MS-C-A	13-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-4	MS-C-A	13-Jun-16	Total Dissolved Solids	40	mg/L	ALS
L1782817-4	MS-C-A	13-Jun-16	Turbidity	3.53	NTU	ALS
L1787809-1	MS-C-A	21-Jun-16	Conductivity	112	uS/cm	ALS
L1787809-1	MS-C-A	21-Jun-16	pH	7.81	pH units	ALS
L1787809-1	MS-C-A	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-1	MS-C-A	21-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787809-1	MS-C-A	21-Jun-16	N-NO3 (Nitrate)	0.05	mg/L	ALS
L1787809-1	MS-C-A	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-1	MS-C-A	28-Jun-16	pH	7.82	pH units	ALS
L1790062-1	MS-C-A	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790062-1	MS-C-A	28-Jun-16	Turbidity	0.53	mg/L	ALS
L1779756-7	MS-C-B	6-Jun-16	Conductivity	52	uS/cm	ALS
L1779756-7	MS-C-B	6-Jun-16	pH	7.64	pH units	ALS
L1779756-7	MS-C-B	6-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1779756-7	MS-C-B	6-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1779756-7	MS-C-B	6-Jun-16	N-NO3 (Nitrate)	0.022	mg/L	ALS
L1779756-7	MS-C-B	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-5	MS-C-B	13-Jun-16	pH	7.57	pH units	ALS
L1782817-5	MS-C-B	13-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-5	MS-C-B	13-Jun-16	Total Dissolved Solids	40	mg/L	ALS
L1782817-5	MS-C-B	13-Jun-16	Turbidity	3.64	NTU	ALS
L1787809-2	MS-C-B	21-Jun-16	Conductivity	115	uS/cm	ALS
L1787809-2	MS-C-B	21-Jun-16	pH	7.84	pH units	ALS
L1787809-2	MS-C-B	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-2	MS-C-B	21-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787809-2	MS-C-B	21-Jun-16	N-NO3 (Nitrate)	0.061	mg/L	ALS
L1787809-2	MS-C-B	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-2	MS-C-B	28-Jun-16	pH	7.66	pH units	ALS
L1790062-2	MS-C-B	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790062-2	MS-C-B	28-Jun-16	Turbidity	1.01	NTU	ALS
L1782817-6	MS-C-C	13-Jun-16	Conductivity	563	uS/cm	ALS
L1782817-6	MS-C-C	13-Jun-16	pH	7.79	pH units	ALS
L1782817-6	MS-C-C	13-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-6	MS-C-C	13-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1782817-6	MS-C-C	13-Jun-16	N-NO3 (Nitrate)	2.65	mg/L	ALS
L1782817-6	MS-C-C	13-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787809-3	MS-C-C	21-Jun-16	Conductivity	865	uS/cm	ALS
L1787809-3	MS-C-C	21-Jun-16	pH	7.99	pH units	ALS
L1787809-3	MS-C-C	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-3	MS-C-C	21-Jun-16	N-NH3 (Ammonia)	0.033	mg/L	ALS
L1787809-3	MS-C-C	21-Jun-16	N-NO3 (Nitrate)	9.53	mg/L	ALS
L1787809-3	MS-C-C	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-3	MS-C-C	27-Jun-16	pH	7.58	pH units	ALS
L1790062-3	MS-C-C	27-Jun-16	Total Suspended Solids	10	mg/L	ALS
L1790062-3	MS-C-C	27-Jun-16	Turbidity	1.07	NTU	ALS
L1790062-4	MS-C-C (Travel Blank)	27-Jun-16	pH	5.84	pH units	ALS
L1790062-4	MS-C-C (Travel Blank)	27-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790062-4	MS-C-C (Travel Blank)	27-Jun-16	Turbidity	0.11	NTU	ALS
L1779756-3	MS-C-D	6-Jun-16	Conductivity	251	uS/cm	ALS
L1779756-3	MS-C-D	6-Jun-16	pH	8.05	pH units	ALS
L1779756-3	MS-C-D	6-Jun-16	Total Suspended Solids	12.9	mg/L	ALS
L1779756-3	MS-C-D	6-Jun-16	N-NH3 (Ammonia)	0.028	mg/L	ALS
L1779756-3	MS-C-D	6-Jun-16	N-NO3 (Nitrate)	0.316	mg/L	ALS
L1779756-3	MS-C-D	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-7	MS-C-D	13-Jun-16	pH	7.89	pH units	ALS
L1782817-7	MS-C-D	13-Jun-16	Total Suspended Solids	12.8	mg/L	ALS
L1782817-7	MS-C-D	13-Jun-16	Total Dissolved Solids	116	mg/L	ALS
L1782817-7	MS-C-D	13-Jun-16	Turbidity	28.4	NTU	ALS
L1787809-4	MS-C-D	21-Jun-16	Conductivity	679	uS/cm	ALS
L1787809-4	MS-C-D	21-Jun-16	pH	8.24	pH units	ALS
L1787809-4	MS-C-D	21-Jun-16	Total Suspended Solids	2.4	mg/L	ALS
L1787809-4	MS-C-D	21-Jun-16	N-NH3 (Ammonia)	0.216	mg/L	ALS
L1787809-4	MS-C-D	21-Jun-16	N-NO3 (Nitrate)	4.45	mg/L	ALS
L1787809-4	MS-C-D	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-5	MS-C-D	27-Jun-16	pH	8.45	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1790062-5	MS-C-D	27-Jun-16	Total Suspended Solids	7.2	mg/L	ALS
L1790062-5	MS-C-D	27-Jun-16	Turbidity	2.51	NTU	ALS
L1779756-2	MS-C-E	6-Jun-16	Conductivity	200	uS/cm	ALS
L1779756-2	MS-C-E	6-Jun-16	pH	8.05	pH units	ALS
L1779756-2	MS-C-E	6-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1779756-2	MS-C-E	6-Jun-16	N-NH3 (Ammonia)	0.011	mg/L	ALS
L1779756-2	MS-C-E	6-Jun-16	N-NO3 (Nitrate)	0.401	mg/L	ALS
L1779756-2	MS-C-E	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-8	MS-C-E	13-Jun-16	pH	7.91	pH units	ALS
L1782817-8	MS-C-E	13-Jun-16	Total Suspended Solids	5.6	mg/L	ALS
L1782817-8	MS-C-E	13-Jun-16	Total Dissolved Solids	144	mg/L	ALS
L1782817-8	MS-C-E	13-Jun-16	Turbidity	12.6	NTU	ALS
L1787809-5	MS-C-E	21-Jun-16	Conductivity	551	uS/cm	ALS
L1787809-5	MS-C-E	21-Jun-16	pH	8.16	pH units	ALS
L1787809-5	MS-C-E	21-Jun-16	Total Suspended Solids	2	mg/L	ALS
L1787809-5	MS-C-E	21-Jun-16	N-NH3 (Ammonia)	0.031	mg/L	ALS
L1787809-5	MS-C-E	21-Jun-16	N-NO3 (Nitrate)	2.99	mg/L	ALS
L1787809-5	MS-C-E	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-6	MS-C-E	27-Jun-16	pH	8.01	pH units	ALS
L1790062-6	MS-C-E	27-Jun-16	Total Suspended Solids	2.4	mg/L	ALS
L1790062-6	MS-C-E	27-Jun-16	Turbidity	1.79	NTU	ALS
L1790062-7	MS-C-E (Duplicate)	27-Jun-16	pH	8.01	pH units	ALS
L1790062-7	MS-C-E (Duplicate)	27-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790062-7	MS-C-E (Duplicate)	27-Jun-16	Turbidity	1.78	NTU	ALS
L1782817-10	MS-C-G	14-Jun-16	Conductivity	49.9	uS/cm	ALS
L1782817-10	MS-C-G	14-Jun-16	pH	7.49	pH units	ALS
L1782817-10	MS-C-G	14-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-10	MS-C-G	14-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1782817-10	MS-C-G	14-Jun-16	N-NO3 (Nitrate)	0.088	mg/L	ALS
L1782817-10	MS-C-G	14-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1787809-12	MS-C-G	21-Jun-16	Conductivity	68.5	uS/cm	ALS
L1787809-12	MS-C-G	21-Jun-16	pH	7.78	pH units	ALS
L1787809-12	MS-C-G	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-12	MS-C-G	21-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787809-12	MS-C-G	21-Jun-16	N-NO3 (Nitrate)	0.058	mg/L	ALS
L1787809-12	MS-C-G	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-9	MS-C-G	28-Jun-16	pH	7.63	pH units	ALS
L1790062-9	MS-C-G	28-Jun-16	Total Suspended Solids	2	mg/L	ALS
L1790062-9	MS-C-G	28-Jun-16	Turbidity	0.54	NTU	ALS
L1779756-9	MS-C-H	6-Jun-16	Conductivity	92.9	uS/cm	ALS
L1779756-9	MS-C-H	6-Jun-16	pH	7.92	pH units	ALS
L1779756-9	MS-C-H	6-Jun-16	Total Suspended Solids	3	mg/L	ALS
L1779756-9	MS-C-H	6-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1779756-9	MS-C-H	6-Jun-16	N-NO3 (Nitrate)	0.026	mg/L	ALS
L1779756-9	MS-C-H	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-11	MS-C-H	14-Jun-16	pH	7.92	pH units	ALS
L1782817-11	MS-C-H	14-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-11	MS-C-H	14-Jun-16	Total Dissolved Solids	64	mg/L	ALS
L1782817-11	MS-C-H	14-Jun-16	Turbidity	3.53	NTU	ALS
L1787809-13	MS-C-H	21-Jun-16	Conductivity	189	uS/cm	ALS
L1787809-13	MS-C-H	21-Jun-16	pH	8.08	pH units	ALS
L1787809-13	MS-C-H	21-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-13	MS-C-H	21-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787809-13	MS-C-H	21-Jun-16	N-NO3 (Nitrate)	0.047	mg/L	ALS
L1787809-13	MS-C-H	21-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1779756-5	MQ-C-A	6-Jun-16	Conductivity	54.4	uS/cm	ALS
L1779756-5	MQ-C-A	6-Jun-16	pH	7.68	pH units	ALS
L1779756-5	MQ-C-A	6-Jun-16	Total Suspended Solids	6.2	mg/L	ALS
L1779756-5	MQ-C-A	6-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1779756-5	MQ-C-A	6-Jun-16	N-NO3 (Nitrate)	0.076	mg/L	ALS
L1779756-5	MQ-C-A	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-1	MQ-C-A	13-Jun-16	pH	7.9	pH units	ALS
L1782817-1	MQ-C-A	13-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1782817-1	MQ-C-A	13-Jun-16	Total Dissolved Solids	48	mg/L	ALS
L1782817-1	MQ-C-A	13-Jun-16	Turbidity	2.11	NTU	ALS
L1787809-9	MQ-C-A	20-Jun-16	Conductivity	62	uS/cm	ALS
L1787809-9	MQ-C-A	20-Jun-16	pH	7.81	pH units	ALS
L1787809-9	MQ-C-A	20-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1787809-9	MQ-C-A	20-Jun-16	N-NH3 (Ammonia)	<0.020	mg/L	ALS
L1787809-9	MQ-C-A	20-Jun-16	N-NO3 (Nitrate)	0.082	mg/L	ALS
L1787809-9	MQ-C-A	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-11	MQ-C-A	27-Jun-16	pH	7.7	pH units	ALS
L1790062-11	MQ-C-A	27-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790062-11	MQ-C-A	27-Jun-16	Turbidity	5.29	NTU	ALS
L1779756-13	MQ-C-B	7-Jun-16	Conductivity	99.6	uS/cm	ALS
L1779756-13	MQ-C-B	7-Jun-16	pH	7.76	pH units	ALS
L1779756-13	MQ-C-B	7-Jun-16	Total Suspended Solids **(see Note 4)**	**48**	mg/L	ALS
L1779756-13	MQ-C-B	7-Jun-16	N-NH3 (Ammonia)	0.266	mg/L	ALS
L1779756-13	MQ-C-B	7-Jun-16	N-NO3 (Nitrate)	0.766	mg/L	ALS
L1779756-13	MQ-C-B	7-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
47965	MQ-C-B	7-Jun-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1782817-2	MQ-C-B	13-Jun-16	pH	7.77	pH units	ALS
L1782817-2	MQ-C-B	13-Jun-16	Total Suspended Solids	4.8	mg/L	ALS
L1782817-2	MQ-C-B	13-Jun-16	Total Dissolved Solids	60	mg/L	ALS
L1782817-2	MQ-C-B	13-Jun-16	Turbidity	9.33	NTU	ALS
L1787809-10	MQ-C-B	20-Jun-16	Conductivity	222	uS/cm	ALS
L1787809-10	MQ-C-B	20-Jun-16	pH	7.9	pH units	ALS
L1787809-10	MQ-C-B	20-Jun-16	Total Suspended Solids	2.4	mg/L	ALS
L1787809-10	MQ-C-B	20-Jun-16	N-NH3 (Ammonia)	0.585	mg/L	ALS
L1787809-10	MQ-C-B	20-Jun-16	N-NO3 (Nitrate)	2.56	mg/L	ALS
L1787809-10	MQ-C-B	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-12	MQ-C-B	27-Jun-16	pH	7.85	pH units	ALS
L1790062-12	MQ-C-B	27-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1790062-12	MQ-C-B	27-Jun-16	Turbidity	3.98	NTU	ALS
L1779756-4	MQ-C-D	6-Jun-16	Conductivity	116	uS/cm	ALS
L1779756-4	MQ-C-D	6-Jun-16	pH	7.8	pH units	ALS
L1779756-4	MQ-C-D	6-Jun-16	Total Suspended Solids	7.8	mg/L	ALS
L1779756-4	MQ-C-D	6-Jun-16	N-NH3 (Ammonia)	0.135	mg/L	ALS
L1779756-4	MQ-C-D	6-Jun-16	N-NO3 (Nitrate)	0.526	mg/L	ALS
L1779756-4	MQ-C-D	6-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1782817-3	MQ-C-D	13-Jun-16	pH	7.77	pH units	ALS
L1782817-3	MQ-C-D	13-Jun-16	Total Suspended Solids	5.2	mg/L	ALS
L1782817-3	MQ-C-D	13-Jun-16	Total Dissolved Solids	100	mg/L	ALS
L1782817-3	MQ-C-D	13-Jun-16	Turbidity	13.5	NTU	ALS
L1787809-11	MQ-C-D	20-Jun-16	Conductivity	339	uS/cm	ALS
L1787809-11	MQ-C-D	20-Jun-16	pH	8.17	pH units	ALS
L1787809-11	MQ-C-D	20-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1787809-11	MQ-C-D	20-Jun-16	N-NH3 (Ammonia)	0.289	mg/L	ALS
L1787809-11	MQ-C-D	20-Jun-16	N-NO3 (Nitrate)	1.18	mg/L	ALS
L1787809-11	MQ-C-D	20-Jun-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1790062-13	MQ-C-D	27-Jun-16	pH	8.21	pH units	ALS
L1790062-13	MQ-C-D	27-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1790062-13	MQ-C-D	27-Jun-16	Turbidity	8.65	NTU	ALS
MILNE PORT SITE						
L1793581-1	MP-01	5-Jul-16	pH	7.69	pH units	ALS
L1793581-1	MP-01	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793581-1	MP-01	5-Jul-16	Ammonia, Total (as N)	0.059	mg/L	ALS
L1793581-1	MP-01	5-Jul-16	Nitrate (as N)	7.6	mg/L	ALS
L1793581-1	MP-01	5-Jul-16	Total Phosphorus	6.8	mg/L	ALS
L1793581-1	MP-01	5-Jul-16	Faecal Coliforms	0	CFU/100mL	ALS
L1793581-1	MP-01	5-Jul-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1793581-1	MP-01	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1793576-1	MP-01A (Pre-Discharge)	5-Jul-16	pH	10.16	pH units	ALS
L1793576-1	MP-01A (Pre-Discharge)	5-Jul-16	Total Suspended Solids	80	mg/L	ALS
L1793576-1	MP-01A (Pre-Discharge)	5-Jul-16	Total Dissolved Solids	1190	mg/L	ALS
L1793576-1	MP-01A (Pre-Discharge)	5-Jul-16	Turbidity	39.7	NTU	ALS
L1800885-1	MP-04-LF	18-Jul-16	pH	8.36	pH units	ALS
L1800885-1	MP-04-LF	18-Jul-16	Total Suspended Solids	3.3	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

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WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1800885-1	MP-04-LF	18-Jul-16	Lead (Pb)-Total	0.00024	mg/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	Oil and Grease, Total	3.2	mg/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	Benzene	<0.50	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	Ethylbenzene	<0.50	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	Toluene	<0.50	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	o-Xylene	<0.50	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	m+p-Xylenes	<1.0	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	F1-BTEX	<100	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	F2 (C10-C16)	1070	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	F3 (C16-C34)	4340	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	F4 (C34-C50)	<250	ug/L	ALS
L1800885-1	MP-04-LF	18-Jul-16	Total Hydrocarbons (C6-C50)	5410	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	pH	8.07	pH units	ALS
L1800885-2	MP-04-SD	18-Jul-16	Total Suspended Solids	26	mg/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Lead (Pb)-Total	0.00025	mg/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Oil and Grease, Total	9.2	mg/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Benzene	<0.50	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Ethylbenzene	<0.50	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Toluene	<0.50	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	o-Xylene	<0.50	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	m+p-Xylenes	<1.0	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	F1-BTEX	<100	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	F2 (C10-C16)	1560	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	F3 (C16-C34)	12300	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	F4 (C34-C50)	1690	ug/L	ALS
L1800885-2	MP-04-SD	18-Jul-16	Total Hydrocarbons (C6-C50)	15600	ug/L	ALS
L1800881-1	MP-05	18-Jul-16	Hardness (as CaCO3)	281	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	pH	8.3	pH units	ALS
L1800881-1	MP-05	18-Jul-16	Total Suspended Solids	4	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Total Dissolved Solids	910	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Turbidity	4.32	NTU	ALS
L1800881-1	MP-05	18-Jul-16	Alkalinity, Total (as CaCO3)	161	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Chloride (Cl)	331	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Fluoride (F)	0.537	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Nitrate (as N)	6.72	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Total Kjeldahl Nitrogen	1.43	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Phosphorus, Total	0.0104	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Sulfate (SO4)	89.8	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Dissolved Organic Carbon	5	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Total Organic Carbon	5.1	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Aluminum (Al)-Total	0.106	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Arsenic (As)-Total	0.00033	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Calcium (Ca)-Total	55.9	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Copper (Cu)-Total	0.0017	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Iron (Fe)-Total	0.087	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Magnesium (Mg)-Total	37.1	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Manganese (Mn)-Total	0.00874	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Molybdenum (Mo)-Total	0.00911	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Nickel (Ni)-Total	<0.0010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Potassium (K)-Total	15.2	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Selenium (Se)-Total	0.000195	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Sodium (Na)-Total	200 *	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Thallium (Tl)-Total	0.000013	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Uranium (U)-Total	0.0224	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Zinc (Zn)-Total	0.0125	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Aluminum (Al)-Dissolved	0.0327	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Arsenic (As)-Dissolved	0.00032	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Calcium (Ca)-Dissolved	53.5	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Copper (Cu)-Dissolved	0.00147	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Magnesium (Mg)-Dissolved	35.7	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Manganese (Mn)-Dissolved	0.00474	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Molybdenum (Mo)-Dissolved	0.00865	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Potassium (K)-Dissolved	14.6	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Selenium (Se)-Dissolved	0.000201	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Sodium (Na)-Dissolved	191 *	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Thallium (Tl)-Dissolved	0.00001	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Uranium (U)-Dissolved	0.0228	mg/L	ALS
L1800881-1	MP-05	18-Jul-16	Zinc (Zn)-Dissolved	0.0091	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Hardness (as CaCO3)	435	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	pH	8.11	pH units	ALS
L1800881-2	MP-06	18-Jul-16	Total Suspended Solids	2.8	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Total Dissolved Solids	824	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Turbidity	1.68	NTU	ALS
L1800881-2	MP-06	18-Jul-16	Alkalinity, Total (as CaCO3)	67	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Chloride (Cl)	198	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Fluoride (F)	0.125	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Nitrate (as N)	3.83	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Total Kjeldahl Nitrogen	0.68	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Phosphorus, Total	0.007	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Sulfate (SO4)	304	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Dissolved Organic Carbon	2.2	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Total Organic Carbon	2.3	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Aluminum (Al)-Total	0.019	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Arsenic (As)-Total	0.00016	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Calcium (Ca)-Total	70	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Copper (Cu)-Total	<0.0010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Iron (Fe)-Total	<0.050	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Magnesium (Mg)-Total	69.3	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Manganese (Mn)-Total	0.0754	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Molybdenum (Mo)-Total	0.00405	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Nickel (Ni)-Total	<0.0010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Potassium (K)-Total	8.38	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Selenium (Se)-Total	0.00113	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Sodium (Na)-Total	91.3	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Thallium (Tl)-Total	0.000034	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Uranium (U)-Total	0.0176	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Aluminum (Al)-Dissolved	0.0082	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Arsenic (As)-Dissolved	0.00015	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Calcium (Ca)-Dissolved	65.8	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Copper (Cu)-Dissolved	0.00145	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Iron (Fe)-Dissolved	0.195	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Magnesium (Mg)-Dissolved	65.8	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Manganese (Mn)-Dissolved	0.0363	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Molybdenum (Mo)-Dissolved	0.00376	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Nickel (Ni)-Dissolved	0.00073	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Potassium (K)-Dissolved	7.9	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Selenium (Se)-Dissolved	0.00115	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Sodium (Na)-Dissolved	87.3	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Thallium (Tl)-Dissolved	0.000031	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Uranium (U)-Dissolved	0.0172	mg/L	ALS
L1800881-2	MP-06	18-Jul-16	Zinc (Zn)-Dissolved	0.0017	mg/L	ALS
48376	MP-06	18-Jul-16	Acute Toxicity	non-lethal	mortality %	Aquatox

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1793579-3	MP-06 TEMP	5-Jul-16	Conductivity	555	uS/cm	ALS
L1793579-3	MP-06 TEMP	5-Jul-16	pH	8.21	pH units	ALS
L1793579-3	MP-06 TEMP	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793579-3	MP-06 TEMP	5-Jul-16	Ammonia, Total (as N)	0.04	mg/L	ALS
L1793579-3	MP-06 TEMP	5-Jul-16	Nitrate (as N)	0.503	mg/L	ALS
L1793579-3	MP-06 TEMP	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	Conductivity	536	uS/cm	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	pH	8.38	pH units	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	Total Suspended Solids	5.6	mg/L	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	Ammonia, Total (as N)	0.08	mg/L	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	Nitrate (as N)	1.01	mg/L	ALS
L1793579-4	MP-06 TEMP1	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1804264-6	MP-06 TEMP1	26-Jul-16	pH	8.11	pH units	ALS
L1804264-6	MP-06 TEMP1	26-Jul-16	Total Suspended Solids	4.8	mg/L	ALS
L1793579-7	MP-C-B	5-Jul-16	Conductivity	527	uS/cm	ALS
L1793579-7	MP-C-B	5-Jul-16	pH	8.36	pH units	ALS
L1793579-7	MP-C-B	5-Jul-16	Total Suspended Solids	19.6	mg/L	ALS
L1793579-7	MP-C-B	5-Jul-16	Ammonia, Total (as N)	0.101	mg/L	ALS
L1793579-7	MP-C-B	5-Jul-16	Nitrate (as N)	1.24	mg/L	ALS
L1793579-7	MP-C-B	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1804264-4	MP-C-B	26-Jul-16	pH	8.37	pH units	ALS
L1804264-4	MP-C-B	26-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1793579-5	MP-C-B01	5-Jul-16	Conductivity	513	uS/cm	ALS
L1793579-5	MP-C-B01	5-Jul-16	pH	8.28	pH units	ALS
L1793579-5	MP-C-B01	5-Jul-16	Total Suspended Solids	9.3	mg/L	ALS
L1793579-5	MP-C-B01	5-Jul-16	Ammonia, Total (as N)	0.051	mg/L	ALS
L1793579-5	MP-C-B01	5-Jul-16	Nitrate (as N)	1.84	mg/L	ALS
L1793579-5	MP-C-B01	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1797757-5	MP-C-B01	12-Jul-16	pH	8.3	uS/cm	ALS
L1797757-5	MP-C-B01	12-Jul-16	Total Suspended Solids	2	pH units	ALS
L1797757-5	MP-C-B01	12-Jul-16	Total Dissolved Solids	317	mg/L	ALS
L1797757-5	MP-C-B01	12-Jul-16	Turbidity	5.43	mg/L	ALS
L1800892-1	MP-C-B01	18-Jul-16	Conductivity	589	uS/cm	ALS
L1800892-1	MP-C-B01	18-Jul-16	pH	8.37	pH units	ALS
L1800892-1	MP-C-B01	18-Jul-16	Total Suspended Solids	3.2	mg/L	ALS
L1800892-1	MP-C-B01	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800892-1	MP-C-B01	18-Jul-16	Nitrate (as N)	1.84	mg/L	ALS
L1800892-1	MP-C-B01	18-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1804264-5	MP-C-B01	26-Jul-16	pH	8.3	uS/cm	ALS
L1804264-5	MP-C-B01	26-Jul-16	Total Suspended Solids	<2.0	pH units	ALS
L1793579-6	MP-C-B0101	5-Jul-16	Conductivity	513	uS/cm	ALS
L1793579-6	MP-C-B0101	5-Jul-16	pH	8.29	pH units	ALS
L1793579-6	MP-C-B0101	5-Jul-16	Total Suspended Solids	7.7	mg/L	ALS
L1793579-6	MP-C-B0101	5-Jul-16	Ammonia, Total (as N)	0.056	mg/L	ALS
L1793579-6	MP-C-B0101	5-Jul-16	Nitrate (as N)	1.85	mg/L	ALS
L1793579-6	MP-C-B0101	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1797757-3	MP-C-D	12-Jul-16	pH	8.41	pH units	ALS
L1797757-3	MP-C-D	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797757-3	MP-C-D	12-Jul-16	Total Dissolved Solids	317	mg/L	ALS
L1797757-3	MP-C-D	12-Jul-16	Turbidity	4.07	NTU	ALS
L1793579-8	MP-C-H	5-Jul-16	Conductivity	183	uS/cm	ALS
L1793579-8	MP-C-H	5-Jul-16	pH	8.21	pH units	ALS
L1793579-8	MP-C-H	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793579-8	MP-C-H	5-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1793579-8	MP-C-H	5-Jul-16	Nitrate (as N)	0.055	mg/L	ALS
L1793579-8	MP-C-H	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1797757-4	MP-C-H	12-Jul-16	pH	8.23	pH units	ALS
L1797757-4	MP-C-H	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797757-4	MP-C-H	12-Jul-16	Total Dissolved Solids	125	mg/L	ALS
L1797757-4	MP-C-H	12-Jul-16	Turbidity	0.15	NTU	ALS
L1800892-4	MP-C-H	18-Jul-16	Conductivity	258	uS/cm	ALS
L1800892-4	MP-C-H	18-Jul-16	pH	8.33	pH units	ALS
L1800892-4	MP-C-H	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800892-4	MP-C-H	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800892-4	MP-C-H	18-Jul-16	Nitrate (as N)	0.121	mg/L	ALS
L1800892-4	MP-C-H	18-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1804264-7	MP-C-H	26-Jul-16	pH	8.27	pH units	ALS
L1804264-7	MP-C-H	26-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793579-1	MP-Q1-01	5-Jul-16	Conductivity	220	uS/cm	ALS
L1793579-1	MP-Q1-01	5-Jul-16	pH	8.05	pH units	ALS
L1793579-1	MP-Q1-01	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793579-1	MP-Q1-01	5-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1793579-1	MP-Q1-01	5-Jul-16	Nitrate (as N)	0.481	mg/L	ALS
L1793579-1	MP-Q1-01	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
48238	MP-Q1-01	5-Jul-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1797757-1	MP-Q1-01	12-Jul-16	pH	8.01	pH units	ALS
L1797757-1	MP-Q1-01	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797757-1	MP-Q1-01	12-Jul-16	Total Dissolved Solids	155	mg/L	ALS
L1797757-1	MP-Q1-01	12-Jul-16	Turbidity	0.51	NTU	ALS
L1800892-3	MP-Q1-01	18-Jul-16	Conductivity	306	uS/cm	ALS
L1800892-3	MP-Q1-01	18-Jul-16	pH	8.28	pH units	ALS
L1800892-3	MP-Q1-01	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800892-3	MP-Q1-01	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800892-3	MP-Q1-01	18-Jul-16	Nitrate (as N)	1.02	mg/L	ALS
L1800892-3	MP-Q1-01	18-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1804264-3	MP-Q1-01	26-Jul-16	pH	8.13	pH units	ALS
L1804264-3	MP-Q1-01	26-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1793579-2	MP-Q1-02	5-Jul-16	Conductivity	611	uS/cm	ALS
L1793579-2	MP-Q1-02	5-Jul-16	pH	7.98	pH units	ALS
L1793579-2	MP-Q1-02	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793579-2	MP-Q1-02	5-Jul-16	Ammonia, Total (as N)	0.552	mg/L	ALS
L1793579-2	MP-Q1-02	5-Jul-16	Nitrate (as N)	7.77	mg/L	ALS
L1793579-2	MP-Q1-02	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1797757-2	MP-Q1-02	12-Jul-16	pH	7.97	pH units	ALS
L1797757-2	MP-Q1-02	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797757-2	MP-Q1-02	12-Jul-16	Total Dissolved Solids	450	mg/L	ALS
L1797757-2	MP-Q1-02	12-Jul-16	Turbidity	0.83	NTU	ALS
L1800892-2	MP-Q1-02	18-Jul-16	Conductivity	818	uS/cm	ALS
L1800892-2	MP-Q1-02	18-Jul-16	pH	8.16	pH units	ALS
L1800892-2	MP-Q1-02	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800892-2	MP-Q1-02	18-Jul-16	Ammonia, Total (as N)	0.189	mg/L	ALS
L1800892-2	MP-Q1-02	18-Jul-16	Nitrate (as N)	12	mg/L	ALS
L1800892-2	MP-Q1-02	18-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
48374	MP-Q1-02	18-Jul-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1804264-1	MP-Q1-02	26-Jul-16	pH	7.97	pH units	ALS
L1804264-1	MP-Q1-02	26-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1804264-2	MP-Q1-0201	26-Jul-16	pH	7.99	pH units	ALS
L1804264-2	MP-Q1-0201	26-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1793465-1	MS-01	5-Jul-16	pH	7.39	pH units	ALS
L1793465-1	MS-01	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1793465-1	MS-01	5-Jul-16	Ammonia, Total (as N)	0.177	mg/L	ALS
L1793465-1	MS-01	5-Jul-16	Total Kjeldahl Nitrogen	7.2	mg/L	ALS
L1793465-1	MS-01	5-Jul-16	Total Phosphorus	1.11	mg/L	ALS
L1793465-1	MS-01	5-Jul-16	Faecal Coliforms	0	CFU/100mL	ALS
L1793465-1	MS-01	5-Jul-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1793465-1	MS-01	5-Jul-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1792827-1	MS-03	5-Jul-16	pH	7.6	pH units	ALS
L1792827-1	MS-03	5-Jul-16	Total Suspended Solids	6.8	mg/L	ALS
L1792827-1	MS-03	5-Jul-16	Lead (Pb)-Total	0.00058	mg/L	ALS
L1792827-1	MS-03	5-Jul-16	Oil and Grease, Total	**20.2**	mg/L	ALS
L1792827-1	MS-03	5-Jul-16	Benzene	<0.50	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	Ethylbenzene	<0.50	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	Toluene	0.76	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	o-Xylene	5.36	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	m+p-Xylenes	5	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	F1-BTEX	<100	ug/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1792827-1	MS-03	5-Jul-16	F2 (C10-C16)	11500	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	F3 (C16-C34)	15800	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	F4 (C34-C50)	280	ug/L	ALS
L1792827-1	MS-03	5-Jul-16	Total Hydrocarbons (C6-C50)	27700	ug/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	pH	7.24	pH units	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Total Suspended Solids	9.6	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Total Dissolved Solids	50	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Turbidity	19.6	NTU	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Aluminum (Al)-Total	0.65	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Arsenic (As)-Total	0.0001	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Calcium (Ca)-Total	2.75	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Copper (Cu)-Total	0.0013	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Iron (Fe)-Total	0.7	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Lead (Pb)-Total	0.00061	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Magnesium (Mg)-Total	4.25	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Manganese (Mn)-Total	0.106	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Molybdenum (Mo)-Total	0.000125	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Nickel (Ni)-Total	0.00215	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Potassium (K)-Total	0.697	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Selenium (Se)-Total	0.000069	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Sodium (Na)-Total	<0.50	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Thallium (Tl)-Total	0.000018	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Uranium (U)-Total	0.000186	mg/L	ALS
L1796641-1	MS-08 (MMER Pre-Discharge)	12-Jul-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Hardness (as CaCO3)	25	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	pH	7.31	pH units	ALS
L1801067-1	MS-08	19-Jul-16	Total Suspended Solids	10.4	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Total Dissolved Solids	41	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Turbidity	20.8	NTU	ALS
L1801067-1	MS-08	19-Jul-16	Alkalinity, Total (as CaCO3)	11	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Chloride (Cl)	0.64	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Fluoride (F)	<0.020	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Nitrate (as N)	0.221	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Total Kjeldahl Nitrogen	<0.15	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Phosphorus, Total	0.0155	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Sulfate (SO4)	16.9	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Total Organic Carbon	<1.0	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Aluminum (Al)-Total	0.66	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Arsenic (As)-Total	0.00011	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Calcium (Ca)-Total	2.98	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Copper (Cu)-Total	0.0053	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Iron (Fe)-Total	0.774	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Lead (Pb)-Total	0.00061	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Magnesium (Mg)-Total	4.62	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Manganese (Mn)-Total	0.0972	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Nickel (Ni)-Total	0.0024	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Potassium (K)-Total	0.776	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Selenium (Se)-Total	0.00008	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Sodium (Na)-Total	<0.50	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Thallium (Tl)-Total	0.000017	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Uranium (U)-Total	0.000192	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Zinc (Zn)-Total	0.005	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Aluminum (Al)-Dissolved	0.0136	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Calcium (Ca)-Dissolved	3.01	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Copper (Cu)-Dissolved	<0.00020	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Iron (Fe)-Dissolved	0.012	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Magnesium (Mg)-Dissolved	4.27	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Manganese (Mn)-Dissolved	0.0826	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Molybdenum (Mo)-Dissolved	0.000133	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Nickel (Ni)-Dissolved	0.00109	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Potassium (K)-Dissolved	0.514	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Selenium (Se)-Dissolved	0.000096	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Sodium (Na)-Dissolved	<0.50	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Uranium (U)-Dissolved	0.000033	mg/L	ALS
L1801067-1	MS-08	19-Jul-16	Zinc (Zn)-Dissolved	0.0034	mg/L	ALS
48375	MS-08	19-Jul-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Hardness (as CaCO3)	239	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	pH	7.45	pH units	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Total Suspended Solids	4.2	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Total Dissolved Solids	349	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Turbidity	NA	NTU	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Alkalinity, Total (as CaCO3)	14	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Ammonia, Total (as N)	0.17	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Chloride (Cl)	3.25	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Fluoride (F)	0.028	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Nitrate (as N)	1.91	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Total Kjeldahl Nitrogen	0.43	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Phosphorus, Total	<0.0030	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Sulfate (SO4)	223	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Dissolved Organic Carbon	1.5	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Total Organic Carbon	<1.0	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Aluminum (Al)-Total	0.377	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Cadmium (Cd)-Total	0.000062	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Calcium (Ca)-Total	23.1	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Copper (Cu)-Total	0.0036	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Iron (Fe)-Total	1.24	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Lead (Pb)-Total	0.0003	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Magnesium (Mg)-Total	41.9	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Manganese (Mn)-Total	1.58	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Mercury (Hg)-Total	NA	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Nickel (Ni)-Total	0.0212	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Potassium (K)-Total	1.22	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Selenium (Se)-Total	0.000623	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Sodium (Na)-Total	1.15	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Thallium (Tl)-Total	0.000019	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Uranium (U)-Total	0.000195	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Zinc (Zn)-Total	0.0157	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Aluminum (Al)-Dissolved	<0.0050	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Cadmium (Cd)-Dissolved	0.000056	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Calcium (Ca)-Dissolved	23.1	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Copper (Cu)-Dissolved	0.00051	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Magnesium (Mg)-Dissolved	44	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Manganese (Mn)-Dissolved	1.61	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Mercury (Hg)-Dissolved	NA	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Molybdenum (Mo)-Dissolved	0.000117	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Nickel (Ni)-Dissolved	0.0213	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Potassium (K)-Dissolved	1.04	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Selenium (Se)-Dissolved	0.000657	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Sodium (Na)-Dissolved	1.12	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Thallium (Tl)-Dissolved	0.000013	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Uranium (U)-Dissolved	0.000043	mg/L	ALS
L1805159-1	MS-08 (MMER Pre-Discharge)	26-Jul-16	Zinc (Zn)-Dissolved	0.0016	mg/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	pH	6.88	pH units	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Total Suspended Solids	5.2	mg/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Lead (Pb)-Total	<0.0010	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1796628-1	MS-MRY-6	11-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Benzene	<0.50	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Ethylbenzene	<0.50	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Toluene	<0.50	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	F2 (C10-C16)	<100	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	F3 (C16-C34)	310	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	F4 (C34-C50)	<250	ug/L	ALS
L1796628-1	MS-MRY-6	11-Jul-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1792842-13	MS-MRY-13A	42556	Conductivity	840	uS/cm	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	pH	7.5	pH units	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Total Dissolved Solids	485	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Alkalinity, Total (as CaCO3)	216	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Dissolved Organic Carbon	5.4	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Total Organic Carbon	5	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Aluminum (Al)-Total	<0.0030	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Antimony (Sb)-Total	0.00012	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Arsenic (As)-Total	0.00026	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Barium (Ba)-Total	0.052	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Cobalt (Co)-Total	0.00016	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Copper (Cu)-Total	0.00102	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Lithium (Li)-Total	0.0029	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Manganese (Mn)-Total	0.00583	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Molybdenum (Mo)-Total	0.000183	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Nickel (Ni)-Total	0.0123	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Strontium (Sr)-Total	0.0396	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Uranium (U)-Total	0.00117	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Phenols (4AAP)	0.002	mg/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	F2 (C10-C16)	<100	ug/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	F3 (C16-C34)	<250	ug/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	F4 (C34-C50)	<250	ug/L	ALS
L1792842-13	MS-MRY-13A	5-Jul-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Conductivity	962	uS/cm	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	pH	7.81	pH units	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Total Dissolved Solids	515	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Alkalinity, Total (as CaCO3)	192	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Dissolved Organic Carbon	5.2	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Total Organic Carbon	5	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Aluminum (Al)-Total	0.0376	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Arsenic (As)-Total	0.00016	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Barium (Ba)-Total	0.0521	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Cobalt (Co)-Total	0.00021	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Copper (Cu)-Total	0.00137	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Iron (Fe)-Total	0.082	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Lead (Pb)-Total	0.000068	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Lithium (Li)-Total	0.0033	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Manganese (Mn)-Total	0.00457	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Molybdenum (Mo)-Total	0.000135	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Nickel (Ni)-Total	0.0114	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Strontium (Sr)-Total	0.0411	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Uranium (U)-Total	0.000631	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Phenols (4AAP)	0.0016	mg/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	F2 (C10-C16)	<100	ug/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	F3 (C16-C34)	<250	ug/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	F4 (C34-C50)	<250	ug/L	ALS
L1792842-12	MS-MRY-13B	4-Jul-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1796590-7	MS-MRY-13B	11-Jul-16	pH	7.93	pH units	ALS
L1796590-7	MS-MRY-13B	11-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-7	MS-MRY-13B	11-Jul-16	Turbidity	0.49	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Conductivity	1290	uS/cm	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	pH	8.2	pH units	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Total Suspended Solids	10.1	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Total Dissolved Solids	930	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Alkalinity, Total (as CaCO3)	182	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Dissolved Organic Carbon	3.6	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Total Organic Carbon	4	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Aluminum (Al)-Total	0.0054	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Antimony (Sb)-Total	0.00011	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Arsenic (As)-Total	0.00011	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Barium (Ba)-Total	0.0654	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Copper (Cu)-Total	0.00099	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Lithium (Li)-Total	0.0026	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Manganese (Mn)-Total	0.00177	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Molybdenum (Mo)-Total	0.000122	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Nickel (Ni)-Total	0.00948	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Strontium (Sr)-Total	0.0504	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Uranium (U)-Total	0.000808	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Phenols (4AAP)	0.0033	mg/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	F1 (C6-C10)	<100	ug/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	F2 (C10-C16)	<100	ug/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	F3 (C16-C34)	<250	ug/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	F4 (C34-C50)	<250	ug/L	ALS
L1800901-1	MS-MRY-13B	18-Jul-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1803758-12	MS-MRY-13B	25-Jul-16	pH	8.1	pH units	ALS
L1803758-12	MS-MRY-13B	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-12	MS-MRY-13B	25-Jul-16	Turbidity	0.53	NTU	ALS
L1792842-9	MS-C-A	4-Jul-16	Conductivity	186	uS/cm	ALS
L1792842-9	MS-C-A	4-Jul-16	pH	7.76	pH units	ALS
L1792842-9	MS-C-A	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-9	MS-C-A	4-Jul-16	Ammonia, Total (as N)	0.039	mg/L	ALS
L1792842-9	MS-C-A	4-Jul-16	Nitrate (as N)	0.484	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1792842-9	MS-C-A	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-8	MS-C-A	11-Jul-16	pH	7.71	pH units	ALS
L1796590-8	MS-C-A	11-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-8	MS-C-A	11-Jul-16	Total Dissolved Solids	135	mg/L	ALS
L1796590-8	MS-C-A	11-Jul-16	Turbidity	0.34	NTU	ALS
L1800887-5	MS-C-A	18-Jul-16	Conductivity	266	uS/cm	ALS
L1800887-5	MS-C-A	18-Jul-16	pH	7.99	pH units	ALS
L1800887-5	MS-C-A	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-5	MS-C-A	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-5	MS-C-A	18-Jul-16	Nitrate (as N)	0.822	mg/L	ALS
L1800887-5	MS-C-A	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-3	MS-C-A	25-Jul-16	pH	7.91	pH units	ALS
L1803758-3	MS-C-A	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-3	MS-C-A	25-Jul-16	Total Dissolved Solids	140	mg/L	ALS
L1803758-3	MS-C-A	25-Jul-16	Turbidity	0.53	NTU	ALS
L1792842-10	MS-C-B	4-Jul-16	Conductivity	192	uS/cm	ALS
L1792842-10	MS-C-B	4-Jul-16	pH	7.6	pH units	ALS
L1792842-10	MS-C-B	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-10	MS-C-B	4-Jul-16	Ammonia, Total (as N)	0.034	mg/L	ALS
L1792842-10	MS-C-B	4-Jul-16	Nitrate (as N)	0.55	mg/L	ALS
L1792842-10	MS-C-B	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-9	MS-C-B	12-Jul-16	pH	7.56	pH units	ALS
L1796590-9	MS-C-B	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-9	MS-C-B	12-Jul-16	Total Dissolved Solids	138	mg/L	ALS
L1796590-9	MS-C-B	12-Jul-16	Turbidity	0.36	NTU	ALS
L1800887-6	MS-C-B	18-Jul-16	Conductivity	278	uS/cm	ALS
L1800887-6	MS-C-B	18-Jul-16	pH	8.08	pH units	ALS
L1800887-6	MS-C-B	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-6	MS-C-B	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-6	MS-C-B	18-Jul-16	Nitrate (as N)	0.97	mg/L	ALS
L1800887-6	MS-C-B	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-4	MS-C-B	25-Jul-16	pH	7.71	pH units	ALS
L1803758-4	MS-C-B	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-4	MS-C-B	25-Jul-16	Total Dissolved Solids	150	mg/L	ALS
L1803758-4	MS-C-B	25-Jul-16	Turbidity	0.43	NTU	ALS
L1792842-7	MS-C-C	4-Jul-16	Conductivity	867	uS/cm	ALS
L1792842-7	MS-C-C	4-Jul-16	pH	7.52	pH units	ALS
L1792842-7	MS-C-C	4-Jul-16	Total Suspended Solids	3.6	mg/L	ALS
L1792842-7	MS-C-C	4-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1792842-7	MS-C-C	4-Jul-16	Nitrate (as N)	6.73	mg/L	ALS
L1792842-7	MS-C-C	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-4	MS-C-C	11-Jul-16	pH	7.92	pH units	ALS
L1803758-4	MS-C-C	11-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-4	MS-C-C	11-Jul-16	Total Dissolved Solids	413	mg/L	ALS
L1803758-4	MS-C-C	11-Jul-16	Turbidity	0.79	NTU	ALS
L1800887-7	MS-C-C	18-Jul-16	Conductivity	909	uS/cm	ALS
L1800887-7	MS-C-C	18-Jul-16	pH	8.21	pH units	ALS
L1800887-7	MS-C-C	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-7	MS-C-C	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-7	MS-C-C	18-Jul-16	Nitrate (as N)	8.3	mg/L	ALS
L1800887-7	MS-C-C	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-5	MS-C-C	25-Jul-16	pH	7.95	pH units	ALS
L1803758-5	MS-C-C	25-Jul-16	Total Suspended Solids	4.8	mg/L	ALS
L1803758-5	MS-C-C	25-Jul-16	Total Dissolved Solids	525	mg/L	ALS
L1803758-5	MS-C-C	25-Jul-16	Turbidity	1.44	NTU	ALS
L1796590-5	MS-C-D	11-Jul-16	Conductivity	842	uS/cm	ALS
L1796590-5	MS-C-D	11-Jul-16	pH	7.92	pH units	ALS
L1796590-5	MS-C-D	11-Jul-16	Total Suspended Solids	4.4	mg/L	ALS
L1796590-5	MS-C-D	11-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1796590-5	MS-C-D	11-Jul-16	Nitrate (as N)	5.07	mg/L	ALS
L1796590-5	MS-C-D	11-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1800887-8	MS-C-D	18-Jul-16	Conductivity	867	uS/cm	ALS
L1800887-8	MS-C-D	18-Jul-16	pH	8.43	pH units	ALS
L1800887-8	MS-C-D	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-8	MS-C-D	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-8	MS-C-D	18-Jul-16	Nitrate (as N)	5.77	mg/L	ALS
L1800887-8	MS-C-D	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-6	MS-C-D	25-Jul-16	pH	8.4	pH units	ALS
L1803758-6	MS-C-D	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-6	MS-C-D	25-Jul-16	Total Dissolved Solids	485	mg/L	ALS
L1803758-6	MS-C-D	25-Jul-16	Turbidity	1.68	NTU	ALS
L1792842-5	MS-C-E	4-Jul-16	Conductivity	571	uS/cm	ALS
L1792842-5	MS-C-E	4-Jul-16	pH	7.89	pH units	ALS
L1792842-5	MS-C-E	4-Jul-16	Total Suspended Solids	8.8	mg/L	ALS
L1792842-5	MS-C-E	4-Jul-16	Ammonia, Total (as N)	0.041	mg/L	ALS
L1792842-5	MS-C-E	4-Jul-16	Nitrate (as N)	2.22	mg/L	ALS
L1792842-5	MS-C-E	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-6	MS-C-E	11-Jul-16	pH	7.62	pH units	ALS
L1796590-6	MS-C-E	11-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1796590-6	MS-C-E	11-Jul-16	Total Dissolved Solids	550	mg/L	ALS
L1796590-6	MS-C-E	11-Jul-16	Turbidity	1.33	NTU	ALS
L1800887-9	MS-C-E	18-Jul-16	Conductivity	780	uS/cm	ALS
L1800887-9	MS-C-E	18-Jul-16	pH	8.29	pH units	ALS
L1800887-9	MS-C-E	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-9	MS-C-E	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-9	MS-C-E	18-Jul-16	Nitrate (as N)	5.13	mg/L	ALS
L1800887-9	MS-C-E	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-11	MS-C-E	25-Jul-16	pH	8.13	pH units	ALS
L1803758-11	MS-C-E	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-11	MS-C-E	25-Jul-16	Total Dissolved Solids	460	mg/L	ALS
L1803758-11	MS-C-E	25-Jul-16	Turbidity	0.96	NTU	ALS
L1792842-6	MS-C-E01	4-Jul-16	Conductivity	588	uS/cm	ALS
L1792842-6	MS-C-E01	4-Jul-16	pH	7.89	pH units	ALS
L1792842-6	MS-C-E01	4-Jul-16	Total Suspended Solids	10	mg/L	ALS
L1792842-6	MS-C-E01	4-Jul-16	Ammonia, Total (as N)	0.06	mg/L	ALS
L1792842-6	MS-C-E01	4-Jul-16	Nitrate (as N)	2.36	mg/L	ALS
L1792842-6	MS-C-E01	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1792842-11	MS-C-F	4-Jul-16	Conductivity	233	uS/cm	ALS
L1792842-11	MS-C-F	4-Jul-16	pH	8.19	pH units	ALS
L1792842-11	MS-C-F	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-11	MS-C-F	4-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1792842-11	MS-C-F	4-Jul-16	Nitrate (as N)	0.956	mg/L	ALS
L1792842-11	MS-C-F	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-10	MS-C-F	12-Jul-16	pH	8.16	pH units	ALS
L1796590-10	MS-C-F (See Note)	12-Jul-16	Total Suspended Solids	**20.4**	mg/L	ALS
L1796590-10	MS-C-F	12-Jul-16	Total Dissolved Solids	175	mg/L	ALS
L1796590-10	MS-C-F	12-Jul-16	Turbidity	0.83	NTU	ALS
L1800887-10	MS-C-F	18-Jul-16	Conductivity	387	uS/cm	ALS
L1800887-10	MS-C-F	18-Jul-16	pH	8.23	pH units	ALS
L1800887-10	MS-C-F	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-10	MS-C-F	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-10	MS-C-F	18-Jul-16	Nitrate (as N)	1.78	mg/L	ALS
L1800887-10	MS-C-F	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-14	MS-C-F	25-Jul-16	pH	8.13	pH units	ALS
L1803758-14	MS-C-F (See Note)	25-Jul-16	Total Suspended Solids	**53.3**	mg/L	ALS
L1803758-14	MS-C-F	25-Jul-16	Total Dissolved Solids	230	mg/L	ALS
L1803758-14	MS-C-F	25-Jul-16	Turbidity	24.5	NTU	ALS
L1806451-1	MS-C-F	29-Jul-16	pH	8.09	pH units	ALS
L1806451-1	MS-C-F	29-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1806451-1	MS-C-F	29-Jul-16	Total Dissolved Solids	200	mg/L	ALS
L1806451-1	MS-C-F	29-Jul-16	Turbidity	0.89	NTU	ALS
L1792842-8	MS-C-G	4-Jul-16	Conductivity	193	uS/cm	ALS
L1792842-8	MS-C-G	4-Jul-16	pH	7.53	pH units	ALS
L1792842-8	MS-C-G	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-8	MS-C-G	4-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1792842-8	MS-C-G	4-Jul-16	Nitrate (as N)	0.165	mg/L	ALS
L1792842-8	MS-C-G	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-12	MS-C-G	12-Jul-16	pH	7.51	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1796590-12	MS-C-G (See Note)	12-Jul-16	Total Suspended Solids	24	mg/L	ALS
L1796590-12	MS-C-G	12-Jul-16	Total Dissolved Solids	105	mg/L	ALS
L1796590-12	MS-C-G	12-Jul-16	Turbidity	0.58	NTU	ALS
L1800887-11	MS-C-G	18-Jul-16	Conductivity	209	uS/cm	ALS
L1800887-11	MS-C-G	18-Jul-16	pH	8.19	pH units	ALS
L1800887-11	MS-C-G	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-11	MS-C-G	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-11	MS-C-G	18-Jul-16	Nitrate (as N)	0.239	mg/L	ALS
L1800887-11	MS-C-G	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-7	MS-C-G	25-Jul-16	pH	7.72	pH units	ALS
L1803758-7	MS-C-G	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-7	MS-C-G	25-Jul-16	Total Dissolved Solids	110	mg/L	ALS
L1803758-7	MS-C-G	25-Jul-16	Turbidity	0.21	NTU	ALS
L1800887-12	MS-C-G01	18-Jul-16	Conductivity	209	uS/cm	ALS
L1800887-12	MS-C-G01	18-Jul-16	pH	8.17	pH units	ALS
L1800887-12	MS-C-G01	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-12	MS-C-G01	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-12	MS-C-G01	18-Jul-16	Nitrate (as N)	0.209	mg/L	ALS
L1800887-12	MS-C-G01	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1800887-13	MS-C-H	18-Jul-16	Conductivity	210	uS/cm	ALS
L1800887-13	MS-C-H	18-Jul-16	pH	8.28	pH units	ALS
L1800887-13	MS-C-H	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-13	MS-C-H	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-13	MS-C-H	18-Jul-16	Nitrate (as N)	<0.020	mg/L	ALS
L1800887-13	MS-C-H	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-8	MS-C-H	25-Jul-16	pH	8.09	pH units	ALS
L1803758-8	MS-C-H	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-8	MS-C-H	25-Jul-16	Total Dissolved Solids	105	mg/L	ALS
L1803758-8	MS-C-H	25-Jul-16	Turbidity	0.31	NTU	ALS
L1792842-1	MQ-C-A	4-Jul-16	Conductivity	115	uS/cm	ALS
L1792842-1	MQ-C-A	4-Jul-16	pH	7.8	pH units	ALS
L1792842-1	MQ-C-A	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792842-1	MQ-C-A	4-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1792842-1	MQ-C-A	4-Jul-16	Nitrate (as N)	0.05	mg/L	ALS
L1792842-1	MQ-C-A	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-1	MQ-C-A	11-Jul-16	pH	8.01	pH units	ALS
L1796590-1	MQ-C-A	11-Jul-16	Total Suspended Solids	3.2	mg/L	ALS
L1796590-1	MQ-C-A	11-Jul-16	Total Dissolved Solids	100	mg/L	ALS
L1796590-1	MQ-C-A	11-Jul-16	Turbidity	0.3	NTU	ALS
L1800887-1	MQ-C-A	18-Jul-16	Conductivity	204	uS/cm	ALS
L1800887-1	MQ-C-A	18-Jul-16	pH	8.29	pH units	ALS
L1800887-1	MQ-C-A	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-1	MQ-C-A	18-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1800887-1	MQ-C-A	18-Jul-16	Nitrate (as N)	0.031	mg/L	ALS
L1800887-1	MQ-C-A	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-9	MQ-C-A	25-Jul-16	pH	8.12	pH units	ALS
L1803758-9	MQ-C-A	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-9	MQ-C-A	25-Jul-16	Total Dissolved Solids	155	mg/L	ALS
L1803758-9	MQ-C-A	25-Jul-16	Turbidity	0.57	NTU	ALS
L1803758-9	MQ-C-A01	25-Jul-16	pH	8.09	pH units	ALS
L1803758-9	MQ-C-A01	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-9	MQ-C-A01	25-Jul-16	Total Dissolved Solids	145	mg/L	ALS
L1803758-9	MQ-C-A01	25-Jul-16	Turbidity	0.76	NTU	ALS
L1792842-3	MQ-C-B	4-Jul-16	Conductivity	811	uS/cm	ALS
L1792842-3	MQ-C-B	4-Jul-16	pH	7.8	pH units	ALS
L1792842-3	MQ-C-B	4-Jul-16	Total Suspended Solids	2.8	mg/L	ALS
L1792842-3	MQ-C-B	4-Jul-16	Ammonia, Total (as N)	2.66	mg/L	ALS
L1792842-3	MQ-C-B	4-Jul-16	Nitrate (as N)	14.4	mg/L	ALS
L1792842-3	MQ-C-B	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
48240	MQ-C-B	4-Jul-16	Acute Toxicity	non-lethal	mortality %	Aquatox
L1796590-3	MQ-C-B	11-Jul-16	pH	7.74	pH units	ALS
L1796590-3	MQ-C-B	11-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-3	MQ-C-B	11-Jul-16	Total Dissolved Solids	760	mg/L	ALS
L1796590-3	MQ-C-B	11-Jul-16	Turbidity	2.07	NTU	ALS
L1800887-2	MQ-C-B	18-Jul-16	Conductivity	1110	uS/cm	ALS
L1800887-2	MQ-C-B	18-Jul-16	pH	8.14	pH units	ALS
L1800887-2	MQ-C-B	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800887-2	MQ-C-B	18-Jul-16	Ammonia, Total (as N)	2.36	mg/L	ALS
L1800887-2	MQ-C-B	18-Jul-16	Nitrate (as N)	16.5	mg/L	ALS
L1800887-2	MQ-C-B	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-1	MQ-C-B	25-Jul-16	pH	8.09	pH units	ALS
L1803758-1	MQ-C-B	25-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1803758-1	MQ-C-B	25-Jul-16	Total Dissolved Solids	275	mg/L	ALS
L1803758-1	MQ-C-B	25-Jul-16	Turbidity	3.08	NTU	ALS
L1792842-2	MQ-C-D	4-Jul-16	Conductivity	361	uS/cm	ALS
L1792842-2	MQ-C-D	4-Jul-16	pH	8.28	pH units	ALS
L1792842-2	MQ-C-D	4-Jul-16	Total Suspended Solids	4.4	mg/L	ALS
L1792842-2	MQ-C-D	4-Jul-16	Ammonia, Total (as N)	0.245	mg/L	ALS
L1792842-2	MQ-C-D	4-Jul-16	Nitrate (as N)	0.921	mg/L	ALS
L1792842-2	MQ-C-D	4-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1796590-2	MQ-C-D	11-Jul-16	pH	8.34	pH units	ALS
L1796590-2	MQ-C-D	11-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-2	MQ-C-D	11-Jul-16	Total Dissolved Solids	219	mg/L	ALS
L1796590-2	MQ-C-D	11-Jul-16	Turbidity	2.68	NTU	ALS
L1800887-3	MQ-C-D	18-Jul-16	Conductivity	410	uS/cm	ALS
L1800887-3	MQ-C-D	18-Jul-16	pH	8.32	pH units	ALS
L1800887-3	MQ-C-D	18-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1800887-3	MQ-C-D	18-Jul-16	Ammonia, Total (as N)	0.343	mg/L	ALS
L1800887-3	MQ-C-D	18-Jul-16	Nitrate (as N)	1.22	mg/L	ALS
L1800887-3	MQ-C-D	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-2	MQ-C-D	25-Jul-16	pH	8.3	pH units	ALS
L1803758-2	MQ-C-D	25-Jul-16	Total Suspended Solids	2	mg/L	ALS
L1803758-2	MQ-C-D	25-Jul-16	Total Dissolved Solids	210	mg/L	ALS
L1803758-2	MQ-C-D	25-Jul-16	Turbidity	2.66	NTU	ALS
L1796590-11	MQ-C-E	12-Jul-16	Conductivity	356	uS/cm	ALS
L1796590-11	MQ-C-E	12-Jul-16	pH	7.94	pH units	ALS
L1796590-11	MQ-C-E	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1796590-11	MQ-C-E	12-Jul-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1796590-11	MQ-C-E	12-Jul-16	Nitrate (as N)	3.91	mg/L	ALS
L1796590-11	MQ-C-E	12-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1800887-4	MQ-C-E	18-Jul-16	Conductivity	399	uS/cm	ALS
L1800887-4	MQ-C-E	18-Jul-16	pH	8.21	pH units	ALS
L1800887-4	MQ-C-E (Nee Note)	18-Jul-16	Total Suspended Solids	33	mg/L	ALS
L1800887-4	MQ-C-E	18-Jul-16	Ammonia, Total (as N)	0.035	mg/L	ALS
L1800887-4	MQ-C-E	18-Jul-16	Nitrate (as N)	5.53	mg/L	ALS
L1800887-4	MQ-C-E	18-Jul-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1803758-13	MQ-C-E	25-Jul-16	pH	8.12	pH units	ALS
L1803758-13	MQ-C-E	25-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1803758-13	MQ-C-E	25-Jul-16	Total Dissolved Solids	200	mg/L	ALS
L1803758-13	MQ-C-E	25-Jul-16	Turbidity	1.45	NTU	ALS
MILNE PORT SITE						
L1810000-1	MP-01	2-Aug-16	pH	7.69	pH units	ALS
L1810000-1	MP-01	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810000-1	MP-01	2-Aug-16	Ammonia, Total (as N)	0.076	mg/L	ALS
L1810000-1	MP-01	2-Aug-16	Total Phosphorus	10.9	mg/L	ALS
L1810000-1	MP-01	2-Aug-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1810000-1	MP-01	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
48523	MP-01	5-Aug-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1810825-1	MP-01	9-Aug-16	Faecal Coliforms	0	CFU/100mL	ALS
L1815156-1	MP-04	17-Aug-16	pH	6.53	pH units	ALS
L1815156-1	MP-04 (See Note)	17-Aug-16	Total Suspended Solids	20	mg/L	ALS
L1815156-1	MP-04	17-Aug-16	Lead (Pb)-Total	<0.0010	mg/L	ALS
L1815156-1	MP-04	17-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1815156-1	MP-04	17-Aug-16	Benzene	<0.50	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	Ethylbenzene	<0.50	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	Toluene	<0.50	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	F1-BTEX	<100	ug/L	ALS

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TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1815156-1	MP-04	17-Aug-16	F2 (C10-C16)	670	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	F3 (C16-C34)	900	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1815156-1	MP-04	17-Aug-16	Total Hydrocarbons (C6-C50)	1570	ug/L	ALS
L1818479-2	MP-04	22-Aug-16	pH	6.67	pH units	ALS
L1818479-2	MP-04 (See Note)	22-Aug-16	Total Suspended Solids	**16.4**	mg/L	ALS
L1818479-2	MP-04	22-Aug-16	Turbidity	10.8	NTU	ALS
L1823628-1	MP-04	31-Aug-16	pH	8.7	pH units	ALS
L1823628-1	MP-04	31-Aug-16	Total Suspended Solids	4.8	mg/L	ALS
L1823628-1	MP-04	31-Aug-16	Lead (Pb)-Total	<0.0010	mg/L	ALS
L1823628-1	MP-04	31-Aug-16	Oil and Grease, Total	3	mg/L	ALS
L1823628-1	MP-04	31-Aug-16	Benzene	<0.50	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	Ethylbenzene	<0.50	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	Toluene	<0.50	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	F1-BTEX	<100	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	F2 (C10-C16)	3390	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	F3 (C16-C34)	5100	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1823628-1	MP-04	31-Aug-16	Total Hydrocarbons (C6-C50)	8490	ug/L	ALS
L1810168-10	MP-05	2-Aug-16	Hardness (as CaCO3)	289	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	pH	8.37	pH units	ALS
L1810168-10	MP-05	2-Aug-16	Total Suspended Solids	6.9	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Total Dissolved Solids	861	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Turbidity	7.54	NTU	ALS
L1810168-10	MP-05	2-Aug-16	Alkalinity, Total (as CaCO3)	521	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Ammonia, Total (as N)	0.028	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Chloride (Cl)	314	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Fluoride (F)	0.506	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Nitrate (as N)	7.99	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Total Kjeldahl Nitrogen	0.79	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Phosphorus, Total	0.0188	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Sulfate (SO4)	83.9	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Dissolved Organic Carbon	4.8	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Total Organic Carbon	4.8	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Aluminum (Al)-Total	0.154	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Arsenic (As)-Total	0.00033	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Calcium (Ca)-Total	56.9	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Copper (Cu)-Total	0.0015	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Iron (Fe)-Total	0.157	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Lead (Pb)-Total	0.00016	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Magnesium (Mg)-Total	35.2	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Manganese (Mn)-Total	0.00867	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Molybdenum (Mo)-Total	0.00773	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Nickel (Ni)-Total	0.00064	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Potassium (K)-Total	13.9	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Selenium (Se)-Total	0.000139	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Sodium (Na)-Total	163	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Thallium (Tl)-Total	0.000013	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Uranium (U)-Total	0.0179	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Zinc (Zn)-Total	0.021	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Aluminum (Al)-Dissolved	0.0297	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Arsenic (As)-Dissolved	0.00031	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Calcium (Ca)-Dissolved	56.8	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Copper (Cu)-Dissolved	0.00124	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Magnesium (Mg)-Dissolved	35.9	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Manganese (Mn)-Dissolved	0.0037	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Molybdenum (Mo)-Dissolved	0.00739	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Potassium (K)-Dissolved	14	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Selenium (Se)-Dissolved	0.000174	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Sodium (Na)-Dissolved	178	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Uranium (U)-Dissolved	0.0172	mg/L	ALS
L1810168-10	MP-05	2-Aug-16	Zinc (Zn)-Dissolved	0.0172	mg/L	ALS
L1813138-1	MP-05	13-Aug-16	pH	8.44	pH units	ALS
L1813138-1	MP-05	13-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1813138-1	MP-05	13-Aug-16	Total Dissolved Solids	667	mg/L	ALS
L1813138-1	MP-05	13-Aug-16	Turbidity	13.8	NTU	ALS
L1810168-9	MP-06	2-Aug-16	Hardness (as CaCO3)	458	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	pH	8.06	pH units	ALS
L1810168-9	MP-06	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Total Dissolved Solids	892	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Turbidity	1.93	NTU	ALS
L1810168-9	MP-06	2-Aug-16	Alkalinity, Total (as CaCO3)	53	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Ammonia, Total (as N)	0.032	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Chloride (Cl)	200	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Fluoride (F)	0.127	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Nitrate (as N)	3.79	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Total Kjeldahl Nitrogen	0.51	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Phosphorus, Total	0.0084	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Sulfate (SO4)	308	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Dissolved Organic Carbon	2.6	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Total Organic Carbon	2.5	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Aluminum (Al)-Total	0.036	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Arsenic (As)-Total	0.0002	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Calcium (Ca)-Total	66.7	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Copper (Cu)-Total	<0.0010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Iron (Fe)-Total	<0.050	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Magnesium (Mg)-Total	67.1	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Manganese (Mn)-Total	0.0166	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Molybdenum (Mo)-Total	0.00356	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Nickel (Ni)-Total	<0.00050	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Potassium (K)-Total	8.04	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Selenium (Se)-Total	0.00105	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Sodium (Na)-Total	85.9	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Thallium (Tl)-Total	0.000035	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Uranium (U)-Total	0.0168	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Zinc (Zn)-Total	0.0038	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Aluminum (Al)-Dissolved	0.0087	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Arsenic (As)-Dissolved	0.00019	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Calcium (Ca)-Dissolved	68.7	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Copper (Cu)-Dissolved	0.00077	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Magnesium (Mg)-Dissolved	69.5	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Manganese (Mn)-Dissolved	0.0145	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Molybdenum (Mo)-Dissolved	0.00331	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Potassium (K)-Dissolved	8.56	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Selenium (Se)-Dissolved	0.00124	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Sodium (Na)-Dissolved	91.1	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Thallium (Tl)-Dissolved	0.000033	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Uranium (U)-Dissolved	0.0159	mg/L	ALS
L1810168-9	MP-06	2-Aug-16	Zinc (Zn)-Dissolved	0.002	mg/L	ALS
L1810168-7	MP-C-B	2-Aug-16	Conductivity	612	uS/cm	ALS
L1810168-7	MP-C-B	2-Aug-16	pH	8.39	pH units	ALS
L1810168-7	MP-C-B	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS

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TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1810168-7	MP-C-B	2-Aug-16	Ammonia, Total (as N)	0.034	mg/L	ALS
L1810168-7	MP-C-B	2-Aug-16	Nitrate (as N)	1.2	mg/L	ALS
L1810168-7	MP-C-B	2-Aug-16	Oil & Grease - Total	<4.0	mg/L	ALS
L1818479-8	MP-C-B	23-Aug-16	pH	8.31	pH units	ALS
L1818479-8	MP-C-B	23-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818479-8	MP-C-B	23-Aug-16	Total Dissolved Solids	355	mg/L	ALS
L1818479-8	MP-C-B	23-Aug-16	Turbidity	1.45	NTU	ALS
L1823639-5	MP-C-B	30-Aug-16	Conductivity	735	uS/cm	ALS
L1823639-5	MP-C-B	30-Aug-16	pH	8.35	pH units	ALS
L1823639-5	MP-C-B	30-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823639-5	MP-C-B	30-Aug-16	Ammonia, Total (as N)	0.036	mg/L	ALS
L1823639-5	MP-C-B	30-Aug-16	Nitrate (as N)	1.28	mg/L	ALS
L1823639-5	MP-C-B	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1810168-6	MP-C-B01	2-Aug-16	Conductivity	612	uS/cm	ALS
L1810168-6	MP-C-B01	2-Aug-16	pH	8.37	pH units	ALS
L1810168-6	MP-C-B01	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810168-6	MP-C-B01	2-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1810168-6	MP-C-B01	2-Aug-16	Nitrate (as N)	1.34	mg/L	ALS
L1810168-6	MP-C-B01	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810482-4	MP-C-B01	8-Aug-16	pH	8.42	uS/cm	ALS
L1810482-4	MP-C-B01	8-Aug-16	Total Suspended Solids	<2.0	pH units	ALS
L1810482-4	MP-C-B01	8-Aug-16	Total Dissolved Solids	292	mg/L	ALS
L1810482-4	MP-C-B01	8-Aug-16	Turbidity	2.41	mg/L	ALS
L1815157-4	MP-C-B01	16-Aug-16	Conductivity	727	uS/cm	ALS
L1815157-4	MP-C-B01	16-Aug-16	pH	8.37	pH units	ALS
L1815157-4	MP-C-B01	16-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815157-4	MP-C-B01	16-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815157-4	MP-C-B01	16-Aug-16	Nitrate (as N)	2.09	mg/L	ALS
L1815157-4	MP-C-B01	42598	Oil & Grease - Total	<2.0	mg/L	ALS
L1818479-7	MP-C-B01	23-Aug-16	pH	8.26	pH units	ALS
L1818479-7	MP-C-B01	23-Aug-16	Total Suspended Solids	4.4	mg/L	ALS
L1818479-7	MP-C-B01	23-Aug-16	Total Dissolved Solids	355	mg/L	ALS
L1818479-7	MP-C-B01	23-Aug-16	Turbidity	2.54	NTU	ALS
L1823639-4	MP-C-B01	30-Aug-16	Conductivity	732	uS/cm	ALS
L1823639-4	MP-C-B01	30-Aug-16	pH	8.32	pH units	ALS
L1823639-4	MP-C-B01	30-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823639-4	MP-C-B01	30-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1823639-4	MP-C-B01	30-Aug-16	Nitrate (as N)	1.7	mg/L	ALS
L1823639-4	MP-C-B01	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1810168-8	MP-C-H	2-Aug-16	Conductivity	367	uS/cm	ALS
L1810168-8	MP-C-H	2-Aug-16	pH	8.36	pH units	ALS
L1810168-8	MP-C-H	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810168-8	MP-C-H	2-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1810168-8	MP-C-H	2-Aug-16	Nitrate (as N)	0.167	mg/L	ALS
L1810168-8	MP-C-H	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810482-3	MP-C-H	8-Aug-16	pH	8.31	pH units	ALS
L1810482-3	MP-C-H	8-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810482-3	MP-C-H	8-Aug-16	Total Dissolved Solids	162	mg/L	ALS
L1810482-3	MP-C-H	8-Aug-16	Turbidity	0.39	NTU	ALS
L1815157-3	MP-C-H	16-Aug-16	Conductivity	348	uS/cm	ALS
L1815157-3	MP-C-H	16-Aug-16	pH	8.35	pH units	ALS
L1815157-3	MP-C-H	16-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815157-3	MP-C-H	16-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815157-3	MP-C-H	16-Aug-16	Nitrate (as N)	0.102	mg/L	ALS
L1815157-3	MP-C-H	16-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1818479-9	MP-C-H	23-Aug-16	pH	8.27	pH units	ALS
L1818479-9	MP-C-H	23-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818479-9	MP-C-H	23-Aug-16	Total Dissolved Solids	160	mg/L	ALS
L1818479-9	MP-C-H	23-Aug-16	Turbidity	0.14	NTU	ALS
L1823639-6	MP-C-H	30-Aug-16	Conductivity	389	uS/cm	ALS
L1823639-6	MP-C-H	30-Aug-16	pH	8.37	pH units	ALS
L1823639-6	MP-C-H	30-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823639-6	MP-C-H	30-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1823639-6	MP-C-H	30-Aug-16	Nitrate (as N)	0.131	mg/L	ALS
L1823639-6	MP-C-H	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1810168-1	MP-Q1-01	2-Aug-16	Conductivity	342	uS/cm	ALS
L1810168-1	MP-Q1-01	2-Aug-16	pH	8.25	pH units	ALS
L1810168-1	MP-Q1-01	2-Aug-16	Total Suspended Solids	4.8	mg/L	ALS
L1810168-1	MP-Q1-01	2-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1810168-1	MP-Q1-01	2-Aug-16	Nitrate (as N)	1.23	mg/L	ALS
L1810168-1	MP-Q1-01	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	Conductivity	342	uS/cm	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	pH	8.29	pH units	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	Total Suspended Solids	3.4	mg/L	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	Nitrate (as N)	1.23	mg/L	ALS
L1810168-2	MP-Q1-0101 (Duplicate)	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810482-1	MP-Q1-01	8-Aug-16	pH	7.95	pH units	ALS
L1810482-1	MP-Q1-01	8-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810482-1	MP-Q1-01	8-Aug-16	Total Dissolved Solids	172	mg/L	ALS
L1810482-1	MP-Q1-01	8-Aug-16	Turbidity	0.73	NTU	ALS
L1815157-1	MP-Q1-01	16-Aug-16	Conductivity	347	uS/cm	ALS
L1815157-1	MP-Q1-01	16-Aug-16	pH	8.18	pH units	ALS
L1815157-1	MP-Q1-01	16-Aug-16	Total Suspended Solids	9.8	mg/L	ALS
L1815157-4	MP-Q1-01	16-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815157-4	MP-Q1-01	16-Aug-16	Nitrate (as N)	0.816	mg/L	ALS
L1815157-4	MP-Q1-01	16-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1818479-3	MP-Q1-01	23-Aug-16	pH	8.04	pH units	ALS
L1818479-3	MP-Q1-01	23-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1818479-3	MP-Q1-01	23-Aug-16	Total Dissolved Solids	170	mg/L	ALS
L1818479-3	MP-Q1-01	23-Aug-16	Turbidity	0.47	NTU	ALS
L1818479-4	MP-Q1-0103 (Travel Blank)	23-Aug-16	pH	6.05	pH units	ALS
L1818479-4	MP-Q1-0103 (Travel Blank)	23-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818479-4	MP-Q1-0103 (Travel Blank)	23-Aug-16	Total Dissolved Solids	<20	mg/L	ALS
L1818479-4	MP-Q1-0103 (Travel Blank)	23-Aug-16	Turbidity	<0.10	NTU	ALS
L1823639-1	MP-Q1-01	30-Aug-16	Conductivity	419	uS/cm	ALS
L1823639-1	MP-Q1-01	30-Aug-16	pH	8.22	pH units	ALS
L1823639-1	MP-Q1-01	30-Aug-16	Total Suspended Solids	2.9	mg/L	ALS
L1823639-1	MP-Q1-01	30-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1823639-1	MP-Q1-01	30-Aug-16	Nitrate (as N)	1.38	mg/L	ALS
L1823639-1	MP-Q1-01	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1810168-3	MP-Q1-02	42584	Conductivity	752	uS/cm	ALS
L1810168-3	MP-Q1-02	2-Aug-16	pH	8.15	pH units	ALS
L1810168-3	MP-Q1-02	2-Aug-16	Total Suspended Solids	2.5	mg/L	ALS
L1810168-3	MP-Q1-02	2-Aug-16	Ammonia, Total (as N)	0.267	mg/L	ALS
L1810168-3	MP-Q1-02	2-Aug-16	Nitrate (as N)	14	mg/L	ALS
L1810168-3	MP-Q1-02	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	Conductivity	<3.0	uS/cm	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	pH	6.76	pH units	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	Nitrate (as N)	<0.020	mg/L	ALS
L1810168-4	MP-Q1-0202 (Field Blank)	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1810482-2	MP-Q1-02	8-Aug-16	pH	7.95	pH units	ALS
L1810482-2	MP-Q1-02	8-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810482-2	MP-Q1-02	8-Aug-16	Total Dissolved Solids	710	mg/L	ALS
L1810482-2	MP-Q1-02	8-Aug-16	Turbidity	0.46	NTU	ALS
L1815157-2	MP-Q1-02	16-Aug-16	Conductivity	865	uS/cm	ALS
L1815157-2	MP-Q1-02	16-Aug-16	pH	8.13	pH units	ALS
L1815157-2	MP-Q1-02	16-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815157-2	MP-Q1-02	16-Aug-16	Ammonia, Total (as N)	0.057	mg/L	ALS
L1815157-2	MP-Q1-02	16-Aug-16	Nitrate (as N)	15.5	mg/L	ALS
L1815157-2	MP-Q1-02	16-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1818479-5	MP-Q1-02	23-Aug-16	pH	7.92	pH units	ALS
L1818479-5	MP-Q1-02	23-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818479-5	MP-Q1-02	23-Aug-16	Total Dissolved Solids	415	mg/L	ALS
L1818479-5	MP-Q1-02	23-Aug-16	Turbidity	0.27	NTU	ALS
L1818479-6	MP-Q1-0201 (Duplicate)	23-Aug-16	pH	7.9	pH units	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1818479-6	MP-Q1-0201 (Duplicate)	23-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1818479-6	MP-Q1-0201 (Duplicate)	23-Aug-16	Total Dissolved Solids	410	mg/L	ALS
L1818479-6	MP-Q1-0201 (Duplicate)	23-Aug-16	Turbidity	0.28	NTU	ALS
L1823639-2	MP-Q1-02	30-Aug-16	Conductivity	838	uS/cm	ALS
L1823639-2	MP-Q1-02	30-Aug-16	pH	8.11	pH units	ALS
L1823639-2	MP-Q1-02	30-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823639-2	MP-Q1-02	30-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1823639-2	MP-Q1-02	30-Aug-16	Nitrate (as N)	12.7	mg/L	ALS
L1823639-2	MP-Q1-02	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	Conductivity	839	uS/cm	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	pH	8.12	pH units	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	Nitrate (as N)	12.7	mg/L	ALS
L1823639-3	MP-Q1-0201 (Duplicate)	30-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1807073-1	MS-01	2-Aug-16	pH	7.65	pH units	ALS
L1807073-1	MS-01	2-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1807073-1	MS-01	2-Aug-16	Ammonia, Total (as N)	0.2	mg/L	ALS
L1807073-1	MS-01	2-Aug-16	Total Phosphorus	0.762	mg/L	ALS
L1807073-1	MS-01	2-Aug-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1807073-1	MS-01	2-Aug-16	Oil & Grease - Total	<2.0	mg/L	ALS
48524	MS-01	5-Aug-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1810824-1	MS-01	9-Aug-16	Faecal Coliforms	2	CFU/100mL	ALS
L1810828-1	MS-MRY-6	9-Aug-16	pH	7.03	pH units	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Total Suspended Solids	46.2	mg/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Lead (Pb)-Total	0.00029	mg/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Benzene	<0.50	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Ethylbenzene	<0.50	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Toluene	<0.50	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	F1-BTEX	<100	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	F2 (C10-C16)	<100	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	F3 (C16-C34)	420	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1810828-1	MS-MRY-6	9-Aug-16	Total Hydrocarbons (C6-C50)	420	ug/L	ALS
L1807074-1	MS-08	1-Aug-16	pH	7.19	pH units	ALS
L1807074-1	MS-08 (See Note)	1-Aug-16	Total Suspended Solids	**18**	mg/L	ALS
L1807074-1	MS-08	1-Aug-16	Turbidity	14.5	NTU	ALS
L1807074-1	MS-08	1-Aug-16	Arsenic (As)-Total	0.00013	mg/L	ALS
L1807074-1	MS-08	1-Aug-16	Copper (Cu)-Total	0.0018	mg/L	ALS
L1807074-1	MS-08	1-Aug-16	Lead (Pb)-Total	0.00044	mg/L	ALS
L1807074-1	MS-08	1-Aug-16	Nickel (Ni)-Total	0.034	mg/L	ALS
L1807074-1	MS-08	1-Aug-16	Zinc (Zn)-Total	0.0052	mg/L	ALS
L1809405-1	MS-08	5-Aug-16	pH	6.68	pH units	ALS
L1809405-1	MS-08	5-Aug-16	Total Suspended Solids	10	mg/L	ALS
L1809405-1	MS-08	5-Aug-16	Total Dissolved Solids	830	mg/L	ALS
L1809405-1	MS-08	5-Aug-16	Turbidity	17.2	NTU	ALS
L1810826-1	MS-08	9-Aug-16	pH	6.92	pH units	ALS
L1810826-1	MS-08	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Aluminum (Al)-Total	0.035	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Cadmium (Cd)-Total	0.000187	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Calcium (Ca)-Total	49.6	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Copper (Cu)-Total	0.0047	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Iron (Fe)-Total	1.41	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Magnesium (Mg)-Total	130	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Manganese (Mn)-Total	5.69	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Molybdenum (Mo)-Total	<0.000050	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Nickel (Ni)-Total	0.0711	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Potassium (K)-Total	1.84	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Selenium (Se)-Total	0.00199	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Sodium (Na)-Total	2.41	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Thallium (Tl)-Total	0.000032	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Uranium (U)-Total	0.000058	mg/L	ALS
L1810826-1	MS-08	9-Aug-16	Zinc (Zn)-Total	0.0079	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Conductivity	1240	uS/cm	ALS
L1815159-1	MS-08	16-Aug-16	Hardness (as CaCO3)	683	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	pH	7.03	pH units	ALS
L1815159-1	MS-08	16-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Total Dissolved Solids	1030	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Turbidity	3.09	NTU	ALS
L1815159-1	MS-08	16-Aug-16	Alkalinity, Total (as CaCO3)	21	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Ammonia, Total (as N)	0.694	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Chloride (Cl)	7.9	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Fluoride (F)	<0.10	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Nitrate (as N)	4.95	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Total Kjeldahl Nitrogen	1.16	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Phosphorus, Total	0.048	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Sulfate (SO4)	688	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Total Organic Carbon	<1.0	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Aluminum (Al)-Total	0.02	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Cadmium (Cd)-Total	0.00019	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Calcium (Ca)-Total	54.8	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Copper (Cu)-Total	0.0022	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Iron (Fe)-Total	0.333	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Magnesium (Mg)-Total	136	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Manganese (Mn)-Total	6.19	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Molybdenum (Mo)-Total	0.000052	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Nickel (Ni)-Total	0.0743	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Potassium (K)-Total	1.91	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Selenium (Se)-Total	0.00195	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Sodium (Na)-Total	2.73	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Thallium (Tl)-Total	0.000032	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Uranium (U)-Total	0.00003	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Zinc (Zn)-Total	0.0078	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Aluminum (Al)-Dissolved	<0.0050	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Cadmium (Cd)-Dissolved	0.000192	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Calcium (Ca)-Dissolved	52.3	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Copper (Cu)-Dissolved	0.00129	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Magnesium (Mg)-Dissolved	134	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Manganese (Mn)-Dissolved	6.17	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Molybdenum (Mo)-Dissolved	<0.000050	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Nickel (Ni)-Dissolved	0.0726	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Potassium (K)-Dissolved	1.84	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Selenium (Se)-Dissolved	0.0021	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Sodium (Na)-Dissolved	2.62	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Thallium (Tl)-Dissolved	0.000032	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Uranium (U)-Dissolved	0.000014	mg/L	ALS
L1815159-1	MS-08	16-Aug-16	Zinc (Zn)-Dissolved	0.0062	mg/L	ALS
L1820236-1	MS-08	28-Aug-16	pH	6.91	pH units	ALS
L1820236-1	MS-08	28-Aug-16	Total Suspended Solids	10	mg/L	ALS
L1820236-1	MS-08	28-Aug-16	Total Dissolved Solids	960	mg/L	ALS
L1820236-1	MS-08	28-Aug-16	Turbidity	3.06	NTU	ALS
L1821470-1	MS-08	30-Aug-16	Conductivity	1300	uS/cm	ALS
L1821470-1	MS-08	30-Aug-16	Hardness (as CaCO3)	718	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	pH	7.21	pH units	ALS
L1821470-1	MS-08	30-Aug-16	Total Suspended Solids	2.9	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Total Dissolved Solids	1060	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1821470-1	MS-08	30-Aug-16	Turbidity	1.48	NTU	ALS
L1821470-1	MS-08	30-Aug-16	Alkalinity, Total (as CaCO3)	16	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Ammonia, Total (as N)	0.719	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Chloride (Cl)	7.91	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Fluoride (F)	0.112	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Nitrate (as N)	5.23	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Total Kjeldahl Nitrogen	1.13	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Phosphorus, Total	<0.030	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Sulfate (SO4)	668	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Dissolved Organic Carbon	<1.0	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Total Organic Carbon	<1.0	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Aluminum (Al)-Total	0.057	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Arsenic (As)-Total	<0.00010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Cadmium (Cd)-Total	0.000174	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Calcium (Ca)-Total	54.7	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Copper (Cu)-Total	0.001	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Iron (Fe)-Total	0.268	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Magnesium (Mg)-Total	136	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Manganese (Mn)-Total	6.11	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Molybdenum (Mo)-Total	<0.000050	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Nickel (Ni)-Total	0.0671	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Potassium (K)-Total	1.96	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Selenium (Se)-Total	0.002	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Sodium (Na)-Total	2.62	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Thallium (Tl)-Total	0.000034	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Uranium (U)-Total	0.000044	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Zinc (Zn)-Total	0.007	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Aluminum (Al)-Dissolved	0.0057	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Cadmium (Cd)-Dissolved	0.000184	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Calcium (Ca)-Dissolved	56.3	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Copper (Cu)-Dissolved	0.00076	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Magnesium (Mg)-Dissolved	140	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Manganese (Mn)-Dissolved	6.45	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Molybdenum (Mo)-Dissolved	<0.000050	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Nickel (Ni)-Dissolved	0.0674	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Potassium (K)-Dissolved	1.87	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Selenium (Se)-Dissolved	0.00214	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Sodium (Na)-Dissolved	2.7	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Thallium (Tl)-Dissolved	0.000031	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Uranium (U)-Dissolved	0.000027	mg/L	ALS
L1821470-1	MS-08	30-Aug-16	Zinc (Zn)-Dissolved	0.0086	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Conductivity	1160	uS/cm	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	pH	8.08	pH units	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Total Dissolved Solids	834	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Alkalinity, Total (as CaCO3)	195	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Nitrate (as N)	0.265	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Dissolved Organic Carbon	5.3	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Total Organic Carbon	5.3	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Aluminum (Al)-Total	<0.0030	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Antimony (Sb)-Total	0.00019	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Arsenic (As)-Total	0.00024	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Barium (Ba)-Total	0.0731	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Beryllium (Be)-Total	<0.00050	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Bismuth (Bi)-Total	<0.00050	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Boron (B)-Total	0.017	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Cadmium (Cd)-Total	0.000014	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Calcium (Ca)-Total	88.5	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Cobalt (Co)-Total	0.00018	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Copper (Cu)-Total	0.00124	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Lithium (Li)-Total	0.0023	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Magnesium (Mg)-Total	71.3	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Manganese (Mn)-Total	0.00823	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Molybdenum (Mo)-Total	0.000208	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Nickel (Ni)-Total	0.0133	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Potassium (K)-Total	2.14	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Silicon (Si)-Total	5.16	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Silver (Ag)-Total	<0.000010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Sodium (Na)-Total	13.3	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Strontium (Sr)-Total	0.0509	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Uranium (U)-Total	0.00176	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Phenols (4AAP)	0.0047	mg/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	F2 (C10-C16)	<100	ug/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	F3 (C16-C34)	<250	ug/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1807077-6	MS-MRY-13A	1-Aug-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Conductivity	896	uS/cm	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	pH	8.12	pH units	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Total Suspended Solids	2.9	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Total Dissolved Solids	683	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Alkalinity, Total (as CaCO3)	142	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Nitrate (as N)	0.053	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Dissolved Organic Carbon	4.8	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Total Organic Carbon	4.7	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Aluminum (Al)-Total	<0.0030	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Arsenic (As)-Total	0.00011	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Barium (Ba)-Total	0.0478	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Beryllium (Be)-Total	<0.00050	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Bismuth (Bi)-Total	<0.00050	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Boron (B)-Total	<0.010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Calcium (Ca)-Total	69.1	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Copper (Cu)-Total	0.00099	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Lithium (Li)-Total	0.0023	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Magnesium (Mg)-Total	53.7	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Manganese (Mn)-Total	0.00191	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Molybdenum (Mo)-Total	0.000152	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Nickel (Ni)-Total	0.00857	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Potassium (K)-Total	1.81	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Silicon (Si)-Total	4.19	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Silver (Ag)-Total	<0.000010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Sodium (Na)-Total	7.02	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Strontium (Sr)-Total	0.0359	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1807077-7	MS-MRY-13B	1-Aug-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Uranium (U)-Total	0.000474	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Phenols (4AAP)	<0.0010	mg/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	F2 (C10-C16)	<100	ug/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	F3 (C16-C34)	<250	ug/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1807077-7	MS-MRY-13B	1-Aug-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1811524-1	MS-MRY-13B	9-Aug-16	pH	8.08	pH units	ALS
L1811524-1	MS-MRY-13B	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811524-1	MS-MRY-13B	9-Aug-16	Total Dissolved Solids	619	mg/L	ALS
L1811524-1	MS-MRY-13B	9-Aug-16	Turbidity	0.38	NTU	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Conductivity	1230	uS/cm	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	pH	8.07	pH units	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Total Dissolved Solids	767	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Alkalinity, Total (as CaCO3)	138	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Dissolved Organic Carbon	3.9	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Total Organic Carbon	3.9	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Aluminum (Al)-Total	<0.0030	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Antimony (Sb)-Total	0.00012	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Arsenic (As)-Total	0.00013	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Barium (Ba)-Total	0.0684	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Beryllium (Be)-Total	<0.00050	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Bismuth (Bi)-Total	<0.00050	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Boron (B)-Total	<0.010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Calcium (Ca)-Total	98.8	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Chromium (Cr)-Total	<0.00050	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Cobalt (Co)-Total	<0.00010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Copper (Cu)-Total	0.00111	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Iron (Fe)-Total	<0.030	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Lead (Pb)-Total	<0.000050	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Lithium (Li)-Total	0.0032	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Magnesium (Mg)-Total	81.2	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Manganese (Mn)-Total	0.000625	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Molybdenum (Mo)-Total	0.000106	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Nickel (Ni)-Total	0.00861	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Potassium (K)-Total	2.23	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Selenium (Se)-Total	<0.0010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Silicon (Si)-Total	4.55	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Silver (Ag)-Total	<0.000010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Sodium (Na)-Total	10.2	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Strontium (Sr)-Total	0.0499	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Thallium (Tl)-Total	<0.00010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Titanium (Ti)-Total	<0.010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Uranium (U)-Total	0.000642	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Vanadium (V)-Total	<0.0010	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Phenols (4AAP)	0.0135	mg/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	F1 (C6-C10)	<100	ug/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	F2 (C10-C16)	<100	ug/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	F3 (C16-C34)	<250	ug/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	F4 (C34-C50)	<250	ug/L	ALS
L1818073-4	MS-MRY-13B	22-Aug-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
L1820695-5	MS-MRY-13B	29-Aug-16	pH	8.09	pH units	ALS
L1820695-5	MS-MRY-13B	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-5	MS-MRY-13B	29-Aug-16	Total Dissolved Solids	1130	mg/L	ALS
L1820695-5	MS-MRY-13B	29-Aug-16	Turbidity	0.27	NTU	ALS
L1807077-9	MS-C-A	1-Aug-16	Conductivity	247	uS/cm	ALS
L1807077-9	MS-C-A	1-Aug-16	pH	8.05	pH units	ALS
L1807077-9	MS-C-A	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-9	MS-C-A	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807077-9	MS-C-A	1-Aug-16	Nitrate (as N)	0.935	mg/L	ALS
L1807077-9	MS-C-A	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-5	MS-C-A	9-Aug-16	pH	7.95	pH units	ALS
L1811476-5	MS-C-A	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-5	MS-C-A	9-Aug-16	Total Dissolved Solids	105	mg/L	ALS
L1811476-5	MS-C-A	9-Aug-16	Turbidity	0.74	NTU	ALS
L1818073-10	MS-C-A	22-Aug-16	Conductivity	239	uS/cm	ALS
L1818073-10	MS-C-A	22-Aug-16	pH	7.92	pH units	ALS
L1818073-10	MS-C-A	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-10	MS-C-A	22-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1818073-10	MS-C-A	22-Aug-16	Nitrate (as N)	0.663	mg/L	ALS
L1818073-10	MS-C-A	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1820695-10	MS-C-A	29-Aug-16	pH	7.96	pH units	ALS
L1820695-10	MS-C-A	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-10	MS-C-A	29-Aug-16	Total Dissolved Solids	140	mg/L	ALS
L1820695-10	MS-C-A	29-Aug-16	Turbidity	0.28	NTU	ALS
L1807077-8	MS-C-B	1-Aug-16	Conductivity	249	uS/cm	ALS
L1807077-8	MS-C-B	1-Aug-16	pH	8.05	pH units	ALS
L1807077-8	MS-C-B	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-8	MS-C-B	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807077-8	MS-C-B	1-Aug-16	Nitrate (as N)	0.997	mg/L	ALS
L1807077-8	MS-C-B	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-6	MS-C-B	9-Aug-16	pH	7.86	pH units	ALS
L1811476-6	MS-C-B	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-6	MS-C-B	9-Aug-16	Total Dissolved Solids	120	mg/L	ALS
L1811476-6	MS-C-B	9-Aug-16	Turbidity	0.78	NTU	ALS
L1818073-11	MS-C-B	22-Aug-16	Conductivity	251	uS/cm	ALS
L1818073-11	MS-C-B	22-Aug-16	pH	7.83	pH units	ALS
L1818073-11	MS-C-B	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-11	MS-C-B	22-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1818073-11	MS-C-B	22-Aug-16	Nitrate (as N)	0.79	mg/L	ALS
L1818073-11	MS-C-B	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1820695-13	MS-C-B	29-Aug-16	pH	7.9	pH units	ALS
L1820695-13	MS-C-B	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-13	MS-C-B	29-Aug-16	Total Dissolved Solids	145	mg/L	ALS
L1820695-13	MS-C-B	29-Aug-16	Turbidity	0.26	NTU	ALS
L1811476-7	MS-C-C	9-Aug-16	pH	8.02	pH units	ALS
L1811476-7	MS-C-C	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-7	MS-C-C	9-Aug-16	Total Dissolved Solids	459	mg/L	ALS
L1811476-7	MS-C-C	9-Aug-16	Turbidity	0.42	NTU	ALS
L1818073-7	MS-C-C	22-Aug-16	Conductivity	755	uS/cm	ALS
L1818073-7	MS-C-C	22-Aug-16	pH	8.04	pH units	ALS
L1818073-7	MS-C-C	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-7	MS-C-C	22-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1818073-7	MS-C-C	22-Aug-16	Nitrate (as N)	5.79	mg/L	ALS
L1818073-7	MS-C-C	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1820695-6	MS-C-C	29-Aug-16	pH	8.04	pH units	ALS
L1820695-6	MS-C-C	29-Aug-16	Total Suspended Solids	14.4	mg/L	ALS
L1820695-6	MS-C-C	29-Aug-16	Total Dissolved Solids	485	mg/L	ALS
L1820695-6	MS-C-C	29-Aug-16	Turbidity	0.85	NTU	ALS
L1807077-4	MS-C-D	1-Aug-16	Conductivity	778	uS/cm	ALS
L1807077-4	MS-C-D	1-Aug-16	pH	8.3	pH units	ALS
L1807077-4	MS-C-D	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-4	MS-C-D	1-Aug-16	Ammonia, Total (as N)	0.031	0.031	ALS
L1807077-4	MS-C-D	1-Aug-16	Nitrate (as N)	6.23	6.23	ALS
L1807077-4	MS-C-D	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	Conductivity	777	uS/cm	ALS
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	pH	8.29	pH units	ALS
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	Ammonia, Total (as N)	0.029	mg/L	ALS
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	Nitrate (as N)	6.21	mg/L	ALS
L1807077-3	MS-C-D (Duplicate)	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-8	MS-C-D	9-Aug-16	pH	8.32	pH units	ALS
L1811476-8	MS-C-D	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-8	MS-C-D	9-Aug-16	Total Dissolved Solids	443	mg/L	ALS
L1811476-8	MS-C-D	9-Aug-16	Turbidity	1.38	NTU	ALS
L1818073-6	MS-C-D	22-Aug-16	Conductivity	761	uS/cm	ALS
L1818073-6	MS-C-D	22-Aug-16	pH	8.37	pH units	ALS
L1818073-6	MS-C-D	22-Aug-16	Total Suspended Solids	5.2	mg/L	ALS
L1818073-6	MS-C-D	22-Aug-16	Ammonia, Total (as N)	0.054	mg/L	ALS
L1818073-6	MS-C-D	22-Aug-16	Nitrate (as N)	7.22	NTU	ALS
L1818073-6	MS-C-D	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1807077-1	MS-C-E	01-Aug-16	Conductivity	653	uS/cm	ALS
L1807077-1	MS-C-E	01-Aug-16	pH	8.16	pH units	ALS
L1807077-1	MS-C-E	01-Aug-16	Total Suspended Solids	10	mg/L	ALS
L1807077-1	MS-C-E	01-Aug-16	Ammonia, Total (as N)	0.024	mg/L	ALS
L1807077-1	MS-C-E	01-Aug-16	Nitrate (as N)	4.41	mg/L	ALS
L1807077-1	MS-C-E	01-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-9	MS-C-E	9-Aug-16	pH	8.13	pH units	ALS
L1811476-9	MS-C-E	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-9	MS-C-E	9-Aug-16	Total Dissolved Solids	385	mg/L	ALS
L1811476-9	MS-C-E	9-Aug-16	Turbidity	0.5	NTU	ALS
L1815158-2	MS-C-E	15-Aug-16	Conductivity	630	uS/cm	ALS
L1815158-2	MS-C-E	15-Aug-16	pH	8.27	pH units	ALS
L1815158-2	MS-C-E	15-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815158-2	MS-C-E	15-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815158-2	MS-C-E	15-Aug-16	Nitrate (as N)	4.73	mg/L	ALS
L1815158-2	MS-C-E	15-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1818073-5	MS-C-E	22-Aug-16	pH	8.09	pH units	ALS
L1818073-5	MS-C-E	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-5	MS-C-E	22-Aug-16	Total Dissolved Solids	364	mg/L	ALS
L1818073-5	MS-C-E	22-Aug-16	Turbidity	0.38	NTU	ALS
L1820695-7	MS-C-E	29-Aug-16	pH	8.09	pH units	ALS
L1820695-7	MS-C-E	29-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1820695-7	MS-C-E	29-Aug-16	Total Dissolved Solids	405	mg/L	ALS
L1820695-7	MS-C-E	29-Aug-16	Turbidity	0.66	NTU	ALS
L1807077-12	MS-C-F	1-Aug-16	Conductivity	336	uS/cm	ALS
L1807077-12	MS-C-F	1-Aug-16	pH	8.08	pH units	ALS
L1807077-12	MS-C-F	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-12	MS-C-F	1-Aug-16	Ammonia, Total (as N)	0.03	mg/L	ALS
L1807077-12	MS-C-F	1-Aug-16	Nitrate (as N)	1.61	mg/L	ALS
L1807077-12	MS-C-F	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-10	MS-C-F	9-Aug-16	pH	7.95	pH units	ALS
L1811476-10	MS-C-F	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-10	MS-C-F	9-Aug-16	Total Dissolved Solids	140	mg/L	ALS
L1811476-10	MS-C-F	9-Aug-16	Turbidity	1.89	NTU	ALS
L1818073-1	MS-C-F	22-Aug-16	Conductivity	269	uS/cm	ALS
L1818073-1	MS-C-F	22-Aug-16	pH	8.18	pH units	ALS
L1818073-1	MS-C-F	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-1	MS-C-F	22-Aug-16	Ammonia, Total (as N)	0.026	mg/L	ALS
L1818073-1	MS-C-F	22-Aug-16	Nitrate (as N)	0.951	mg/L	ALS
L1818073-1	MS-C-F	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1820695-9	MS-C-F	29-Aug-16	pH	8.14	pH units	ALS
L1820695-9	MS-C-F	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-9	MS-C-F	29-Aug-16	Total Dissolved Solids	165	mg/L	ALS
L1820695-9	MS-C-F	29-Aug-16	Turbidity	0.41	NTU	ALS
L1807077-10	MS-C-G	1-Aug-16	Conductivity	192	uS/cm	ALS
L1807077-10	MS-C-G	1-Aug-16	pH	8.12	pH units	ALS
L1807077-10	MS-C-G	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-10	MS-C-G	1-Aug-16	Ammonia, Total (as N)	0.021	mg/L	ALS
L1807077-10	MS-C-G	1-Aug-16	Nitrate (as N)	0.215	mg/L	ALS
L1807077-10	MS-C-G	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-11	MS-C-G	9-Aug-16	pH	7.93	pH units	ALS
L1811476-11	MS-C-G	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-11	MS-C-G	9-Aug-16	Total Dissolved Solids	105	mg/L	ALS
L1811476-11	MS-C-G	9-Aug-16	Turbidity	0.32	NTU	ALS
L1818073-3	MS-C-G	22-Aug-16	Conductivity	211	uS/cm	ALS
L1818073-3	MS-C-G	22-Aug-16	pH	7.8	pH units	ALS
L1818073-3	MS-C-G	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-3	MS-C-G	22-Aug-16	Ammonia, Total (as N)	0.026	mg/L	ALS
L1818073-3	MS-C-G	22-Aug-16	Nitrate (as N)	0.866	mg/L	ALS
L1820695-11	MS-C-G	29-Aug-16	pH	7.89	pH units	ALS
L1820695-11	MS-C-G	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-11	MS-C-G	29-Aug-16	Total Dissolved Solids	130	mg/L	ALS
L1820695-11	MS-C-G	29-Aug-16	Turbidity	0.17	NTU	ALS
L1807077-13	MS-C-H	1-Aug-16	Conductivity	240	uS/cm	ALS
L1807077-13	MS-C-H	1-Aug-16	pH	8.26	pH units	ALS
L1807077-13	MS-C-H	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-13	MS-C-H	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807077-13	MS-C-H	1-Aug-16	Nitrate (as N)	<0.020	mg/L	ALS
L1807077-13	MS-C-H	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-12	MS-C-H	9-Aug-16	pH	8.16	pH units	ALS
L1811476-12	MS-C-H	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-12	MS-C-H	9-Aug-16	Total Dissolved Solids	135	mg/L	ALS
L1811476-12	MS-C-H	9-Aug-16	Turbidity	0.54	NTU	ALS
L1815158-3	MS-C-H	15-Aug-16	Conductivity	248	uS/cm	ALS
L1815158-3	MS-C-H	15-Aug-16	pH	8.31	pH units	ALS
L1815158-3	MS-C-H	15-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815158-3	MS-C-H	15-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815158-3	MS-C-H	15-Aug-16	Nitrate (as N)	<0.020	mg/L	ALS
L1815158-3	MS-C-H	15-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1818073-2	MS-C-H	22-Aug-16	pH	8.2	pH units	ALS
L1818073-2	MS-C-H	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-2	MS-C-H	22-Aug-16	Total Dissolved Solids	123	mg/L	ALS
L1818073-2	MS-C-H	22-Aug-16	Turbidity	0.52	NTU	ALS
L1820695-12	MS-C-H	29-Aug-16	pH	8.24	pH units	ALS
L1820695-12	MS-C-H	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-12	MS-C-H	29-Aug-16	Total Dissolved Solids	140	mg/L	ALS
L1820695-12	MS-C-H	29-Aug-16	Turbidity	0.31	NTU	ALS
L1807076-1	MQ-C-A	1-Aug-16	Conductivity	288	uS/cm	ALS
L1807076-1	MQ-C-A	1-Aug-16	pH	8.21	pH units	ALS
L1807076-1	MQ-C-A	1-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807076-1	MQ-C-A	1-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1807076-1	MQ-C-A	1-Aug-16	Nitrate (as N)	<0.020	mg/L	ALS
L1807076-1	MQ-C-A	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-1	MQ-C-A	9-Aug-16	pH	8.17	pH units	ALS
L1811476-1	MQ-C-A	9-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1811476-1	MQ-C-A	9-Aug-16	Total Dissolved Solids	150	mg/L	ALS
L1811476-1	MQ-C-A	9-Aug-16	Turbidity	0.45	NTU	ALS
L1818073-9	MQ-C-A	22-Aug-16	Conductivity	335	uS/cm	ALS
L1818073-9	MQ-C-A	22-Aug-16	pH	8.16	pH units	ALS
L1818073-9	MQ-C-A	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-9	MQ-C-A	22-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1818073-9	MQ-C-A	22-Aug-16	Nitrate (as N)	<0.020	mg/L	ALS
L1818073-9	MQ-C-A	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1820695-8	MQ-C-A	29-Aug-16	pH	8.27	pH units	ALS
L1820695-8	MQ-C-A	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-8	MQ-C-A	29-Aug-16	Total Dissolved Solids	200	mg/L	ALS
L1820695-8	MQ-C-A	29-Aug-16	Turbidity	0.18	NTU	ALS
L1807077-5	MQ-C-B	1-Aug-16	Conductivity	412	uS/cm	ALS
L1807077-5	MQ-C-B	1-Aug-16	pH	8.2	pH units	ALS
L1807077-5	MQ-C-B	1-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1807077-5	MQ-C-B	1-Aug-16	Ammonia, Total (as N)	0.202	mg/L	ALS
L1807077-5	MQ-C-B	1-Aug-16	Nitrate (as N)	1.87	mg/L	ALS
L1807077-5	MQ-C-B	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1807077-14	MQ-C-B	5-Aug-16	Conductivity	356	uS/cm	ALS
L1807077-14	MQ-C-B	5-Aug-16	pH	8.22	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1807077-14	MQ-C-B	5-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1807077-14	MQ-C-B	5-Aug-16	Ammonia, Total (as N)	0.284	mg/L	ALS
L1807077-14	MQ-C-B	5-Aug-16	Nitrate (as N)	2.37	mg/L	ALS
L1807077-14	MQ-C-B	5-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
48525	MQ-C-B	5-Aug-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1811476-2	MQ-C-B	9-Aug-16	pH	8.2	pH units	ALS
L1811476-2	MQ-C-B	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811476-2	MQ-C-B	9-Aug-16	Total Dissolved Solids	265	mg/L	ALS
L1811476-2	MQ-C-B	9-Aug-16	Turbidity	1.14	NTU	ALS
L1818073-13	MQ-C-B	22-Aug-16	Conductivity	791	uS/cm	ALS
L1818073-13	MQ-C-B	22-Aug-16	pH	8.04	pH units	ALS
L1818073-13	MQ-C-B	22-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1818073-13	MQ-C-B	22-Aug-16	Ammonia, Total (as N)	0.407	mg/L	ALS
L1818073-13	MQ-C-B	22-Aug-16	Nitrate (as N)	7.09	mg/L	ALS
L1818073-13	MQ-C-B	22-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
48754	MQ-C-B	23-Aug-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1820695-2	MQ-C-B	29-Aug-16	pH	8.23	pH units	ALS
L1820695-2	MQ-C-B	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-2	MQ-C-B	29-Aug-16	Total Dissolved Solids	300	mg/L	ALS
L1820695-2	MQ-C-B	29-Aug-16	Turbidity	1.03	NTU	ALS
L1807077-11	MQ-C-D	1-Aug-16	Conductivity	416	uS/cm	ALS
L1807077-11	MQ-C-D	1-Aug-16	pH	8.22	pH units	ALS
L1807077-11	MQ-C-D (See Note)	1-Aug-16	Total Suspended Solids	**32.7**	mg/L	ALS
L1807077-11	MQ-C-D	1-Aug-16	Ammonia, Total (as N)	0.301	mg/L	ALS
L1807077-11	MQ-C-D	1-Aug-16	Nitrate (as N)	1.93	mg/L	ALS
L1807077-11	MQ-C-D	1-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1811476-3	MQ-C-D	9-Aug-16	pH	8.08	pH units	ALS
L1811476-3	MQ-C-D	9-Aug-16	Total Suspended Solids	3.6	mg/L	ALS
L1811476-3	MQ-C-D	9-Aug-16	Total Dissolved Solids	233	mg/L	ALS
L1811476-3	MQ-C-D	9-Aug-16	Turbidity	4.1	NTU	ALS
L1815158-4	MQ-C-D	15-Aug-16	Conductivity	444	uS/cm	ALS
L1815158-4	MQ-C-D	15-Aug-16	pH	8.26	pH units	ALS
L1815158-4	MQ-C-D	15-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1815158-4	MQ-C-D	15-Aug-16	Ammonia, Total (as N)	0.296	mg/L	ALS
L1815158-4	MQ-C-D	15-Aug-16	Nitrate (as N)	2.49	mg/L	ALS
L1815158-4	MQ-C-D	15-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1818073-8	MQ-C-D	22-Aug-16	pH	8.15	pH units	ALS
L1818073-8	MQ-C-D	22-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1818073-8	MQ-C-D	22-Aug-16	Total Dissolved Solids	219	mg/L	ALS
L1818073-8	MQ-C-D	22-Aug-16	Turbidity	2.32	NTU	ALS
L1820695-4	MQ-C-D	29-Aug-16	pH	8.53	pH units	ALS
L1820695-4	MQ-C-D	29-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1820695-4	MQ-C-D	29-Aug-16	Total Dissolved Solids	365	mg/L	ALS
L1820695-4	MQ-C-D	29-Aug-16	Turbidity	0.68	NTU	ALS
L1811476-4	MQ-C-E	9-Aug-16	pH	8.04	pH units	ALS
L1811476-4	MQ-C-E	9-Aug-16	Total Suspended Solids	5.6	mg/L	ALS
L1811476-4	MQ-C-E	9-Aug-16	Total Dissolved Solids	262	mg/L	ALS
L1811476-4	MQ-C-E	9-Aug-16	Turbidity	2.27	NTU	ALS
L1815158-1	MQ-C-E	15-Aug-16	Conductivity	422	uS/cm	ALS
L1815158-1	MQ-C-E	15-Aug-16	pH	8.23	pH units	ALS
L1815158-1	MQ-C-E	15-Aug-16	Total Suspended Solids	6.9	mg/L	ALS
L1815158-1	MQ-C-E	15-Aug-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1815158-1	MQ-C-E	15-Aug-16	Nitrate (as N)	7.3	mg/L	ALS
L1815158-1	MQ-C-E	15-Aug-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1818073-12	MQ-C-E	22-Aug-16	pH	8.2	pH units	ALS
L1818073-12	MQ-C-E	22-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1818073-12	MQ-C-E	22-Aug-16	Total Dissolved Solids	215	mg/L	ALS
L1818073-12	MQ-C-E	22-Aug-16	Turbidity	2.41	NTU	ALS
L1820695-1	MQ-C-E	29-Aug-16	pH	8.1	pH units	ALS
L1820695-1	MQ-C-E	29-Aug-16	Total Suspended Solids	4	mg/L	ALS
L1820695-1	MQ-C-E	29-Aug-16	Total Dissolved Solids	245	mg/L	ALS
L1820695-1	MQ-C-E	29-Aug-16	Turbidity	1.07	NTU	ALS
MILNE PORT SITE						
L1828896-1	MP-01	13-Sep-16	pH	7.73	pH units	ALS
L1828896-1	MP-01	13-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Ammonia, Total (as N)	0.065	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Total Phosphorus	9.37	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Biochemical Oxygen Demand	2.3	mg/L	ALS
L1828896-1	MP-01	13-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	pH	7.67	pH units	ALS
L1832535-1	MP-01	20-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Ammonia, Total (as N)	0.097	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Total Phosphorus	11.9	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1832535-1	MP-01	20-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	pH	8.73	pH units	ALS
L1824250-1	MP-04	5-Sep-16	Total Suspended Solids	2.8	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Lead (Pb)-Total	0.00039	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824250-1	MP-04	5-Sep-16	Benzene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Ethylbenzene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Toluene	<0.50	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F1 (C6-C10)	<100	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F1-BTEX	<100	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F2 (C10-C16)	340	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F3 (C16-C34)	710	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	F4 (C34-C50)	<250	ug/L	ALS
L1824250-1	MP-04	5-Sep-16	Total Hydrocarbons (C6-C50)	1050	ug/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Conductivity	705	uS/cm	ALS
L1824249-5	MP-C-B	6-Sep-16	pH	8.33	pH units	ALS
L1824249-5	MP-C-B	6-Sep-16	Total Suspended Solids	2.0	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Ammonia, Total (as N)	0.071	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Nitrate (as N)	1.37	mg/L	ALS
L1824249-5	MP-C-B	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Conductivity	737	uS/cm	ALS
L1824249-4	MP-C-B01	6-Sep-16	pH	8.34	pH units	ALS
L1824249-4	MP-C-B01	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Ammonia, Total (as N)	0.020	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Nitrate (as N)	1.66	mg/L	ALS
L1824249-4	MP-C-B01	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Conductivity	379	uS/cm	ALS
L1824249-6	MP-C-H	6-Sep-16	pH	8.36	pH units	ALS
L1824249-6	MP-C-H	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Nitrate (as N)	0.150	mg/L	ALS
L1824249-6	MP-C-H	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Conductivity	376	uS/cm	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	pH	8.33	pH units	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Nitrate (as N)	0.153	mg/L	ALS
L1824249-3	MP-C-H (Duplicate)	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Conductivity	473	uS/cm	ALS
L1824249-1	MP-Q1-01	6-Sep-16	pH	8	pH units	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Ammonia, Total (as N)	0.024	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Nitrate (as N)	2.12	mg/L	ALS
L1824249-1	MP-Q1-01	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Conductivity	956	uS/cm	ALS
L1824249-2	MP-Q1-02	6-Sep-16	pH	8.12	pH units	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Ammonia, Total (as N)	0.080	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Nitrate (as N)	12.9	mg/L	ALS
L1824249-2	MP-Q1-02	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
48878	MP-Q1-02	6-Sep-16	Acute Toxicity*	non-lethal	mortality%	Aquatox
MINE SITE						
L1824254-12	MQ-C-A	5-Sep-16	Conductivity	373	uS/cm	ALS
L1824254-12	MQ-C-A	5-Sep-16	pH	8.35	pH units	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1824254-12	MQ-C-A	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Nitrate (as N)	0.028	mg/L	ALS
L1824254-12	MQ-C-A	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Conductivity	574	uS/cm	ALS
L1824255-1	MQ-C-B	6-Sep-16	pH	8.28	pH units	ALS
L1824255-1	MQ-C-B	6-Sep-16	Total Suspended Solids	2.4	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Ammonia, Total (as N)	0.16	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Nitrate (as N)	2.91	mg/L	ALS
L1824255-1	MQ-C-B	6-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
48877	MQ-C-B	6-Sep-16	Acute Toxicity*	non-lethal	mortality %	Aquatox
L1824254-11	MQ-C-D	5-Sep-16	Conductivity	484	uS/cm	ALS
L1824254-11	MQ-C-D	5-Sep-16	pH	8.31	pH units	ALS
L1824254-11	MQ-C-D	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Ammonia, Total (as N)	0.215	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Nitrate (as N)	2.4	mg/L	ALS
L1824254-11	MQ-C-D	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Conductivity	387	uS/cm	ALS
L1824254-10	MQ-C-E	5-Sep-16	pH	8.3	pH units	ALS
L1824254-10	MQ-C-E	5-Sep-16	Total Suspended Solids	6.8	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Nitrate (as N)	4.47	mg/L	ALS
L1824254-10	MQ-C-E	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	pH	7.86	pH units	ALS
L1828895-1	MS-01	14-Sep-16	Total Suspended Solids	<2	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Ammonia, Total (as N)	1.39	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Total Phosphorus	1.28	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Biochemical Oxygen Demand	5.3	mg/L	ALS
L1828895-1	MS-01	14-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	pH	7.91	pH units	ALS
L1832540-1	MS-01	20-Sep-16	Total Suspended Solids	<2	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Ammonia, Total (as N)	2.61	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Total Phosphorus	1.22	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Biochemical Oxygen Demand	8.4	mg/L	ALS
L1832540-1	MS-01	20-Sep-16	Oil & Grease - Total	<2.0	mg/L	ALS
L182889-1	MS-06 (see Note)	12-Sep-16	pH	7.98	pH units	ALS
L182889-1	MS-06	12-Sep-16	Total Suspended Solids	4.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Total Dissolved Solids	183	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Turbidity	7.50	NTU	ALS
L182889-1	MS-06	12-Sep-16	Alkalinity, Total (as CaCO3)	57	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Chloride (Cl)	9.89	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Fluoride (F)	0.088	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nitrate (as N)	0.744	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Total Kjeldahl Nitrogen	0.41	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Phosphorus, Total	0.0099	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sulfate (SO4)	78.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Dissolved Organic Carbon	4.7	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Total Organic Carbon	4.5	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Aluminum (Al)-Total	0.078	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Arsenic (As)-Total	0.00014	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Calcium (Ca)-Total	25.4	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Copper (Cu)-Total	<0.0010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Iron (Fe)-Total	0.110	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Lead (Pb)-Total	0.00013	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Magnesium (Mg)-Total	16.9	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Manganese (Mn)-Total	0.00658	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Molybdenum (Mo)-Total	0.00385	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nickel (Ni)-Total	<0.00050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Potassium (K)-Total	9.44	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Selenium (Se)-Total	0.000121	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sodium (Na)-Total	4.01	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Thallium (Tl)-Total	0.000017	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Uranium (U)-Total	0.00372	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Aluminum (Al)-Dissolved	0.0162	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Arsenic (As)-Dissolved	0.00012	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Calcium (Ca)-Dissolved	26.0	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Copper (Cu)-Dissolved	0.00057	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Magnesium (Mg)-Dissolved	16.6	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Manganese (Mn)-Dissolved	0.00337	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Molybdenum (Mo)-Dissolved	0.00370	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Nickel (Ni)-Dissolved	<0.00050	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Potassium (K)-Dissolved	9.82	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Selenium (Se)-Dissolved	0.000097	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Sodium (Na)-Dissolved	4.08	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Thallium (Tl)-Dissolved	0.000019	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Uranium (U)-Dissolved	0.00353	mg/L	ALS
L182889-1	MS-06	12-Sep-16	Zinc (Zn)-Dissolved	<0.0010	mg/L	ALS
L1823700-1	MS-08	1-Sep-16	pH	7.25	pH units	ALS
L1823700-1	MS-08	1-Sep-16	Total Suspended Solids	12.8	mg/L	ALS
L1823700-1	MS-08	1-Sep-16	Total Dissolved Solids	1040	mg/L	ALS
L1823700-1	MS-08	1-Sep-16	Turbidity	15.7	NTU	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	pH	6.99	pH units	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	Total Dissolved Solids	1070	mg/L	ALS
L1823657-1	MS-08	2-Sep-16 (11:30)	Turbidity	19.6	NTU	ALS
L1823657-1	MS-08 (see Note)	2-Sep-16 (11:30)	Total Suspended Solids	**16.8**	mg/L	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	pH	7.02	pH units	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	Total Suspended Solids	14	mg/L	ALS
L1823657-2	MS-08	2-Sep-16 (17:00)	Total Dissolved Solids	1050	mg/L	ALS
L1823657-2	MS-08 (see Note)	2-Sep-16 (17:00)	Turbidity	**16.7**	NTU	ALS
L1824254-3	MS-C-A	5-Sep-16	Conductivity	264	uS/cm	ALS
L1824254-3	MS-C-A	5-Sep-16	pH	8.17	pH units	ALS
L1824254-3	MS-C-A	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Ammonia, Total (as N)	0.031	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Nitrate (as N)	0.668	mg/L	ALS
L1824254-3	MS-C-A	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Conductivity	279	uS/cm	ALS
L1824254-4	MS-C-B	5-Sep-16	pH	8.13	pH units	ALS
L1824254-4	MS-C-B	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Nitrate (as N)	0.847	mg/L	ALS
L1824254-4	MS-C-B	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Conductivity	807	uS/cm	ALS
L1824254-8	MS-C-C	5-Sep-16	pH	8.25	pH units	ALS
L1824254-8	MS-C-C	5-Sep-16	Total Suspended Solids	2.4	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Ammonia, Total (as N)	0.029	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Nitrate (as N)	6.01	mg/L	ALS
L1824254-8	MS-C-C	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Conductivity	778	uS/cm	ALS
L1824254-9	MS-C-D	5-Sep-16	pH	8.38	pH units	ALS
L1824254-9	MS-C-D	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Nitrate (as N)	6.96	mg/L	ALS
L1824254-9	MS-C-D	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Conductivity	659	uS/cm	ALS
L1824254-1	MS-C-E	5-Sep-16	pH	8.2	pH units	ALS
L1824254-1	MS-C-E	5-Sep-16	Total Suspended Solids	10.4	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Nitrate (as N)	4.36	mg/L	ALS
L1824254-1	MS-C-E	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Conductivity	299	uS/cm	ALS
L1824254-2	MS-C-F	5-Sep-16	pH	8.23	pH units	ALS

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1824254-2	MS-C-F	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Nitrate (as N)	0.93	mg/L	ALS
L1824254-2	MS-C-F	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Conductivity	225	uS/cm	ALS
L1824254-5	MS-C-G	5-Sep-16	pH	7.9	pH units	ALS
L1824254-5	MS-C-G	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Nitrate (as N)	0.878	mg/L	ALS
L1824254-5	MS-C-G	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Conductivity	222	uS/cm	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	pH	8.4	pH units	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Nitrate (as N)	0.869	mg/L	ALS
L1824254-13	MS-C-G (Duplicate)	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Conductivity	254	uS/cm	ALS
L1824254-6	MS-C-H	5-Sep-16	pH	8.23	pH units	ALS
L1824254-6	MS-C-H	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Ammonia, Total (as N)	<0.020	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Nitrate (as N)	<0.20	mg/L	ALS
L1824254-6	MS-C-H	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Conductivity	1630	uS/cm	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	pH	8.11	pH units	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Suspended Solids	2.8	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Dissolved Solids	899	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Alkalinity, Total (as CaCO3)	144	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Dissolved Organic Carbon	4	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Organic Carbon	4.5	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Aluminum (Al)-Total	0.068	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Antimony (Sb)-Total	0.00018	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Arsenic (As)-Total	0.00014	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Barium (Ba)-Total	0.0767	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Boron (B)-Total	0.021	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Cadmium (Cd)-Total	0.000012	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Calcium (Ca)-Total	126	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Chromium (Cr)-Total	0.00059	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Cobalt (Co)-Total	0.00012	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Copper (Cu)-Total	0.0011	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Iron (Fe)-Total	0.096	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Lead (Pb)-Total	<0.00010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Lithium (Li)-Total	0.0088	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Magnesium (Mg)-Total	93	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Manganese (Mn)-Total	0.00223	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Molybdenum (Mo)-Total	0.000171	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Nickel (Ni)-Total	0.00882	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Potassium (K)-Total	2.36	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Silicon (Si)-Total	4.18	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Sodium (Na)-Total	13.3	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Strontium (Sr)-Total	0.0668	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Thallium (Tl)-Total	0.000014	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Titanium (Ti)-Total	0.00428	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Uranium (U)-Total	0.00128	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Vanadium (V)-Total	<0.00050	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Zinc (Zn)-Total	<0.0030	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Phenols (4AAP)	0.0017	mg/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F1 (C6-C10)	<100	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F2 (C10-C16)	<100	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F3 (C16-C34)	<250	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	F4 (C34-C50)	<250	ug/L	ALS
L1824254-7	MS-MRY-13B	5-Sep-16	Total Hydrocarbons (C6-C50)	<380	ug/L	ALS
MILNE PORT SITE						
L1839619-1	MP-01	4-Oct-16	pH	7.45	pH units	ALS
L1839619-1	MP-01	4-Oct-16	Total Suspended Solids	<2.0	mg/L	ALS
L1839619-1	MP-01	4-Oct-16	Ammonia, Total (as N)	0.069	mg/L	ALS
L1839619-1	MP-01	4-Oct-16	Total Phosphorus	11.4	mg/L	ALS
L1839619-1	MP-01	4-Oct-16	Fecal Coliforms	0	CFU/100mL	ALS
L1839619-1	MP-01	4-Oct-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1839619-1	MP-01	4-Oct-16	Oil & Grease - Total	<2.0	mg/L	ALS
L1839623-1	MP-05 (*See Note)*	4-Oct-16	Hardness (as CaCO3)	308	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	pH	8.15	pH units	ALS
L1839623-1	MP-05	4-Oct-16	Total Suspended Solids	3.4	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Total Dissolved Solids	642	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Turbidity	8.03	NTU	ALS
L1839623-1	MP-05	4-Oct-16	Alkalinity, Total (as CaCO3)	207	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Ammonia, Total (as N)	0.074	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Chloride (Cl)	203	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Fluoride (F)	0.265	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Nitrate (as N)	6.48	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Total Kjeldahl Nitrogen	1	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Phosphorus, Total	0.011	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Sulfate (SO4)	56	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Dissolved Organic Carbon	5.6	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Total Organic Carbon	5.7	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Aluminum (Al)-Total	0.141	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Arsenic (As)-Total	0.00032	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Calcium (Ca)-Total	64.1	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Copper (Cu)-Total	0.0021	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Iron (Fe)-Total	0.224	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Lead (Pb)-Total	0.0002	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Magnesium (Mg)-Total	38.1	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Manganese (Mn)-Total	0.0375	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Molybdenum (Mo)-Total	0.00366	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Nickel (Ni)-Total	0.00111	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Potassium (K)-Total	9.8	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Selenium (Se)-Total	0.000172	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Sodium (Na)-Total	122	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Thallium (Tl)-Total	0.00001	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Uranium (U)-Total	0.0167	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Zinc (Zn)-Total	0.019	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Aluminum (Al)-Dissolved	0.0132	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Arsenic (As)-Dissolved	0.00026	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Calcium (Ca)-Dissolved	64.5	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Copper (Cu)-Dissolved	0.00165	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Magnesium (Mg)-Dissolved	35.5	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Manganese (Mn)-Dissolved	0.0337	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Molybdenum (Mo)-Dissolved	0.00313	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Nickel (Ni)-Dissolved	0.00084	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Potassium (K)-Dissolved	9.77	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Selenium (Se)-Dissolved	0.000153	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Sodium (Na)-Dissolved	114	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Uranium (U)-Dissolved	0.0152	mg/L	ALS
L1839623-1	MP-05	4-Oct-16	Zinc (Zn)-Dissolved	0.0149	mg/L	ALS
MARY RIVER MINE SITE						
L1839627-1	MS-01	4-Oct-16	pH	7.73	pH units	ALS
L1839627-1	MS-01	4-Oct-16	Total Suspended Solids	2.5	mg/L	ALS

Baffinland

TABLE 5.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2016 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATIONS

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1839627-1	MS-01	4-Oct-16	Ammonia, Total (as N)	0.634	mg/L	ALS
L1839627-1	MS-01	4-Oct-16	Total Phosphorus	1.2	mg/L	ALS
L1839627-1	MS-01	4-Oct-16	Fecal Coliforms	0	mg/L	ALS
L1839627-1	MS-01	4-Oct-16	Biochemical Oxygen Demand	2	mg/L	ALS
L1839627-1	MS-01	4-Oct-16	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT SITE						
L1852751-1	MP-01	1-Nov-16	pH	7.06	pH units	ALS
L1852751-1	MP-01	1-Nov-16	Total Suspended Solids	<2.0	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Ammonia, Total (as N)	0.07	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Total Phosphorus	12.6	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Fecal Coliforms	0	CFU/100mL	ALS
L1852751-1	MP-01	1-Nov-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1852751-1	MP-01	1-Nov-16	Oil & Grease - Total	<2.0	mg/L	ALS
MARY RIVER MINE SITE						
L1852753-1	MS-01	1-Nov-16	pH	7.35	pH units	ALS
L1852753-1	MS-01	1-Nov-16	Total Suspended Solids	4	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Ammonia, Total (as N)	0.178	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Total Phosphorus	1.52	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Fecal Coliforms	0	CFU/100mL	ALS
L1852753-1	MS-01	1-Nov-16	Biochemical Oxygen Demand	<2.0	mg/L	ALS
L1852753-1	MS-01	1-Nov-16	Oil & Grease - Total	<2.0	mg/L	ALS
MILNE PORT SITE						
L1867510-1	MP-01	6-Dec-17	pH	7.78	pH units	*ALS*
L1867510-1	MP-01	6-Dec-17	Total Suspended Solids	6	mg/L	*ALS*
L1867510-1	MP-01	6-Dec-17	Ammonia, Total (as N)	0.055	mg/L	*ALS*
L1867510-1	MP-01	6-Dec-17	Total Phosphorus	13.9	mg/L	*ALS*
L1867510-1	MP-01	6-Dec-17	Fecal Coliforms	0	CFU/100mL	*ALS*
L1867510-1	MP-01	6-Dec-17	Biochemical Oxygen Demand	2	mg/L	*ALS*
L1867510-1	MP-01	6-Dec-17	Oil & Grease - Total	<2.0	mg/L	*ALS*
MARY RIVER MINE SITE						
L1867513-1	MS-01	6-Dec-17	pH	7.71	pH units	*ALS*
L1867513-1	MS-01	6-Dec-17	Total Suspended Solids	2	mg/L	*ALS*
L1867513-1	MS-01	6-Dec-17	Ammonia, Total (as N)	0.101	mg/L	*ALS*
L1867513-1	MS-01	6-Dec-17	Total Phosphorus	1.21	mg/L	*ALS*
L1867513-1	MS-01	6-Dec-17	Fecal Coliforms	0	CFU/100mL	*ALS*
L1867513-1	MS-01	6-Dec-17	Biochemical Oxygen Demand	<2.0	mg/L	*ALS*
L1867513-1	MS-01	6-Dec-17	Oil & Grease - Total	<2.0	mg/L	*ALS*

Date of Excedence	***Notes***
February 23, 2016	Faecal Coliforms for a sample of MS-01 was 1050 CFU/100 mL. The off spec condition was due to a very temporary upset condition and/or possibly a problem during sampling resulting in a sample bias. The result from a subsequent sample taken on March 8 was 1 CFU/100 mL.
May 10, 2016	TSS for samples of MS-C-D and MS-C-E were 39.4 mg/L and 66.0 mg/L, respectively. Subsequent samples of MS-C-D were 12.8 mg/L - May 16, 7.0 mg/L - May 23, and 9.6 mg/L May 31. Subsequent samples of MS-C-E were 16.0 mg/L - May 16, 23.8 mg/L - May 23. Refer to Spill Report - 16-158 and Follow Up Report submitted to INAC June 24.
May 23, 2016	TSS for samples of MQ-C-B were 42.9 mg/L and 47.0 mg/L on May 23 and May 28, respectively. The result from a sample taken May 31 was 22.8 mg/L. Silt fences and silt curtain installed for control, monitoring is ongoing.
May 24, 2016	TSS for pre-discharge untreated sample of MS-06 was 35.1 mg/L. The result of a subsequent sample taken June 18 was 12.0 mg/L. There has been no discharge from this facility.
June 7, 2016	Grab samples MP-06 dated June 7, 2016 and MP-05 dated June 13, 2016 were collected during the construction of diversion ditches, as such Table 1: Effluent Quality Limits for Surface Runoff during Construction Phase is used to evaluate water quality.
June 7, 2016	Grab sample MP-C-B and MP-C-B01 dated June 7, 2016 are evaluated against the Maximum Concentration of Any Grab Sample Limits provided in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.
June 7, 2016	Grab sample MQ-C-B dated June 7, 2016 was collected during freshette runoff as well as the construction of drainage features (silt fences, jute bedding, and flocculent) that address sedimentation and water quality impacts in this area. Follow up samples collected on June 13, 20 and 27, 2016 indicated improvements with respect to total suspended solids concentrations.
June 13, 2016	Grab sample MP-Q1-02 dated June 13, 2016 was collected during freshette runoff. Drainage features (silt fences and flocculent) were installed address sedimentation and water quality impacts in this area. Follow up samples collected on June 16, 20 and 28, 2016 indicated improvements with respect to total suspended solids concentrations.
July 12, 2016	Grab sample MS-C-F dated July 12, 2016 was collected during a rain event. No visible mine related sediment loading was observed during this sampling event. Results from follow up sample collected on July 18, 2015 showed parameter concentrations below criteria listed in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.
July 25, 2016	Grab sample MS-C-F dated July 25, 2016 was collected subsequent to rain event. No visible mine related sediment loading was observed during this sampling event. Results from follow up sample collected on July 29, 2015 showed parameter concentrations below criteria listed in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.
July 12, 2016	Grab sample MS-C-G dated July 12, 2016 was collected during a rain event. No visible mine related sediment loading was observed during this sampling event. Results from follow up sample collected on July 18, 2015 showed parameter concentrations below criteria listed in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.
July 18, 2016	Grab sample MS-C-E dated July 18, 2016 was collected during a rain event. Sediment control features (jute mat, flocculent and silt fence) were installed in drainage basin above sample site. Results from follow up sample collected on July 25, 2015 showed parameter concentrations below criteria listed in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.
August 17, 2016	Final effluent samples MP-04 dated August 17 and 22, 2016, were collected at the discharge point (greater than 200 m from any water course) slightly exceeded Water Licence water quality criterion of 15 mg/L (Table 9: Effluent Quality Discharge Limits for the Landfarm Facilities). However, the result of a third sample, collected on August 31, showed parameter concentrations far below the referenced criteria. The monthly average of three (3) samlples collected during August was 4.8 mg/L.
August 1, 2016	The exceedance for grab sample MS-08 dated August 1, 2016 was likely due to sampling error. Results from follow up samplse collected in August 2016 showed parameter concentrations below criteria listed in Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds. The monthly average of the six (6) samples collected at MS-08 during August was 7.5 mg/L.
August 1, 2016	Grab sample MQ-C-D dated August 1, 2016 was collected after a rain event. Results from follow up sample collected on August 9, 2016 showed parameter concentrations below criteria listed in Table 11: Effluent Quality Discharge Limits for Contact Water during Operations Phase and the Early Revenue Phase of the Project.. The monthly average of five (5) samples collected at MQ-C-D during August was 8.1 mg/L.
September 1, 2016	Due to logistical and holding time requirements, pre discharge sampling was completed on 30-August-16. Refer to Table 2 - Water Licence 2AM-MRY1325 Monthly SNP Report – August 2016.
September 2, 2016	Incliment weather restricted access to MS-08 on 2-Sep-16 (11:30). Sample was collected directly from the Waste Rock Pond. Elevated TSS levels were caused by snow and ice that had fallen into the pond at the sampling location which may have disturbed bottom sediments. A follow-up sample collecetd at 17:00 confirmed a TSS reading less than the Water Licence Criteria of 15 mg/L for grab samples. The monthly average of the 3 samples collected at MS-08 during September was 14.5 mg/L
September 12, 2016	Due to logistical and holding time requirements the monthly acute lethality sample collected at MS-06 on September 12, 2016 could not be analyzed upon receipt at the laboratory.
October 4, 2016	Internal evaluation sample of MP-05. No treatment or discharge occurred.

ATTACHMENT 5

2017 QIA-NWB Annual Report for Operations

- Table 5.1 Water Licence Water Quality Monitoring Locations
- Table 5.2 Water Quality Results for Water Licence Monitoring Locations

Baffinland

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude	Status in 2017
		Easting (m)	Northing (m)			
Milne Port Site						
MP-MRY-2	Fresh Water Intake at Philips Creek (Summer)	514,503	7,964,579	71° 46' 52" N	80° 35' 4" W	Inactive
MP-MRY-3	Fresh Water Intake from Km 32 Lake (Winter)	521,547	7,953,735	71° 41' 00" N	80° 23' 09" W	Active
MP-01	Milne Port Sewage Treatment Facilities (discharge into ditch prior to ocean)	503,209	7,976,485	71° 53' 18" N	80° 54' 27" W	Active
MP-01a	Milne Port Waste Stabilisation Pond (PWSP)	503,625	7,976,015	71° 53' 03" N	80° 53' 44" W	Active
MP-03	Milne Port Bulk Fuel Storage Facility Stormwater	503,638	7,976,272	71° 52' 11" N	80° 53' 43" W	Active
MP-04	Milne Port Landfarm Facility Storm Water	503,710	7,975,574	71° 52' 49" N	80° 53' 35" W	Active
MP-MRY-04	Milne Exploration Phase Sewage Treatment Facilities	503,462	7,975,764	71° 52' 55" N	80° 54" 01" W	Inactive (Decommissioned)
MP-MRY-04a	Milne Exploration Phase Sewage PWSP	503,344	7,976,118	71° 53' 06" N	80° 54' 13" W	Inactive (Decommissioned)
MP-05	Milne Port Ore Stockpile Sedimentation Pond (East)	503,469	7,976,383	71° 53' 15" N	80° 54' 00" W	Active
MP-06	Milne Port Ore Stockpile Sedimentation Pond (West)	503,125	7,976,364	71° 53' 14" N	80° 54' 36" W	Active
MP-MRY-7	Milne Exploration Phase Bladder Farm Fuel Storage Facility Storm water	503,309	7,976,097	71° 53' 06" N	80° 54' 17" W	Inactive (Decommissioned)
MP-MRY-12	Bulk Sample Stockpile Area Seepage	503,357	7,976,453	71° 53' 17" N	80° 54' 11" W	Inactive
MP-C-A	Surface discharge downstream of construction area at Milne Port	503,214	7,976,483	71° 53' 18" N	80° 54' 27" W	Inactive
MP-C-B		503,191	7,975,396	71° 52' 43" N	80° 54' 29" W	Active
MP-C-B01		503,242	7,975,558	71° 52' 48" N	80° 54' 24" W	Active
MP-C-C		503,436	7,975,427	71° 52' 44" N	80° 54' 04" W	Inactive
MP-C-D		503,651	7,976,363	71° 53' 14" N	80° 53' 41" W	Inactive
MP-C-E		503,736	7,976,346	71° 53' 14" N	80° 53' 32" W	Active
MP-C-F		503,922	7,976,304	71° 53' 12" N	80° 53' 13" W	Active
MP-C-G		502,939	7,976,238	71° 53' 10" N	80° 54' 55" W	Inactive
MP-C-H		504,113	7,976,509	71° 53' 19" N	80° 52' 53" W	Active
MP-Q1-01	Surface Runoff and/or Discharge Quarries	503,828	7,975,062	71° 52' 32" N	80° 53' 23" W	Active
MP-Q1-02		503,811	7,975,272	71° 52' 39" N	80° 53' 25" W	Active
Mary River Mine Site						
MS-MRY-1	Fresh Water Intake from Camp Lake	557,793	7,914,684	71° 19' 38.6" N	79° 22' 57" W	Active
MS-01	Mine Site Sewage Treatment Facilities	561,322	7,913,257	71° 18' 49.4" N	79° 17' 5.6" W	Active
MS-02	Mine Site Maintenance Shop Oily Water WWTF (Truck Wash)	561,638	7,913,222	71° 18' 48" N	79° 16' 34" W	Active (no discharge to receiving environment)

Baffinland

TABLE 5.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT
WATER LICENCE WATER QUALITY MONITORING LOCATIONS

Monitoring Station	Description	UTM Coordinates (NAD83)		Latitude	Longitude	Status in 2017
		Easting (m)	Northing (m)			
MS-03	Mine Site Bulk Fuel Storage Facility Stormwater	561,258	7,913,304	71° 18' 51" N	79° 17' 12" W	Active (no discharge to receiving environment)
MS-MRY-4	Exploration Camp Sewage Treaatment Facility (used as holding tank for Weatherhaven Camp)	558,141	7,914,427	71° 19' 30" N	79° 22' 22.6" W	Inactive (used as holding tank)
MS-MRY-4a	Exploration Camp Polishing Waste Stabilization Ponds (PWSP)	558,470	7,914,237	71° 19' 23.6" N	79° 21' 50" W	Active
MS-MRY-6	Exploration Camp Bulk Fuel Storage Facility (Bladder Farm) Stormwater	558,186	7,914,780	71° 19' 41" N	79° 22' 17" W	Active
MS-06	Ore Stockpile Pond Stormwater (Crusher Pad)	561,475	7,913,000	71° 18' 41" N	79° 16' 51" W	Active
MS-08	Waste Rock Stockpile West Pond	563,492	7,916,273	71° 20' 25" N	79° 13' 18" W	Active
MS-MRY-9	Bulk Sample Open Pit - Suface water drainage (to become inactive in future)	563,246	7,914,632	71° 19' 32" N	79° 13' 48" W	Inactive (no flow)
MS-MRY-10	Bulk Sample Weathered Ore Stockpile - Downstream surface water drainage (to become inactive in the future)	563,488	7,915,197	71° 19' 50" N	79° 13' 22" W	Inactive (no flow)
MS-MRY-11	Bulk Sample Processing - Downstream surface water discharge (to become inactive in the future)	560,690	7,913,350	71° 18' 53" N	79° 18' 09" W	Inactive (no flow)
MS-MRY-13a & MS-MRY-13b	Non-Hazarous Landfill Facility - Downstream surface water drainage	13a: 560,754 13b: 560,642	13a: 7,912,484 13b: 7,912,527	13a:71° 18' 25" N 13b: 71° 18'26.5" N	13a: 79° 18' 5" W 13b: 79° 18' 16.1" W	Active
MS-C-A	Surface discharge downstream of construction area at Mine Site	561,263	7,913,571	71° 19' 00" N	79° 17' 11" W	Active
MS-C-B		561,454	7,913,537	71° 18' 58" N	79° 16' 52" W	Active
MS-C-C		561,110	7,913,199	71° 18' 48" N	79° 17' 27" W	Active
MS-C-D	Surface discharge downstream of construction area at Mine Site	561,008	7,913,280	71° 18' 50" N	79° 17' 37" W	Active
MS-C-E		560,980	7,913,388	71° 18' 54" N	79° 17' 40" W	Active
MS-C-F		561,797	7,913,278	71° 18' 49" N	79° 16' 17" W	Active
MS-C-G		561,813	7,911,830	71° 18' 03" N	79° 16' 20" W	Active
MS-C-H		561,162	7,912,067	71° 18" 11" N	79° 17' 25" W	Active
MQ-C-A	Surface Runoff and/or Discharge Quarries	559,489	7,914,408	71° 19' 28" N	79° 20' 07" W	Active
MQ-C-B		560,076	7,913,888	71° 19' 11" N	79° 19' 09" W	Active
MQ-C-D		559,422	7,914,223	71° 19' 23" N	79° 20' 14" W	Active
MQ-C-E		563,351	7,912,902	71° 18' 36" N	79° 13' 42" W	Active

Notes:
Monitoring Station names beginning with MP-Q and MQ-C correspond to QIA Quarry Lease and Quarry Management Plans

Baffinland

TABLE 5.2.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-01	MP-01 EFFLUENT	MP-01 EFFLUENT DUP	WWTP DISCHARGE VAC	MP-01-TRUCK	MP-01-TRUCK	MP-01
	ALS Laboratory Sample ID			L1876935-1	L1888655-1	L1888655-2	L1896436-1	L1898972-3	L1904338-1	L1909692-1
	Sample Date & Time			1/3/2017 3:00:00 PM	2/7/2017 3:30:00 PM	2/7/2017 3:30:00 PM	2/28/2017 2:50:00 PM	3/7/2017 3:30:00 PM	3/21/2017 11:00:00 AM	4/4/2017 3:30:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	7.58	7.67	7.69	7.76	7.64	7.74	7.65
Total Suspended Solids	mg/L	2	<120	8.7	<2.0	<2.0	2.2	<2.0	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	78	81	83	84	74	99	90
Ammonia, Total (as N)	mg/L	0.02	-	0.243	0.072	0.075	<0.020	0.039	0.103	0.06
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.69	2.37	2.12	9.6	8.6	6.9	7.2
Phosphorus, Total	mg/L	0.003	-	11.2	9.77	9.57	9.88	8.25	9.22	8.91
Fecal Coliforms	CFU/100mL	0	10,000	-	0	0	**50000**	0	20	11
BOD	mg/L	2	100	-	<2.0	<2.0	3.7	<2.0	<2.0	<2.0
COD	mg/L	10	-	38	28	28	93	31	28	30
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acute Toxicity[2,3]	N/A		Non-Lethal	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean
[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L1920536-1	233460	L1938021-1	L1954209-1	L1969204-1	L1987402-1	L2009586-1
	Sample Date & Time			5/2/2017 2:00:00 PM	5/2/2017 2:00:00 PM	6/6/2017 2:00:00 PM	7/4/2017 2:00:00 PM	8/1/2017 2:00:00 PM	9/5/2017 2:30:00 PM	10/17/2017 2:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	6.85	-	7.7	7.73	7.57	7.63	7.51
Total Suspended Solids	mg/L	2	<120	3.8	-	<2.0	2.3	3	2.1	13.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	26	-	85	96	83	88	79
Ammonia, Total (as N)	mg/L	0.02	-	0.327	-	0.052	0.099	2.28	0.106	0.114
Total Kjeldahl Nitrogen	mg/L	0.15	-	6.2	-	6.4	2.51	4.33	1.92	2
Phosphorus, Total	mg/L	0.003	-	11.7	-	10.5	11.1	10.3	8.54	8.16
Fecal Coliforms	CFU/100mL	0	10,000	5	-	0	0	0	<2	0
BOD	mg/L	2	100	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	32	-	30	28	34	23	25
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0
Acute Toxicity[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean
[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-0101	MP-0103	MP-01	MP-01	MP-0101	MP-0103
	ALS Laboratory Sample ID			L2009586-3	L2009586-4	L2023694-1	L2035927-1	L2035927-3	L2035927-4
	Sample Date & Time			10/17/2017 2:10:00 PM	10/17/2017 2:10:00 PM	11/14/2017 2:45:00 PM	12/12/2017 2:45:00 PM	12/12/2017 2:45:00 PM	12/12/2017 2:45:00 PM
	QA/QC Sample Type			Duplicate	Travel Blank	N/A	N/A	Duplicate	Travel Blank
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.46	6.07	7.77	7.88	7.79	6.45
Total Suspended Solids	mg/L	2	<120	37	4.2	<2.0	2.3	3.6	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	80	<10	165	196	196	<10
Ammonia, Total (as N)	mg/L	0.02	-	0.199	<0.020	0.116	0.097	0.075	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.1	<0.15	1.91	1.85	1.63	<0.15
Phosphorus, Total	mg/L	0.003	-	8.29	<0.0030	8.67	10.4	10.3	0.0033
Fecal Coliforms	CFU/100mL	0	10,000	1	0	1	0	0	0
BOD	mg/L	2	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	28	<10	22	33	32	<10
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0	2.5	<2.0
Acute Toxicity[2,3]	N/A		Non-Lethal	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5: Effluent Quality Discharge Limits for Sewage Treatment Facilities to the Ocean
[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.2
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-03

Analyte	Sample ID			MP-03 @ 1510[2]	MP-03 @ 1530[2]	MP-03-25
	ALS Laboratory Sample ID			L1933804-2	L1933804-1	L1945629-1
	Sample Date & Time			5/29/2017 3:10:00 PM	5/29/2017 3:30:00 PM	6/20/2017 11:45:00 AM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	7.65	7.55	9.03
Total Suspended Solids	mg/L	2	-	<2.0	4.3	<2.0
Total Dissolved Solids	mg/L	20	-	305	176	506
Turbidity	NTU	0.1	-	14.8	41.4	-
Ammonia, Total (as N)	mg/L	0.02	-	0.483	0.326	0.428
Phosphorus, Total	mg/L	0.003	-	0.0155	0.0302	1.94
Aluminum (Al)-Total	mg/L	0.01	-	0.352	0.668	<0.010
Antimony (Sb)-Total	mg/L	0.0001	-	0.00023	0.00024	0.00046
Arsenic (As)-Total	mg/L	0.0001	-	0.00015	0.00016	0.00038
Barium (Ba)-Total	mg/L	0.0002	-	0.0107	0.0125	0.00195
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.072	0.034	<0.010
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000069	0.000069	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	22	14.2	24.5
Cesium (Cs)-Total	mg/L	0.00001	-	0.000068	0.0001	0.00258
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	0.00152	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	0.00029	0.00039	<0.00010
Copper (Cu)-Total	mg/L	0.001	-	0.0028	0.0024	0.0012
Iron (Fe)-Total	mg/L	0.05	-	0.274	0.589	<0.050
Lead (Pb)-Total	mg/L	0.00005	0.001	0.000498	**0.00152**	0.000155
Lithium (Li)-Total	mg/L	0.001	-	0.0074	0.0047	0.0156
Magnesium (Mg)-Total	mg/L	0.05	-	10.7	7.6	20.6
Manganese (Mn)-Total	mg/L	0.0005	-	0.0899	0.0344	0.0039
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.0026	0.00165	0.0065
Nickel (Ni)-Total	mg/L	0.0005	-	0.00085	0.00101	<0.00050
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	2.15
Potassium (K)-Total	mg/L	0.05	-	5.7	3.09	37.7
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00533	0.00325	0.123
Selenium (Se)-Total	mg/L	0.00005	-	0.000066	<0.000050	0.000505
Silicon (Si)-Total	mg/L	0.1	-	1.44	1.68	9.71
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	53.3	43.3	107
Strontium (Sr)-Total	mg/L	0.001	-	0.0765	0.049	0.23
Sulfur (S)-Total	mg/L	0.5	-	4.49	2.75	8.02
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	0.000018	0.00002	<0.000010
Thorium (Th)-Total	mg/L	0.0001	-	0.00014	0.00024	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	0.00696	0.019	0.00031
Tungsten (W)-Total	mg/L	0.0001	-	0.00158	0.00016	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.0894	0.0127	0.0455
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	0.00074	0.00053
Zinc (Zn)-Total	mg/L	0.003	-	0.0098	0.0189	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	0.00067	0.0009	<0.00030
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	8.9	<2.0	<2.0
Animal/Veg Oil & Grease	mg/L	2	-	-	-	<2.0
Mineral Oil and Grease	mg/L	1	-	-	-	<1.0
Benzene	ug/L	0.5	370	0.54	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	2.62	1.17	<0.50
Toluene	ug/L	0.5	2	**5.83**	1.89	<0.50
o-Xylene	ug/L	0.3	-	8.98	6.26	<0.30
m+p-Xylenes	ug/L	0.4	-	14.3	9.47	<0.40
Xylenes (Total)	ug/L	0.5	-	23.3	15.7	<0.50
4-Bromofluorobenzene	%	Surrogate	-	101.1	104.9	99.4
1,4-Difluorobenzene	%	Surrogate	-	97.6	101.6	99
F1 (C6-C10)	ug/L	25	-	104	98	<25
F1-BTEX	ug/L	25	-	71	80	<25
F2 (C10-C16)	ug/L	100	-	3550	1750	<100
F3 (C16-C34)	ug/L	250	-	1250	540	<250
F4 (C34-C50)	ug/L	250	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	370	-	4900	2400	<370
Chrom. to baseline at nC50		n/a	-	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	92.2	96.8	105.4
3,4-Dichlorotoluene	%	Surrogate	-	97.4	100.5	96.4

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities
[2]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.2
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-03

Analyte	Sample ID			MP-03	MP-03	MP-03-01
	ALS Laboratory Sample ID			L1952926-1	L1954231-1	L1973869-1
	Sample Date & Time			6/30/2017 7:45:00 AM	7/4/2017 12:15:00 PM	8/10/2017 1:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	8.61	8.17	8.01
Total Suspended Solids	mg/L	2	-	<2.0	<2.0	3.2
Total Dissolved Solids	mg/L	20	-	-	-	-
Turbidity	NTU	0.1	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.001	0.00026	0.00044	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	<2.0	<2.0	3.7
Animal/Veg Oil & Grease	mg/L	2	-	-	-	-
Mineral Oil and Grease	mg/L	1	-	-	-	-
Benzene	ug/L	0.5	370	<0.50	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50	<0.50	<0.50
Toluene	ug/L	0.5	2	<0.50	<0.50	1.03
o-Xylene	ug/L	0.3	-	<0.50	<0.50	1.53
m+p-Xylenes	ug/L	0.4	-	<1.0	<1.0	2.1
Xylenes (Total)	ug/L	0.5	-	<1.1	<1.1	3.6
4-Bromofluorobenzene	%	Surrogate	-	100.2	101.1	108.5
1,4-Difluorobenzene	%	Surrogate	-	99.1	99.4	102.7
F1 (C6-C10)	ug/L	25	-	<100	<100	<100
F1-BTEX	ug/L	25	-	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	<100	<100	1560
F3 (C16-C34)	ug/L	250	-	<250	<250	720
F4 (C34-C50)	ug/L	250	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	370	-	<380	<380	2280
Chrom. to baseline at nC50		n/a	-	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	97.9	105.6	91.2
3,4-Dichlorotoluene	%	Surrogate	-	91.7	97.2	90.5

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities
[2]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.2
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-03

Analyte	Sample ID			MP-03-02	MP-03-3	MP-03-2
	ALS Laboratory Sample ID			L1973869-2	L1987159-1	L1987159-2
	Sample Date & Time			8/10/2017 1:10:00 PM	9/4/2017 10:15:00 AM	9/4/2017 10:30:00 AM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	8.12	8.09	7.89
Total Suspended Solids	mg/L	2	-	2.6	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	-	519	-
Turbidity	NTU	0.1	-	-	4.31	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.001	<0.00050	0.00037	0.00037
Lithium (Li)-Total	mg/L	0.001	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	3.7	<2.0	<2.0
Animal/Veg Oil & Grease	mg/L	2	-	-	-	-
Mineral Oil and Grease	mg/L	1	-	-	-	-
Benzene	ug/L	0.5	370	<0.50	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	0.65	<0.50	<0.50
Toluene	ug/L	0.5	2	1.95	0.69	<0.50
o-Xylene	ug/L	0.3	-	3.01	1.29	0.74
m+p-Xylenes	ug/L	0.4	-	4.1	1.4	<1.0
Xylenes (Total)	ug/L	0.5	-	7.1	2.7	<1.1
4-Bromofluorobenzene	%	Surrogate	-	123.8	105.6	112.9
1,4-Difluorobenzene	%	Surrogate	-	103.1	101.5	101.9
F1 (C6-C10)	ug/L	25	-	<100	<100	<100
F1-BTEX	ug/L	25	-	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	1630	1230	3430
F3 (C16-C34)	ug/L	250	-	700	670	1150
F4 (C34-C50)	ug/L	250	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	370	-	2340	1900	4580
Chrom. to baseline at nC50		n/a	-	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	93.2	93.1	92.7
3,4-Dichlorotoluene	%	Surrogate	-	97.3	92.3	95.6

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities
[2]Internal samples. Effluent not discharging to the environment.

Baffinland

TABLE 5.2.2
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-03

Analyte	Sample ID			MP-03	MP-03
	ALS Laboratory Sample ID			L1988825-1	L1990185-1
	Sample Date & Time			9/9/2017 10:40:00 AM	9/10/2017 2:00:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
pH	pH units	0.1	-	8.03	7.77
Total Suspended Solids	mg/L	2	-	<2.0	4
Total Dissolved Solids	mg/L	20	-	595	970
Turbidity	NTU	0.1	-	2.76	2.7
Ammonia, Total (as N)	mg/L	0.02	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-
Arsenic (As)-Total	mg/L	0.0001	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-
Copper (Cu)-Total	mg/L	0.001	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.001	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-
Zinc (Zn)-Total	mg/L	0.003	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	-	-
Animal/Veg Oil & Grease	mg/L	2	-	-	-
Mineral Oil and Grease	mg/L	1	-	-	-
Benzene	ug/L	0.5	370	-	-
Ethylbenzene	ug/L	0.5	90	-	-
Toluene	ug/L	0.5	2	-	-
o-Xylene	ug/L	0.3	-	-	-
m+p-Xylenes	ug/L	0.4	-	-	-
Xylenes (Total)	ug/L	0.5	-	-	-
4-Bromofluorobenzene	%	Surrogate	-	-	-
1,4-Difluorobenzene	%	Surrogate	-	-	-
F1 (C6-C10)	ug/L	25	-	-	-
F1-BTEX	ug/L	25	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	370	-	-	-
Chrom. to baseline at nC50		n/a	-	-	-
2-Bromobenzotrifluoride	%	Surrogate	-	-	-
3,4-Dichlorotoluene	%	Surrogate	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities
[2] Internal samples. Effluent not discharging to the environment.

TABLE 5.2.3
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-04

Analyte	Sample ID			MP-04[2]	MP-04-A[3]	MP-04[3]	MP-04-2	MP-04-3	MP-04-1	MP-04A
	ALS Laboratory Sample ID			L1941239-2	L1941239-3	L1968278-1	L1973496-2	L1973496-3	L1973496-1	L1972638-1
	Sample Date & Time			6/12/2017 12:00:00 PM	6/12/2017 5:45:00 PM	8/1/2017 1:00:00 PM	8/7/2017 6:00:00 PM	8/7/2017 6:30:00 PM	8/8/2017 8:30:00 AM	8/8/2017 8:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	8.02	9.04	8.36	8.02	8.06	8.14	7.99
Total Suspended Solids	mg/L	2	15	5.8	19.7	6.8	7.3	7.1	7.9	<2.0
Total Dissolved Solids	mg/L	20	-	-	-	-	-	-	-	-
Turbidity	NTU	0.1	-	-	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.0001	0.001	0.00087	**0.00136**	**0.00197**	0.00054	0.00054	0.00056	0.00076
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	0.000815	-	-	-	0.000309
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	<2.0	8.1	<2.0	<2.0	<2.0	<2.0	<2.0
Benzene	ug/L	0.5	370	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50	0.55	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	ug/L	0.5	2	<0.50	0.6	<0.50	<0.50	<0.50	<0.50	<0.50
o-Xylene	ug/L	0.5	-	<0.50	1.49	<0.50	<0.50	<0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1	-	<1.0	3	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1	4.5	<1.1	<1.1	<1.1	<1.1	<1.1
4-Bromofluorobenzene	%	Surrogate	-	102.9	102.6	103.1	103.7	107.2	100.8	104.1
1,4-Difluorobenzene	%	Surrogate	-	100.5	101.4	104.5	101.5	101.6	103.1	104.5
F1 (C6-C10)	ug/L	100	-	<100	<100	<100	<100	<100	<100	<100
F1-BTEX	ug/L	100	-	<100	<100	<100	<100	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	290	4630	<100	380	380	390	<100
F3 (C16-C34)	ug/L	250	-	1170	2190	380	860	910	930	380
F4 (C34-C50)	ug/L	250	-	<250	<250	<250	<250	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	1460	6820	<380	1250	1290	1310	380
Chrom. to baseline at nC50		n/a	-	YES	YES	YES	YES	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	95.2	90.2	92	91.3	97.9	97.5	100.7
3,4-Dichlorotoluene	%	Surrogate	-	91.4	80.3	75.7	100.8	96	93.2	76.2

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9: Effluent Quality Discharge Limits for the Landfarm Facilities

[2]Samples taken from the Milne Port Landfarm.

[3]Internal samples. Effluent not discharging to the environment.

Baffinland

TABLE 5.2.3
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-04

Analyte	Sample ID			MP-04[2]	MP-04[2]	MP-04A	MP-04A-20[3]	MP-04[2]	MP-04A
	ALS Laboratory Sample ID			L1978396-1	L1978437-1	L1981236-1	L1980960-1	L1984227-1	L1984168-1
	Sample Date & Time			8/20/2017 7:05:00 PM	8/21/2017 12:30:00 PM	8/22/2017 8:15:00 AM	8/24/2017 12:50:00 PM	8/24/2017 2:50:00 PM	8/29/2017 3:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	8.34	8.29	8.03	7.92	8.17	8.03
Total Suspended Solids	mg/L	2	15	2.8	7.6	**23.8**	6.5	5.5	3.8
Total Dissolved Solids	mg/L	20	-	345	365	-	-	400	-
Turbidity	NTU	0.1	-	4.92	7.15	-	-	10.9	-
Lead (Pb)-Total	mg/L	0.0001	0.001	-	-	**0.00121**	**0.00138**	-	0.00049
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	-	-	<2.0	<2.0	-	<2.0
Benzene	ug/L	0.5	370	-	-	<0.50	<0.50	-	<0.50
Ethylbenzene	ug/L	0.5	90	-	-	<0.50	<0.50	-	<0.50
Toluene	ug/L	0.5	2	-	-	<0.50	<0.50	-	<0.50
o-Xylene	ug/L	0.5	-	-	-	<0.50	<0.50	-	<0.50
m+p-Xylenes	ug/L	1	-	-	-	<1.0	<1.0	-	<1.0
Xylenes (Total)	ug/L	1.1	-	-	-	<1.1	<1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	-	-	102.2	95.8	-	99.8
1,4-Difluorobenzene	%	Surrogate	-	-	-	99.9	100.1	-	102.8
F1 (C6-C10)	ug/L	100	-	-	-	<100	<100	-	<100
F1-BTEX	ug/L	100	-	-	-	<100	<100	-	<100
F2 (C10-C16)	ug/L	100	-	-	-	<100	<100	-	<100
F3 (C16-C34)	ug/L	250	-	-	-	1580	<250	-	<250
F4 (C34-C50)	ug/L	250	-	-	-	<250	<250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	-	1580	<380	-	<380
Chrom. to baseline at nC50		n/a	-	-	-	YES	YES	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	-	-	87.3	92.4	-	71.1
3,4-Dichlorotoluene	%	Surrogate	-	-	-	76	83.2	-	88

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9: Effluent Quality Discharge Limits for the Landfarm Facilities

[2]All samples taken from the landfarm. Supersedes sample ID

[3]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.4
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B01	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L1927995-1	L1931308-1	L1931308-2	L1938001-5	L1941239-4	L1945624-2	L1950072-4	L1954224-4
	Sample Date & Time			5/15/2017 5:30:00 PM	5/22/2017 5:20:00 PM	5/22/2017 5:20:00 PM	6/5/2017 12:10:00 PM	6/12/2017 4:00:00 PM	6/20/2017 9:05:00 AM	6/26/2017 12:00:00 PM	7/3/2017 5:00:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]								
Conductivity	umhos/cm	3	-	337	-	-	473	-	401	-	624
pH	pH units	0.1	6.0 - 9.5	7.99	7.95	7.98	8.12	8.28	8.28	8.23	-
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4.9	10.8	13.2	12.4	8	3	6.4	-
Total Dissolved Solids	mg/L	10	-	-	138	175	-	253	-	250	-
Turbidity	NTU	0.1	-	-	9.54	11.6	-	36.8	-	12.6	-
Ammonia, Total (as N)	mg/L	0.02	-	0.211	-	-	0.46	-	0.232	-	0.104
Nitrate (as N)	mg/L	0.02	-	0.12	-	-	0.696	-	1.93	-	2.15
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	-	<2.0	-	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.4
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B-01
	ALS Laboratory Sample ID			L1957697-2	L1961578-2	L1969210-2	L1974157-2	L1976363-2	L1984172-6	L1984172-5
	Sample Date & Time			7/10/2017 1:30:00 PM	7/17/2017 8:20:00 AM	8/1/2017 9:20:00 AM	8/8/2017 3:45:00 PM	8/14/2017 4:15:00 PM	8/22/2017 10:00:00 AM	8/22/2017 10:00:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	-	724	761	-	774	-	-
pH	pH units	0.1	6.0 - 9.5	8.23	8.16	8.1	8.21	8.25	8.26	8.24
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.8	2.6	3.3	<2.0	3.6	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	414	-	-	451	-	465	466
Turbidity	NTU	0.1	-	4.19	-	-	1.75	-	1.79	1.6
Ammonia, Total (as N)	mg/L	0.02	-	-	0.136	0.055	-	0.091	-	-
Nitrate (as N)	mg/L	0.02	-	-	0.809	2.06	-	3.57	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-	<2.0	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.4
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B02	MP-C-B	MP-C-B03
	ALS Laboratory Sample ID			L1984045-3	L1987600-1	L1990177-5	L1990177-4	L1995168-1	L1995168-2
	Sample Date & Time			8/28/2017 11:45:00 AM	9/5/2017 10:45:00 AM	9/12/2017 12:00:00 PM	9/12/2017 12:00:00 PM	9/20/2017 12:00:00 PM	9/20/2017 5:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A	Travel Blank
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	794	662	-	-	893	<3.0
pH	pH units	0.1	6.0 - 9.5	8.2	8.29	8.09	6.41	7.97	6.7
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.4	4.3	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	449	<10	-	-
Turbidity	NTU	0.1	-	-	-	1.68	1.07	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.115	0.087	-	-	0.14	<0.020
Nitrate (as N)	mg/L	0.02	-	3.3	3.59	-	-	3.86	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	<2.0	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B0101
	ALS Laboratory Sample ID			L1938001-4	L1941239-7	L1945624-3	L1950072-5	L1954224-5	L1957697-3	L1957697-4
	Sample Date & Time			6/5/2017 11:50:00 AM	6/12/2017 4:10:00 PM	6/20/2017 9:10:00 AM	6/26/2017 12:10:00 PM	7/3/2017 5:50:00 PM	7/10/2017 12:30:00 PM	7/10/2017 1:45:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	467	-	396	-	605	-	-
pH	pH units	0.1	6.0 - 9.5	8.13	8.22	8.28	8.21	-	8.26	8.27
Total Suspended Solids	mg/L	2	Grab 30, Average 15	13.7	7.1	5	12.4	-	3.8	4.4
Total Dissolved Solids	mg/L	10	-	-	259	-	265	-	399	402
Turbidity	NTU	0.1	-	-	39.4	-	19.1	-	3.75	3.14
Ammonia, Total (as N)	mg/L	0.02	-	0.478	-	0.231	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.708	-	2	-	2.57	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B0102	MP-C-B01	MP-C-B01-02
	ALS Laboratory Sample ID			L1961578-3	L1969210-3	L1974157-3	L1976363-3	L1976363-1	L1984172-3	L1984172-4
	Sample Date & Time			7/17/2017 8:40:00 AM	8/1/2017 9:00:00 AM	8/8/2017 3:40:00 PM	8/14/2017 4:35:00 PM	8/14/2017 4:35:00 PM	8/22/2017 9:45:00 AM	8/22/2017 9:45:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Blank	N/A	Field Blank
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	644	748	-	747	<3.0	-	-
pH	pH units	0.1	6.0 - 9.5	8.21	8.24	8.31	8.46	5.66	8.31	5.73
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.8	4.4	<2.0	2.4	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	448	-	-	442	<10
Turbidity	NTU	0.1	-	-	-	1.68	-	-	1.8	0.63
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	0.047	-	0.056	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	2.82	2.18	-	3.8	<0.020	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	<2.0	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B0102
	ALS Laboratory Sample ID			L1984045-4	L1987600-2	L1990177-3	L1995168-3	L1995168-4	L1995168-5
	Sample Date & Time			8/28/2017 11:30:00 AM	9/5/2017 10:30:00 AM	9/12/2017 12:10:00 PM	9/20/2017 11:40:00 AM	9/20/2017 11:45:00 AM	9/20/2017 11:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Duplicate	Field Blank
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	796	620	-	875	872	<3.0
pH	pH units	0.1	6.0 - 9.5	8.21	8.3	8.12	8.1	8.11	6.68
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4.1	<2.0	<2.0	2.8	2.4	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	424	-	-	-
Turbidity	NTU	0.1	-	-	-	2.47	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.102	0.06	-	0.169	0.17	0.059
Nitrate (as N)	mg/L	0.02	-	3.36	3.56	-	3.89	3.87	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	<2.0	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L1941239-1	L1945624-1	L1950072-1	L1951128-1	L1954224-2	233905	L1957697-1
	Sample Date & Time			6/12/2017 11:45:00 AM	6/19/2017 6:25:00 PM	6/26/2017 9:20:00 AM	6/27/2017 7:44:00 AM	7/4/2017 11:30:00 AM	7/4/2017 11:30:00 AM	7/10/2017 12:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	175	107	-	-	138	-	-
pH	pH units	0.1	6.0 - 9.5	7.99	8.06	7.77	7.78	8.13	-	8.05
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	2	<2.0	-	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	38	20	-	-	98
Turbidity	NTU	0.1	-	-	-	0.28	0.1	-	-	0.51
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.04	<0.020	-	-	<0.020	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	<2.0	-	-
Acute Lethality[2,3]	N/A		-	-	-	-	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H01	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L1961578-1	L1961578-4	L1967088-1	L1969210-1	L1974157-1	L1976363-7	L1984172-2
	Sample Date & Time			7/17/2017 2:35:00 PM	7/17/2017 2:35:00 PM	7/24/2017 2:45:00 PM	8/1/2017 2:00:00 PM	8/8/2017 3:15:00 PM	8/15/2017 2:20:00 PM	8/22/2017 11:55:00 AM
	QA/QC Sample Type			N/A	Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	213	213	-	239	-	299	-
pH	pH units	0.1	6.0 - 9.5	8.17	8.19	8.18	8.17	8.25	8.29	8.3
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	98	-	137	-	148
Turbidity	NTU	0.1	-	-	-	0.26	-	0.37	-	0.57
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	<0.020	<0.020	-	0.053	-	0.047	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-	<2.0	-
Acute Lethality[2,3]	N/A		-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H01	MP-C-H	MP-C-H	MP-C-H	MP-C-H01
	ALS Laboratory Sample ID			L1984045-1	L1984045-2	L1987600-5	L1990177-2	L1995168-6	L1995168-7
	Sample Date & Time			8/28/2017 11:00:00 AM	8/28/2017 11:00:00 AM	9/5/2017 9:00:00 AM	9/11/2017 3:05:00 PM	9/20/2017 10:40:00 AM	9/20/2017 10:45:00 AM
	QA/QC Sample Type			N/A	Duplicate	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	335	334	290	-	320	321
pH	pH units	0.1	6.0 - 9.5	8.27	8.27	8.3	8.18	8.02	8.11
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	-	178	-	-
Turbidity	NTU	0.1	-	-	-	-	0.37	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	0.028	<0.020	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	0.08	0.078	0.077	-	0.063	0.058
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	-	<2.0	<2.0
Acute Lethality[2,3]	N/A		-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05 @1100	MP-05 @1300	MP-05 @1500	MP-05 @1700
	ALS Laboratory Sample ID			L1931746-1	L1932516-2	L1932516-3	L1932516-4	L1932516-5
	Sample Date & Time			5/25/2017 2:30:00 PM	5/26/2017 11:00:00 AM	5/26/2017 1:00:00 PM	5/26/2017 3:00:00 PM	5/26/2017 5:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	37	125	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.22	8	8.01	7.94	7.99
Total Suspended Solids	mg/L	2	15	4.4	**111**	**149**	**95.5**	**39.2**
Total Dissolved Solids	mg/L	13	-	64	335	335	310	305
Turbidity	NTU	0.1	-	3.88	209	243	159	81.4
Alkalinity, Total (as CaCO3)	mg/L	10	-	23	75	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	0.431	-	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	32.9	95.5	-	-	-
Fluoride (F)	mg/L	0.02	-	0.052	0.045	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.38	0.97	-	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	2.18	-	-	-
Phosphorus, Total	mg/L	0.003	-	0.043	0.11	-	-	-
Sulfate (SO4)	mg/L	0.3	-	7.23	30.2	-	-	-
Dissolved Organic Carbon	mg/L	1	-	<1.0	5.2	-	-	-
Total Organic Carbon	mg/L	1	-	1.1	6.4	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	0.184	5	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	0.00076	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	0.000089	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	7.09	33	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	0.009	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.59	5.98	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00027	0.00812	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	4.77	16	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.0173	0.241	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000455	0.00566	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00056	0.0062	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	1.09	8.57	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	0.000111	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	17.5	35.2	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	0.000109	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.00164	0.0175	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	0.0224	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0325	0.0146	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	0.0001	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	0.000015	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	7.06	29.1	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00038	0.00134	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	4.7	12.6	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00649	0.125	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000488	0.00707	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	0.0008	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	1.14	7.11	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	<0.000050	0.000116	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	18.6	38.5	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	0.000014	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0016	0.0153	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010	<0.0010	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	0.0027	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			233644	L1933218-2	L1933136-4	L1933136-3	L1933136-1
	Sample Date & Time			5/27/2017 8:45:00 AM	5/27/2017 9:30:00 AM	5/27/2017 11:30:00 AM	5/27/2017 1:30:00 PM	5/27/2017 3:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	42	-	-	-
pH	pH units	0.1	6.0 - 9.5	-	7.69	8.06	7.99	7.73
Total Suspended Solids	mg/L	2	15	-	**28.5**	8.4	10	6.4
Total Dissolved Solids	mg/L	13	-	-	85	175	225	255
Turbidity	NTU	0.1	-	-	66.3	23.7	27.4	17.4
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	21	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	0.119	-	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	33.1	-	-	-
Fluoride (F)	mg/L	0.02	-	-	0.046	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	0.354	-	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	0.56	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	0.051	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	9.24	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	1.5	-	-	-
Total Organic Carbon	mg/L	1	-	-	1.2	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	1.06	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00017	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	<0.000010	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	10.6	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0024	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	1.43	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	0.00098	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	5.66	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.0662	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00123	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00174	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	2.59	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000052	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	16.2	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000023	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00252	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	0.0055	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0338	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	8.83	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00025	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	4.8	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.0375	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00114	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	2.16	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.000053	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	17.3	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.00135	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	<0.0010	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1933136-2	L1933136-5	L1933136-6	L1933136-7	L1933136-8
	Sample Date & Time			5/27/2017 5:30:00 PM	5/28/2017 2:30:00 PM	5/28/2017 4:30:00 PM	5/28/2017 10:30:00 AM	5/28/2017 12:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.9	7.91	7.96	7.91	7.94
Total Suspended Solids	mg/L	2	15	**25.2**	**19.6**	**47.6**	12.9	**77.6**
Total Dissolved Solids	mg/L	13	-	233	310	365	271	300
Turbidity	NTU	0.1	-	54.8	43.5	66.8	38	59.9
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	-	-	-	-
Total Organic Carbon	mg/L	1	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1933059-4	233663	L1933059-1	L1933059-2	L1933059-3
	Sample Date & Time			5/29/2017 11:40:00 AM	5/29/2017 11:40:00 AM	5/29/2017 1:40:00 PM	5/29/2017 3:40:00 PM	5/29/2017 5:40:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.88	-	7.93	8.08	8.03
Total Suspended Solids	mg/L	2	15	**33.6**	-	**30.3**	**36.4**	**40.8**
Total Dissolved Solids	mg/L	13	-	470	-	417	360	341
Turbidity	NTU	0.1	-	75	-	74.4	91.6	83.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	81	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.483	-	-	-	-
Bromide (Br)	mg/L	0.1	-	0.32	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	136	-	-	-	-
Fluoride (F)	mg/L	0.02	-	0.069	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	1.53	-	-	-	-
Nitrite (as N)	mg/L	0.01	-	0.034	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.69	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	0.0436	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	22	-	-	-	-
Dissolved Organic Carbon	mg/L	1	-	5.7	-	-	-	-
Total Organic Carbon	mg/L	1	-	5.8	-	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	1.71	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	0.00013	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00037	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0231	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	0.0001	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	0.000062	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	0.084	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000027	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	34.1	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000245	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	0.00241	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00121	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0039	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	1.87	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00212	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	0.014	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	17.6	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.139	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00462	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00258	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	7.16	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00775	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000082	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	4	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	61	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.101	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	7.95	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000041	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	0.00083	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	0.0001	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.0625	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	0.0001	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.0204	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	0.00243	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0074	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	0.00119	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0118	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	0.00013	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00013	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0141	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	0.073	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000013	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	30.5	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.00035	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.0015	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	0.0082	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	16.3	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.102	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00476	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00071	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.050	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	6.68	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00343	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000087	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	0.738	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	62.3	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.0944	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	7.86	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.00020	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000013	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0207	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	0.0015	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1934329-1	L1934329-2	L1934329-3	L1938471-1	L1939258-2
	Sample Date & Time			5/30/2017 11:00:00 AM	5/30/2017 1:00:00 PM	5/30/2017 3:00:00 PM	6/6/2017 10:40:00 AM	6/8/2017 10:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	-	-	182	-
pH	pH units	0.1	6.0 - 9.5	7.96	7.99	8	8.04	7.84
Total Suspended Solids	mg/L	2	15	**22.5**	**22.5**	**26.5**	**15.7**	12.4
Total Dissolved Solids	mg/L	13	-	350	315	330	324	345
Turbidity	NTU	0.1	-	68.9	68	71.5	69.4	43.8
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	72	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	0.511	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	90	-
Fluoride (F)	mg/L	0.02	-	-	-	-	0.041	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	1.82	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	1.19	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	0.0421	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	71.2	-
Dissolved Organic Carbon	mg/L	1	-	-	-	-	3.3	-
Total Organic Carbon	mg/L	1	-	-	-	-	4.1	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-	-	0.856	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	0.0003	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	0.000032	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	35.4	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	0.0022	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	1.15	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	0.00126	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	21.7	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	0.46	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	0.00211	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	0.00233	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	4.4	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	0.00028	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	36.3	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	0.000025	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	0.0194	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	0.0086	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	0.0109	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	0.00015	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	0.000011	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	35.8	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	0.00094	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	0.011	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	22.5	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	0.445	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	<0.000010	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	0.00225	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	0.00121	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	4.39	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	0.000278	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	38	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	0.000013	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	0.0189	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	0.0038	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-Lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1941948-1	L1974036-2	L1976360-1	234166	L1977784-1
	Sample Date & Time			6/14/2017 9:35:00 AM	8/11/2017 10:05:00 AM	8/15/2017 11:45:00 AM	8/15/2017 11:45:00 AM	8/17/2017 5:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	202	-	311	-	-
pH	pH units	0.1	6.0 - 9.5	7.85	8.4	8.11	-	8.3
Total Suspended Solids	mg/L	2	15	14.4	4.4	3.7	-	2
Total Dissolved Solids	mg/L	13	-	405	605	631	-	600
Turbidity	NTU	0.1	-	28.5	8.77	7.93	-	4.64
Alkalinity, Total (as CaCO3)	mg/L	10	-	86	-	150	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.315	-	0.03	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	133	-	216	-	-
Fluoride (F)	mg/L	0.02	-	0.071	-	0.252	-	-
Nitrate (as N)	mg/L	0.02	-	3.59	-	6.35	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.19	-	0.66	-	-
Phosphorus, Total	mg/L	0.003	-	0.019	-	0.0065	-	-
Sulfate (SO4)	mg/L	0.3	-	75.5	-	91.3	-	-
Dissolved Organic Carbon	mg/L	1	-	3.5	-	4.4	-	-
Total Organic Carbon	mg/L	1	-	3.7	-	4.4	-	-
Aluminum (Al)-Total	mg/L	0.01	-	0.52	-	0.128	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00025	-	0.00024	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000011	-	0.00001	-	-
Calcium (Ca)-Total	mg/L	0.5	-	32.4	-	59.3	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0018	-	0.0017	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.554	-	0.165	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00058	-	0.00017	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	30.3	-	40.9	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.347	-	0.0101	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00297	-	0.00424	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00182	-	0.00109	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	6.83	-	9.9	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000286	-	0.000182	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	66.3	-	109	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.00002	-	0.000017	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.0183	-	0.0164	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.004	-	0.0075	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0087	-	0.0208	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00018	-	0.00023	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000011	-	<0.000010	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	30.9	-	60	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00117	-	0.00123	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	-	<0.010	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	30.3	-	39.1	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.313	-	0.00344	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00293	-	0.00431	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00114	-	0.00051	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	5.96	-	9.98	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000303	-	0.000206	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	66.4	-	107	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000012	-	0.000011	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0169	-	0.0145	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0017	-	0.0056	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1977826-1	L1977854-1	L1978414-1	L1984164-1	L1987524-1
	Sample Date & Time			8/18/2017 2:30:00 PM	8/19/2017 2:50:00 PM	8/20/2017 11:20:00 AM	8/29/2017 1:30:00 PM	8/31/2017 5:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.26	8.27	8.33	8.28	8.23
Total Suspended Solids	mg/L	2	15	<2.0	3.6	2	2.1	3
Total Dissolved Solids	mg/L	13	-	658	711	660	730	737
Turbidity	NTU	0.1	-	4.6	4.39	4.36	9.97	6.35
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	-	-	-	-
Total Organic Carbon	mg/L	1	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05	MP-05	MP-05	MP-05
	ALS Laboratory Sample ID			L1988065-1	L1987426-1	L1988473-1	L1988826-1	L1990203-1
	Sample Date & Time			9/2/2017 5:00:00 PM	9/4/2017 11:30:00 AM	9/7/2017 6:00:00 PM	9/9/2017 6:30:00 PM	9/10/2017 5:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Hardness (as CaCO3)	mg/L	10	-	-	355	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.26	8.27	8.22	8.24	8.22
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0	2
Total Dissolved Solids	mg/L	13	-	686	757	729	770	933
Turbidity	NTU	0.1	-	4.61	2.96	3.38	3.12	2.85
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	182	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	0.025	-	-	-
Bromide (Br)	mg/L	0.1	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	243	-	-	-
Fluoride (F)	mg/L	0.02	-	-	0.263	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	7.19	-	-	-
Nitrite (as N)	mg/L	0.01	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	0.54	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	0.006	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	89.1	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	4.2	-	-	-
Total Organic Carbon	mg/L	1	-	-	4.4	-	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	0.056	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00026	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	<0.000010	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	75.9	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0016	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	0.089	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.00010	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	43	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.0189	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00363	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00085	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	10.4	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000154	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	118	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000011	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.01	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	0.0102	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0112	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	0.00024	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	72.4	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00146	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	42.3	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.0134	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00338	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.00069	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	10.4	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.000167	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	115	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.00976	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.0089	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05
	ALS Laboratory Sample ID			L1994794-1
	Sample Date & Time			9/12/2017 4:30:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Hardness (as CaCO3)	mg/L	10	-	-
pH	pH units	0.1	6.0 - 9.5	8.2
Total Suspended Solids	mg/L	2	15	2.3
Total Dissolved Solids	mg/L	13	-	838
Turbidity	NTU	0.1	-	1.29
Alkalinity, Total (as CaCO3)	mg/L	10	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-
Bromide (Br)	mg/L	0.1	-	-
Chloride (Cl)	mg/L	0.5	-	-
Fluoride (F)	mg/L	0.02	-	-
Nitrate (as N)	mg/L	0.02	-	-
Nitrite (as N)	mg/L	0.01	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-
Phosphorus, Total	mg/L	0.003	-	-
Sulfate (SO4)	mg/L	0.3	-	-
Dissolved Organic Carbon	mg/L	1	-	-
Total Organic Carbon	mg/L	1	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-
Barium (Ba)-Total	mg/L	0.0002	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-
Boron (B)-Total	mg/L	0.01	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-
Iron (Fe)-Total	mg/L	0.05	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-
Lithium (Li)-Total	mg/L	0.001	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-
Phosphorus (P)-Total	mg/L	0.05	-	-
Potassium (K)-Total	mg/L	0.05	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-
Silicon (Si)-Total	mg/L	0.1	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-
Sodium (Na)-Total	mg/L	0.5	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-
Sulfur (S)-Total	mg/L	0.5	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-
Uranium (U)-Total	mg/L	0.00001	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.001	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06	MP-06	MP-06
	ALS Laboratory Sample ID			L1931746-2	L1933218-1	233644	L1937982-1
	Sample Date & Time			5/25/2017 2:15:00 PM	5/27/2017 8:45:00 AM	5/27/2017 8:45:00 AM	6/3/2017 2:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Hardness (as CaCO3)	mg/L	10	-	86	113	-	-
pH	pH units	0.1	6.0 - 9.5	7.49	7.38	-	7.72
Total Suspended Solids	mg/L	2	15	2.4	4.3	-	4.9
Total Dissolved Solids	mg/L	13	-	133	175	-	485
Turbidity	NTU	0.1	-	11.8	13.2	-	30.4
Alkalinity, Total (as CaCO3)	mg/L	10	-	21	22	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.229	0.292	-	-
Chloride (Cl)	mg/L	0.5	-	19.1	25.8	-	-
Fluoride (F)	mg/L	0.02	-	<0.020	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.381	0.55	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.47	0.57	-	-
Phosphorus, Total	mg/L	0.003	-	<0.030	<0.030	-	-
Sulfate (SO4)	mg/L	0.3	-	54.8	85.4	-	-
Dissolved Organic Carbon	mg/L	0.5	-	<1.0	1.4	-	-
Total Organic Carbon	mg/L	0.5	-	1.2	1.2	-	-
Aluminum (Al)-Total	mg/L	0.01	-	0.077	0.125	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-
Calcium (Ca)-Total	mg/L	0.5	-	12	15.2	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	<0.0010	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.098	0.228	-	-
Lead (Pb)-Total	mg/L	0.0001	0.2	<0.00010	0.0001	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	13.8	17.5	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.454	0.522	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000445	0.000652	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00263	0.00268	-	-
Potassium (K)-Total	mg/L	0.05	-	1.11	1.43	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000243	0.000314	-	-
Sodium (Na)-Total	mg/L	0.5	-	10	11.5	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000013	0.000016	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.000298	0.000547	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	12.3	15.2	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	<0.00020	<0.00020	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	0.00027	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	13.5	18.1	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.425	0.488	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000453	0.000633	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00238	0.00225	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	1.14	1.4	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000259	0.000348	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	10.2	11.9	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000013	0.000015	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000265	0.000456	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0012	0.0014	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	-	-
Acute Lethality[2,3]	N/A		Non-lethal	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06	MP-06	MP-06
	ALS Laboratory Sample ID			L1937994-1	L1938471-2	L1939258-1	L1957704-2
	Sample Date & Time			6/4/2017 3:45:00 PM	6/6/2017 11:20:00 AM	6/8/2017 10:00:00 AM	7/12/2017 2:25:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Hardness (as CaCO3)	mg/L	10	-	317	307	-	392
pH	pH units	0.1	6.0 - 9.5	7.72	7.9	7.77	8.13
Total Suspended Solids	mg/L	2	15	3.8	<2.0	5.2	<2.0
Total Dissolved Solids	mg/L	13	-	496	508	575	665
Turbidity	NTU	0.1	-	31.2	14.6	20.7	0.47
Alkalinity, Total (as CaCO3)	mg/L	10	-	42	50	-	69
Ammonia, Total (as N)	mg/L	0.02	-	0.297	0.325	-	0.041
Chloride (Cl)	mg/L	0.5	-	89	88.6	-	110
Fluoride (F)	mg/L	0.02	-	0.052	0.029	-	0.071
Nitrate (as N)	mg/L	0.02	-	2.51	1.99	-	2.8
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.95	0.86	-	0.77
Phosphorus, Total	mg/L	0.003	-	0.0138	0.0122	-	0.0061
Sulfate (SO4)	mg/L	0.3	-	217	214	-	293
Dissolved Organic Carbon	mg/L	0.5	-	3.1	3.2	-	1.63
Total Organic Carbon	mg/L	0.5	-	3.5	5.4	-	1.5
Aluminum (Al)-Total	mg/L	0.01	-	0.159	0.056	-	0.013
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00013	0.0001	-	0.00012
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	39.5	38.5	-	60.8
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	<0.0010	-	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.376	0.1	-	<0.050
Lead (Pb)-Total	mg/L	0.0001	0.2	0.00013	<0.00010	-	<0.00010
Magnesium (Mg)-Total	mg/L	0.05	-	48.6	45.3	-	55.9
Manganese (Mn)-Total	mg/L	0.0005	-	0.731	0.663	-	0.11
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00159	0.00168	-	0.00265
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00222	0.0018	-	0.0008
Potassium (K)-Total	mg/L	0.05	-	4.52	4.28	-	5.52
Selenium (Se)-Total	mg/L	0.00005	-	0.000862	0.000846	-	0.00102
Sodium (Na)-Total	mg/L	0.5	-	37.5	35.2	-	42.1
Thallium (Tl)-Total	mg/L	0.00001	-	0.000021	0.000021	-	0.000026
Uranium (U)-Total	mg/L	0.00001	-	0.0065	0.00619	-	0.00877
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050	-	0.0086
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	-	0.00012
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	45.3	43	-	63.9
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00031	0.00028	-	0.00043
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	49.6	48.5	-	56.4
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.729	0.721	-	0.0941
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00185	0.00181	-	0.00264
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00175	0.00163	-	0.00056
Potassium (K)-Dissolved	mg/L	0.05	-	4.69	4.64	-	5.63
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000906	0.000886	-	0.00105
Sodium (Na)-Dissolved	mg/L	0.5	-	37.3	37.4	-	43.3
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000021	0.00002	-	0.000026
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00647	0.0065	-	0.00864
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0026	0.0034	-	0.0015
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-
Acute Lethality[2,3]	N/A		Non-lethal	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06	MP-06	MP-06
	ALS Laboratory Sample ID			233946	L1966887-2	L1969284-2	L1974036-1
	Sample Date & Time			7/12/2017 2:00:00 AM	7/30/2017 3:00:00 PM	8/1/2017 2:15:00 PM	8/11/2017 10:05:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Hardness (as CaCO3)	mg/L	10	-	-	422	-	-
pH	pH units	0.1	6.0 - 9.5	-	7.94	7.76	8.09
Total Suspended Solids	mg/L	2	15	-	<2.0	3.9	2
Total Dissolved Solids	mg/L	13	-	-	688	673	608
Turbidity	NTU	0.1	-	-	1.09	2.98	10.9
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	63	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	-
Chloride (Cl)	mg/L	0.5	-	-	111	-	-
Fluoride (F)	mg/L	0.02	-	-	0.082	-	-
Nitrate (as N)	mg/L	0.02	-	-	2.49	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	0.31	-	-
Phosphorus, Total	mg/L	0.003	-	-	<0.0030	-	-
Sulfate (SO4)	mg/L	0.3	-	-	300	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	1.7	-	-
Total Organic Carbon	mg/L	0.5	-	-	1.8	-	-
Aluminum (Al)-Total	mg/L	0.01	-	-	0.021	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00013	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	<0.000010	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	64.7	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	<0.0010	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	<0.050	-	-
Lead (Pb)-Total	mg/L	0.0001	0.2	-	<0.00010	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	62.8	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.0153	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00267	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00064	-	-
Potassium (K)-Total	mg/L	0.05	-	-	5.56	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.001	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	45.7	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000024	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00927	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0113	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	0.00013	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	63.5	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00044	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	63.9	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.0131	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00246	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	6.04	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.00103	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	45.2	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	0.000025	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.00891	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.0012	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-
Acute Lethality[2,3]	N/A		Non-lethal	Non-lethal	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L1976360-2	L1984164-2
	Sample Date & Time			8/15/2017 6:30:00 PM	8/29/2017 1:40:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	397	-
pH	pH units	0.1	6.0 - 9.5	7.91	8.02
Total Suspended Solids	mg/L	2	15	2.8	<2.0
Total Dissolved Solids	mg/L	13	-	685	573
Turbidity	NTU	0.1	-	6.14	11.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	76	-
Ammonia, Total (as N)	mg/L	0.02	-	0.042	-
Chloride (Cl)	mg/L	0.5	-	99.9	-
Fluoride (F)	mg/L	0.02	-	0.088	-
Nitrate (as N)	mg/L	0.02	-	2.22	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.7	-
Phosphorus, Total	mg/L	0.003	-	0.0079	-
Sulfate (SO4)	mg/L	0.3	-	258	0
Dissolved Organic Carbon	mg/L	0.5	-	2.8	-
Total Organic Carbon	mg/L	0.5	-	2.5	-
Aluminum (Al)-Total	mg/L	0.01	-	0.053	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00018	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	-
Calcium (Ca)-Total	mg/L	0.5	-	66.1	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	-
Iron (Fe)-Total	mg/L	0.05	-	0.086	-
Lead (Pb)-Total	mg/L	0.0001	0.2	<0.00010	-
Magnesium (Mg)-Total	mg/L	0.05	-	56.9	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.0316	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00261	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00076	-
Potassium (K)-Total	mg/L	0.05	-	5.63	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000874	-
Sodium (Na)-Total	mg/L	0.5	-	46.3	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000026	-
Uranium (U)-Total	mg/L	0.00001	-	0.00818	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0104	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00016	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	63.5	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00063	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	57.9	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.0263	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00262	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	5.9	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000961	-
Sodium (Na)-Dissolved	mg/L	0.5	-	46.1	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000023	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00805	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0011	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-
Acute Lethality[2,3]	N/A		Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.9
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L1941239-8	233784	L1945624-5	L1967088-2	L1967544-1	L1969210-4	L1974157-6
	Sample Date & Time			6/13/2017 9:30:00 AM	6/13/2017 9:30:00 AM	6/20/2017 9:42:00 AM	7/24/2017 3:50:00 PM	7/25/2017 8:10:00 AM	8/1/2017 12:00:00 PM	8/8/2017 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	306	-	357	-	332	398	-
pH	pH units	0.1	6.0 - 9.5	8.17	-	8.28	8.2	8.2	8.19	8.24
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	**89.8**	-	2.9	2.5	4.4	9.4	4.3
Total Dissolved Solids	mg/L	10	-	-	-	-	179	-	-	291
Turbidity	NTU	0.1	-	-	-	-	1.69	-	-	3.74
Ammonia, Total (as N)	mg/L	0.02	-	0.075	-	0.07	-	<0.020	0.047	-
Nitrate (as N)	mg/L	0.02	-	4.12	-	5.94	-	2.4	5.34	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0	<2.0	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.9
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101
	ALS Laboratory Sample ID			L1976363-6	234167	L1984172-1	L1984045-6	L1987600-3	L1990177-1	L1990177-6
	Sample Date & Time			8/15/2017 10:50:00 AM	8/15/2017 10:50:00 AM	8/22/2017 5:50:00 PM	8/29/2017 2:10:00 PM	9/5/2017 10:00:00 AM	9/12/2017 11:40:00 AM	9/12/2017 11:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	382	-	-	298	303	-	-
pH	pH units	0.1	6.0 - 9.5	8.09	-	8.21	8.14	8.22	8.03	8.09
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	5.6	-	4.9	4.7	<2.0	3.9	3.5
Total Dissolved Solids	mg/L	10	-	-	-	203	-	-	194	202
Turbidity	NTU	0.1	-	-	-	4.71	-	-	2	2.82
Ammonia, Total (as N)	mg/L	0.02	-	0.061	-	-	<0.020	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	5.2	-	-	1.45	1.43	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	<2.0	-	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L1941239-9	L1945624-6	L1950072-2	L1957697-6	233949	L1961578-5	L1967088-3
	Sample Date & Time			6/13/2017 9:10:00 AM	6/20/2017 9:30:00 AM	6/26/2017 9:40:00 AM	7/11/2017 11:55:00 AM	7/11/2017 11:55:00 AM	7/17/2017 2:20:00 PM	7/24/2017 4:10:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	373	296	-	417	-	484	-
pH	pH units	0.1	6.0 - 9.5	7.99	8.09	7.83	7.95	-	8.06	8.11
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	**142**	**37.3**	11.6	21.7	-	29.9	9.1
Total Dissolved Solids	mg/L	10	-	-	-	175	-	-	-	343
Turbidity	NTU	0.1	-	-	-	7.07	-	-	-	3.37
Ammonia, Total (as N)	mg/L	0.02	-	1.53	0.643	-	0.058	-	0.036	-
Nitrate (as N)	mg/L	0.02	-	5.7	4.34	-	9.36	-	10.8	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-	<2.0	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for June and July exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L1969210-5	234062	L1974157-4	L1976363-4	L1984172-7	L1984045-5	234255
	Sample Date & Time			8/1/2017 11:10:00 AM	8/1/2017 9:55:00 AM	8/8/2017 3:05:00 PM	8/14/2017 12:00:00 PM	8/22/2017 10:40:00 AM	8/29/2017 1:50:00 PM	8/29/2017 1:50:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	507	-	-	597	-	621	-
pH	pH units	0.1	6.0 - 9.5	8.06	-	8.11	8.09	8.11	8.08	-
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	-	2	8.8	2.1	3.3	-
Total Dissolved Solids	mg/L	10	-	-	-	408	-	388	-	-
Turbidity	NTU	0.1	-	-	-	1.69	-	1.83	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.206	-	-	0.122	-	0.082	-
Nitrate (as N)	mg/L	0.02	-	12.9	-	-	17.5	-	20.1	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	-	<2.0	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-lethal	-	-	-	-	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for June and July exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02
	ALS Laboratory Sample ID			L1987600-4
	Sample Date & Time			9/5/2017 10:10:00 AM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	650
pH	pH units	0.1	6.0 - 9.5	8.12
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	10	-	-
Turbidity	NTU	0.1	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.039
Nitrate (as N)	mg/L	0.02	-	23.7
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0
Acute Lethality[3,4]	N/A		Non-Lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for June and July exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-0101	MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L1876933-1	L1888660-1	L1888660-3	L1898963-1	L1909694-1	L1920670-1	233461
	Sample Date & Time			1/3/2017 2:45:00 PM	2/7/2017 3:30:00 PM	2/7/2017 3:30:00 PM	3/7/2017 3:30:00 PM	4/4/2017 4:30:00 PM	5/2/2017 4:30:00 PM	5/2/2017 4:30:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	7.65	7.74	7.75	7.71	7.6	7.5	-
Total Suspended Solids	mg/L	2	35	2.9	<2.0	<2.0	2.4	<2.0	2.1	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	66	82	76	77	79	69	-
Ammonia, Total (as N)	mg/L	0.02	4	0.068	0.065	0.064	0.075	0.057	0.114	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.53	1.67	1.59	2.33	5.4	4.9	-
Phosphorus, Total	mg/L	0.003	4	1.02	1.55	1.54	0.995	1.28	1.04	-
Fecal Coliforms	CFU/100mL	0	1,000	-	1	5	1	0	12	-
BOD	mg/L	2	30	-	<2.0	<2.0	<2.0	<2.0	<2.0	-
COD	mg/L	10	-	25	18	22	29	22	22	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-	-	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-01	MS-01	MS-01	MS-0101	MS-0103
	ALS Laboratory Sample ID			L1938032-1	L1953894-1	L1969173-1	L1987421-1	L2013415-1	L2013415-4	L2013415-3
	Sample Date & Time			6/6/2017 3:00:00 PM	7/4/2017 3:30:00 PM	8/1/2017 3:30:00 PM	9/5/2017 3:30:00 PM	10/24/2017 3:00:00 PM	10/24/2017 3:00:00 PM	10/24/2017 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Duplicate	Travel Blank
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	7.43	7.21	7.51	7.41	7.46	7.43	6.29
Total Suspended Solids	mg/L	2	35	5.9	<2.0	2.3	<2.0	2.2	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	42	46	58	50	50	51	<10
Ammonia, Total (as N)	mg/L	0.02	4	0.464	0.104	0.089	0.053	0.151	0.145	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.88	1.5	1.81	1.91	2.01	1.91	<0.15
Phosphorus, Total	mg/L	0.003	4	1.51	2.71	1.87	3.49	0.741	0.743	<0.0030
Fecal Coliforms	CFU/100mL	0	1,000	13	2	0	<2	0	0	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	36	28	24	21	94	18	<10
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-0102	MS-0103	MS-01	MS-0101
	ALS Laboratory Sample ID			L2023696-1	L2023696-4	L2023696-3	L2035949-1	L2035949-3
	Sample Date & Time			11/14/2017 3:00:00 PM	11/14/2017 3:00:00 PM	11/14/2017 3:00:00 PM	12/12/2017 3:15:00 PM	12/12/2017 3:15:00 PM
	QA/QC Sample Type			N/A	Field Blank	Travel Blank	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]					
pH	pH units	0.1	6.0 - 9.5	7	6.12	6.51	7.67	7.59
Total Suspended Solids	mg/L	2	35	4.4	<2.0	<2.0	2.7	6.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	36	<10	<10	89	88
Ammonia, Total (as N)	mg/L	0.02	4	1.16	<0.020	<0.020	0.043	0.065
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.11	<0.15	<0.15	1.56	1.61
Phosphorus, Total	mg/L	0.003	4	1.98	<0.0030	0.0038	1.11	1.16
Fecal Coliforms	CFU/100mL	0	1,000	1	0	0	0	3
BOD	mg/L	2	30	3.6	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	28	<10	<10	26	26
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0	<2.0
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-04B

Analyte	Sample ID			MS-MRY-04B	MS-MRY-04B	MS-MRY-04B	MS-MRY-04B-1	MS-MRY-04B-2	MS-MRY-04B-1	MS-MRY-04B-2
	ALS Laboratory Sample ID			L1937793-3	L1941005-1	L1942014-1	L1942554-1	L1942554-2	L1943891-1	L1943891-2
	Sample Date & Time			6/6/2017 10:19:00 AM	6/13/2017 12:04:00 PM	6/13/2017 4:20:00 PM	6/14/2017 8:50:00 AM	6/14/2017 2:20:00 PM	6/15/2017 12:15:00 AM	6/15/2017 4:15:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
pH	pH units	0.1	6.0 - 9.5	7.74	7.32	7.23	7.37	7.35	7.14	7.16
Total Suspended Solids	mg/L	2	35	5.4	6.8	<2.0	5.6	6.4	8.8	10
Total Dissolved Solids	mg/L	20	-	-	-	100	67	73	73	78
Turbidity	NTU	0.1	-	-	-	4.61	4.56	5.02	4.57	5.15
Alkalinity, Total (as CaCO3)	mg/L	10	-	28	16	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	4	0.121	0.108	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.99	1.14	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	0.0516	0.0801	-	-	-	-	-
Fecal Coliforms	CFU/100mL	0	1000	0	0	-	-	-	-	-
BOD	mg/L	2	30	3.1	3.1	-	-	-	-	-
COD	mg/L	10	-	19	27	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

Baffinland

TABLE 5.2.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-04B

Analyte	Sample ID			MS-MRY-04B-3	MS-MRY-04B-1	MS-MRY-04B-2	MS-MRY-04B-3	MS-MRY-04B	MS-MRY-04B-1
	ALS Laboratory Sample ID			L1943891-3	L1945271-1	L1945271-2	L1945271-3	L1945288-1	L1945293-1
	Sample Date & Time			6/15/2017 8:30:00 AM	6/19/2017 1:15:00 PM	6/19/2017 5:30:00 PM	6/19/2017 9:30:00 PM	6/20/2017 12:00:00 PM	6/20/2017 1:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.03	7.68	7.65	7.64	7.66	7.42
Total Suspended Solids	mg/L	2	35	3.2	17.3	17.9	15.9	13.3	26.8
Total Dissolved Solids	mg/L	20	-	148	142	152	157	-	240
Turbidity	NTU	0.1	-	4.58	7.33	7.23	7.67	-	9.09
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	81	-
Ammonia, Total (as N)	mg/L	0.02	4	-	-	-	-	1.62	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	4.79	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	0.243	-
Fecal Coliforms	CFU/100mL	0	1000	-	-	-	-	0	-
BOD	mg/L	2	30	-	-	-	-	16	-
COD	mg/L	10	-	-	-	-	-	98	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4: Effluent Quality Discharge Limits for Sewage Treatment Facilities to Freshwater Receiving Environment

Baffinland

TABLE 5.2.13
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-6

Analyte	Sample ID			MS-MRY-6	MS-MRY-6	MS-MRY-6	MS-MRY-06[2]	MS-MRY-06
	ALS Laboratory Sample ID			L1940484-1	L1940484-4	L1945276-1	L1950713-1	L1957733-1
	Sample Date & Time			6/11/2017 6:45:00 PM	6/12/2017 9:00:00 AM	6/20/2017 11:30:00 AM	6/27/2017 10:20:00 AM	7/10/2017 5:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
pH	pH units	0.1	-	7.27	7.5	8.13	7.43	6.9
Total Suspended Solids	mg/L	2	-	9.5	10.6	3.3	18.8	37.3
Lead (Pb)-Total	mg/L	0.0001	0.001	0.00073	0.00043	0.00033	**0.00247**	<0.0001
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	<2.0	<2.0	<2.0	2.5	<2.0
Benzene	ug/L	0.5	370	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	ug/L	0.5	2	<0.50	<0.50	<0.50	<0.50	<0.50
o-Xylene	ug/L	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1	-	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1	<1.1	<1.1	<1.1	<1.1
4-Bromofluorobenzene	%	Surrogate	-	95.7	98.3	99.8	98.3	95
1,4-Difluorobenzene	%	Surrogate	-	103.3	98.9	98.5	96.4	96.4
F1 (C6-C10)	ug/L	100	-	<100	<100	<100	<100	<100
F1-BTEX	ug/L	100	-	<100	<100	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	<100	<100	<100	<100	<100
F3 (C16-C34)	ug/L	250	-	600	650	410	300	<250
F4 (C34-C50)	ug/L	250	-	<250	<250	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	600	650	410	<380	<380
Chrom. to baseline at nC50		n/a	-	YES	YES	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	90.8	94.2	101.8	95.8	95.2
3,4-Dichlorotoluene	%	Surrogate	-	91.9	95.3	100.1	93.6	97.5

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities

[2]Internal samples. Effluent not discharging to the environment.

Baffinland

TABLE 5.2.13
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-6

Analyte	Sample ID			MS-MRY-06	MS-MRY-6	MS-MRY-6
	ALS Laboratory Sample ID			L1965127-1	L1969593-1	L1975306-1
	Sample Date & Time			7/21/2017 8:30:00 AM	8/2/2017 9:20:00 AM	8/15/2017 12:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	7.26	7.39	7.64
Total Suspended Solids	mg/L	2	-	34.3	14.8	7.5
Lead (Pb)-Total	mg/L	0.0001	0.001	**0.00163**	0.00066	0.00042
Oil and Grease, Total	mg/L	2	15 and No Visible Sheen	<2.0	2.3	<2.0
Benzene	ug/L	0.5	370	<0.50	<0.50	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50	<0.50	<0.50
Toluene	ug/L	0.5	2	<0.50	<0.50	<0.50
o-Xylene	ug/L	0.5	-	<0.50	<0.50	<0.50
m+p-Xylenes	ug/L	1	-	<1.0	<1.0	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1	<1.1	<1.1
4-Bromofluorobenzene	%	Surrogate	-	94.3	100.9	107.3
1,4-Difluorobenzene	%	Surrogate	-	101.9	102.9	103.7
F1 (C6-C10)	ug/L	100	-	<100	<100	<100
F1-BTEX	ug/L	100	-	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	150	<100	<100
F3 (C16-C34)	ug/L	250	-	870	1330	<250
F4 (C34-C50)	ug/L	250	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	1030	1330	<380
Chrom. to baseline at nC50		n/a	-	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	90.4	98.2	90
3,4-Dichlorotoluene	%	Surrogate	-	92.9	101	117.6

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities

[2]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.14
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-06	MS-06	MS-06
	ALS Laboratory Sample ID			L1933231-1	233645	L1938012-1	233735	L1957694-1
	Sample Date & Time			5/26/2017 2:40:00 PM	5/26/2017 2:40:00 PM	6/6/2017 2:30:00 PM	6/6/2017 2:30:00 PM	7/11/2017 9:00:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	89.5	-	536	-	924
Hardness (as CaCO3)	mg/L	10	-	30	-	245	-	436
pH	pH units	0.1	6.0 - 9.5	7.1	-	7.69	-	7.72
Total Suspended Solids	mg/L	2	15	2.9	-	10.1	-	2.6
Total Dissolved Solids	mg/L	13	-	41	-	346	-	705
Turbidity	NTU	0.1	-	3.79	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	4.1	-	2.9
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	-	33	-	42
Ammonia, Total (as N)	mg/L	0.02	-	0.214	-	0.653	-	0.464
Chloride (Cl)	mg/L	0.5	-	1.29	-	10.6	-	17.2
Fluoride (F)	mg/L	0.02	-	<0.020	-	0.044	-	0.03
Nitrate (as N)	mg/L	0.02	-	0.259	-	1.57	-	4.98
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.21	-	0.99	-	1.19
Phosphorus, Total	mg/L	0.003	-	<0.030	-	<0.0030	-	0.0055
Sulfate (SO4)	mg/L	0.3	-	30.6	-	206	-	405
Cyanide, Total	mg/L	0.002	1	-	-	<0.020	-	<0.0020
Dissolved Organic Carbon	mg/L	0.5	-	<1.0	-	2.8	-	1.86
Total Organic Carbon	mg/L	0.5	-	<1.0	-	4.2	-	1.78
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.029	-	0.1	-	0.0413
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	-	0.00012	-	<0.00010
Barium (Ba)-Total	mg/L	0.0002	-	-	-	0.0144	-	0.0206
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	<0.000050	-	<0.000050
Boron (B)-Total	mg/L	0.01	-	-	-	0.021	-	0.033
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000013	-	0.000051	-	0.000049
Calcium (Ca)-Total	mg/L	0.5	-	3.26	-	25.5	-	44.4
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	0.000013	-	0.000015
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	<0.00050	-	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	0.00692	-	0.00258
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	-	0.0019	-	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.14	-	0.382	-	0.131
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00015	-	0.00134	-	0.000705
Lithium (Li)-Total	mg/L	0.001	-	-	-	0.0124	-	0.0171
Magnesium (Mg)-Total	mg/L	0.05	-	5.5	-	44.9	-	79.3
Manganese (Mn)-Total	mg/L	0.0005	-	0.351	-	1.7	-	1.76
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000178	-	0.00175	-	0.00194
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00279	-	0.008	-	0.0103
Phosphorus (P)-Total	mg/L	0.05	-	-	-	<0.050	-	<0.050
Potassium (K)-Total	mg/L	0.05	-	1.17	-	7.71	-	10.7
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	0.00348	-	0.00823
Selenium (Se)-Total	mg/L	0.00005	-	0.000081	-	0.000467	-	0.00108
Silicon (Si)-Total	mg/L	0.1	-	-	-	0.57	-	0.69
Silver (Ag)-Total	mg/L	0.00005	-	-	-	<0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	<0.50	-	3.45	-	7.2
Strontium (Sr)-Total	mg/L	0.001	-	-	-	0.0425	-	0.0776
Sulfur (S)-Total	mg/L	0.5	-	-	-	75.7	-	143
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	<0.00020	-	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	0.000011	-	0.000024	-	0.000037
Thorium (Th)-Total	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	0.00237	-	<0.0010
Tungsten (W)-Total	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.000173	-	0.00275	-	0.0024
Vanadium (V)-Total	mg/L	0.0005	-	-	-	<0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0035	-	0.0042	-	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	<0.00030	-	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	-	<0.0050	-	0.0074
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	<0.00010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	0.0144	-	0.022
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	<0.000050	-	<0.000050
Boron (B)-Dissolved	mg/L	0.01	-	-	-	0.022	-	0.033
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000015	-	0.00005	-	0.000046
Calcium (Ca)-Dissolved	mg/L	0.05	-	3.15	-	27.6	-	45.7
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	<0.000010	-	0.000015
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	<0.00050	-	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	0.00645	-	0.00226
Copper (Cu)-Dissolved	mg/L	0.0002	-	<0.00020	-	0.00074	-	0.00043
Iron (Fe)-Dissolved	mg/L	0.01	-	0.013	-	<0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	0.000167	-	0.000062
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	0.0142	-	0.0195
Magnesium (Mg)-Dissolved	mg/L	0.05	-	5.32	-	42.7	-	78.2
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.338	-	1.67	-	1.68
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000162	-	0.0019	-	0.00199
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00263	-	0.00739	-	0.00714
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	<0.050	-	<0.050
Potassium (K)-Dissolved	mg/L	0.05	-	1.21	-	7.97	-	11.2
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	0.00334	-	0.00819
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000091	-	0.000538	-	0.00118
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	0.385	-	0.563
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	<0.000050	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.5	-	0.51	-	3.51	-	7.38
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	0.0439	-	0.0763
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	76	-	146
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	<0.00020	-	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	-	0.000027	-	0.000038
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	<0.00030	-	<0.00030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	<0.00010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000138	-	0.00254	-	0.0023
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	<0.00050	-	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0036	-	0.0036	-	0.0027
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	<0.00030	-	<0.00030
Ra-226	Bq/L	0.0038	0.37	<0.0100	-	0.46	-	0.0093
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds and MMER Regulations

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

[4]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.14
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-06	MS-06[4]	MS-06
	ALS Laboratory Sample ID			233947	L1969176-14	234061	L1975310-1	L1980961-1
	Sample Date & Time			7/11/2017 9:00:00 AM	8/01/2017 3:45:00 PM	8/01/2017 3:45:00 PM	8/15/2017 12:00:00 PM	8/24/2017 1:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	859	-	869	909
Hardness (as CaCO3)	mg/L	10	-	-	-	-	408	433
pH	pH units	0.1	6.0 - 9.5	-	7.58	-	7.77	7.7
Total Suspended Solids	mg/L	2	15	-	3.9	-	**32.5**	<2.0
Total Dissolved Solids	mg/L	13	-	-	639	-	634	664
Turbidity	NTU	0.1	-	-	16.9	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	41	41
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	0.069	0.043
Chloride (Cl)	mg/L	0.5	-	-	-	-	15.3	16.1
Fluoride (F)	mg/L	0.02	-	-	-	-	0.054	0.061
Nitrate (as N)	mg/L	0.02	-	-	-	-	4.83	5.05
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	0.63	0.33
Phosphorus, Total	mg/L	0.003	-	-	-	-	0.0186	<0.0030
Sulfate (SO4)	mg/L	0.3	-	-	-	-	362	378
Cyanide, Total	mg/L	0.002	1	-	<0.0020	-	-	<0.20
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	1.6	1.6
Total Organic Carbon	mg/L	0.5	-	-	-	-	1.8	1.4
Acidity (as CaCO3)	mg/L	2	-	-	-	-	<2.0	2
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0592	-	0.198	0.0328
Antimony (Sb)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00011	-	0.00014	0.00012
Barium (Ba)-Total	mg/L	0.0002	-	-	0.0186	-	0.0202	0.021
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	-	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.01	-	-	0.032	-	0.032	0.032
Cadmium (Cd)-Total	mg/L	0.00001	-	-	0.000033	-	0.000031	0.000032
Calcium (Ca)-Total	mg/L	0.5	-	-	41.5	-	43.1	44.6
Cesium (Cs)-Total	mg/L	0.00001	-	-	0.000011	-	0.000024	0.000013
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	-	0.00053	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	-	0.00117	-	0.00107	0.00064
Copper (Cu)-Total	mg/L	0.001	0.3	-	<0.0010	-	<0.0010	0.0031
Iron (Fe)-Total	mg/L	0.05	-	-	0.201	-	0.611	0.071
Lead (Pb)-Total	mg/L	0.00005	0.2	-	0.000582	-	0.000598	0.000694
Lithium (Li)-Total	mg/L	0.001	-	-	0.0168	-	0.0156	0.0174
Magnesium (Mg)-Total	mg/L	0.05	-	-	76	-	76.8	78.9
Manganese (Mn)-Total	mg/L	0.0005	-	-	1	-	0.689	0.538
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.0016	-	0.00147	0.00179
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00481	-	0.00751	0.00855
Phosphorus (P)-Total	mg/L	0.05	-	-	<0.050	-	<0.050	<0.050
Potassium (K)-Total	mg/L	0.05	-	-	9.91	-	11.1	11.4
Rubidium (Rb)-Total	mg/L	0.0002	-	-	0.00831	-	0.0101	0.0105
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000995	-	0.000997	0.000959
Silicon (Si)-Total	mg/L	0.1	-	-	0.24	-	0.35	0.11
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	-	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	-	6.59	-	6.73	6.73
Strontium (Sr)-Total	mg/L	0.001	-	-	0.0661	-	0.07	0.0727
Sulfur (S)-Total	mg/L	0.5	-	-	141	-	135	139
Tellurium (Te)-Total	mg/L	0.0002	-	-	<0.00020	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000033	-	0.000039	0.000033
Thorium (Th)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	-	<0.0015	-	<0.0080	<0.0020
Tungsten (W)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	-	0.00178	-	0.00162	0.00155
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050	-	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-	<0.0030	0.0035
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030	-	<0.00030	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	0.0066	0.0075
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	0.0199	0.0211
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050	<0.000050
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	0.03	0.032
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	0.000028	0.00003
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	42.1	45.2
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	0.000012	0.00001
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	<0.00050	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	0.00067	0.00058
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	0.00033	0.00035
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	0.000081	0.000098
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	0.0163	0.0169
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	73.6	77.8
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	0.612	0.483
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	0.0016	0.00173
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	0.00323	0.0035
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	<0.050	<0.050
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	10.6	11.5
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	0.00956	0.0105
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	0.00089	0.000966
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	0.062	<0.050
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050	<0.000050
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	6.62	6.77
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	0.0678	0.073
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	127	146
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	<0.00020	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	0.000032	0.000035
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	<0.00030	<0.00030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010	<0.00010
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	0.0014	0.00147
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	<0.00050	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	0.0011	0.0013
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	<0.00030	<0.00030
Ra-226	Bq/L	0.0038	0.37	-	0.011	-	0.011	<0.0089
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-	Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds and MMER Regulations

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

[4]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.14
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06
	ALS Laboratory Sample ID			L1981777-1
	Sample Date & Time			8/24/2017 1:00:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence and MMER Criteria[1]	
Conductivity	umhos/cm	3	-	-
Hardness (as CaCO3)	mg/L	10	-	-
pH	pH units	0.1	6.0 - 9.5	7.64
Total Suspended Solids	mg/L	2	15	2
Total Dissolved Solids	mg/L	13	-	640
Turbidity	NTU	0.1	-	3.98
Acidity (as CaCO3)	mg/L	2	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-
Chloride (Cl)	mg/L	0.5	-	-
Fluoride (F)	mg/L	0.02	-	-
Nitrate (as N)	mg/L	0.02	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-
Phosphorus, Total	mg/L	0.003	-	-
Sulfate (SO4)	mg/L	0.3	-	-
Cyanide, Total	mg/L	0.002	1	-
Dissolved Organic Carbon	mg/L	0.5	-	-
Total Organic Carbon	mg/L	0.5	-	-
Acidity (as CaCO3)	mg/L	2	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-
Barium (Ba)-Total	mg/L	0.0002	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-
Boron (B)-Total	mg/L	0.01	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-
Iron (Fe)-Total	mg/L	0.05	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-
Lithium (Li)-Total	mg/L	0.001	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-
Phosphorus (P)-Total	mg/L	0.05	-	-
Potassium (K)-Total	mg/L	0.05	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-
Silicon (Si)-Total	mg/L	0.1	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-
Sodium (Na)-Total	mg/L	0.5	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-
Sulfur (S)-Total	mg/L	0.5	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-
Uranium (U)-Total	mg/L	0.00001	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-
Ra-226	Bq/L	0.0038	0.37	-
Acute Lethality[2,3]	N/A		Non-Lethal	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds and MMER Regulations
[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)
[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)
[4]Internal samples. Effluent not discharging to the environment.

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1950717-1	233856	L1954208-1	L1954143-1	L1952134-1
	Sample Date & Time			6/27/2017 1:00:00 PM	6/27/2017 1:00:00 PM	7/1/2017 3:45:00 PM	7/2/2017 8:24:00 PM	7/3/2017 8:30:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	52.3	-	67.3	-	-
Hardness (as CaCO3)	mg/L	10	-	22	-	26	-	-
pH	pH units	0.1	6.0 - 9.5	7.12	-	7.19	7	7
Total Suspended Solids	mg/L	2	15	<2.0	-	3.4	**18.8**	**19.2**
Total Dissolved Solids	mg/L	13	-	25	-	36	105	105
Turbidity	NTU	0.1	-	-	-	-	30.3	25.9
Acidity (as CaCO3)	mg/L	2	-	3.3	-	2.4	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	-	<10	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.049	-	0.028	-	-
Chloride (Cl)	mg/L	0.5	-	<0.50	-	0.52	-	-
Fluoride (F)	mg/L	0.02	-	<0.020	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.081	-	0.15	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.17	-	<0.15	-	-
Phosphorus, Total	mg/L	0.003	-	0.0045	-	0.0061	-	-
Sulfate (SO4)	mg/L	0.3	-	15	-	20.9	-	-
Cyanide, Total	mg/L	0.002	1	<0.0020	-	<0.0020	-	-
Dissolved Organic Carbon	mg/L	0.5	-	<1.0	-	<0.50	-	-
Total Organic Carbon	mg/L	0.5	-	<1.0	-	0.73	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.109	-	0.106	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	-	<0.00010	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.00192	-	0.00276	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Boron (B)-Total	mg/L	0.01	-	<0.010	-	<0.010	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Calcium (Ca)-Total	mg/L	0.5	-	2.13	-	2.88	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000012	-	0.000015	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00126	-	0.0013	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	-	0.009	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.191	-	0.2	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000096	-	0.000323	-	-
Lithium (Li)-Total	mg/L	0.001	-	0.001	-	0.0011	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	3.7	-	4.68	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.0883	-	0.119	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000056	-	0.000067	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00145	-	0.00175	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	<0.050	-	-
Potassium (K)-Total	mg/L	0.05	-	0.24	-	0.341	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00053	-	0.00069	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000095	-	0.000087	-	-
Silicon (Si)-Total	mg/L	0.1	-	0.28	-	0.24	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Sodium (Na)-Total	mg/L	0.5	-	<0.50	-	<0.50	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0016	-	0.0021	-	-
Sulfur (S)-Total	mg/L	0.5	-	5.4	-	6.79	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	<0.00020	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	0.00048	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00372	-	0.0047	-	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.00008	-	0.000119	-	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	<0.0030	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	<0.00030	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0087	-	0.0067	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0018	-	0.0021	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Boron (B)-Dissolved	mg/L	0.01	-	<0.010	-	<0.010	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	2.34	-	2.95	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.00122	-	0.00121	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00035	-	0.00026	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	0.018	-	0.012	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	0.0013	-	0.0011	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	3.87	-	4.55	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.092	-	0.117	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	<0.000050	-	0.000066	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00131	-	0.00146	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.050	-	<0.050	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	0.277	-	0.299	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00034	-	0.00035	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000085	-	0.000091	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	0.079	-	0.088	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	<0.50	-	<0.50	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.0019	-	0.0022	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	4.21	-	6.88	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.00020	-	<0.00020	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.00030	-	<0.00030	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000032	-	0.000053	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0024	-	0.0013	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.00030	-	<0.00030	-	-
Ra-226	Bq/L	0.0045	0.37	<0.0068	-	<0.0051	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1954085-1	L1954760-1	L1957780-1	L1957684-1	233948
	Sample Date & Time			7/4/2017 8:45:00 AM	7/7/2017 8:35:00 AM	7/8/2017 8:45:00 AM	7/11/2017 10:00:00 AM	7/11/2017 10:00:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	192	-	-	486	-
Hardness (as CaCO3)	mg/L	10	-	81	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.08	6.76	6.88	6.5	-
Total Suspended Solids	mg/L	2	15	13.6	4.8	<2.0	2.3	-
Total Dissolved Solids	mg/L	13	-	127	215	271	371	-
Turbidity	NTU	0.1	-	-	5.85	1.06	7.81	-
Acidity (as CaCO3)	mg/L	2	-	2.8	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.114	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	0.89	-	-	-	-
Fluoride (F)	mg/L	0.02	-	<0.020	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.658	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.26	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	0.0158	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	70.6	-	-	-	-
Cyanide, Total	mg/L	0.002	1	<0.0020	-	-	<0.020	-
Dissolved Organic Carbon	mg/L	0.5	-	<0.50	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	0.97	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.342	-	-	0.107	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.0001	-	-	<0.00010	-
Barium (Ba)-Total	mg/L	0.0002	-	0.00692	-	-	0.00776	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	-	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	<0.010	-	-	0.012	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000017	-	-	0.000049	-
Calcium (Ca)-Total	mg/L	0.5	-	6.93	-	-	16.8	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000048	-	-	0.000015	-
Chromium (Cr)-Total	mg/L	0.0005	-	0.00105	-	-	<0.00050	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00637	-	-	0.0196	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.003	-	-	0.0024	-
Iron (Fe)-Total	mg/L	0.05	-	0.857	-	-	0.939	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000688	-	-	0.000354	-
Lithium (Li)-Total	mg/L	0.001	-	0.0018	-	-	0.004	-
Magnesium (Mg)-Total	mg/L	0.05	-	16.8	-	-	42.9	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.552	-	-	1.54	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000083	-	-	0.000061	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00695	-	-	0.0211	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	-	<0.050	-
Potassium (K)-Total	mg/L	0.05	-	0.697	-	-	1.01	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00192	-	-	0.00192	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000323	-	-	0.000902	-
Silicon (Si)-Total	mg/L	0.1	-	0.69	-	-	0.56	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	<0.50	-	-	0.76	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0046	-	-	0.0115	-
Sulfur (S)-Total	mg/L	0.5	-	26.6	-	-	74.3	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000014	-	-	0.000022	-
Thorium (Th)-Total	mg/L	0.0001	-	0.00053	-	-	0.00012	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.019	-	-	<0.0060	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	-
Uranium (U)-Total	mg/L	0.00001	-	0.000165	-	-	0.000086	-
Vanadium (V)-Total	mg/L	0.0005	-	0.00083	-	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0046	-	-	0.0068	-
Zirconium (Zr)-Total	mg/L	0.0003	-	0.00035	-	-	<0.00030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.00419	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	<0.010	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000018	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	6.98	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.00586	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.001	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	0.16	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	0.0021	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	15.5	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.504	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000082	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.006	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.050	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	0.519	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00075	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000335	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	0.164	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	<0.50	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.0047	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	25.8	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.00020	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000031	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0028	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	0.012	-	-	0.012	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-0801	MS-08	MS-08	MS-08	MS-0802
	ALS Laboratory Sample ID			L1957684-2	L1963051-1	L1962205-1	L1965122-1	L1965122-2
	Sample Date & Time			7/11/2017 10:00:00 AM	7/18/2017 10:15:00 AM	7/19/2017 10:00:00 AM	7/21/2017 11:15:00 AM	7/21/2017 11:15:00 AM
	QA/QC Sample Type			Duplicate	N/A	N/A	N/A	Field Blank
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	486	608	-	656	<3.0
Hardness (as CaCO3)	mg/L	10	-	-	-	-	318	<10
pH	pH units	0.1	6.0 - 9.5	6.6	6.93	6.69	6.92	6.21
Total Suspended Solids	mg/L	2	15	4.6	5.8	4.4	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	353	446	462	-	-
Turbidity	NTU	0.1	-	7.66	10.1	6.75	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	10	<10
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	0.431	<0.020
Chloride (Cl)	mg/L	0.5	-	-	-	-	2.59	<0.50
Fluoride (F)	mg/L	0.02	-	-	-	-	0.024	<0.020
Nitrate (as N)	mg/L	0.02	-	-	-	-	2.46	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	0.62	<0.15
Phosphorus, Total	mg/L	0.003	-	-	-	-	<0.015	<0.0030
Sulfate (SO4)	mg/L	0.3	-	-	-	-	308	<0.30
Cyanide, Total	mg/L	0.002	1	0.0023	<0.0020	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	<1.0	<1.0
Total Organic Carbon	mg/L	0.5	-	-	-	-	<1.0	<1.0
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0742	0.167	-	0.0363	0.0393
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-	<0.00010	<0.00010
Barium (Ba)-Total	mg/L	0.0002	-	0.0076	0.0104	-	0.0101	0.00055
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.012	0.015	-	0.014	<0.010
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000053	0.000058	-	0.000057	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	16.2	20.8	-	22.6	0.52
Cesium (Cs)-Total	mg/L	0.00001	-	0.000012	0.000028	-	<0.000010	<0.000010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	0.00059	-	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0195	0.0231	-	0.0249	<0.00010
Copper (Cu)-Total	mg/L	0.001	0.3	0.0024	0.0026	-	0.007	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.855	0.91	-	0.477	<0.050
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000762	0.000329	-	0.000485	<0.000050
Lithium (Li)-Total	mg/L	0.001	-	0.0039	0.0046	-	0.0045	<0.0010
Magnesium (Mg)-Total	mg/L	0.05	-	41.7	57.7	-	63.5	<0.050
Manganese (Mn)-Total	mg/L	0.0005	-	1.53	1.94	-	2.12	<0.00050
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000058	0.000064	-	<0.000050	<0.000050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0206	0.0266	-	0.0283	<0.00050
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	-	<0.050	<0.050
Potassium (K)-Total	mg/L	0.05	-	1	1.22	-	1.23	<0.050
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00194	0.0026	-	0.00214	<0.00020
Selenium (Se)-Total	mg/L	0.00005	-	0.000933	0.00117	-	0.00119	<0.000050
Silicon (Si)-Total	mg/L	0.1	-	0.5	0.75	-	0.55	2.4
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	0.76	0.96	-	0.97	0.64
Strontium (Sr)-Total	mg/L	0.001	-	0.0116	0.0154	-	0.0155	<0.0010
Sulfur (S)-Total	mg/L	0.5	-	76.4	94.6	-	107	<0.50
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	0.000021	0.000025	-	0.00002	<0.000010
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	0.0002	-	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	0.00042	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	0.00963	-	<0.002	<0.00030
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.000081	0.00011	-	0.000055	<0.000010
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.008	0.0067	-	0.01	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	-	<0.00030	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	<0.0067	0.012	-	0.01	<0.0066
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1965132-1	L1969645-1	L1969176-15	234061	L1971191-1
	Sample Date & Time			7/25/2017 9:20:00 AM	7/29/2017 7:30:00 PM	8/1/2017 4:30:00 PM	8/1/2017 4:30:00 PM	8/3/2017 10:25:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	695	-	1860	-	-
Hardness (as CaCO3)	mg/L	10	-	338	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	6.98	6.4	**5.25**	-	**4.8**
Total Suspended Solids	mg/L	2	15	<2.0	10.1	10.7	-	2.8
Total Dissolved Solids	mg/L	13	-	527	753	1700	-	1840
Turbidity	NTU	0.1	-	-	21.6	20.1	-	8.05
Acidity (as CaCO3)	mg/L	2	-	3.3	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	12	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.414	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	2.73	-	-	-	-
Fluoride (F)	mg/L	0.02	-	0.03	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	2.61	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.57	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	<0.0030	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	334	-	-	-	-
Cyanide, Total	mg/L	0.002	1	<0.0020	-	0.0056	-	-
Dissolved Organic Carbon	mg/L	0.5	-	<1.0	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	<1.0	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0322	-	0.816	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	-	<0.0010	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	-	<0.0010	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0108	-	0.0201	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	<0.0010	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	<0.00050	-	-
Boron (B)-Total	mg/L	0.01	-	0.014	-	<0.10	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000056	-	0.00027	-	-
Calcium (Ca)-Total	mg/L	0.5	-	24.8	-	53.6	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	<0.000010	-	<0.00010	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	-	<0.0050	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.024	-	0.186	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0013	-	0.029	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.393	-	34.8	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000143	-	0.00764	-	-
Lithium (Li)-Total	mg/L	0.001	-	0.0049	-	0.014	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	58.1	-	227	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	2.31	-	9.6	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.000050	-	<0.00050	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0267	-	0.215	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	<0.50	-	-
Potassium (K)-Total	mg/L	0.05	-	1.14	-	2.31	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00218	-	0.0045	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.00128	-	0.0031	-	-
Silicon (Si)-Total	mg/L	0.1	-	0.51	-	1.5	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	<0.00050	-	-
Sodium (Na)-Total	mg/L	0.5	-	0.86	-	<5.0	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0169	-	0.038	-	-
Sulfur (S)-Total	mg/L	0.5	-	106	-	374	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	<0.0020	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000024	-	<0.00010	-	-
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	-	<0.0010	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	<0.0010	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00134	-	<0.007	-	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	<0.0010	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.000057	-	0.00121	-	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	<0.0050	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0048	-	0.042	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	<0.0030	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0108	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	0.014	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000061	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	24.6	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0256	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00026	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	0.087	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	0.0047	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	67.1	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	2.46	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0286	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.050	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	1.31	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00221	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00135	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	0.49	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	1.07	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.016	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	113	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.00020	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000022	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.00010	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000024	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.00050	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0051	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.00030	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	0.0077	-	0.015	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	**Lethal**	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1981313-3	L1980957-1	234211	L1981776-1	L1981313-1
	Sample Date & Time			8/24/2017 4:25:00 PM	8/24/2017 4:45:00 PM	8/24/2017 4:45:00 PM	8/24/2017 6:05:00 PM	8/24/2017 7:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	3330	-	-	-
Hardness (as CaCO3)	mg/L	10	-	-	1990	-	-	-
pH	pH units	0.1	6.0 - 9.5	6.96	6.99	-	6.9	7.02
Total Suspended Solids	mg/L	2	15	13.6	13.3	-	12	12.4
Total Dissolved Solids	mg/L	13	-	3070	3140	-	3130	2840
Turbidity	NTU	0.1	-	43.7	-	-	42.3	37.4
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	82	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	1.67	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	9.1	-	-	-
Fluoride (F)	mg/L	0.02	-	-	<0.20	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	7.98	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	2.08	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	<0.0030	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	2040	-	-	-
Cyanide, Total	mg/L	0.002	1	-	<0.20	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	1.4	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	1.5	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	14	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	0.0271	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.0010	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.00050	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	<0.10	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	0.00038	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	88.6	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	<0.00010	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	0.283	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	<0.010	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	7.1	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	0.024	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	423	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	18.1	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	<0.00050	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.317	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	<0.50	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	3.45	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	0.0061	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.00474	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	1.1	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.00050	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	95.1	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	0.06	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	762	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	<0.0020	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.00011	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	<0.0010	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	<0.0030	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	<0.0010	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	<0.00010	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.030	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.0030	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	<0.050	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.0264	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.00050	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	<0.10	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	0.00032	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	89.9	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	<0.00010	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.0050	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	0.27	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	<0.0020	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	2.79	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.00050	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	0.025	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	429	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	17.9	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	<0.00050	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.301	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<0.50	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	3.47	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.0064	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.00475	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	1.01	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.00050	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	95.3	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.061	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	729	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.0020	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.00010	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.0030	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.0010	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	<0.00010	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.0050	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.016	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	<0.0030	-	-	-
Ra-226	Bq/L	0.0045	0.37	-	0.03	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1981313-2	L1981303-2	L1981529-2	L1981703-2	L1981704-2
	Sample Date & Time			8/24/2017 8:00:00 PM	8/25/2017 8:05:00 AM	8/25/2017 2:30:00 PM	8/25/2017 6:20:00 PM	8/26/2017 9:35:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	-	-	-	-
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	6.99	7.2	7.36	7.45	7.62
Total Suspended Solids	mg/L	2	15	10.8	7.6	6.4	4.4	10
Total Dissolved Solids	mg/L	13	-	2860	3110	3140	3140	3100
Turbidity	NTU	0.1	-	36.1	18.6	15.9	12.1	17.1
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	-	-	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

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MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1981776-2	L1981778-2	L1981779-2	L1984355-1	L1984358-1
	Sample Date & Time			8/26/2017 3:40:00 PM	8/26/2017 6:00:00 PM	8/27/2017 8:20:00 AM	8/28/2017 12:20:00 PM	8/29/2017 8:49:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	-	-	-	-
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.63	7.66	7.64	7.76	7.59
Total Suspended Solids	mg/L	2	15	**17.2**	**15.6**	**240**	11.8	12.8
Total Dissolved Solids	mg/L	13	-	2980	3060	2800	2680	2680
Turbidity	NTU	0.1	-	26.8	22.5	210	18.8	30.8
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	-	-	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08	MS-08
	ALS Laboratory Sample ID			L1984409-1	L1984409-2	L1984365-1	L1985509-3	L1985509-1
	Sample Date & Time			8/29/2017 10:50:00 AM	8/29/2017 11:00:00 AM	8/29/2017 2:58:00 PM	8/30/2017 11:50:00 AM	8/30/2017 6:05:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	-	-	2850	-
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.61	7.62	7.57	6.5	6.43
Total Suspended Solids	mg/L	2	15	9.8	9.8	9.1	**26.3**	**29.6**
Total Dissolved Solids	mg/L	13	-	2600	2570	2610	2810	2940
Turbidity	NTU	0.1	-	27	27.4	29.1	78.3	95.1
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	-	-	-	0.0078	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-	-	-	0.324	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	<0.0010	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	<0.0010	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	0.0295	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	<0.0010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	<0.00050	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	<0.10	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	0.00025	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	86.3	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	<0.00010	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	<0.0050	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	0.242	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	<0.010	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	12.4	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	0.0008	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	0.022	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	404	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	16.6	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	<0.00050	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	0.261	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	<0.50	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	3.07	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	0.0054	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	0.0041	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	1.2	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	<0.00050	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	65.6	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	0.059	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	650	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	<0.0020	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	0.00016	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	<0.0010	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	<0.0010	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	<0.0050	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	<0.0010	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	0.00151	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	<0.0050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	<0.030	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	-	-	-	0.023	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-08-1	MS-08-3
	ALS Laboratory Sample ID			L1985515-1	L1985520-1	L1988035-1	L1988046-1	L1988308-1
	Sample Date & Time			8/31/2017 8:30:00 AM	8/31/2017 11:55:00 AM	9/1/2017 4:45:00 PM	9/3/2017 11:45:00 AM	9/4/2017 5:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	-	-	-	-
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	6.84	7.08	**5.8**	**5.45**	**5.55**
Total Suspended Solids	mg/L	2	15	**24.5**	**26.4**	**34.8**	**18.4**	**22.7**
Total Dissolved Solids	mg/L	13	-	2890	2860	3320	3530	3670
Turbidity	NTU	0.1	-	84.5	85.6	129	75.4	63.7
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	-	-	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	-	-	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Pond

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08-1	MS-08	MS-08-1
	ALS Laboratory Sample ID			L1988827-1	L1987487-1	234308	L1988700-1
	Sample Date & Time			9/4/2017 6:00:00 PM	9/5/2017 9:56:00 AM	9/5/2017 2:50:00 PM	9/6/2017 11:15:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]				
Conductivity	umhos/cm	3	-	3420	-	-	-
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	**5.75**	**5.77**	-	**5.16**
Total Suspended Solids	mg/L	2	15	13.2	12.1	-	12.8
Total Dissolved Solids	mg/L	13	-	3420	3830	-	3770
Turbidity	NTU	0.1	-	57.2	46.9	-	37.8
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	0.0067	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.171	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0281	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	-	-	-
Boron (B)-Total	mg/L	0.01	-	<0.10	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.00034	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	98.4	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.373	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	28.9	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	0.03	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	515	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	22	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.398	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	-	-	-
Potassium (K)-Total	mg/L	0.05	-	3.56	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.006	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.00567	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	1.5	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	50.2	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.072	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	866	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.00012	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.00092	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.032	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	0.022	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	**Lethal**	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Met

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L1933807-3	L1938558-1	L1942055-7	L1946654-11	L1949986-11	L1972601-10
	Sample Date & Time			5/29/2017 11:35:00 AM	6/5/2017 12:50:00 PM	6/12/2017 1:27:00 PM	6/20/2017 3:20:00 PM	6/26/2017 11:50:00 AM	8/8/2017 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	34.9	62.9	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.3	7.75	7.87	8	8.03	8.18
Total Suspended Solids	mg/L	2	15	4.9	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	14	30	29	195	230	285
Turbidity	NTU	0.1	-	-	-	1.42	0.59	0.34	1.06
Alkalinity, Total (as CaCO3)	mg/L	10	-	14	28	-	-	-	-
Dissolved Organic Carbon	mg/L	1	-	3.4	4	-	-	-	-
Total Organic Carbon	mg/L	1	-	3.1	3.8	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.206	0.036	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.00296	0.00462	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	<0.010	<0.010	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	2.49	4.98	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000016	<0.000010	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00033	<0.00010	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.001	<0.0010	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.513	0.086	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000306	0.000052	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	<0.0010	<0.0010	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	2.32	3.81	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.0149	0.00161	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00017	0.000237	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00193	0.0039	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	0.622	0.817	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00175	0.00205	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	0.64	0.7	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	<0.50	<0.50	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0022	0.0035	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	1.53	0.83	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00569	0.00086	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.000087	0.000048	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0076	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.0048	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	<0.010	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	5.46	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00071	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	0.028	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	<0.0010	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	3.76	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.0007	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.000217	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.0037	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<0.050	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	0.846	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.00193	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	0.682	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	0.51	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.0037	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	0.8	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.00020	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.00030	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.000037	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.0029	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	<0.00030	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	0.0021	<0.0010	-	-	-	-
F1 (C6-C10)	ug/L	100	-	<100	<100	-	-	-	-
F2 (C10-C16)	ug/L	100	-	<100	<100	-	-	-	-
F3 (C16-C34)	ug/L	250	-	<250	<250	-	-	-	-
F4 (C34-C50)	ug/L	250	-	<250	<250	-	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	<380	-	-	-	-
Chrom. to baseline at nC50		n/a	-	YES	YES	-	-	-	-
2-Bromobenzotrifluoride	%	Surrogate	-	93.8	87.1	-	-	-	-
3,4-Dichlorotoluene	%	Surrogate	-	94.1	98.7	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities

TABLE 5.2.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A
	ALS Laboratory Sample ID			L1984043-14
	Sample Date & Time			8/28/2017 2:30:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	420
pH	pH units	0.1	6.0 - 9.5	8.08
Total Suspended Solids	mg/L	2	15	<2.0
Total Dissolved Solids	mg/L	10	-	254
Turbidity	NTU	0.1	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	182
Dissolved Organic Carbon	mg/L	1	-	5.4
Total Organic Carbon	mg/L	1	-	4.9
Aluminum (Al)-Total	mg/L	0.005	-	0.0151
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00019
Barium (Ba)-Total	mg/L	0.0002	-	0.0245
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.015
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	32.2
Cesium (Cs)-Total	mg/L	0.00001	-	0.00001
Chromium (Cr)-Total	mg/L	0.0005	-	0.00055
Cobalt (Co)-Total	mg/L	0.0001	-	<0.00010
Copper (Cu)-Total	mg/L	0.001	0.3	0.0012
Iron (Fe)-Total	mg/L	0.05	-	<0.050
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050
Lithium (Li)-Total	mg/L	0.001	-	0.0015
Magnesium (Mg)-Total	mg/L	0.05	-	26.6
Manganese (Mn)-Total	mg/L	0.0005	-	0.00105
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000222
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00769
Phosphorus (P)-Total	mg/L	0.05	-	<0.050
Potassium (K)-Total	mg/L	0.05	-	1.93
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00626
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050
Silicon (Si)-Total	mg/L	0.1	-	4.81
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	8.46
Strontium (Sr)-Total	mg/L	0.001	-	0.0202
Sulfur (S)-Total	mg/L	0.5	-	6.51
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	0.00104
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.00108
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0
Phenols (4AAP)	mg/L	0.001	-	0.001
F1 (C6-C10)	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	<100
F3 (C16-C34)	ug/L	250	-	<250
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380
Chrom. to baseline at nC50		n/a	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	98.6
3,4-Dichlorotoluene	%	Surrogate	-	94.2

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Lan

TABLE 5.2.17
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY13-B	MS-MRY-13B
	ALS Laboratory Sample ID			L1933807-4	L1938558-2	L1942055-6	L1946654-12	L1949986-12	L1972601-11
	Sample Date & Time			5/29/2017 10:45:00 AM	6/5/2017 12:20:00 PM	6/12/2017 1:15:00 PM	6/20/2017 3:40:00 PM	6/26/2017 11:40:00 AM	8/8/2017 2:55:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	47.1	89.6	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.37	7.76	7.99	8.15	8.18	8.28
Total Suspended Solids	mg/L	2	15	<2.0	2.1	2.1	6.4	4.8	<2.0
Total Dissolved Solids	mg/L	10	-	22	53	71	310	285	345
Turbidity	NTU	0.1	-	-	-	0.8	1.76	1.4	1.04
Alkalinity, Total (as CaCO3)	mg/L	10	-	17	33	-	-	-	-
Dissolved Organic Carbon	mg/L	1	-	3	4.3	-	-	-	-
Total Organic Carbon	mg/L	1	-	3	4.4	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.088	0.026	-	-	-	-
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-	-	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.00387	0.00678	-	-	-	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Boron (B)-Total	mg/L	0.01	-	<0.010	0.012	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	0.00001	-	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	3.79	8.18	-	-	-	-
Cesium (Cs)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-	-	-	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00016	<0.00010	-	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	0.0012	-	-	-	-
Iron (Fe)-Total	mg/L	0.05	-	0.216	0.064	-	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00019	0.000059	-	-	-	-
Lithium (Li)-Total	mg/L	0.001	-	<0.0010	0.0019	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	2.68	5.75	-	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.00615	0.00137	-	-	-	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000208	0.000277	-	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00234	0.00531	-	-	-	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	0.684	0.97	-	-	-	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00165	0.00202	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	0.52	0.87	-	-	-	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	<0.50	0.91	-	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0027	0.0051	-	-	-	-
Sulfur (S)-Total	mg/L	0.5	-	1.53	0.91	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	-	-	-
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00297	0.00095	-	-	-	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.000058	0.000054	-	-	-	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-	-	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0061	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.00649	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	0.012	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	8.02	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00086	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	0.019	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	0.0018	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	5.53	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.00061	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.000245	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.00491	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<0.050	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	0.974	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.00205	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	0.831	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	0.89	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.0049	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	0.88	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.00020	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.00030	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.000045	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.00050	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.0012	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	<0.00030	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	-
Phenols (4AAP)	mg/L	0.001	-	0.0013	<0.0010	-	-	-	-
F1 (C6-C10)	ug/L	100	-	<100	<100	-	-	-	-
F2 (C10-C16)	ug/L	100	-	<100	<100	-	-	-	-
F3 (C16-C34)	ug/L	250	-	<250	<250	-	-	-	-
F4 (C34-C50)	ug/L	250	-	<250	<250	-	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	<380	-	-	-	-
Chrom. to baseline at nC50		n/a	-	YES	YES	-	-	-	-
2-Bromobenzotrifluoride	%	Surrogate	-	91.6	84.9	-	-	-	-
3,4-Dichlorotoluene	%	Surrogate	-	106.1	95.8	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Landfill Facilities

Baffinland

TABLE 5.2.17
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L1975323-6	L1978447-12	L1984043-17	L1987589-11
	Sample Date & Time			8/14/2017 1:30:00 PM	8/21/2017 12:50:00 PM	8/28/2017 2:05:00 PM	9/4/2017 2:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	597	-	750	2060
pH	pH units	0.1	6.0 - 9.5	8.33	8.27	8.2	8.16
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	402	350	509	1380
Turbidity	NTU	0.1	-	-	0.22	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	165	-	153	157
Dissolved Organic Carbon	mg/L	1	-	6	-	4.5	5.2
Total Organic Carbon	mg/L	1	-	5.4	-	4.8	5.1
Aluminum (Al)-Total	mg/L	0.005	-	0.0032	-	0.0176	<0.0030
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00012	-	0.00016	0.00015
Barium (Ba)-Total	mg/L	0.0002	-	0.0345	-	0.0405	0.108
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00050	-	<0.00010	<0.00050
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	-	<0.000050	<0.00050
Boron (B)-Total	mg/L	0.01	-	0.03	-	0.032	0.084
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	0.000012
Calcium (Ca)-Total	mg/L	0.5	-	49.5	-	56.8	157
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	<0.000010	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010
Copper (Cu)-Total	mg/L	0.001	0.3	0.00134	-	0.0012	0.00128
Iron (Fe)-Total	mg/L	0.05	-	<0.030	-	<0.050	<0.030
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	-	<0.000050	<0.000050
Lithium (Li)-Total	mg/L	0.001	-	0.0097	-	0.0222	0.105
Magnesium (Mg)-Total	mg/L	0.05	-	33.6	-	39	98
Manganese (Mn)-Total	mg/L	0.0005	-	0.000802	-	0.00144	0.00061
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000179	-	0.000175	0.00014
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00742	-	0.00691	0.00841
Phosphorus (P)-Total	mg/L	0.05	-	-	-	<0.050	-
Potassium (K)-Total	mg/L	0.05	-	1.72	-	1.8	2.69
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	0.00512	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.0010	-	<0.000050	<0.0010
Silicon (Si)-Total	mg/L	0.1	-	3.92	-	3.94	4.49
Silver (Ag)-Total	mg/L	0.00005	-	<0.000010	-	<0.000050	<0.000010
Sodium (Na)-Total	mg/L	0.5	-	9.87	-	10.5	22.4
Strontium (Sr)-Total	mg/L	0.001	-	0.0323	-	0.0406	0.13
Sulfur (S)-Total	mg/L	0.5	-	-	-	5.48	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.00010	-	<0.000010	<0.00010
Thorium (Th)-Total	mg/L	0.0001	-	-	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.010	-	0.00101	<0.010
Tungsten (W)-Total	mg/L	0.0001	-	-	-	<0.00010	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	0.000907	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.0010	-	<0.00050	<0.0010
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	<0.0030	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-	<0.00030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	<2.0
Phenols (4AAP)	mg/L	0.001	-	<0.0010	-	<0.0010	<0.0010
F1 (C6-C10)	ug/L	100	-	<100	-	<100	<100
F2 (C10-C16)	ug/L	100	-	<100	-	<100	<100
F3 (C16-C34)	ug/L	250	-	<250	-	<250	<250
F4 (C34-C50)	ug/L	250	-	<250	-	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	<380	<380
Chrom. to baseline at nC50		n/a	-	YES	-	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	88.4	-	102.8	89.1
3,4-Dichlorotoluene	%	Surrogate	-	108.8	-	95.2	91.3

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Effluent Quality Discharge Limits for the Lar

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TABLE 5.2.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L1933807-8	L1937998-6	L1942055-3	L1946654-8	L1949986-8	L1954220-7
	Sample Date & Time			5/30/2017 11:30:00 AM	6/4/2017 4:00:00 AM	6/12/2017 11:39:00 AM	6/20/2017 12:00:00 PM	6/26/2017 4:15:00 PM	7/3/2017 3:50:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	58.7	58.8	-	-	-	143
pH	pH units	0.1	6.0 - 9.5	7.62	7.62	7.85	7.7	7.75	7.95
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	2.8	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	31	113	50	-
Turbidity	NTU	0.1	-	-	-	1.83	3.97	1.87	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	-	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.055	0.031	-	-	-	0.178
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A01	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L1957744-7	L1963045-6	L1963045-7	L1965106-1	L1969176-1	L1972601-1
	Sample Date & Time			7/10/2017 2:30:00 PM	7/16/2017 2:35:00 PM	7/16/2017 2:35:00 PM	7/24/2017 9:50:00 AM	7/31/2017 2:50:00 PM	8/7/2017 5:40:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	192	192	-	158	-
pH	pH units	0.1	6.0 - 9.5	7.94	7.96	7.92	7.9	7.91	7.82
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	90	-	-	128	-	76
Turbidity	NTU	0.1	-	0.69	-	-	0.3	-	0.53
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.215	0.205	-	0.217	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-	<4.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A01	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L1975323-2	L1978447-1	L1978447-13	L1984043-6	L1987589-1	L1989579-1	L1994866-1
	Sample Date & Time			8/14/2017 10:05:00 AM	8/21/2017 5:10:00 PM	8/21/2017 4:10:00 PM	8/28/2017 6:10:00 PM	9/4/2017 1:40:00 PM	9/11/2017 3:00:00 PM	9/19/2017 4:30:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	197	-	-	213	199	-	212
pH	pH units	0.1	6.0 - 9.5	7.8	7.96	8.19	8	8.09	7.89	7.73
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	65	145	-	-	115	-
Turbidity	NTU	0.1	-	-	0.29	0.13	-	-	0.24	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	-	<0.020	0.028	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.342	-	-	0.377	0.259	-	0.215
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	<2.0	-	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A02	MS-C-A03
	ALS Laboratory Sample ID			L1994866-2	L1994866-3
	Sample Date & Time			9/19/2017 4:30:00 PM	9/19/2017 4:30:00 PM
	QA/QC Sample Type			Field Blank	Travel Blank
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	<3.0	<3.0
pH	pH units	0.1	6.0 - 9.5	7.29	6.1
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Proje

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TABLE 5.2.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L1933807-9	L1937998-7	L1942055-4	L1946654-9	L1949986-9	L1954220-8	L1957744-11
	Sample Date & Time			5/30/2017 12:15:00 PM	6/4/2017 4:15:00 AM	6/12/2017 11:48:00 AM	6/20/2017 2:17:00 PM	6/26/2017 6:40:00 PM	7/3/2017 5:05:00 PM	7/10/2017 9:35:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	59	59.5	-	-	-	148	-
pH	pH units	0.1	6.0 - 9.5	7.59	7.62	7.85	7.63	7.67	8	7.86
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	3.6	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	34	75	55	-	97
Turbidity	NTU	0.1	-	-	-	2.26	4.47	2.09	-	0.54
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.062	0.03	-	-	-	0.336	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B02
	ALS Laboratory Sample ID			L1963045-11	L1965106-2	L1969176-2	L1972601-2	L1975323-3	L1978447-2	L1978447-14
	Sample Date & Time			7/16/2017 3:00:00 PM	7/24/2017 10:10:00 AM	7/31/2017 6:25:00 PM	8/7/2017 6:00:00 PM	8/14/2017 10:40:00 AM	8/21/2017 6:40:00 PM	8/21/2017 3:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Field Blank
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	200	-	157	-	204	-	-
pH	pH units	0.1	6.0 - 9.5	7.88	7.95	7.9	7.91	7.72	7.8	6.25
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	129	-	82	-	65	<20
Turbidity	NTU	0.1	-	-	0.31	-	0.78	-	0.3	<0.10
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.238	-	0.242	-	0.397	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<4.0	-	<2.0	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B02	MS-C-B03
	ALS Laboratory Sample ID			L1984043-7	L1987589-2	L1989579-2	L1994866-4	L1994866-5	L1994866-6
	Sample Date & Time			8/28/2017 6:25:00 PM	9/4/2017 1:15:00 PM	9/11/2017 3:00:00 PM	9/19/2017 4:50:00 PM	9/19/2017 4:50:00 PM	9/19/2017 4:50:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Blank	Travel Blank
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	218	204	-	233	<3.0	<3.0
pH	pH units	0.1	6.0 - 9.5	7.96	8.07	7.8	7.24	6.55	5.76
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	110	-	-	-
Turbidity	NTU	0.1	-	-	-	0.35	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	0.447	0.315	-	0.39	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L1933807-7	L1937998-5	L1942055-10	L1946654-7	L1949986-7	L1954220-6	L1957744-6
	Sample Date & Time			5/29/2017 4:25:00 PM	6/4/2017 2:31:00 AM	6/12/2017 2:24:00 PM	6/20/2017 11:40:00 AM	6/27/2017 3:30:00 AM	7/3/2017 3:05:00 PM	7/10/2017 10:15:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	364	307	-	-	-	754	-
pH	pH units	0.1	6.0 - 9.5	7.86	7.72	8.1	7.88	7.63	8.01	7.88
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	9.9	<2.0	<2.0	<2.0	2.6	2.5
Total Dissolved Solids	mg/L	10	-	-	-	128	276	300	-	579
Turbidity	NTU	0.1	-	-	-	0.82	1.21	0.38	-	1.31
Ammonia, Total (as N)	mg/L	0.02	-	0.416	0.034	-	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	1.63	1.44	-	-	-	5.1	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C01	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L1963045-5	L1965106-3	L1969176-3	L1969176-16	L1972601-3	L1975323-9	L1978447-3
	Sample Date & Time			7/16/2017 9:50:00 AM	7/24/2017 10:30:00 AM	7/31/2017 4:50:00 PM	7/31/2017 4:50:00 PM	8/8/2017 3:25:00 PM	8/14/2017 3:35:00 PM	8/21/2017 4:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	747	-	696	691	-	863	-
pH	pH units	0.1	6.0 - 9.5	8.05	8.03	8.05	7.96	8.04	8.03	7.99
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	3	7.5	<2.0	<2.0	12	4	<2.0
Total Dissolved Solids	mg/L	10	-	-	533		-	524	-	520
Turbidity	NTU	0.1	-	-	2.3		-	5.44	-	0.61
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	4.33	-	4.86	4.96	-	5.4	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	<2.0	-	<2.0	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L1984043-8	L1987589-3
	Sample Date & Time			8/28/2017 4:55:00 PM	9/4/2017 11:55:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	884	869
pH	pH units	0.1	6.0 - 9.5	8.1	8.2
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	6.24	5.66
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L1927998-2	L1933807-6	L1937998-4	L1942055-9	L1946654-6	L1949986-6	L1954220-5
	Sample Date & Time			5/15/2017 1:56:00 PM	5/29/2017 4:05:00 PM	6/4/2017 2:15:00 AM	6/12/2017 2:15:00 PM	6/20/2017 11:20:00 AM	6/27/2017 3:05:00 AM	7/3/2017 2:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	314	307	253	-	-	-	714
pH	pH units	0.1	6.0 - 9.5	7.89	7.93	7.86	8.15	8.02	8.19	8.38
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	2.4	5.1	<2.0	3.6	<2.0	3.2
Total Dissolved Solids	mg/L	10	-	-	-	-	123	252	350	-
Turbidity	NTU	0.1	-	-	-	-	3.78	2.67	1.67	-
Ammonia, Total (as N)	mg/L	0.02	-	0.381	0.333	0.041	-	-	-	<0.020
Nitrate (as N)	mg/L	0.02	-	1.07	1.23	0.821	-	-	-	3.53
Oil and Grease, Total	mg/L	2	No Visible Sheen	44.9	<2.0	<2.0	-	-	-	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L1957744-5	L1963045-4	L1965106-4	L1969176-4	L1972601-4	L1975323-8	L1978447-4
	Sample Date & Time			7/10/2017 10:25:00 AM	7/16/2017 10:15:00 AM	7/24/2017 11:00:00 AM	7/31/2017 5:20:00 PM	8/8/2017 3:20:00 PM	8/14/2017 3:20:00 PM	8/21/2017 2:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	-	773	-	689	-	798	-
pH	pH units	0.1	6.0 - 9.5	8.33	8.33	8.36	8.21	8.32	8.45	8.43
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	4.5	<2.0	3	3.8	3	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	530	-	527	-	474	-	455
Turbidity	NTU	0.1	-	2.93	-	3.26	-	3.55	-	1.25
Ammonia, Total (as N)	mg/L	0.02	-	-	0.023	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	3.92	-	4.34	-	4.88	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	-	<2.0	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L1984043-9	L1987589-4
	Sample Date & Time			8/28/2017 3:25:00 PM	9/4/2017 12:10:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	815	815
pH	pH units	0.1	6.0 - 9.5	8.29	8.32
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-
Turbidity	NTU	0.1	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	5.81	6.15
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L1927998-1	L1930306-2	L1933807-2	L1935148-7	L1935911-8	L1936153-7	L1937998-2
	Sample Date & Time			5/15/2017 2:25:00 PM	5/22/2017 5:10:00 PM	5/29/2017 3:25:00 PM	6/1/2017 12:00:00 AM	6/2/2017 1:15:00 PM	6/3/2017 11:07:00 AM	6/4/2017 2:00:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	121	-	154	-	-	-	197
pH	pH units	0.1	6.0 - 9.5	7.76	7.67	7.84	7.78	7.82	7.75	7.86
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	25.7	20.8	21.5	17.6	**66**	18.4	8.1
Total Dissolved Solids	mg/L	10	-	-	100	-	125	95	100	-
Turbidity	NTU	0.1	-	-	61.9	-	23.8	103	31.5	-
Ammonia, Total (as N)	mg/L	0.02	-	0.057	-	0.051	-	-	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.316	-	0.394	-	-	-	0.494
Oil and Grease, Total	mg/L	2	No Visible Sheen	21	-	<2.0	-	-	-	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

TABLE 5.2.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L1942055-8	L1946654-5	L1949986-5	L1954220-4	L1957744-4	L1963045-3	L1965106-5
	Sample Date & Time			6/12/2017 2:08:00 PM	6/20/2017 11:00:00 AM	6/27/2017 2:15:00 AM	7/3/2017 2:05:00 PM	7/10/2017 10:35:00 AM	7/16/2017 1:40:00 PM	7/24/2017 11:10:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	-	-	-	681	-	713	-
pH	pH units	0.1	6.0 - 9.5	8.11	7.98	7.9	8.17	8.09	8.07	8.17
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	2.2	28.4	<2.0	6.2	4.2	2.6	<2.0
Total Dissolved Solids	mg/L	10	-	116	233	325	-	538	-	518
Turbidity	NTU	0.1	-	1.86	4.21	1.13	-	3.29	-	2.04
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	2.78	-	2.95	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	-	<2.0	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

TABLE 5.2.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L1969176-5	L1972601-5	L1975323-7	L1978447-5	L1984043-10	L1987589-5
	Sample Date & Time			7/31/2017 5:30:00 PM	8/8/2017 3:15:00 PM	8/14/2017 2:50:00 PM	8/21/2017 2:20:00 PM	8/28/2017 3:10:00 PM	9/4/2017 12:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	598	-	774	-	801	835
pH	pH units	0.1	6.0 - 9.5	8.13	8.19	8.17	8.04	8.12	8.2
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	2.8	<2.0	<2.0	7.8
Total Dissolved Solids	mg/L	10	-	-	518	-	470	-	-
Turbidity	NTU	0.1	-	-	1.24	-	0.81	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020	0.037
Nitrate (as N)	mg/L	0.02	-	2.87	-	4.07	-	5.43	5.87
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

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TABLE 5.2.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F-01	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L1937998-10	L1937998-11	L1942055-5	L1946654-10	L1949986-10	L1954220-9	L1957744-9
	Sample Date & Time			6/4/2017 5:10:00 AM	6/4/2017 5:10:00 AM	6/12/2017 12:53:00 PM	6/20/2017 2:40:00 PM	6/27/2017 4:10:00 AM	7/3/2017 5:45:00 PM	7/10/2017 2:45:00 PM
	QA/QC Sample Type			N/A	Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	55	56.7	-	-	-	148	-
pH	pH units	0.1	6.0 - 9.5	7.57	7.43	7.81	7.53	7.75	7.99	8.05
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	3.8	<2.0	2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	41	70	45	-	97
Turbidity	NTU	0.1	-	-	-	3.84	7.09	2.89	-	1.08
Ammonia, Total (as N)	mg/L	0.02	-	0.026	<0.020	-	-	-	0.024	-
Nitrate (as N)	mg/L	0.02	-	0.046	0.047	-	-	-	0.199	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	<2.0	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F01
	ALS Laboratory Sample ID			L1963045-8	L1969176-11	L1972601-6	L1975323-1	L1978447-11	L1984043-16	L1984043-1
	Sample Date & Time			7/16/2017 3:20:00 PM	7/31/2017 6:00:00 PM	8/7/2017 4:45:00 PM	8/14/2017 9:45:00 AM	8/21/2017 4:55:00 PM	8/28/2017 5:20:00 PM	8/28/2017 5:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Duplicate
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	219	166	-	214	-	237	236
pH	pH units	0.1	6.0 - 9.5	8.07	7.88	8.08	7.95	8.15	8.09	8.04
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	84	-	100	-	-
Turbidity	NTU	0.1	-	-	-	2.6	-	0.75	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.045	<0.020	-	<0.020	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	0.361	0.548	-	0.514	-	0.497	0.47
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F
	ALS Laboratory Sample ID			L1987589-10
	Sample Date & Time			9/4/2017 4:30:00 PM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	208
pH	pH units	0.1	6.0 - 9.5	8.08
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0
Total Dissolved Solids	mg/L	13	-	-
Turbidity	NTU	0.1	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.349
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L1942055-1	L1946654-3	L1949986-3	L1954220-3	L1957744-3	L1963045-2	L1965106-6
	Sample Date & Time			6/12/2017 10:48:00 AM	6/20/2017 4:30:00 PM	6/26/2017 11:00:00 AM	7/3/2017 1:25:00 PM	7/10/2017 9:20:00 AM	7/16/2017 8:25:00 AM	7/24/2017 11:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	128	-	-	158	-	179	-
pH	pH units	0.1	6.0 - 9.5	7.91	7.6	7.66	8.01	7.95	7.99	8.03
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	9.2	<2.0	5.1	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	86	45	-	99	-	131
Turbidity	NTU	0.1	-	-	3.49	1.92	-	0.16	-	0.19
Ammonia, Total (as N)	mg/L	0.02	-	0.025	-	-	0.033	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.084	-	-	0.063	-	0.095	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	-	<2.0	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

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TABLE 5.2.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G03	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L1969176-6	L1975323-5	L1978447-6	L1984043-11	L1984043-3	L1987589-6	L1989579-6
	Sample Date & Time			7/31/2017 11:30:00 AM	8/14/2017 12:00:00 PM	8/21/2017 1:55:00 PM	8/28/2017 12:45:00 PM	8/28/2017 12:45:00 PM	9/5/2017 4:55:00 AM	9/11/2017 1:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	169	204	-	212	<3.0	216	-
pH	pH units	0.1	6.0 - 9.5	8.09	7.83	7.72	8.04	6.11	8.15	7.89
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	90	-	-	-	130
Turbidity	NTU	0.1	-	-	-	0.26	-	-	-	0.2
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	<0.020	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.239	2.42	-	1.9	<0.020	2.25	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	<2.0	<2.0	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G01	MS-C-G02	MS-C-G03
	ALS Laboratory Sample ID			L1994866-19	L1994866-20	L1994866-21	L1994866-22
	Sample Date & Time			9/20/2017 2:00:00 PM	9/20/2017 2:00:00 PM	9/20/2017 2:00:00 PM	9/20/2017 2:00:00 PM
	QA/QC Sample Type			N/A	Duplicate	Field Blank	Travel Blank
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	224	225	<3.0	<3.0
pH	pH units	0.1	6.0 - 9.5	7.59	7.75	6.45	5.63
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	-	-
Turbidity	NTU	0.1	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.031	0.025	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	2.22	2.23	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.25
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L1933807-5	L1938558-3	L1942055-2	L1946654-13	L1949986-13	L1957744-10	L1963045-9
	Sample Date & Time			5/29/2017 1:05:00 PM	6/5/2017 11:40:00 AM	6/12/2017 11:13:00 AM	6/20/2017 3:55:00 PM	6/26/2017 10:30:00 AM	7/10/2017 9:35:00 AM	7/16/2017 9:00:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	49.1	59.5	-	-	-	177	193
pH	pH units	0.1	6.0 - 9.5	7.49	7.75	7.88	7.62	7.47	8.06	8.04
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.1	<2.0	<2.0	3.2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	14	130	95	-	-
Turbidity	NTU	0.1	-	-	-	3.38	0.66	2.82	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.067	<0.020	-	-	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	0.178	0.048	-	-	-	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	-	-	<2.0	<2.0

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

TABLE 5.2.25
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L1965106-7	L1969176-7	L1975323-4	L1978447-7	L1984043-12	L1987589-7
	Sample Date & Time			7/24/2017 12:00:00 PM	7/31/2017 11:40:00 AM	8/14/2017 11:30:00 AM	8/21/2017 1:25:00 PM	8/28/2017 1:25:00 PM	9/5/2017 4:40:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	215	243	-	253	253
pH	pH units	0.1	6.0 - 9.5	8.08	8.16	8.04	8.16	8.22	8.16
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	141	-	-	100	-	-
Turbidity	NTU	0.1	-	0.46	-	-	0.23	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	<0.020	-	<0.020	0.031
Nitrate (as N)	mg/L	0.02	-	-	<0.020	<0.020	-	<0.020	0.03
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-	<2.0	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

Baffinland

TABLE 5.2.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L1937998-3	L1942055-13	L1946654-2	L1949986-2	L1954220-1	L1957744-1	L1965106-9
	Sample Date & Time			6/4/2017 11:16:00 PM	6/12/2017 4:35:00 PM	6/20/2017 9:40:00 AM	6/26/2017 1:10:00 PM	7/3/2017 10:10:00 AM	7/10/2017 1:50:00 PM	7/24/2017 2:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	80.4	-	-	-	80	-	203
pH	pH units	0.1	6.0 - 9.5	7.72	7.86	7.64	7.59	7.84	8	8.09
Total Suspended Solids	mg/L	2	15	<2.0	5.7	<2.0	<2.0	<2.0	3.4	<2.0
Total Dissolved Solids	mg/L	13	-	-	40	43	24	-	64	-
Turbidity	NTU	0.1	-	-	4.73	1.67	7.94	-	1.27	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	-	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	<0.020	-	-	-	0.049	-	0.057
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	-	<2.0	-	<2.0
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A
	ALS Laboratory Sample ID			L1969176-9	L1972601-8	L1975323-11	L1978447-9	L1984043-4	L1984043-5	234254
	Sample Date & Time			7/31/2017 7:20:00 PM	8/8/2017 2:10:00 PM	8/14/2017 4:30:00 PM	8/21/2017 3:30:00 PM	8/29/2017 11:40:00 AM	8/29/2017 11:40:00 AM	8/29/2017 11:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	234	-	295	-	295	294	-
pH	pH units	0.1	6.0 - 9.5	8.17	8.28	8.2	8.24	8.17	8.22	-
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	-
Total Dissolved Solids	mg/L	13	-	-	115	-	120	-	-	-
Turbidity	NTU	0.1	-	-	1.08	-	0.25	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020	<0.020	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020	<0.020	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0	<2.0	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-	-	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A02	MQ-C-A03
	ALS Laboratory Sample ID			L1987589-8	L1989579-4	L1994866-11	L1994866-12	L1994866-13	L1994866-14
	Sample Date & Time			9/4/2017 3:25:00 PM	9/11/2017 12:00:00 PM	9/19/2017 7:45:00 PM	9/19/2017 7:45:00 PM	9/19/2017 7:45:00 PM	9/19/2017 7:45:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Duplicate	Field Blank	Travel Blank
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	305	-	348	350	<3.0	<3.0
pH	pH units	0.1	6.0 - 9.5	8.3	8.08	7.98	7.98	7.85	5.86
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	170	-	-	-	-
Turbidity	NTU	0.1	-	-	0.24	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	<0.020	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	<0.020	-	<0.020	<0.020	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	<2.0	<2.0	<2.0
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

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TABLE 5.2.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L1933807-10	L1937998-8	L1942055-11	L1941010-1	233783	L1946654-4	L1949986-4
	Sample Date & Time			5/30/2017 1:25:00 PM	6/4/2017 1:20:00 AM	6/12/2017 3:00:00 PM	6/13/2017 10:00:00 AM	6/13/2017 10:00:00 AM	6/20/2017 10:43:00 AM	6/27/2017 1:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	107	126	-	98.9	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.7	7.63	7.85	7.63	-	7.83	7.76
Total Suspended Solids	mg/L	2	15	7.3	2.2	3.8	<2.0	-	4	8.8
Total Dissolved Solids	mg/L	10	-	-	-	25	-	-	83	85
Turbidity	NTU	0.1	-	-	-	16.2	-	-	9.13	21.8
Ammonia, Total (as N)	mg/L	0.02	-	0.036	<0.020	-	0.032	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.227	0.192	-	0.219	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	-	<2.0	-	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L1953923-1	233901	L1957744-8	L1963045-10	L1965106-8	234029	L1969176-8
	Sample Date & Time			7/4/2017 10:20:00 AM	7/4/2017 10:20:00 AM	7/10/2017 11:35:00 AM	7/16/2017 8:45:00 AM	7/24/2017 1:15:00 PM	7/24/2017 1:15:00 PM	7/31/2017 3:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	346	-	-	358	626	-	319
pH	pH units	0.1	6.0 - 9.5	7.89	-	8.04	8.05	8.1	-	8.16
Total Suspended Solids	mg/L	2	15	<2.0	-	5.3	18	5.7	-	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	229	-	-	-	-
Turbidity	NTU	0.1	-	-	-	12.7	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.022	-	-	<0.020	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	5.39	-	-	2.47	5.45	-	2.27
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	-	<2.0	<2.0	-	<2.0
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

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TABLE 5.2.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L1972601-7	L1975323-12	L1975323-13	234168	L1978447-8	L1984043-13	L1987251-1
	Sample Date & Time			8/8/2017 2:30:00 PM	8/15/2017 10:05:00 AM	8/15/2017 10:05:00 AM	8/15/2017 10:05:00 AM	8/21/2017 4:10:00 PM	8/28/2017 4:35:00 PM	9/5/2017 5:10:00 PM
	QA/QC Sample Type			N/A	N/A	Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	-	333	333	-	-	397	389
pH	pH units	0.1	6.0 - 9.5	8.31	8.25	8.17	-	8.22	8.2	8.1
Total Suspended Solids	mg/L	2	15	2.8	<2.0	<2.0	-	<2.0	5	3.4
Total Dissolved Solids	mg/L	10	-	183	-	-	-	215	-	-
Turbidity	NTU	0.1	-	1.47	-	-	-	1.2	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	0.065	0.055	-	-	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	-	1.15	1.15	-	-	1.85	2.23
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	<2.0	<2.0	-	-	<2.0	<2.0
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-lethal	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B02	MQ-C-B03
	ALS Laboratory Sample ID			234305	L1989579-3	L1994866-7	L1994866-8	L1994866-9	L1994866-10
	Sample Date & Time			9/5/2017 5:10:00 PM	9/11/2017 1:00:00 PM	9/19/2017 7:10:00 PM	9/19/2017 7:10:00 PM	9/19/2017 7:10:00 PM	9/19/2017 7:10:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Duplicate	Field Blank	Travel Blank
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	-	377	376	<3.0	<3.0
pH	pH units	0.1	6.0 - 9.5	-	7.96	7.75	7.85	6.6	5.8
Total Suspended Solids	mg/L	2	15	-	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	225	-	-	-	-
Turbidity	NTU	0.1	-	-	0.53	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	<0.020	0.071	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	-	-	0.994	1.03	<0.020	<0.020
Oil and Grease, Total	mg/L	2	No Visible Sheen	-	-	<2.0	<2.0	<2.0	<2.0
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[3]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

Baffinland

TABLE 5.2.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L1930306-1	233627	L1933807-1	L1937998-1	L1942055-12	L1946654-1	L1949986-1
	Sample Date & Time			5/23/2017 3:30:00 PM	5/23/2017 3:30:00 PM	5/29/2017 5:55:00 PM	6/4/2017 11:50:00 PM	6/12/2017 4:26:00 PM	6/20/2017 9:20:00 AM	6/26/2017 1:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	315		-	107	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.75		7.73	7.76	8.03	7.83	8.03
Total Suspended Solids[2]	mg/L	2	15	**26.8**		**19.5**	4.6	<2.0	6.4	6
Total Dissolved Solids	mg/L	10	-	-		80	-	77	110	110
Turbidity	NTU	0.1	-	-		44.2	-	11	8.71	7.58
Ammonia, Total (as N)	mg/L	0.02	-	0.08		-	0.038	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.818		-	0.179	-	-	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0		-	<2.0	-	-	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L1954220-2	L1957744-2	L1963045-1	L1965106-10	L1969176-10	L1972601-9	L1975323-10
	Sample Date & Time			7/3/2017 10:30:00 AM	7/10/2017 2:00:00 PM	7/16/2017 11:55:00 AM	7/24/2017 2:35:00 PM	7/31/2017 7:05:00 PM	8/8/2017 2:15:00 PM	8/14/2017 4:10:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	260	-	286	-	296	-	342
pH	pH units	0.1	6.0 - 9.5	8.19	8.13	8.1	7.83	8.16	8.21	8.28
Total Suspended Solids[2]	mg/L	2	15	2.8	3.6	5.9	<2.0	<2.0	<2.0	2
Total Dissolved Solids	mg/L	10	-	-	160	-	208	-	144	-
Turbidity	NTU	0.1	-	-	3.82	-	1.09	-	4.17	-
Ammonia, Total (as N)	mg/L	0.02	-	0.043	-	0.034	-	0.021	-	0.038
Nitrate (as N)	mg/L	0.02	-	0.616	-	0.668	-	0.95	-	1.14
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	-	<2.0	-	<2.0
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D03	MQ-C-D	MQ-C-D	MQ-C-D02	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L1975323-15	L1978447-10	L1984043-15	L1984043-2	L1987589-9	L1989579-5	L1994866-15
	Sample Date & Time			8/14/2017 4:10:00 PM	8/21/2017 3:45:00 PM	8/28/2017 4:05:00 PM	8/28/2017 4:05:00 PM	9/4/2017 3:00:00 PM	9/11/2017 12:00:00 PM	9/19/2017 7:45:00 PM
	QA/QC Sample Type			Travel Blank	N/A	N/A	Field Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]							
Conductivity	umhos/cm	3	-	<3.0	-	373	<3.0	375	-	398
pH	pH units	0.1	6.0 - 9.5	5.7	8.15	8.09	5.88	8.23	7.91	7.52
Total Suspended Solids[2]	mg/L	2	15	<2.0	<2.0	2.6	<2.0	4.2	4	2
Total Dissolved Solids	mg/L	10	-	-	140	-	-	-	205	-
Turbidity	NTU	0.1	-	-	2.2	-	-	-	6.91	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	0.059	<0.020	0.031	-	0.053
Nitrate (as N)	mg/L	0.02	-	<0.020	-	1.4	<0.020	1.54	-	1.33
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	-	<2.0	<2.0	<2.0	-	<2.0
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

TABLE 5.2.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2017 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D01	MQ-C-D02	MQ-C-D03	MQ-C-D
	ALS Laboratory Sample ID			L1994866-16	L1994866-17	L1994866-18	L1997815-1
	Sample Date & Time			9/19/2017 7:45:00 PM	9/19/2017 7:45:00 PM	9/19/2017 7:45:00 PM	9/25/2017 3:15:00 PM
	QA/QC Sample Type			Duplicate	Field Blank	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	398	<3.0	<3.0	-
pH	pH units	0.1	6.0 - 9.5	7.55	6.25	5.63	7.7
Total Suspended Solids[2]	mg/L	2	15	2.4	<2.0	<2.0	3.2
Total Dissolved Solids	mg/L	10	-	-	-	-	245
Turbidity	NTU	0.1	-	-	-	-	3.64
Ammonia, Total (as N)	mg/L	0.02	-	0.033	<0.020	<0.020	-
Nitrate (as N)	mg/L	0.02	-	1.35	<0.020	<0.020	-
Oil and Grease, Total	mg/L	2	No Visible Sheen	<2.0	<2.0	<2.0	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11: Effluent Quality Discharge Limits for Contact Water during the Operations Phase and the Early Revenue Phase of the Project

[2]Average TSS for May and June exceeded maximum average TSS concentration discharge limits

[3]Acute lethality to Rainbow trout, Oncorhynchus mykiss (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/13)

[4]Acute lethality to Daphnia magna (as per Environment Canada's Environmental Protection Series Method EPS/1/RM/14)

ATTACHMENT 6

2018 QIA-NWB Annual Report for Operations

- Table 7.0 Water Licence Water Quality Monitoring Locations – 2018
- Table 7.1 Water Quality Results for Water Licence Monitoring Locations - 2018

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TABLE 7.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER LICENCE WATER QUALITY MONITORING LOCATIONS – 2018

Monitoring Station	Description	Location (UTM; NAD83; 17 W)		Location		Status in 2018
		Easting (m)	Northing (m)	Latitude	Longitude	
Milne Port						
MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52" N	80° 35' 4" W	Inactive
MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00" N	80° 23' 09" W	Active
MP-01	Milne Port Sewage Treatment Plant	503209	7976485	71° 53' 18" N	80° 54' 27" W	Active
MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 03" N	80° 53' 44" W	Active
MP-03	Milne Port Bulk Fuel Storage Facility (stormwater)	503638	7976272	71° 52' 11" N	80° 53' 43" W	Active
MP-04	Milne Port Landfarm Facility	503710	7975574	71° 52' 49" N	80° 53' 35" W	Active
MP-MRY-04	Milne Port Exploration Phase Sewage Treatment Plant	503462	7975764	71° 52' 55" N	80° 54" 01" W	Inactive[1]
MP-MRY-04A	Milne Port Exploration Phase PWSP	503344	7976118	71° 53' 06" N	80° 54' 13" W	Inactive[1]
MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 15" N	80° 54' 00" W	Active
MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14" N	80° 54' 36" W	Active
MP-MRY-7	Milne Port Exploration Phase Bladder Fuel Storage Facility (stormwater)	503309	7976097	71° 53' 06" N	80° 54' 17" W	Inactive[1]
MP-MRY-12	Milne Port 2008 Bulk Sample Program - Stockpile (surface drainage/seepage)	503357	7976453	71° 53' 17" N	80° 54' 11" W	Inactive[2]
MP-C-A	Surface water drainage downstream of Milne Port infrastructure.	503214	7976483	71° 53' 18" N	80° 54' 27" W	Inactive[2]
MP-C-B		503191	7975396	71° 52' 43" N	80° 54' 29" W	Active
MP-C-B01		503242	7975558	71° 52' 48" N	80° 54' 24" W	Active
MP-C-C		503436	7975427	71° 52' 44" N	80° 54' 04" W	Inactive[2]
MP-C-D		503651	7976363	71° 53' 14" N	80° 53' 41" W	Inactive[2]
MP-C-E		503736	7976346	71° 53' 14" N	80° 53' 32" W	Active
MP-C-F		503922	7976304	71° 53' 12" N	80° 53' 13" W	Active
MP-C-G		502939	7976238	71° 53' 10" N	80° 54' 55" W	Inactive[2]
MP-C-H		504113	7976509	71° 53' 19" N	80° 52' 53" W	Active
MP-Q1-01	Surface water drainage downstream of the Q1 Quarry.	503828	7975062	71° 52' 32" N	80° 53' 23" W	Active
MP-Q1-02		503811	7975272	71° 52' 39" N	80° 53' 25" W	Active
Mine Site						
MS-MRY-1	Fresh Water Intake at Camp Lake	557793	7914684	71° 19' 38.6" N	79° 22' 57" W	Active
MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	79° 17' 5.6" W	Active

Notes:

[1]Exploration Phase infrastructure decommissioned.

[2]No surface water flows at location in 2018.

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TABLE 7.0

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER LICENCE WATER QUALITY MONITORING LOCATIONS – 2018

Monitoring Station	Description	Location (UTM; NAD83; 17 W)		Location		Status in 2018
		Easting (m)	Northing (m)	Latitude	Longitude	
Mine Site cont'd						
MS-01B	Mine Site Sewage Treatment Plant No. 2	560794	7913235	71° 18′ 49.2″ N	79° 17′ 58.8″ W	Active
MS-02	Mine Site Mobile Maintenance Buildings (meltwater)	561638	7913222	71° 18' 48" N	79° 16' 34" W	Active
MS-03	Mine Site Bulk Fuel Storage Facility (stormwater)	561258	7913304	71° 18' 51" N	79° 17' 12" W	Active
MS-MRY-4	Mine Site Exploration Camp Sewage Treatment Plant	558141	7914427	71° 19' 30" N	79° 22' 22.6" W	Inactive[1]
MS-MRY-4A, B, C	Mine Site PWSPs	558470	7914237	71° 19' 23.6" N	79° 21' 50" W	Active
MS-MRY-6	Mine Site Exploration Camp Bulk Fuel Storage Facility (MS-HWB-7)	558341	7914508	71° 19' 41" N	79° 22' 17" W	Active
MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 41" N	79° 16' 51" W	Active
MS-08	Waste Rock Facility - Surface Water Management Pond	563492	7916273	71° 20' 25" N	79° 13' 18" W	Active
MS-MRY-9	Mine Site 2008 Bulk Sample Program - Open Pit (surface drainage/seepage)	563246	7914632	71° 19' 32" N	79° 13' 48" W	Inactive[2]
MS-MRY-10	Mine Site 2008 Bulk Sample Program - Stockpile (surface drainage/seepage)	563488	7915197	71° 19' 50" N	79° 13' 22" W	Inactive[2]
MS-MRY-11	Mine Site 2008 Bulk Sample Program - Ore Crushing Area (surface drainage/seepage)	560690	7913350	71° 18' 53" N	79° 18' 09" W	Inactive[2]
MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (surface drainage/seepage)	560754	7912484	71° 18' 25" N	79° 18' 5" W	Active
MS-MRY-13B		560642	7912527	71° 18'27" N	79° 18' 16" W	
MS-C-A	Surface water drainage downstream of Mine Site infrastructure.	561263	7913571	71° 19' 00" N	79° 17' 11" W	Active
MS-C-B		561454	7913537	71° 18' 58" N	79° 16' 52" W	Active
MS-C-C		561110	7913199	71° 18' 48" N	79° 17' 27" W	Active
MS-C-D		561008	7913280	71° 18' 50" N	79° 17' 37" W	Active
MS-C-E		560980	7913388	71° 18' 54" N	79° 17' 40" W	Active
MS-C-F		561797	7913278	71° 18' 49'' N	79° 16' 17'' W	Active
MS-C-G		561813	7911830	71° 18' 03" N	79° 16' 20" W	Active
MS-C-H		561162	7912067	71° 18" 11" N	79° 17' 25" W	Active
MQ-C-A	Surface water drainage downstream of QMR2 Quarry.	559489	7914408	71° 19' 28'' N	79° 20' 07'' W	Active
MQ-C-B		560076	7913888	71° 19' 11'' N	79° 19' 09'' W	Active
MQ-C-D		559422	7914223	71° 19' 23'' N	79° 20' 14'' W	Active
MQ-C-E	Surface water drainage downstream of D1Q2 Quarry.	563351	7912902	71° 18' 36" N	79° 13' 42" W	Active

Notes:

[1]Exploration Phase infrastructure decommissioned.

[2]No surface water flows at location in 2018.

TABLE 7.1.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01	MP-01	MP-0103	MP-01
	ALS Laboratory Sample ID			L2043724-1	L2043724-3	L2054248-1	L2068010-1	L2068010-3	L2076019-1
	Sample Date & Time			1/9/2018 14:45	1/9/2018 14:45	2/6/2018 14:45	3/13/2018 13:45	3/13/2018 13:45	4/3/2018 13:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.9	7.85	7.48	7.49	6.15	7.54
Total Suspended Solids	mg/L	2	<120	<2.0	2.1	<2.0	3.1	<2.0	2.5
Alkalinity, Total (as CaCO3)	mg/L	10	-	156	158	76	73	<10	71
Ammonia, Total (as N)	mg/L	0.02	-	0.078	0.057	0.188	0.115	<0.020	0.251
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.09	2.13	2.01	2.29	<0.15	2.24
Phosphorus, Total	mg/L	0.003	-	9.99	9.93	11.6	9.99	0.0062	11
Fecal Coliforms	CFU/100mL	0	10,000	0	0	1	6	0	1
BOD	mg/L	2	100	<2.0	2.4	<2.0	<2.0	<2.0	10.7
COD	mg/L	10	-	39	37	43	40	<10	43
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	2.2
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity[2,3]	N/A		Non-Lethal	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L2088476-1	L2107700-1	L2124906-1	L2124906-1	L2168412-1	L2178013-1
	Sample Date & Time			5/1/2018 13:45	6/5/2018 13:45	7/4/2018 13:45	8/22/2018 13:45	9/19/2018 13:45	10/2/2018 10:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.81	7.26	7.4	7.52	7.69	7.38
Total Suspended Solids	mg/L	2	<120	2.1	<2.0	6.8	<2.0	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	128	69	66	61	72	73
Ammonia, Total (as N)	mg/L	0.02	-	0.101	0.12	0.086	0.053	0.058	1.37
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.8	2.02	3.13	1.58	1.81	1.91
Phosphorus, Total	mg/L	0.003	-	6.47	9.25	11.4	8.78	9.21	8.43
Fecal Coliforms	CFU/100mL	0	10,000	0	0	0	0	0	0
BOD	mg/L	2	100	<2.0	<2.0	2.4	<2.0	<2.0	<2.0
COD	mg/L	10	-	31	36	47	45	47	49
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity[2,3]	N/A		Non-Lethal	-	-	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.1
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01

Analyte	Sample ID			MP-0102	MP-01	MP-0101	MP-01	MP-0101
	ALS Laboratory Sample ID			L2178013-3	L2194088-1	L2194088-2	L2210761-1	L2210761-3
	Sample Date & Time			10/2/2018 10:00	11/6/2018 10:40	11/6/2018 10:40	12/12/2018 12:30	12/12/2018 12:30
	QA/QC Sample Type			Field Blank	N/A	Field Duplicate	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]					
pH	pH units	0.1	6.0 - 9.5	5.99	7.07	7.06	7.48	7.43
Total Suspended Solids	mg/L	2	<120	<2.0	<2.0	<2.0	4.8	2.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	58	59	102	101
Ammonia, Total (as N)	mg/L	0.02	-	0.059	0.04	0.036	1.32	1.19
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	2.03	2.13	4.3	4.6
Phosphorus, Total	mg/L	0.003	-	0.0133	7.14	7.16	9.97	9.87
Fecal Coliforms	CFU/100mL	0	10,000	0	0	0	0	0
BOD	mg/L	2	100	<2.0	<2.0	<2.0	2.5	2
COD	mg/L	10	-	<10	40	40	33	36
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

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TABLE 7.1.2
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-01a

Analyte	Sample ID			MP-01a	MP-01a
	ALS Laboratory Sample ID			L2155757-1	L2160265-1
	Sample Date & Time			8/28/2018 3:10:00 PM	9/1/2018 8:15:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
pH	pH units	0.1	6.0 - 9.5	7.79	7.55
Total Suspended Solids	mg/L	2	<120	85.2	71.5
Alkalinity, Total (as CaCO3)	mg/L	10	-	295	276
Ammonia, Total (as N)	mg/L	0.02	-	3.51	4.19
Total Kjeldahl Nitrogen	mg/L	0.15	-	18.2	14.4
Phosphorus, Total	mg/L	0.003	-	1.25	1.12
Fecal Coliforms	CFU/100mL	0	10,000	125	100
BOD	mg/L	2	100	23.6	20.4
COD	mg/L	10	-	520	400
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity[2,3]	N/A		Non-Lethal	Non-lethal	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

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TABLE 7.1.3
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-03

Analyte	Sample ID			MP-03	MP-03	MP-03
	ALS Laboratory Sample ID			L2112845-1	L2151335-1	L2151335-3
	Sample Date & Time			6/13/2018 12:15	8/16/2018 14:55	8/18/2018 9:20
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	8.06	8.15	-
Total Suspended Solids	mg/L	2	-	3.3	<2.0	-
Total Dissolved Solids	mg/L	20	-	-	20200	-
Turbidity	NTU	0.1	-	-	8.22	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	0.777
Phosphorus, Total	mg/L	0.003	-	-	-	0.012
Arsenic (As)-Total	mg/L	0.0001	-	-	0.00054	-
Copper (Cu)-Total	mg/L	0.001	-	-	0.0027	-
Lead (Pb)-Total	mg/L	0.0001	0.001	<0.00050	0.00069	-
Nickel (Ni)-Total	mg/L	0.0005	-	-	0.001	-
Zinc (Zn)-Total	mg/L	0.003	-	-	0.0052	-
Oil and Grease, Total	mg/L	2	15	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	
Benzene	ug/L	0.5	370	<0.50	<0.50	-
Ethylbenzene	ug/L	0.5	90	<0.50	<0.50	-
Toluene	ug/L	0.5	2	<0.50	0.5	-
o-Xylene	ug/L	0.3	-	<0.50	0.56	-
m+p-Xylenes	ug/L	0.4	-	<1.0	<1.0	-
Xylenes (Total)	ug/L	0.5	-	<1.1	<1.1	-
4-Bromofluorobenzene	%	Surrogate	-	94.2	94.8	-
1,4-Difluorobenzene	%	Surrogate	-	98.6	96.5	-
F1 (C6-C10)	ug/L	25	-	<100	<100	-
F1-BTEX	ug/L	25	-	<100	<100	-
F2 (C10-C16)	ug/L	100	-	270	140	-
F3 (C16-C34)	ug/L	250	-	<250	<250	-
F4 (C34-C50)	ug/L	250	-	<250	<250	-
Total Hydrocarbons (C6-C50)	ug/L	370	-	<380	<380	-
Chrom. to baseline at nC50		n/a	-	YES	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	96.5	90.6	-
3,4-Dichlorotoluene	%	Surrogate	-	95.6	100.3	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8

Baffinland

TABLE 7.1.4
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-04

Analyte	Sample ID			MP-04
	ALS Laboratory Sample ID			L2160270-1
	Sample Date & Time			9/1/2018 12:30
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.1	6.0 - 9.5	8.07
Total Suspended Solids	mg/L	2	15	4.5
Total Dissolved Solids	mg/L	20	-	533
Turbidity	NTU	0.1	-	16.2
Lead (Pb)-Total	mg/L	0.0001	0.001	<0.00050
Oil and Grease, Total	mg/L	2	15	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.5	370	<0.50
Ethylbenzene	ug/L	0.5	90	<0.50
Toluene	ug/L	0.5	2	<0.50
o-Xylene	ug/L	0.5	-	<0.50
m+p-Xylenes	ug/L	1	-	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	94.8
1,4-Difluorobenzene	%	Surrogate	-	95.7
F1 (C6-C10)	ug/L	100	-	<100
F1-BTEX	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	460
F3 (C16-C34)	ug/L	250	-	<250
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	460
Chrom. to baseline at nC50		n/a	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	92.5
3,4-Dichlorotoluene	%	Surrogate	-	107.9

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9

TABLE 7.1.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2111033-2	L2120589-7	L2123843-7	L2128204-6
	Sample Date & Time			6/11/2018 1:40:00 PM	6/25/2018 10:45:00 AM	7/2/2018 10:45:00 AM	7/10/2018 9:55:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	566	469	508	-
pH	pH units	0.1	6.0 - 9.5	8.05	8.21	8.2	8.1
Total Suspended Solids	mg/L	2	Grab 30, Average 15	17.4	2.5	<2.0	2.9
Total Dissolved Solids	mg/L	10	-	-	-	-	385
Turbidity	NTU	0.1	-	-	-	-	11.6
Ammonia, Total (as N)	mg/L	0.02	-	1.32	1.26	1.17	-
Nitrate (as N)	mg/L	0.02	-	4.88	6.13	8.6	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2131995-8	L2137113-7	L2141875-7	L2143614-7
	Sample Date & Time			7/17/2018 11:50:00 AM	7/23/2018 3:05:00 PM	7/30/2018 6:00:00 PM	8/7/2018 5:05:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	533	-	545	537
pH	pH units	0.1	6.0 - 9.5	8.24	8.29	8.1	8.17
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	2	4.8	5.2
Total Dissolved Solids	mg/L	10	-	-	346	329	317
Turbidity	NTU	0.1	-	-	10.2	11.2	21.7
Ammonia, Total (as N)	mg/L	0.02	-	1.23	-	0.618	0.647
Nitrate (as N)	mg/L	0.02	-	7.5	-	5.08	5.09
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2148774-6	L2152813-4	L2157679-9	L2160216-4
	Sample Date & Time			8/14/2018 4:35:00 PM	8/21/2018 3:25:00 PM	8/27/2018 11:30:00 AM	9/4/2018 6:10:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	-	556	-	736
pH	pH units	0.1	6.0 - 9.5	8.33	8.27	8.24	8.25
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.2	4.2	<2.0	4
Total Dissolved Solids	mg/L	10	-	376	344	386	415
Turbidity	NTU	0.1	-	4.16	10.7	3.53	7.4
Ammonia, Total (as N)	mg/L	0.02	-	-	0.551	-	0.166
Nitrate (as N)	mg/L	0.02	-	-	5.32	-	6.36
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.5
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B

Analyte	Sample ID			MP-C-B
	ALS Laboratory Sample ID			L2164348-4
	Sample Date & Time			9/10/2018 11:45:00 AM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	-
pH	pH units	0.1	6.0 - 9.5	8.19
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	10	-	464
Turbidity	NTU	0.1	-	2.68
Ammonia, Total (as N)	mg/L	0.02	-	-
Nitrate (as N)	mg/L	0.02	-	-
Oil and Grease, Total	mg/L	2	-	-
	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B01	MP-C-B0101
	ALS Laboratory Sample ID			L2107359-1	L2111033-3	L2111033-4	L2120589-5	L2120589-6
	Sample Date & Time			6/4/2018 8:40:00 AM	6/11/2018 2:00:00 PM	6/11/2018 2:00:00 PM	6/25/2018 10:20:00 AM	6/25/2018 10:20:00 AM
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	339	-	-	467	465
pH	pH units	0.1	6.0 - 9.5	7.9	8.03	8.04	8.17	8.19
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	**44.7**	**46.1**	**52.4**	3.2	2.8
Total Dissolved Solids	mg/L	10	-	-	369	364	-	-
Turbidity	NTU	0.1	-	-	115	116	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.501	-	-	1.37	1.37
Nitrate (as N)	mg/L	0.02	-	1.29	-	-	6.53	6.3
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

TABLE 7.1.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2123843-6	L2128204-5	L2131995-7	L2137113-6
	Sample Date & Time			7/2/2018 10:35:00 AM	7/10/2018 9:45:00 AM	7/17/2018 2:45:00 PM	7/23/2018 2:55:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	501	-	516	-
pH	pH units	0.1	6.0 - 9.5	8.18	8.1	8.22	8.22
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	3.7	2.2	2.5
Total Dissolved Solids	mg/L	10	-	-	386	-	346
Turbidity	NTU	0.1	-	-	13.1	-	15.8
Ammonia, Total (as N)	mg/L	0.02	-	1.09	-	1.02	-
Nitrate (as N)	mg/L	0.02	-	8.72	-	6.94	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

TABLE 7.1.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2141875-6	L2143614-6	L2143614-3	L2148774-3	L2152813-3
	Sample Date & Time			7/30/2018 5:45:00 PM	8/7/2018 4:45:00 PM	8/7/2018 4:45:00 PM	8/14/2018 4:20:00 PM	8/21/2018 2:30:00 PM
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	525	532	529	-	541
pH	pH units	0.1	6.0 - 9.5	8.11	8.15	8.15	8.24	8.24
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	4.6	6.7	5.7	4	3.5
Total Dissolved Solids	mg/L	10	-	324	322	314	340	336
Turbidity	NTU	0.1	-	11.9	24.9	24.5	4.94	11.1
Ammonia, Total (as N)	mg/L	0.02	-	0.697	0.644	0.698	-	0.558
Nitrate (as N)	mg/L	0.02	-	5.33	5.19	5.12	-	5.23
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

TABLE 7.1.6
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2157679-10	L2160216-3	L2164348-3
	Sample Date & Time			8/27/2018 11:45:00 AM	9/4/2018 5:50:00 PM	9/10/2018 12:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	683	-
pH	pH units	0.1	6.0 - 9.5	8.25	8.3	8.18
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	366	386	455
Turbidity	NTU	0.1	-	4.5	4.62	3.17
Ammonia, Total (as N)	mg/L	0.02	-	-	0.111	-
Nitrate (as N)	mg/L	0.02	-	-	8.64	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

TABLE 7.1.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H01	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2107359-6	L2107359-5	L2111033-1	L2116243-1	L2120589-1
	Sample Date & Time			6/4/2018 6:20:00 AM	6/4/2018 6:20:00 AM	6/11/2018 9:20:00 AM	6/18/2018 3:00:00 PM	6/25/2018 8:20:00 AM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	1140	1150	-	112	-
pH	pH units	0.1	6.0 - 9.5	7.9	7.9	7.86	7.94	8.05
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.6	7.2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	99	-	82
Turbidity	NTU	0.1	-	-	-	3.77	-	0.77
Ammonia, Total (as N)	mg/L	0.02	-	0.059	0.056	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.294	0.277	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H01	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2123843-1	L2128204-1	L2128204-2	L2131995-1	L2137113-1
	Sample Date & Time			7/2/2018 8:05:00 AM	7/10/2018 8:20:00 AM	7/10/2018 8:20:00 AM	7/17/2018 8:30:00 AM	7/23/2018 1:40:00 PM
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	151	-	-	215	-
pH	pH units	0.1	6.0 - 9.5	8.01	8.05	8.05	8.15	8.22
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	121	118	-	127
Turbidity	NTU	0.1	-	-	0.89	0.42	-	0.43
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-	-	0.035	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H
	ALS Laboratory Sample ID			L2141875-1	L2143614-1	L2148774-7	L2148774-8	L2152813-6
	Sample Date & Time			7/30/2018 10:05:00 AM	8/7/2018 1:00:00 PM	8/14/2018 9:10:00 AM	8/14/2018 9:10:00 AM	8/21/2018 5:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	241	256	-	-	247
pH	pH units	0.1	6.0 - 9.5	8.12	8.19	8.22	8.23	8.28
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	138	142	161	157	150
Turbidity	NTU	0.1	-	0.68	0.58	0.34	0.54	0.31
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	-	0.029
Nitrate (as N)	mg/L	0.02	-	0.035	0.03	-	-	0.029
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.7
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-C-H

Analyte	Sample ID			MP-C-H01	MP-C-H	MP-C-H03	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2152813-7	L2157679-1	L2157679-2	L2160216-6	L2164348-6
	Sample Date & Time			8/21/2018 5:00:00 PM	8/27/2018 8:40:00 AM	8/27/2018 8:40:00 AM	9/4/2018 12:00:00 PM	9/10/2018 9:30:00 AM
	QA/QC Sample Type			Field Duplicate	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	247	-	-	283	-
pH	pH units	0.1	6.0 - 9.5	8.29	8.2	5.99	8.24	8.17
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	142	201	11	153	176
Turbidity	NTU	0.1	-	0.23	0.16	0.19	0.33	0.24
Ammonia, Total (as N)	mg/L	0.02	-	0.031	-	-	0.026	-
Nitrate (as N)	mg/L	0.02	-	0.03	-	-	0.046	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-05
	ALS Laboratory Sample ID			L2116394-1	L2123842-1
	Sample Date & Time			6/19/2018 11:00:00 AM	7/3/2018 1:35:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	274	351
pH	pH units	0.1	6.0 - 9.5	8.13	8.22
Total Suspended Solids	mg/L	2	15	2	3.2
Total Dissolved Solids	mg/L	13	-	581	669
Turbidity	NTU	0.1	-	10.2	14.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	83	109
Ammonia, Total (as N)	mg/L	0.02	-	0.868	0.042
Chloride (Cl)	mg/L	0.5	-	178	199
Fluoride (F)	mg/L	0.02	-	0.204	0.221
Nitrate (as N)	mg/L	0.02	-	7.64	8.82
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.35	0.57
Phosphorus, Total	mg/L	0.003	-	0.006	0.0077
Sulfate (SO4)	mg/L	0.3	-	120	126
Dissolved Organic Carbon	mg/L	1	-	3.5	4.32
Total Organic Carbon	mg/L	1	-	3.6	3.63
Aluminum (Al)-Total	mg/L	0.01	-	0.115	0.215
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00021	0.00023
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	54.9	65.3
Copper (Cu)-Total	mg/L	0.001	0.3	0.0014	0.0016
Iron (Fe)-Total	mg/L	0.05	-	0.144	0.261
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00014	0.00025
Magnesium (Mg)-Total	mg/L	0.05	-	37.1	16
Manganese (Mn)-Total	mg/L	0.0005	-	0.0312	0.241
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00519	0.00566
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00138	0.0062
Potassium (K)-Total	mg/L	0.05	-	10.3	11.2
Selenium (Se)-Total	mg/L	0.00005	-	0.000223	0.000201
Sodium (Na)-Total	mg/L	0.5	-	77.4	87.8
Thallium (Tl)-Total	mg/L	0.00001	-	0.000025	0.000022
Uranium (U)-Total	mg/L	0.00001	-	0.0335	0.0325
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0037	0.0043
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0141	0.0194
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00016	0.00021
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	51.8	67.8
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00112	0.00128
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	35.2	44.2
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.0141	0.00671
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.0048	0.0055
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0011	0.00079
Potassium (K)-Dissolved	mg/L	0.05	-	9.93	11.8
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000248	0.000205
Sodium (Na)-Dissolved	mg/L	0.5	-	72.2	94.4
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000023	0.00002
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0312	0.0328
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0026	0.0022
Acute Lethality[2,3]	N/A		Non-Lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-0501	MP-05
	ALS Laboratory Sample ID			L2123842-2	L2143845-1
	Sample Date & Time			7/3/2018 1:35:00 PM	8/8/2018 2:40:00 PM
	QA/QC Sample Type			Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	350	363
pH	pH units	0.1	6.0 - 9.5	8.23	8.04
Total Suspended Solids	mg/L	2	15	3.2	4.3
Total Dissolved Solids	mg/L	13	-	663	726
Turbidity	NTU	0.1	-	13.6	9.64
Alkalinity, Total (as CaCO3)	mg/L	10	-	112	166
Ammonia, Total (as N)	mg/L	0.02	-	0.041	0.114
Chloride (Cl)	mg/L	0.5	-	199	219
Fluoride (F)	mg/L	0.02	-	0.25	0.198
Nitrate (as N)	mg/L	0.02	-	8.79	3.98
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.54	1.08
Phosphorus, Total	mg/L	0.003	-	0.0095	0.0073
Sulfate (SO4)	mg/L	0.3	-	125	105
Dissolved Organic Carbon	mg/L	1	-	3.55	14.3
Total Organic Carbon	mg/L	1	-	3.97	16.3
Aluminum (Al)-Total	mg/L	0.01	-	0.167	0.137
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00023	0.00024
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	65.9	84.3
Copper (Cu)-Total	mg/L	0.001	0.3	0.0015	0.0021
Iron (Fe)-Total	mg/L	0.05	-	0.199	0.179
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00024	0.00022
Magnesium (Mg)-Total	mg/L	0.05	-	41.8	42.8
Manganese (Mn)-Total	mg/L	0.0005	-	0.0228	0.0424
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00579	0.00314
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00118	0.00114
Potassium (K)-Total	mg/L	0.05	-	11	8.74
Selenium (Se)-Total	mg/L	0.00005	-	0.000188	0.00018
Sodium (Na)-Total	mg/L	0.5	-	88.6	75.5
Thallium (Tl)-Total	mg/L	0.00001	-	0.000019	0.000014
Uranium (U)-Total	mg/L	0.00001	-	0.0336	0.0165
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0041	0.0101
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0211	0.0116
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.0002	0.00019
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	66.3	80.6
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00129	0.00143
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	44.7	39.2
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00685	0.0273
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00554	0.00297
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00081	0.00086
Potassium (K)-Dissolved	mg/L	0.05	-	11.9	8.06
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000201	0.000172
Sodium (Na)-Dissolved	mg/L	0.5	-	92.6	71.9
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000017	0.000015
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0333	0.0164
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0024	0.0071
Acute Lethality[2,3]	N/A		Non-Lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.8
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-05

Analyte	Sample ID			MP-05	MP-0501
	ALS Laboratory Sample ID			L2160180-1	L2160180-2
	Sample Date & Time			9/5/2018 10:20:00 AM	9/5/2018 10:20:00 AM
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	561	582
pH	pH units	0.1	6.0 - 9.5	8.26	8.28
Total Suspended Solids	mg/L	2	15	4.2	4.9
Total Dissolved Solids	mg/L	13	-	1000	1030
Turbidity	NTU	0.1	-	11.2	12.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	185	185
Ammonia, Total (as N)	mg/L	0.02	-	0.076	0.092
Chloride (Cl)	mg/L	0.5	-	291	291
Fluoride (F)	mg/L	0.02	-	0.167	0.168
Nitrate (as N)	mg/L	0.02	-	5.83	5.85
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.53	0.57
Phosphorus, Total	mg/L	0.003	-	0.0104	0.0124
Sulfate (SO4)	mg/L	0.3	-	177	178
Dissolved Organic Carbon	mg/L	1	-	9.99	10.3
Total Organic Carbon	mg/L	1	-	10.6	10.9
Aluminum (Al)-Total	mg/L	0.01	-	0.169	0.181
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00026	0.00027
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	119	119
Copper (Cu)-Total	mg/L	0.001	0.3	0.002	0.0021
Iron (Fe)-Total	mg/L	0.05	-	0.297	0.315
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00025	0.00028
Magnesium (Mg)-Total	mg/L	0.05	-	65	65.7
Manganese (Mn)-Total	mg/L	0.0005	-	0.288	0.292
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00247	0.00246
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00155	0.00154
Potassium (K)-Total	mg/L	0.05	-	9.24	9.29
Selenium (Se)-Total	mg/L	0.00005	-	0.000381	0.000358
Sodium (Na)-Total	mg/L	0.5	-	87.2	88.7
Thallium (Tl)-Total	mg/L	0.00001	-	0.000014	0.000016
Uranium (U)-Total	mg/L	0.00001	-	0.0157	0.0162
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0196	0.0192
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0102	0.011
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00022	0.00023
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	117	125
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00198	0.00181
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	65.3	65.5
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.253	0.257
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00233	0.00245
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00125	0.00126
Potassium (K)-Dissolved	mg/L	0.05	-	9.78	9.54
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000387	0.000371
Sodium (Na)-Dissolved	mg/L	0.5	-	88.7	93.5
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.00001	0.000011
Uranium (U)-Dissolved	mg/L	0.00001	-	0.015	0.0151
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0139	0.0143
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.9
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-0601
	ALS Laboratory Sample ID			L2116369-1	L2116369-2
	Sample Date & Time			/19/2018 11:45:00 AM	/19/2018 11:45:00 AM
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	507	507
pH	pH units	0.1	6.0 - 9.5	7.96	7.9
Total Suspended Solids	mg/L	2	15	<2.0	4.8
Total Dissolved Solids	mg/L	13	-	822	845
Turbidity	NTU	0.1	-	8.82	10.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	59	59
Ammonia, Total (as N)	mg/L	0.02	-	0.894	0.879
Chloride (Cl)	mg/L	0.5	-	65.2	64.7
Fluoride (F)	mg/L	0.02	-	0.078	0.078
Nitrate (as N)	mg/L	0.02	-	3.76	3.76
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.3	1.29
Phosphorus, Total	mg/L	0.003	-	<0.030	<0.030
Sulfate (SO4)	mg/L	0.3	-	427	426
Dissolved Organic Carbon	mg/L	0.5	-	2.8	2.3
Total Organic Carbon	mg/L	0.5	-	2.5	2.3
Aluminum (Al)-Total	mg/L	0.01	-	0.045	0.061
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00014	0.00013
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	70.9	71.5
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.122	0.18
Lead (Pb)-Total	mg/L	0.0001	0.2	<0.00010	0.00011
Magnesium (Mg)-Total	mg/L	0.05	-	83.6	82.3
Manganese (Mn)-Total	mg/L	0.0005	-	1.86	1.76
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00157	0.00159
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00338	0.00343
Potassium (K)-Total	mg/L	0.05	-	4.92	4.81
Selenium (Se)-Total	mg/L	0.00005	-	0.00133	0.00135
Sodium (Na)-Total	mg/L	0.5	-	28.6	28
Thallium (Tl)-Total	mg/L	0.00001	-	0.000026	0.000026
Uranium (U)-Total	mg/L	0.00001	-	0.00667	0.00703
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	71.3	72.2
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00055	0.00054
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	79.8	79.3
Manganese (Mn)-Dissolved	mg/L	0.0005	-	1.69	1.71
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00158	0.00156
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00304	0.00303
Potassium (K)-Dissolved	mg/L	0.05	-	4.77	4.56
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00135	0.00134
Sodium (Na)-Dissolved	mg/L	0.5	-	27.3	26.4
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000028	0.000026
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00686	0.00695
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0013	0.0013
Acute Lethality[2,3]	N/A		Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.9
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L2143845-2	L2162554-1
	Sample Date & Time			8/8/2018 5:40:00 PM	/10/2018 11:30:00 AI
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	10	-	621	341
pH	pH units	0.1	6.0 - 9.5	8.01	8.17
Total Suspended Solids	mg/L	2	15	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	1010	499
Turbidity	NTU	0.1	-	2.07	11
Alkalinity, Total (as CaCO3)	mg/L	10	-	91	126
Ammonia, Total (as N)	mg/L	0.02	-	0.023	0.126
Chloride (Cl)	mg/L	0.5	-	84.4	83.8
Fluoride (F)	mg/L	0.02	-	0.111	0.1
Nitrate (as N)	mg/L	0.02	-	6.3	4.79
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.5	0.63
Phosphorus, Total	mg/L	0.003	-	0.011	0.0036
Sulfate (SO4)	mg/L	0.3	-	536	157
Dissolved Organic Carbon	mg/L	0.5	-	2.67	4.61
Total Organic Carbon	mg/L	0.5	-	3.28	4
Aluminum (Al)-Total	mg/L	0.01	-	0.011	0.051
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00013	0.00017
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	101	74
Copper (Cu)-Total	mg/L	0.001	0.3	0.0011	0.0011
Iron (Fe)-Total	mg/L	0.05	-	<0.050	0.113
Lead (Pb)-Total	mg/L	0.0001	0.2	0.00011	<0.00010
Magnesium (Mg)-Total	mg/L	0.05	-	101	37.7
Manganese (Mn)-Total	mg/L	0.0005	-	0.202	0.151
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00173	0.00254
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00152	0.00143
Potassium (K)-Total	mg/L	0.05	-	6.43	4.68
Selenium (Se)-Total	mg/L	0.00005	-	0.00152	0.000369
Sodium (Na)-Total	mg/L	0.5	-	40.6	35.8
Thallium (Tl)-Total	mg/L	0.00001	-	0.00002	0.000017
Uranium (U)-Total	mg/L	0.00001	-	0.00749	0.0361
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	0.0087
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00011	0.00013
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	102	69.9
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00073	0.0011
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	0.000074	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	88.7	40.5
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.172	0.135
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00172	0.00237
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00136	0.00111
Potassium (K)-Dissolved	mg/L	0.05	-	5.84	5.16
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.0016	0.000424
Sodium (Na)-Dissolved	mg/L	0.5	-	37.4	38.1
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000022	0.000014
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00802	0.0342
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010	<0.0010
Acute Lethality[2,3]	N/A		Non-lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.9
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-06

Analyte	Sample ID			MP-0601
	ALS Laboratory Sample ID			L2162554-2
	Sample Date & Time			/10/2018 11:30:00 AM
	QA/QC Sample Type			Field Duplicate
	Units	LOR	Water Licence Criteria[1]	
Hardness (as CaCO3)	mg/L	10	-	347
pH	pH units	0.1	6.0 - 9.5	8.18
Total Suspended Solids	mg/L	2	15	<2.0
Total Dissolved Solids	mg/L	13	-	518
Turbidity	NTU	0.1	-	11.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	128
Ammonia, Total (as N)	mg/L	0.02	-	0.135
Chloride (Cl)	mg/L	0.5	-	83.8
Fluoride (F)	mg/L	0.02	-	0.104
Nitrate (as N)	mg/L	0.02	-	4.79
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.62
Phosphorus, Total	mg/L	0.003	-	0.0052
Sulfate (SO4)	mg/L	0.3	-	157
Dissolved Organic Carbon	mg/L	0.5	-	4.7
Total Organic Carbon	mg/L	0.5	-	3.95
Aluminum (Al)-Total	mg/L	0.01	-	0.055
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00016
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000010
Calcium (Ca)-Total	mg/L	0.5	-	68.9
Copper (Cu)-Total	mg/L	0.001	0.3	0.0011
Iron (Fe)-Total	mg/L	0.05	-	0.12
Lead (Pb)-Total	mg/L	0.0001	0.2	<0.00010
Magnesium (Mg)-Total	mg/L	0.05	-	36.8
Manganese (Mn)-Total	mg/L	0.0005	-	0.149
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00245
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00137
Potassium (K)-Total	mg/L	0.05	-	4.62
Selenium (Se)-Total	mg/L	0.00005	-	0.000357
Sodium (Na)-Total	mg/L	0.5	-	35.7
Thallium (Tl)-Total	mg/L	0.00001	-	0.000019
Uranium (U)-Total	mg/L	0.00001	-	0.0354
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0072
Arsenic (As)-Dissolved	mg/L	0.0001	-	0.00014
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	71.8
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00101
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	40.7
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.135
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00248
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.00114
Potassium (K)-Dissolved	mg/L	0.05	-	5.13
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00038
Sodium (Na)-Dissolved	mg/L	0.5	-	37.8
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000013
Uranium (U)-Dissolved	mg/L	0.00001	-	0.034
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010
Acute Lethality[2,3]	N/A		Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-0102	MP-Q1-01
	ALS Laboratory Sample ID			L2107359-4	L2117043-1	L2117043-2	L2120589-2
	Sample Date & Time			6/4/2018 7:15:00 AM	6/19/2018 7:10:00 PM	6/19/2018 7:10:00 PM	6/25/2018 8:50:00 AM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	238	160	<3.0	-
pH	pH units	0.1	6.0 - 9.5	8	7.99	6.22	8.05
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	**144**	5.8	<2.0	5.3
Total Dissolved Solids	mg/L	10	-	-	-	-	162
Turbidity	NTU	0.1	-	-	-	-	14.8
Ammonia, Total (as N)	mg/L	0.02	-	0.607	0.419	<0.020	-
Nitrate (as N)	mg/L	0.02	-	4.79	3.09	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-Lethal	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2123843-9	L2128204-8	L2131995-10	L2137113-9
	Sample Date & Time			7/3/2018 9:10:00 AM	7/10/2018 8:30:00 AM	7/17/2018 9:30:00 AM	7/23/2018 2:30:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	262	-	255	-
pH	pH units	0.1	6.0 - 9.5	8.1	7.99	8.03	8.13
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	5.2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	196	-	159
Turbidity	NTU	0.1	-	-	7.87	-	0.96
Ammonia, Total (as N)	mg/L	0.02	-	0.596	-	0.22	-
Nitrate (as N)	mg/L	0.02	-	6.69	-	4.25	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	Non-lethal	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-0101	MP-Q1-01	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2137113-3	L2141875-9	L2143614-9	L2148774-2
	Sample Date & Time			7/23/2018 2:30:00 PM	7/30/2018 11:05:00 AM	8/7/2018 6:35:00 PM	8/14/2018 10:20:00 AM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	-	266	279	-
pH	pH units	0.1	6.0 - 9.5	8.09	8.05	8.05	8.02
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	5.3	2.4
Total Dissolved Solids	mg/L	10	-	151	183	176	200
Turbidity	NTU	0.1	-	0.87	1.18	5.67	0.89
Ammonia, Total (as N)	mg/L	0.02	-	-	0.13	0.299	-
Nitrate (as N)	mg/L	0.02	-	-	2.79	3.11	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2152813-8	L2157679-5	L2160216-8	L2164348-8
	Sample Date & Time			8/21/2018 6:45:00 PM	8/27/2018 9:10:00 AM	9/4/2018 7:00:00 PM	9/10/2018 1:10:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	264	-	322	-
pH	pH units	0.1	6.0 - 9.5	8.2	8.18	8.21	8.12
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	159	191	176	187
Turbidity	NTU	0.1	-	1.54	0.92	1.03	1.03
Ammonia, Total (as N)	mg/L	0.02	-	0.136	-	0.022	-
Nitrate (as N)	mg/L	0.02	-	2.37	-	2.46	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	Non-lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.10
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-01

Analyte	Sample ID			MP-Q1-0102
	ALS Laboratory Sample ID			L2164348-10
	Sample Date & Time			9/10/2018 1:10:00 PM
	QA/QC Sample Type			Field Blank
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	-
pH	pH units	0.1	6.0 - 9.5	6
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	10	-	<10
Turbidity	NTU	0.1	-	0.12
Ammonia, Total (as N)	mg/L	0.02	-	-
Nitrate (as N)	mg/L	0.02	-	-
Oil and Grease, Total	mg/L	2	-	-
	-	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2108622-1	L2120296-1	L2123843-2	L2128381-1
	Sample Date & Time			6/6/2018 7:50:00 AM	6/26/2018 7:35:00 PM	7/2/2018 8:40:00 AM	7/11/2018 11:15:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	447	430	-	487
pH	pH units	0.1	6.0 - 9.5	8.02	7.99	7.94	8.05
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	**86.1**	16.1	7	5.7
Total Dissolved Solids	mg/L	10	-	-	-	296	-
Turbidity	NTU	0.1	-	-	-	13	-
Ammonia, Total (as N)	mg/L	0.02	-	1.77	2.91	-	3.78
Nitrate (as N)	mg/L	0.02	-	5.63	21.4	-	24.9
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	Non-Lethal	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-0201	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2131995-2	L2131995-3	L2137113-2	L2141875-2
	Sample Date & Time			7/17/2018 9:15:00 AM	7/17/2018 9:15:00 AM	7/23/2018 2:15:00 PM	7/30/2018 10:50:00 AM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	-	-	554	-
pH	pH units	0.1	6.0 - 9.5	7.95	7.97	8.04	7.92
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	3.6
Total Dissolved Solids	mg/L	10	-	393	394	-	471
Turbidity	NTU	0.1	-	1.89	1.37	-	2.68
Ammonia, Total (as N)	mg/L	0.02	-	-	-	2.44	-
Nitrate (as N)	mg/L	0.02	-	-	-	31.6	-
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2143614-2	L2148774-9	L2152813-9	L2157679-3
	Sample Date & Time			8/7/2018 1:40:00 PM	8/14/2018 10:19:00 AM	8/21/2018 6:50:00 PM	8/27/2018 9:05:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	720	-	762	-
pH	pH units	0.1	6.0 - 9.5	7.92	7.88	8.07	7.99
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	4.8	<2.0
Total Dissolved Solids	mg/L	10	-	458	548	597	548
Turbidity	NTU	0.1	-	3.85	0.59	4.95	0.67
Ammonia, Total (as N)	mg/L	0.02	-	4	-	4.09	-
Nitrate (as N)	mg/L	0.02	-	36.7	-	15.6	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.11
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MP-Q1-02

Analyte	Sample ID			MP-Q1-0201	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2157679-4	L2160216-9	L2164348-9
	Sample Date & Time			8/27/2018 9:05:00 AM	9/4/2018 7:15:00 PM	9/10/2018 12:50:00 PM
	QA/QC Sample Type			Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	853	-
pH	pH units	0.1	6.0 - 9.5	8.01	8.03	7.96
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0	4.2
Total Dissolved Solids	mg/L	10	-	543	635	636
Turbidity	NTU	0.1	-	0.96	3.95	4.13
Ammonia, Total (as N)	mg/L	0.02	-	-	2.34	-
Nitrate (as N)	mg/L	0.02	-	-	55	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-0101	MS-01	MS-01
	ALS Laboratory Sample ID			L2043727-1	L2043727-3	L2049097-1	L2049095-1
	Sample Date & Time			1/9/2018 3:15:00 PM	1/9/2018 3:15:00 PM	1/21/2018 12:00:00 AM	1/23/2018 12:00:00 AM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.5	7.37	-	7.39
Total Suspended Solids	mg/L	2	35	**45.3**	<2.0	<2.0	3.1
Alkalinity, Total (as CaCO3)	mg/L	10	-	64	62	-	83
Ammonia, Total (as N)	mg/L	0.02	4	0.147	0.162	-	0.118
Total Kjeldahl Nitrogen	mg/L	0.15	-	4.35	8	-	4
Phosphorus, Total	mg/L	0.003	4	**4.29**	**4.28**	0.907	0.998
Fecal Coliforms	CFU/100mL	0	1,000	230	150	-	19
BOD	mg/L	2	30	3.8	<2.0	-	<2.0
COD	mg/L	10	-	74	87	-	50
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2054390-1	L2070900-1	L2076007-1	L2088449-1
	Sample Date & Time			2/6/2018 3:00:00 PM	3/20/2018 3:00:00 PM	4/3/2018 3:00:00 PM	5/1/2018 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.72	7.75	7.61	7.59
Total Suspended Solids	mg/L	2	35	<2.0	<2.0	<2.0	2.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	124	84	93	74
Ammonia, Total (as N)	mg/L	0.02	4	0.623	0.397	0.424	1.16
Total Kjeldahl Nitrogen	mg/L	0.15	-	5.55	1.9	3.11	4.12
Phosphorus, Total	mg/L	0.003	4	0.743	1.3	1.68	0.853
Fecal Coliforms	CFU/100mL	0	1,000	1	6	106	1
BOD	mg/L	2	30	<2.0	<2.0	2.1	2.6
COD	mg/L	10	-	52	22	38	37
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2107707-1	L2124925-1	L2152761-1	L2168407-1
	Sample Date & Time			6/5/2018 3:00:00 PM	7/4/2018 2:40:00 PM	8/22/2018 3:00:00 PM	9/19/2018 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.62	7.62	7.79	7.89
Total Suspended Solids	mg/L	2	35	2.1	<2.0	<2.0	2.9
Alkalinity, Total (as CaCO3)	mg/L	10	-	103	89	80	94
Ammonia, Total (as N)	mg/L	0.02	4	1.6	1.24	0.083	0.141
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.81	2.92	3.27	0.83
Phosphorus, Total	mg/L	0.003	4	1.13	1.28	1.13	0.564
Fecal Coliforms	CFU/100mL	0	1,000	24	9	78	45
BOD	mg/L	2	30	2.4	2.3	<2.0	<2.0
COD	mg/L	10	-	38	36	49	50
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	Non-lethal

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-0103	MS-01	MS-0103
	ALS Laboratory Sample ID			L2178004-1	L2178004-3	L2194082-1	L2194082-3
	Sample Date & Time			10/02/2018 2:45:00 PM	10/02/2018 2:45:00 PM	11/6/2018 2:45:00 PM	11/6/2018 2:45:00 PM
	QA/QC Sample Type			N/A	Travel Blank	N/A	Travel Blank
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.51	6.4	7.55	5.92
Total Suspended Solids	mg/L	2	35	<2.0	<2.0	2.7	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	77	<10	86	<10
Ammonia, Total (as N)	mg/L	0.02	4	0.23	0.069	0.055	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.92	<0.15	1.76	<0.15
Phosphorus, Total	mg/L	0.003	4	0.395	0.0099	0.762	<0.0030
Fecal Coliforms	CFU/100mL	0	1,000	1000	0	0	0
BOD	mg/L	2	30	2.2	<2.0	<2.0	<2.0
COD	mg/L	10	-	46	20	37	<10
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.12
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01

Analyte	Sample ID			MS-01	MS-0101
	ALS Laboratory Sample ID			L2210728-1	L2210728-3
	Sample Date & Time			12/12/2018 3:00:00 PM	12/12/2018 3:00:00 PM
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]		
pH	pH units	0.1	6.0 - 9.5	7.42	7.45
Total Suspended Solids	mg/L	2	35	14.3	13.1
Alkalinity, Total (as CaCO3)	mg/L	10	-	78	79
Ammonia, Total (as N)	mg/L	0.02	4	0.113	0.086
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.7	4.6
Phosphorus, Total	mg/L	0.003	4	1.2	1.19
Fecal Coliforms	CFU/100mL	0	1,000	670	630
BOD	mg/L	2	30	3.2	2.7
COD	mg/L	10	-	41	40
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.13
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2092874-1	L2107710-1	L2124920-1	L2152764-1
	Sample Date & Time			5/9/2018 2:30:00 PM	6/5/2018 2:35:00 PM	7/4/2018 2:30:00 PM	8/22/2018 2:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.74	7.54	7.41	7.41
Total Suspended Solids	mg/L	2	35	<2.0	6.7	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	47	43	28	23
Ammonia, Total (as N)	mg/L	0.02	4	<0.020	0.137	0.059	0.126
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.58	0.35	0.87	1.52
Phosphorus, Total	mg/L	0.003	4	1.65	2.87	0.0481	0.476
Fecal Coliforms	CFU/100mL	0	1,000	0	0	0	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	25	29	21	30
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	Non-lethal	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.13
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2168455-1	L2178028-1	L2200739-1	L2210721-1
	Sample Date & Time			9/19/2018 2:15:00 PM	10/2/2018 2:45:00 PM	11/20/2018 2:45:00 PM	12/12/2018 2:45:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.1	6.0 - 9.5	7.71	7.5	7.63	7.21
Total Suspended Solids	mg/L	2	35	<2.0	<2.0	4.8	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	50	51	71	62
Ammonia, Total (as N)	mg/L	0.02	4	<0.020	0.102	0.082	0.479
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.59	1.62	1.45	2.04
Phosphorus, Total	mg/L	0.003	4	1.49	1.42	1.57	1.41
Fecal Coliforms	CFU/100mL	0	1,000	0	1	2	0
BOD	mg/L	2	30	<2.0	<2.0	3.4	<2.0
COD	mg/L	10	-	35	31	29	21
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.14
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-6

Analyte	Sample ID			MS-MRY-6-20	MS-MRY-6	MS-MRY-6
	ALS Laboratory Sample ID			L2107678-3	L2161343-1	L2160167-1
	Sample Date & Time			6/5/2018 7:45:00 PM	8/25/2018 11:50:00 AM	9/4/2018 12:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.1	-	6.44	8.28	7.73
Total Suspended Solids	mg/L	2	-	14	12.2	13.4
Total Dissolved Solids	mg/L	20	-	-	137	857
Turbidity	NTU	0.1	-	-	5.11	16.8
Lead (Pb)-Total	mg/L	0.0001	0.001	<0.00050	0.00036	**0.00127**
Oil and Grease, Total	mg/L	2	15	<2.0	<2.0	6.9
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.5	370	<0.50	<0.50	0.94
Ethylbenzene	ug/L	0.5	90	<0.50	<0.50	<0.50
Toluene	ug/L	0.5	2	<0.50	<0.50	0.85
o-Xylene	ug/L	0.5	-	<0.50	<0.50	0.61
m+p-Xylenes	ug/L	1	-	<1.0	<0.50	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1	<1.1	<1.1
4-Bromofluorobenzene	%	Surrogate	-	102	89	99.1
1,4-Difluorobenzene	%	Surrogate	-	102.3	95.6	96.4
F1 (C6-C10)	ug/L	100	-	<100	<100	<100
F1-BTEX	ug/L	100	-	<100	<100	<100
F2 (C10-C16)	ug/L	100	-	<100	<100	210
F3 (C16-C34)	ug/L	250	-	490	<250	510
F4 (C34-C50)	ug/L	250	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	490	<380	720
Chrom. to baseline at nC50		n/a	-	YES	YES	YES
2-Bromobenzotrifluoride	%	Surrogate	-	93.9	88	98.7
3,4-Dichlorotoluene	%	Surrogate	-	99.3	92.5	101.6

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8

TABLE 7.1.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-06	MS-06	MS-06
	ALS Laboratory Sample ID			L2113176-4	L2117069-1	L2118828-1	L2121631-1	L2122094-2
	Sample Date & Time			6/13/2018 2:55:00 PM	6/19/2018 12:00:00 PM	6/24/2018 5:30:00 PM	6/29/2018 10:00:00 AM	7/2/2018 12:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]					
Conductivity	umhos/cm	3	-	-	836	943	1000	1050
Hardness (as CaCO3)	mg/L	10	-	385	430	463	-	-
pH	pH units	0.1	6.0 - 9.5	7.65	7.61	7.52	7.61	7.68
Total Suspended Solids	mg/L	2	15	5.5	2.7	7.6	<2.0	2.8
Total Dissolved Solids	mg/L	13	-	518	648	700	760	763
Turbidity	NTU	0.1	-	15.8	-	-	8.66	17.9
Acidity (as CaCO3)	mg/L	2	-	-	2.8	3.2	<0.0020	<0.0020
Alkalinity, Total (as CaCO3)	mg/L	10	-	31	31	33	-	-
Ammonia, Total (as N)	mg/L	0.02	-	0.308	0.444	0.44	-	-
Chloride (Cl)	mg/L	0.5	-	12.8	15.3	16.7	-	-
Fluoride (F)	mg/L	0.02	-	0.035	0.042	0.044	-	-
Nitrate (as N)	mg/L	0.02	-	4.06	4.66	4.88	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.61	0.81	0.88	-	-
Phosphorus, Total	mg/L	0.003	-	<0.030	<0.0030	<0.015	-	-
Sulfate (SO4)	mg/L	0.3	-	314	387	426	-	-
Cyanide, Total	mg/L	0.002	1	<0.0020	<0.0020	<0.0020	-	-
Dissolved Organic Carbon	mg/L	0.5	-	1.7	1.5	2.2	-	-
Total Organic Carbon	mg/L	0.5	-	1.5	1.7	1.8	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.154	0.0628	0.0389	0.0274	0.0497
Antimony (Sb)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00013	0.00012	0.00011	0.00011	0.00013
Barium (Ba)-Total	mg/L	0.0002	-	-	0.0106	0.0121	0.0125	0.0135
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.01	-	-	0.025	0.032	0.03	0.029
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000027	0.000042	0.0000442	0.0000406	0.000041
Calcium (Ca)-Total	mg/L	0.5	-	26.5	34.7	44.8	44.5	47.1
Cesium (Cs)-Total	mg/L	0.00001	-	-	0.000012	0.000013	0.000014	0.000017
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	-	0.00601	0.00603	0.00514	0.00528
Copper (Cu)-Total	mg/L	0.001	0.3	0.0012	<0.0010	0.0015	<0.0010	<0.0010
Iron (Fe)-Total	mg/L	0.05	-	0.509	0.206	0.127	0.066	0.175
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00028	0.000138	0.00012	0.00007	0.000089
Lithium (Li)-Total	mg/L	0.001	-	-	0.015	0.0181	0.0186	0.0185
Magnesium (Mg)-Total	mg/L	0.05	-	70.2	82.1	98.2	94	96.7
Manganese (Mn)-Total	mg/L	0.0005	-	1.11	1.41	1.58	1.52	1.58
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000501	0.000669	0.000789	0.000916	0.000952
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00976	0.00891	0.00939	0.00881	0.00899
Phosphorus (P)-Total	mg/L	0.05	-	-	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L	0.05	-	8.51	9.77	10.7	10.9	11
Rubidium (Rb)-Total	mg/L	0.0002	-	-	0.00504	0.00549	0.00625	0.00686
Selenium (Se)-Total	mg/L	0.00005	-	0.000899	0.00103	0.0011	0.00121	0.00125
Silicon (Si)-Total	mg/L	0.1	-	-	0.45	0.49	0.45	0.43
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	<0.000050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	5.39	6.22	7.05	7.03	6.96
Strontium (Sr)-Total	mg/L	0.001	-	-	0.0571	0.063	0.0724	0.0722
Sulfur (S)-Total	mg/L	0.5	-	-	136	168	162	164
Tellurium (Te)-Total	mg/L	0.0002	-	-	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00002	0.000023	0.000029	0.000029	0.000031
Thorium (Th)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	-	<0.00080	<0.00040	<0.00055	<0.0007
Tungsten (W)-Total	mg/L	0.0001	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.00191	0.0019	0.00199	0.0018	0.00161
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0035	0.0089	0.0103	0.0053	0.0061
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030	<0.00030	<0.00030	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050	<0.0050	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.00010	<0.00010	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.0103	0.0112	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.00010	<0.00010	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.000050	<0.000050	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	0.024	0.028	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000025	0.0000334	0.0000418	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	28.6	33.6	40.6	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	0.000012	0.000012	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.00050	<0.00050	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	0.00567	0.00529	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00054	0.00047	0.0005	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	<0.010	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	0.000077	<0.000050	<0.000050	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	0.0151	0.0173	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	76.1	84.1	87.8	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	1.14	1.4	1.45	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000483	0.000654	0.0008	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0094	0.00859	0.00845	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<0.050	<0.050	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	9.2	10.2	10.4	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.00507	0.00578	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000908	0.00101	0.00116	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	0.365	0.387	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.000050	<0.000050	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	5.53	6.42	6.26	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.0559	0.0655	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	142	157	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.00020	<0.00020	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000018	0.000023	0.000032	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.00010	<0.00010	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.00010	<0.00010	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.00030	<0.00030	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.00010	<0.00010	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00152	0.00174	0.00192	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.00050	<0.00050	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0033	0.0085	0.0091	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	0.0033	<0.00030	<0.00030	-	-
Ra-226	Bq/L	0.0038	0.37	0.017	0.012	<0.0075	<0.0091	0.016
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	Non-lethal	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-0601	MS-06	MS-06	MS-06
	ALS Laboratory Sample ID			L2127561-1	L2127561-2	L2130188-1	L2132032-2	L2136756-1
	Sample Date & Time			7/11/2018 3:10:00 PM	7/11/2018 3:10:00 PM	7/16/2018 3:15:00 PM	7/18/2018 2:10:00 PM	7/26/2018 11:30:00 AM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]					
Conductivity	umhos/cm	3	-	1040	5460	1130	1140	1160
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-	644
pH	pH units	0.1	6.0 - 9.5	7.78	7.77	7.56	7.76	7.55
Total Suspended Solids	mg/L	2	15	4	4.4	9.6	2.8	2
Total Dissolved Solids	mg/L	13	-	814	832	900	919	895
Turbidity	NTU	0.1	-	13.2	13.5	8.03	5.54	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-	2.5
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-	41
Ammonia, Total (as N)	mg/L	0.02	-	-	-	-	0.159	0.042
Chloride (Cl)	mg/L	0.5	-	-	-	-	-	21.5
Fluoride (F)	mg/L	0.02	-	-	-	-	-	0.06
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	6.17
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-	<0.15
Phosphorus, Total	mg/L	0.003	-	-	-	-	-	1.74
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-	572
Cyanide, Total	mg/L	0.002	1	<0.0020	<0.0020	<0.20	<0.0020	<0.0020
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	1.6	1.21
Total Organic Carbon	mg/L	0.5	-	-	-	-	1.4	1.31
Aluminum (Al)-Total	mg/L	0.005	-	0.051	0.0468	0.02	0.0162	<0.050
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00014	0.00014	<0.00010	<0.00010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0132	0.0132	0.0149	0.0145	0.0162
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.00050
Boron (B)-Total	mg/L	0.01	-	0.032	0.032	0.034	0.034	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000035	0.0000409	0.0000456	0.0000439	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	51.4	50.1	57.8	60.3	60.6
Cesium (Cs)-Total	mg/L	0.00001	-	0.000015	0.000013	0.000012	0.000012	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.00453	0.00455	0.00556	0.00524	0.0037
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	<0.0010	<0.0010	<0.0010	<0.010
Iron (Fe)-Total	mg/L	0.05	-	0.159	0.15	0.072	0.061	0.11
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000055	0.000061	0.000059	0.000079	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.0196	0.0189	0.0214	0.0201	0.022
Magnesium (Mg)-Total	mg/L	0.05	-	108	106	113	116	120
Manganese (Mn)-Total	mg/L	0.0005	-	1.71	1.74	1.95	1.97	1.6
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000875	0.000937	0.000967	0.000993	0.00082
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00789	0.00783	0.00879	0.00842	0.007
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	<0.050	<0.050	<0.50
Potassium (K)-Total	mg/L	0.05	-	11.1	10.8	11	11.3	12
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00792	0.00786	0.00888	0.00915	0.0105
Selenium (Se)-Total	mg/L	0.00005	-	0.0012	0.0012	0.00142	0.00132	0.00126
Silicon (Si)-Total	mg/L	0.1	-	0.37	0.37	0.29	0.26	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	7.36	7.22	7.16	7.24	7.69
Strontium (Sr)-Total	mg/L	0.001	-	0.0742	0.0764	0.0869	0.0894	0.087
Sulfur (S)-Total	mg/L	0.5	-	199	201	192	190	207
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00003	0.000032	0.000034	0.000032	<0.00010
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	0.00045	0.00058	<0.00040	<0.00030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00158	0.00163	0.00157	0.00153	0.0013
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0039	0.004	0.0084	0.0072	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	<0.00030	<0.00030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-	0.0159
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-	58.9
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-	0.0035
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-	<0.0020
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-	0.019
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-	121
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-	1.54
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-	0.00089
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-	0.0072
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-	12
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-	0.0108
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-	0.00116
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-	<0.50
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-	7.71
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-	0.084
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-	205
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-	<0.00010
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-	0.00114
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-	<0.0030
Ra-226	Bq/L	0.0038	0.37	0.019	0.042	0.05	0.013	0.0065
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.15
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-06	MS-06
	ALS Laboratory Sample ID			L2139790-1	L2142460-1	L2151324-1	L2154892-3
	Sample Date & Time			8/1/2018 11:55:00 AM	8/7/2018 5:30:00 PM	8/18/2018 5:10:00 PM	8/28/2018 4:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	1140	921	1120	1060
Hardness (as CaCO3)	mg/L	10	-	-	-	-	574
pH	pH units	0.1	6.0 - 9.5	7.46	7.3	6.84	7.37
Total Suspended Solids	mg/L	2	15	<2.0	2.8	2.4	4
Total Dissolved Solids	mg/L	13	-	645	740	878	900
Turbidity	NTU	0.1	-	4.85	11	9.77	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	3
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	24
Ammonia, Total (as N)	mg/L	0.02	-	0.024	<0.020	0.03	0.04
Chloride (Cl)	mg/L	0.5	-	-	-	-	15.3
Fluoride (F)	mg/L	0.02	-	-	-	-	0.044
Nitrate (as N)	mg/L	0.02	-	-	-	-	4.35
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	<0.15
Phosphorus, Total	mg/L	0.003	-	-	-	-	<0.030
Sulfate (SO4)	mg/L	0.3	-	-	-	-	539
Cyanide, Total	mg/L	0.002	1	<0.020	<0.0020	<0.0020	<0.0020
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	0.85
Total Organic Carbon	mg/L	0.5	-	-	-	-	1.01
Aluminum (Al)-Total	mg/L	0.005	-	0.025	0.0442	0.0171	0.0842
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00011	0.00011	0.00011	<0.00010
Barium (Ba)-Total	mg/L	0.0002	-	0.0141	0.0133	0.0175	0.017
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.03	0.024	0.032	0.023
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000289	0.0000222	0.0000685	0.0000553
Calcium (Ca)-Total	mg/L	0.5	-	54	45.3	59.9	49.7
Cesium (Cs)-Total	mg/L	0.00001	-	0.000014	0.000013	0.000014	0.000016
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	0.00664	0.00448	0.0168	0.00903
Copper (Cu)-Total	mg/L	0.001	0.3	<0.0010	<0.0010	<0.0010	0.0113
Iron (Fe)-Total	mg/L	0.05	-	0.171	0.176	2.09	0.333
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	<0.000050	<0.000050	0.000572
Lithium (Li)-Total	mg/L	0.001	-	0.0199	0.0148	0.019	0.0142
Magnesium (Mg)-Total	mg/L	0.05	-	103	92.9	109	101
Manganese (Mn)-Total	mg/L	0.0005	-	1.44	1.09	1.9	1.62
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000129	0.0002	0.000084	0.000123
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0118	0.00827	0.0235	0.0168
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L	0.05	-	9.99	8.77	10.3	8.84
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00895	0.00831	0.0108	0.0114
Selenium (Se)-Total	mg/L	0.00005	-	0.00113	0.00105	0.00103	0.00087
Silicon (Si)-Total	mg/L	0.1	-	0.17	0.15	0.13	0.19
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	6.24	5.62	6.13	5.02
Strontium (Sr)-Total	mg/L	0.001	-	0.0761	0.0664	0.077	0.0714
Sulfur (S)-Total	mg/L	0.5	-	182	181	221	181
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00001	-	0.000034	0.000027	0.000038	0.000035
Thorium (Th)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.00070	<0.00070	<0.00030	<0.0035
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.000451	0.000314	0.000196	0.00013
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0034	<0.0030	0.004	0.0073
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	<0.00030	<0.00030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	<0.0050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	0.0163
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	0.024
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	0.0000568
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	54.9
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	0.000013
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	0.00867
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	0.00038
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	0.013
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	0.0156
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	106
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	1.54
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	0.000096
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	0.0162
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	<0.050
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	9.37
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	0.0111
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	0.00088
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	<0.050
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	5.34
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	0.0705
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	196
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	0.000031
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	<0.00030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	<0.00010
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	0.000091
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	0.0047
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	<0.00030
Ra-226	Bq/L	0.0038	0.37	0.011	0.0053	0.012	0.011
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-0801	MS-08	MS-08
	ALS Laboratory Sample ID			L2122068-1	L2122068-2	L2122725-1	L2127393-1
	Sample Date & Time			6/30/2018 3:40:00 PM	6/30/2018 3:40:00 PM	7/3/2018 3:15:00 PM	7/11/2018 10:50:00 AM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	3170	3180	3360	3160
Hardness (as CaCO3)	mg/L	10	-	-	-	2520	-
pH	pH units	0.1	6.0 - 9.5	8.89	8.89	8.88	9.16
Total Suspended Solids	mg/L	2	15	6.4	8	3.6	3.6
Total Dissolved Solids	mg/L	13	-	3220	3140	3950	3220
Turbidity	NTU	0.1	-	12.5	12.7	-	6.78
Acidity (as CaCO3)	mg/L	2	-	-	-	2.2	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	37	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	2.9	-
Chloride (Cl)	mg/L	0.5	-	-	-	6.51	-
Fluoride (F)	mg/L	0.02	-	-	-	0.053	-
Nitrate (as N)	mg/L	0.02	-	-	-	6.5	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	3.41	-
Phosphorus, Total	mg/L	0.003	-	-	-	<0.030	-
Sulfate (SO4)	mg/L	0.3	-	-	-	2340	-
Cyanide, Total	mg/L	0.002	1	0.0063	0.0063	0.0093	0.0081
Dissolved Organic Carbon	mg/L	0.5	-	-	-	1.6	-
Total Organic Carbon	mg/L	0.5	-	-	-	1.87	-
Aluminum (Al)-Total	mg/L	0.005	-	0.058	<0.050	<0.050	<0.050
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0186	0.0191	0.0183	0.0141
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	223	221	287	196
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0119	0.0119	0.0341	0.0083
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	<0.010	0.011	<0.010
Iron (Fe)-Total	mg/L	0.05	-	2.19	2.15	1.66	0.73
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.054	0.051	0.067	0.054
Magnesium (Mg)-Total	mg/L	0.05	-	393	391	440	451
Manganese (Mn)-Total	mg/L	0.0005	-	3.21	3.25	5.59	3.7
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0153	0.0145	0.039	0.0114
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	3.86	3.91	4.01	3.57
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0075	0.0073	0.0086	0.0075
Selenium (Se)-Total	mg/L	0.00005	-	0.00336	0.00395	0.0043	0.00403
Silicon (Si)-Total	mg/L	0.1	-	<1.0	<1.0	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	6.54	6.57	5.43	51.5
Strontium (Sr)-Total	mg/L	0.001	-	0.476	0.471	0.592	0.305
Sulfur (S)-Total	mg/L	0.5	-	705	725	834	800
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00011	<0.00015	0.00015	0.00011
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00024	0.00025	0.00014	0.00056
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	<0.050	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	0.0175	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	<0.00050	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	<0.10	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	<0.000050	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	287	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	<0.00010	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	<0.0050	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	0.0258	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	0.0087	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	<0.10	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	<0.00050	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	0.07	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	438	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	5.59	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	<0.000010	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	<0.00050	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	0.0307	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	<0.50	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	4.06	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	0.0085	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	0.00391	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	<0.50	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	<0.00050	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	5.49	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	0.609	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	857	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	<0.0020	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	0.00015	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	<0.0030	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	<0.0010	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	<0.00010	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	<0.0050	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	<0.010	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	<0.0030	-
Ra-226	Bq/L	0.0045	0.37	0.048	0.029	0.029	0.021
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	Non-lethal	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-0801	MS-08	MS-08	MS-0801
	ALS Laboratory Sample ID			L2127393-2	L2130194-1	L2133777-1	L2133777-2
	Sample Date & Time			7/11/2018 10:50:00 AM	7/16/2018 2:30:00 PM	7/21/2018 1:55:00 PM	7/21/2018 1:55:00 PM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	3210	3410	3420	3430
Hardness (as CaCO3)	mg/L	10	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	9.16	8.33	8.53	8.64
Total Suspended Solids	mg/L	2	15	2.4	<2.0	12.4	13.6
Total Dissolved Solids	mg/L	13	-	3260	3740	3860	3860
Turbidity	NTU	0.1	-	5.9	14.3	19.4	19.1
Acidity (as CaCO3)	mg/L	2	-	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.02	-	-	-	2.02	2.07
Chloride (Cl)	mg/L	0.5	-	-	-	-	-
Fluoride (F)	mg/L	0.02	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	-
Phosphorus, Total	mg/L	0.003	-	-	-	-	-
Sulfate (SO4)	mg/L	0.3	-	-	-	-	-
Cyanide, Total	mg/L	0.002	1	0.0085	<0.20	0.0053	<0.0020
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	-
Total Organic Carbon	mg/L	0.5	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	<0.050	<0.050	0.08	0.08
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.014	0.0177	0.0195	0.021
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	195	197	180	183
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	0.0069	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.008	0.0345	0.0439	0.0445
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	0.011	<0.010	0.01
Iron (Fe)-Total	mg/L	0.05	-	0.73	3.31	4.31	4.42
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.053	0.057	0.052	0.051
Magnesium (Mg)-Total	mg/L	0.05	-	448	524	547	555
Manganese (Mn)-Total	mg/L	0.0005	-	3.59	7.94	8.88	8.83
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	0.00285	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0112	0.0442	0.056	0.0558
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	3.57	4.02	4.39	4.5
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0078	0.0084	0.0083	0.0089
Selenium (Se)-Total	mg/L	0.00005	-	0.00381	0.0038	0.00523	0.00496
Silicon (Si)-Total	mg/L	0.1	-	<1.0	<1.0	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	52.5	16.8	16.9	16.9
Strontium (Sr)-Total	mg/L	0.001	-	0.309	0.369	0.279	0.274
Sulfur (S)-Total	mg/L	0.5	-	804	872	953	982
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00011	0.00013	<0.00020	0.0001
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00053	0.00045	0.00057	0.0006
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	-
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	-
Ra-226	Bq/L	0.0045	0.37	0.015	0.036	0.018	0.039
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-0801	MS-08	MS-08
	ALS Laboratory Sample ID			L2136309-1	L2136309-2	L2139794-1	L2145073-1
	Sample Date & Time			7/24/2018 8:50:00 AM	7/24/2018 8:50:00 AM	8/1/2018 8:55:00 AM	8/10/2018 1:55:00 PM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	3450	3460	2360	5010
Hardness (as CaCO3)	mg/L	10	-	-	-	-	4120
pH	pH units	0.1	6.0 - 9.5	8.28	8.28	8.83	9.23
Total Suspended Solids	mg/L	2	15	14.8	6.8	4.4	**19.3**
Total Dissolved Solids	mg/L	13	-	3780	3790	2580	6370
Turbidity	NTU	0.1	-	10.1	8.69	4.91	-
Acidity (as CaCO3)	mg/L	2	-	-	-	-	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	-	57
Ammonia, Total (as N)	mg/L	0.02	-	1.94	2.02	1.32	2.98
Chloride (Cl)	mg/L	0.5	-	-	-	-	12
Fluoride (F)	mg/L	0.02	-	-	-	-	<0.20
Nitrate (as N)	mg/L	0.02	-	-	-	-	18.7
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	-	3.5
Phosphorus, Total	mg/L	0.003	-	-	-	-	<0.0030
Sulfate (SO4)	mg/L	0.3	-	-	-	-	4930
Cyanide, Total	mg/L	0.002	1	0.005	0.0051	0.0121	0.022
Dissolved Organic Carbon	mg/L	0.5	-	-	-	-	2.04
Total Organic Carbon	mg/L	0.5	-	-	-	-	2.4
Aluminum (Al)-Total	mg/L	0.005	-	<0.050	<0.050	<0.050	0.088
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0178	0.018	0.0221	0.0201
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000050	<0.000050	0.000142	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	195	198	109	321
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0155	0.0152	0.0317	0.0271
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	<0.010	<0.010	0.034
Iron (Fe)-Total	mg/L	0.05	-	1.23	1.12	1.16	4.04
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.054	0.056	0.03	0.061
Magnesium (Mg)-Total	mg/L	0.05	-	551	573	346	800
Manganese (Mn)-Total	mg/L	0.0005	-	4.54	4.71	7.27	6.92
Mercury (Hg)-Total	mg/L	0.00001	-	-	-	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0201	0.0193	0.0436	0.028
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	4.46	4.66	4.13	4.76
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0085	0.0088	0.0057	0.0092
Selenium (Se)-Total	mg/L	0.00005	-	0.00494	0.00491	0.00413	0.00956
Silicon (Si)-Total	mg/L	0.1	-	<1.0	<1.0	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	17	17.2	6.89	4.75
Strontium (Sr)-Total	mg/L	0.001	-	0.295	0.305	0.146	0.655
Sulfur (S)-Total	mg/L	0.5	-	951	981	542	1530
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00011	0.00012	<0.00010	0.00017
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00037	0.00039	0.00033	0.00073
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	-	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	-	-	0.0206
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	-	-	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	-	-	-	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	-	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	-	316
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	-	-	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	-	-	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	-	-	0.0047
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	-	0.0323
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	-	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	-	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	-	-	-	0.054
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	-	809
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	-	6.33
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	-	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	-	<0.00050
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	-	0.006
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	-	-	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	-	4.66
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	-	-	0.0087
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	-	0.00859
Silicon (Si)-Dissolved	mg/L	0.05	-	-	-	-	<0.50
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	-	-	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	-	4.74
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	-	-	0.616
Sulfur (S)-Dissolved	mg/L	0.5	-	-	-	-	1460
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	-	-	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	-	0.00016
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	-	-	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	-	-	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	-	0.00036
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	-	-	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	-	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	-	-	<0.0030
Ra-226	Bq/L	0.0045	0.37	0.017	0.03	0.019	0.041
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-0801	MS-08	MS-08	MS-0801
	ALS Laboratory Sample ID			L2145073-2	L2148404-1	L2150213-1	L2150213-2
	Sample Date & Time			8/10/2018 1:55:00 PM	8/15/2018 5:00:00 PM	8/21/2018 9:00:00 AM	8/21/2018 9:00:00 AM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	5030	5290	3890	3960
Hardness (as CaCO3)	mg/L	10	-	4310	-	2760	2550
pH	pH units	0.1	6.0 - 9.5	9.27	8.57	8.83	8.85
Total Suspended Solids	mg/L	2	15	14.9	12	7.2	6
Total Dissolved Solids	mg/L	13	-	5040	7000	3920	3800
Turbidity	NTU	0.1	-	-	13	-	-
Acidity (as CaCO3)	mg/L	2	-	<2.0	-	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	55	-	48	50
Ammonia, Total (as N)	mg/L	0.02	-	2.99	3.49	1.52	1.58
Chloride (Cl)	mg/L	0.5	-	10.1	-	7.9	8.6
Fluoride (F)	mg/L	0.02	-	<0.20	-	<0.20	<0.20
Nitrate (as N)	mg/L	0.02	-	15.6	-	9.76	10.3
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.86	-	2.19	2.17
Phosphorus, Total	mg/L	0.003	-	<0.0030	-	<0.030	<0.030
Sulfate (SO4)	mg/L	0.3	-	4100	-	2700	2830
Cyanide, Total	mg/L	0.002	1	0.0234	0.48	<0.020	0.0145
Dissolved Organic Carbon	mg/L	0.5	-	1.9	-	2.94	3
Total Organic Carbon	mg/L	0.5	-	2.75	-	3.18	3.08
Aluminum (Al)-Total	mg/L	0.005	-	0.091	0.072	0.057	0.06
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0206	0.022	0.0182	0.0178
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000050	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	330	365	206	214
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0284	0.0348	0.0189	0.0191
Copper (Cu)-Total	mg/L	0.001	0.3	0.034	0.027	0.012	0.012
Iron (Fe)-Total	mg/L	0.05	-	4.18	2.71	1.71	1.7
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.058	0.063	0.04	0.041
Magnesium (Mg)-Total	mg/L	0.05	-	829	986	617	620
Manganese (Mn)-Total	mg/L	0.0005	-	7.07	10.5	5.61	5.72
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	<0.00050	0.00063	0.00057
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0297	0.0402	0.0242	0.0247
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	4.78	5.6	4.99	5.05
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0091	0.0095	0.007	0.0072
Selenium (Se)-Total	mg/L	0.00005	-	0.00935	0.01	0.0062	0.0066
Silicon (Si)-Total	mg/L	0.1	-	<1.0	<1.0	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	4.78	5.81	4.76	4.78
Strontium (Sr)-Total	mg/L	0.001	-	0.667	0.751	0.379	0.39
Sulfur (S)-Total	mg/L	0.5	-	1500	1780	1010	1030
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00017	0.00017	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00066	0.00061	0.00061	0.00063
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.050	-	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0194	-	0.0155	0.0144
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.00050	-	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	<0.10	-	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000050	-	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	328	-	194	177
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.00010	-	<0.00010	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.0050	-	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0049	-	0.006	0.0054
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.0331	-	0.0103	0.0092
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.10	-	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.00050	-	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	0.06	-	0.04	0.034
Magnesium (Mg)-Dissolved	mg/L	0.05	-	846	-	553	512
Manganese (Mn)-Dissolved	mg/L	0.0005	-	6.5	-	4.47	4.09
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	<0.00050	-	0.00062	0.00063
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0065	-	0.0091	0.008
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.50	-	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	4.79	-	4.56	4.05
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0094	-	0.0067	0.0062
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00846	-	0.00571	0.00504
Silicon (Si)-Dissolved	mg/L	0.05	-	<0.50	-	<0.50	<0.50
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.00050	-	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	4.83	-	4.38	3.96
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.65	-	0.355	0.324
Sulfur (S)-Dissolved	mg/L	0.5	-	1460	-	913	848
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.0020	-	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.00017	-	<0.00010	<0.00010
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.0030	-	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.0010	-	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00033	-	0.00036	0.00033
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.0050	-	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.010	-	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.0030	-	<0.0030	<0.0030
Ra-226	Bq/L	0.0045	0.37	0.045	0.033	0.02	0.026
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.16
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-08

Analyte	Sample ID			MS-08	MS-08
	ALS Laboratory Sample ID			L2153611-1	L2158111-1
	Sample Date & Time			8/27/2018 11:05:00 AM	9/4/2018 5:00:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]		
Conductivity	umhos/cm	3	-	5460	8970
Hardness (as CaCO3)	mg/L	10	-	-	9570
pH	pH units	0.1	6.0 - 9.5	8.78	8.76
Total Suspended Solids	mg/L	2	15	9.6	10.8
Total Dissolved Solids	mg/L	13	-	6710	12700
Turbidity	NTU	0.1	-	1.81	-
Acidity (as CaCO3)	mg/L	2	-	-	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	79
Ammonia, Total (as N)	mg/L	0.02	-	2.89	4.29
Chloride (Cl)	mg/L	0.5	-	-	23
Fluoride (F)	mg/L	0.02	-	-	<0.40
Nitrate (as N)	mg/L	0.02	-	-	29.9
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	4.32
Phosphorus, Total	mg/L	0.003	-	-	<0.0030
Sulfate (SO4)	mg/L	0.3	-	-	10600
Cyanide, Total	mg/L	0.002	1	<0.020	<0.20
Dissolved Organic Carbon	mg/L	0.5	-	-	5.1
Total Organic Carbon	mg/L	0.5	-	-	3.5
Aluminum (Al)-Total	mg/L	0.005	-	0.116	<0.50
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.010
Barium (Ba)-Total	mg/L	0.0002	-	0.0209	0.021
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.0050
Boron (B)-Total	mg/L	0.01	-	<0.10	<1.0
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000055	<0.00050
Calcium (Ca)-Total	mg/L	0.5	-	304	623
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.0010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0344	0.02
Copper (Cu)-Total	mg/L	0.001	0.3	0.018	<0.10
Iron (Fe)-Total	mg/L	0.05	-	3.57	1.9
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.0050
Lithium (Li)-Total	mg/L	0.001	-	0.067	<0.10
Magnesium (Mg)-Total	mg/L	0.05	-	931	1930
Manganese (Mn)-Total	mg/L	0.0005	-	9.44	19.5
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	<0.0050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0437	<0.050
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<5.0
Potassium (K)-Total	mg/L	0.05	-	5.43	6.8
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0097	<0.020
Selenium (Se)-Total	mg/L	0.00005	-	0.0108	0.0161
Silicon (Si)-Total	mg/L	0.1	-	<1.0	<10
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.0050
Sodium (Na)-Total	mg/L	0.5	-	5.37	7.8
Strontium (Sr)-Total	mg/L	0.001	-	0.576	1.15
Sulfur (S)-Total	mg/L	0.5	-	1620	3070
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00015	<0.0010
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.010
Uranium (U)-Total	mg/L	0.00001	-	0.00055	0.0025
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.30
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0030	<0.030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	<0.50
Antimony (Sb)-Dissolved	mg/L	0.0001	-	-	<0.010
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.010
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.022
Beryllium (Be)-Dissolved	mg/L	0.0001	-	-	<0.010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	-	<0.0050
Boron (B)-Dissolved	mg/L	0.01	-	-	<1.0
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.00050
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	609
Cesium (Cs)-Dissolved	mg/L	0.00001	-	-	<0.0010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	-	<0.050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	0.013
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.032
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<1.0
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.0050
Lithium (Li)-Dissolved	mg/L	0.001	-	-	<0.10
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	1950
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	20.3
Mercury (Hg)-Dissolved	mg/L	0.00001	-	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	<0.0050
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.050
Phosphorus (P)-Dissolved	mg/L	0.05	-	-	<5.0
Potassium (K)-Dissolved	mg/L	0.05	-	-	6.4
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	<0.020
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.0173
Silicon (Si)-Dissolved	mg/L	0.05	-	-	<5.0
Silver (Ag)-Dissolved	mg/L	0.00005	-	-	<0.0050
Sodium (Na)-Dissolved	mg/L	0.5	-	-	7.5
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	1.15
Sulfur (S)-Dissolved	mg/L	0.5	-	-	3130
Tellurium (Te)-Dissolved	mg/L	0.0002	-	-	<0.020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.0010
Thorium (Th)-Dissolved	mg/L	0.0001	-	-	<0.010
Tin (Sn)-Dissolved	mg/L	0.0001	-	-	<0.010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	-	<0.030
Tungsten (W)-Dissolved	mg/L	0.0001	-	-	<0.010
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.0023
Vanadium (V)-Dissolved	mg/L	0.0005	-	-	<0.050
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	<0.10
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	-	<0.030
Ra-226	Bq/L	0.0045	0.37	0.034	0.032
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.17
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2098315-7	L2101788-6	L2107717-10	L2112089-11	L2116590-11	L2120528-11	L2124774-11	L2126016-7
	Sample Date & Time			5/21/2018 6:35:00 PM	5/28/2018 9:40:00 AM	6/4/2018 3:30:00 PM	6/11/2018 4:35:00 PM	6/18/2018 5:15:00 PM	6/25/2018 4:40:00 PM	7/4/2018 10:55:00 AM	7/9/2018 3:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]								
Conductivity	umhos/cm	3	-	74.5	-	518	1310	1080	-	640	-
pH	pH units	0.1	6.0 - 9.5	7.53	7.25	7.44	7.8	7.92	8.18	7.95	7.77
Total Suspended Solids	mg/L	2	15	14.8	<2.0	<2.0	<2.0	<2.0	<2.0	3.7	<2.0
Total Dissolved Solids	mg/L	10	-	50	27	-	893	728	513	429	333
Turbidity	NTU	0.1	-	-	11	-	-	-	1.32	-	0.88
Alkalinity, Total (as CaCO3)	mg/L	10	-	21	-	<0.020	62	78	-	121	-
Dissolved Organic Carbon	mg/L	1	-	3.7	-	0.129	4.2	4.9	-	3.52	-
Total Organic Carbon	mg/L	1	-	4.4	-	<2.0	5.3	5.2	-	3.92	-
Aluminum (Al)-Total	mg/L	0.005	-	0.825	-	-	0.0269	0.0362	-	0.0646	-
Antimony (Sb)-Total	mg/L	0.0001	-	0.00041	-	-	0.00063	0.0003	-	0.00013	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00026	-	-	0.00018	0.00015	-	0.00014	-
Barium (Ba)-Total	mg/L	0.0002	-	0.00881	-	-	0.0947	0.0676	-	0.0374	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	<0.00010	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	-	<0.000050	<0.000050	-	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	0.013	-	-	0.064	0.031	-	0.029	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000013	-	-	0.0000503	0.000027	-	0.0000121	-
Calcium (Ca)-Total	mg/L	0.5	-	5.86	-	-	163	122	-	58.3	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000105	-	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	0.00216	-	-	<0.00050	<0.00050	-	0.00053	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00099	-	-	<0.00010	0.00011	-	0.00012	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0026	-	-	0.0011	0.0012	-	0.0011	-
Iron (Fe)-Total	mg/L	0.05	-	1.37	-	-	0.042	0.044	-	0.055	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000868	-	-	0.000053	0.000064	-	0.000051	-
Lithium (Li)-Total	mg/L	0.001	-	0.0027	-	-	0.0243	0.0139	-	0.0061	-
Magnesium (Mg)-Total	mg/L	0.05	-	4.36	-	-	35.1	50.8	-	31.6	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.038	-	-	0.00407	0.00446	-	0.00703	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	-	<0.000010	<0.000010	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000652	-	-	0.00188	0.000855	-	0.000418	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.005	-	-	0.0127	0.0115	-	0.0092	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	1.48	-	-	6.99	4.59	-	2.18	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0038	-	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000062	-	-	<0.000050	<0.000050	-	<0.000050	-
Silicon (Si)-Total	mg/L	0.1	-	1.77	-	-	1.85	2.85	-	3.34	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	-	<0.000050	<0.000050	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	0.757	-	-	17.4	15.2	-	8.88	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0072	-	-	0.253	0.155	-	0.0594	-
Sulfur (S)-Total	mg/L	0.5	-	3.35	-	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000018	-	-	0.000039	0.000021	-	0.000012	-
Thorium (Th)-Total	mg/L	0.0001	-	0.00046	-	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	<0.00010	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.0274	-	-	0.00112	0.0014	-	0.00206	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	-	0.0004	0.0002	-	0.00012	-
Uranium (U)-Total	mg/L	0.00001	-	0.000271	-	-	0.00105	0.000888	-	0.000645	-
Vanadium (V)-Total	mg/L	0.0005	-	0.00134	-	-	<0.00050	<0.00050	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0057	-	-	0.031	0.0169	-	0.0065	-
Zirconium (Zr)-Total	mg/L	0.0003	-	0.00047	-	-	<0.00030	<0.00030	-	<0.00030	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.001	-	<0.0010	-	-	<0.0010	0.0012	-	<0.0010	-
F1 (C6-C10)	ug/L	100	-	<100	-	-	<100	<100	-	<100	-
F2 (C10-C16)	ug/L	100	-	<100	-	-	<100	<100	-	<100	-
F3 (C16-C34)	ug/L	250	-	<250	-	-	<250	<250	-	<250	-
F4 (C34-C50)	ug/L	250	-	<250	-	-	<250	<250	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	-	<380	<380	-	<380	-
Chrom. to baseline at nC50		n/a	-	YES	-	-	YES	YES	-	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	88.5	-	-	81.4	79.2	-	89.9	-
3,4-Dichlorotoluene	%	Surrogate	-	103.1	-	-	94.4	92.1	-	80.7	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Baffinland

TABLE 7.1.17
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2131286-9	L2145415-2	L2148365-6
	Sample Date & Time			7/16/2018 10:40:00 AM	8/9/2018 4:30:00 PM	8/13/2018 11:55:00 AM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	700	730	-
pH	pH units	0.1	6.0 - 9.5	7.96	8.1	8.06
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	432	460	560
Turbidity	NTU	0.1	-	-	-	0.44
Alkalinity, Total (as CaCO3)	mg/L	10	-	137	145	-
Dissolved Organic Carbon	mg/L	1	-	3.98	4.98	-
Total Organic Carbon	mg/L	1	-	4.37	5.33	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0176	0.0272	-
Antimony (Sb)-Total	mg/L	0.0001	-	0.00016	0.00011	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00018	0.00017	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0407	0.0504	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	0.025	0.02	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000093	0.0000144	-
Calcium (Ca)-Total	mg/L	0.5	-	58.4	63.2	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	0.00072	-
Cobalt (Co)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0012	0.0014	-
Iron (Fe)-Total	mg/L	0.05	-	0.028	0.04	-
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	0.00011	-
Lithium (Li)-Total	mg/L	0.001	-	0.0049	0.007	-
Magnesium (Mg)-Total	mg/L	0.05	-	39.7	41.2	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.00257	0.00171	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000402	0.000363	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00978	0.00971	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	2.14	2.05	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	0.00005	-
Silicon (Si)-Total	mg/L	0.1	-	3.6	4.22	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	10	10.9	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0603	0.0691	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000017	0.000013	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00086	0.00138	-
Tungsten (W)-Total	mg/L	0.0001	-	0.00011	0.00013	-
Uranium (U)-Total	mg/L	0.00001	-	0.00084	0.00136	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0057	0.0054	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	<0.00030	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.001	-	<0.0010	0.0019	-
F1 (C6-C10)	ug/L	100	-	<100	<100	-
F2 (C10-C16)	ug/L	100	-	<100	<100	-
F3 (C16-C34)	ug/L	250	-	<250	<250	-
F4 (C34-C50)	ug/L	250	-	<250	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	<380	-
Chrom. to baseline at nC50		n/a	-	YES	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	99.9	84.2	-
3,4-Dichlorotoluene	%	Surrogate	-	89	99.8	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Baffinland

TABLE 7.1.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B01	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2098315-8	L2101788-7	L2101788-9	L2107717-11	L2112089-12	L2116590-12	L2120528-12	L2124774-12	L2126016-8
	Sample Date & Time			5/21/2018 6:00:00 PM	5/28/2018 9:25:00 AM	5/28/2018 9:25:00 AM	6/4/2018 3:05:00 PM	6/11/2018 4:15:00 PM	6/18/2018 4:50:00 PM	6/25/2018 4:25:00 PM	7/4/2018 10:35:00 AM	7/9/2018 3:10:00 PM
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]									
Conductivity	umhos/cm	3	-	317	-	-	513	1150	1040	-	866	-
pH	pH units	0.1	6.0 - 9.5	7.73	7.56	7.53	7.53	7.94	7.99	8.25	8.14	8.2
Total Suspended Solids	mg/L	2	15	**20**	2.4	<2.0	<2.0	<2.0	<2.0	3	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	190	55	59	-	805	700	729	592	367
Turbidity	NTU	0.1	-	-	14.9	15.2	-	-	-	1.54	-	1.93
Alkalinity, Total (as CaCO3)	mg/L	10	-	38	-	-	<0.020	62	85	-	123	-
Dissolved Organic Carbon	mg/L	1	-	10.3	-	-	0.085	3.9	4.8	-	4.45	-
Total Organic Carbon	mg/L	1	-	11.9	-	-	<2.0	4.1	5	-	4.64	-
Aluminum (Al)-Total	mg/L	0.005	-	0.316	-	-	-	0.0053	0.0299	-	<0.0050	-
Antimony (Sb)-Total	mg/L	0.0001	-	0.00025	-	-	-	0.00045	0.00018	-	0.0001	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00018	-	-	-	0.00015	0.00018	-	0.00016	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0168	-	-	-	0.0905	0.0693	-	0.0467	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	-	-	<0.00010	<0.00010	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	-	-	<0.000050	<0.000050	-	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	0.02	-	-	-	0.049	0.033	-	0.058	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.00001	-	-	-	0.0000156	0.0000146	-	0.0000092	-
Calcium (Ca)-Total	mg/L	0.5	-	19.2	-	-	-	128	121	-	81.7	-
Cesium (Cs)-Total	mg/L	0.00001	-	0.000033	-	-	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	0.00083	-	-	-	<0.00050	<0.00050	-	<0.00050	-
Cobalt (Co)-Total	mg/L	0.0001	-	0.00065	-	-	-	<0.00010	<0.00010	-	<0.00010	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.002	-	-	-	<0.0010	0.0013	-	0.0012	-
Iron (Fe)-Total	mg/L	0.05	-	0.623	-	-	-	0.013	0.058	-	0.027	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000287	-	-	-	<0.000050	0.000051	-	<0.000050	-
Lithium (Li)-Total	mg/L	0.001	-	0.0091	-	-	-	0.0232	0.031	-	0.0273	-
Magnesium (Mg)-Total	mg/L	0.05	-	13	-	-	-	37.8	51.8	-	41.9	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.0463	-	-	-	0.00096	0.0023	-	0.00154	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	-	-	<0.000010	<0.000010	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00063	-	-	-	0.00107	0.000726	-	0.000311	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00444	-	-	-	0.00831	0.00818	-	0.00785	-
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	-	-	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	3.19	-	-	-	5.17	3.55	-	2.17	-
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00478	-	-	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	0.000141	-	-	-	<0.000050	<0.000050	-	<0.000050	-
Silicon (Si)-Total	mg/L	0.1	-	1.06	-	-	-	1.77	2.69	-	3.45	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	-	-	<0.000050	<0.000050	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	2.8	-	-	-	14.7	14.9	-	12.6	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0186	-	-	-	0.19	0.143	-	0.0864	-
Sulfur (S)-Total	mg/L	0.5	-	9.17	-	-	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	-	-	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000012	-	-	-	0.000036	0.000018	-	0.000012	-
Thorium (Th)-Total	mg/L	0.0001	-	0.0001	-	-	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	-	-	<0.00010	<0.00010	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.012	-	-	-	<0.00030	0.00131	-	0.00053	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	-	-	0.00017	<0.00010	-	<0.00010	-
Uranium (U)-Total	mg/L	0.00001	-	0.000362	-	-	-	0.00061	0.00108	-	0.00132	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	-	-	<0.00050	<0.00050	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	-	-	<0.0030	0.0036	-	<0.0030	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	-	-	<0.00030	<0.00030	-	<0.00030	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.001	-	0.0011	-	-	-	<0.0010	<0.0010	-	<0.0010	-
F1 (C6-C10)	ug/L	100	-	<100	-	-	-	<100	<100	-	<100	-
F2 (C10-C16)	ug/L	100	-	<100	-	-	-	<100	<100	-	<100	-
F3 (C16-C34)	ug/L	250	-	<250	-	-	-	<250	<250	-	<250	-
F4 (C34-C50)	ug/L	250	-	<250	-	-	-	<250	<250	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	-	-	<380	<380	-	<380	-
Chrom. to baseline at nC50		n/a	-	YES	-	-	-	YES	YES	-	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	95	-	-	-	90.7	68.9	-	84.1	-
3,4-Dichlorotoluene	%	Surrogate	-	97.3	-	-	-	92.3	93.4	-	90.2	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Baffinland

TABLE 7.1.18
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B02	MS-MRY-13B	MS-MRY-13B01	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2131286-10	L2136320-10	L2145415-1	L2148365-16	L2148365-10	L2157682-17	L2157682-19	L2160173-5	L2163303-7
	Sample Date & Time			7/16/2018 10:15:00 AM	7/23/2018 2:45:00 PM	8/9/2018 4:00:00 PM	8/13/2018 11:45:00 AM	8/13/2018 11:45:00 AM	8/27/2018 5:40:00 PM	8/27/2018 5:40:00 PM	9/4/2018 9:45:00 AM	9/10/2018 6:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Blank	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]									
Conductivity	umhos/cm	3	-	757	-	1180	-	-	-	-	2290	-
pH	pH units	0.1	6.0 - 9.5	8.21	8.24	8.15	8	5.97	8.06	8.06	8.03	8.02
Total Suspended Solids	mg/L	2	15	2.8	2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	475	576	820	1100	<20	1300	1360	1280	1280
Turbidity	NTU	0.1	-	-	2.32	-	0.32	0.18	0.19	0.52	-	0.15
Alkalinity, Total (as CaCO3)	mg/L	10	-	132	-	115	-	-	-	-	124	-
Dissolved Organic Carbon	mg/L	1	-	4.89	-	5.4	-	-	-	-	5.26	-
Total Organic Carbon	mg/L	1	-	5.88	-	5.07	-	-	-	-	6.09	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0164	-	0.0063	-	-	-	-	0.035	-
Antimony (Sb)-Total	mg/L	0.0001	-	0.00011	-	<0.00010	-	-	-	-	<0.00010	-
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00016	-	0.00014	-	-	-	-	0.00015	-
Barium (Ba)-Total	mg/L	0.0002	-	0.0429	-	0.0868	-	-	-	-	0.161	-
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	-	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-	-	-	<0.000050	-
Boron (B)-Total	mg/L	0.01	-	0.052	-	0.037	-	-	-	-	0.052	-
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000084	-	0.0000113	-	-	-	-	0.0000232	-
Calcium (Ca)-Total	mg/L	0.5	-	68.2	-	113	-	-	-	-	249	-
Cesium (Cs)-Total	mg/L	0.00001	-	-	-	-	-	-	-	-	-	-
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	-	0.00052	-	-	-	-	0.00083	-
Cobalt (Co)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	-	-	0.00017	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0014	-	0.0012	-	-	-	-	0.0014	-
Iron (Fe)-Total	mg/L	0.05	-	0.04	-	0.019	-	-	-	-	0.067	-
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	-	<0.000050	-	-	-	-	0.000051	-
Lithium (Li)-Total	mg/L	0.001	-	0.0164	-	0.0226	-	-	-	-	0.0582	-
Magnesium (Mg)-Total	mg/L	0.05	-	39.5	-	60.6	-	-	-	-	93.1	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.00157	-	0.00104	-	-	-	-	0.00321	-
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-	-	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000246	-	0.000172	-	-	-	-	0.000137	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00844	-	0.00784	-	-	-	-	0.0106	-
Phosphorus (P)-Total	mg/L	0.05	-	-	-	-	-	-	-	-	-	-
Potassium (K)-Total	mg/L	0.05	-	2.01	-	2.26	-	-	-	-	3.33	-
Rubidium (Rb)-Total	mg/L	0.0002	-	-	-	-	-	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	-	0.000054	-	-	-	-	0.000056	-
Silicon (Si)-Total	mg/L	0.1	-	3.76	-	3.68	-	-	-	-	4.45	-
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.5	-	11.5	-	13.1	-	-	-	-	27.3	-
Strontium (Sr)-Total	mg/L	0.001	-	0.0717	-	0.128	-	-	-	-	0.296	-
Sulfur (S)-Total	mg/L	0.5	-	-	-	-	-	-	-	-	-	-
Tellurium (Te)-Total	mg/L	0.0002	-	-	-	-	-	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000015	-	0.000012	-	-	-	-	0.000022	-
Thorium (Th)-Total	mg/L	0.0001	-	-	-	-	-	-	-	-	-	-
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	-	-	0.00014	-
Titanium (Ti)-Total	mg/L	0.0003	-	0.00079	-	<0.00030	-	-	-	-	0.00203	-
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	-	-	<0.00010	-
Uranium (U)-Total	mg/L	0.00001	-	0.00126	-	0.0012	-	-	-	-	0.00357	-
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-	-	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	<0.0030	-	-	-	-	<0.0030	-
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	<0.00030	-	-	-	-	<0.00030	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	-	-	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.001	-	0.0011	-	0.0012	-	-	-	-	<0.0010	-
F1 (C6-C10)	ug/L	100	-	<100	-	<100	-	-	-	-	<100	-
F2 (C10-C16)	ug/L	100	-	<100	-	<100	-	-	-	-	<100	-
F3 (C16-C34)	ug/L	250	-	<250	-	<250	-	-	-	-	<250	-
F4 (C34-C50)	ug/L	250	-	<250	-	<250	-	-	-	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	<380	-	-	-	-	<380	-
Chrom. to baseline at nC50		n/a	-	YES	-	YES	-	-	-	-	YES	-
2-Bromobenzotrifluoride	%	Surrogate	-	85	-	89.7	-	-	-	-	94.5	-
3,4-Dichlorotoluene	%	Surrogate	-	93	-	95.7	-	-	-	-	106.8	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7

Baffinland

TABLE 7.1.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A02	MS-C-A
	ALS Laboratory Sample ID			L2098315-1	L2101788-1	L2107717-5	L2107717-6	L2112089-6
	Sample Date & Time			5/21/2018 3:20:00 PM	5/28/2018 11:25:00 AM	6/4/2018 10:15:00 AM	6/4/2018 10:15:00 AM	6/11/2018 1:40:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	74.7	-	57	<3.0	-
pH	pH units	0.1	6.0 - 9.5	7.37	7.43	7.62	6.27	7.64
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	5.2	2.4	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	45	-	-	59
Turbidity	NTU	0.1	-	-	16.4	-	-	19.7
Ammonia, Total (as N)	mg/L	0.02	-	0.029	-	<0.02	<0.02	-
Nitrate (as N)	mg/L	0.02	-	0.15	-	0.029	<0.02	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2116590-6	L2120528-6	L2124774-6	L2126016-3	L2131286-6
	Sample Date & Time			6/18/2018 11:00:00 AM	6/25/2018 8:40:00 AM	7/3/2018 4:45:00 PM	7/9/2018 8:40:00 AM	7/16/2018 1:55:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	128	-	177	-	182
pH	pH units	0.1	6.0 - 9.5	7.75	7.95	7.87	7.72	7.91
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	106	-	129	-
Turbidity	NTU	0.1	-	-	1.08	-	0.43	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.124	-	0.156	-	0.214
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A01	MS-C-A
	ALS Laboratory Sample ID			L2136320-11	L2145426-7	L2148365-9	L2148365-12	L2152561-4
	Sample Date & Time			7/24/2018 8:10:00 AM	8/10/2018 9:40:00 AM	8/13/2018 10:00:00 AM	8/13/2018 10:00:00 AM	8/23/2018 10:20:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	160	-	-	190
pH	pH units	0.1	6.0 - 9.5	7.94	7.92	7.88	7.85	7.93
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	2.8	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	116	90	104	105	80
Turbidity	NTU	0.1	-	0.52	6.55	3.3	3.16	1.59
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	-	<0.020
Nitrate (as N)	mg/L	0.02	-	-	0.26	-	-	0.232
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.19
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2157682-6	L2160173-6	L2163303-5
	Sample Date & Time			8/28/2018 9:25:00 AM	9/4/2018 2:55:00 PM	9/10/2018 2:20:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	200	-
pH	pH units	0.1	6.0 - 9.5	7.9	7.97	7.99
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	108	105	126
Turbidity	NTU	0.1	-	0.65	0.75	0.49
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.219	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B01	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2098315-2	L2098315-3	L2101788-2	L2107717-7	L2112089-4
	Sample Date & Time			5/21/2018 3:40:00 PM	5/21/2018 3:40:00 PM	5/28/2018 11:40:00 AM	6/4/2018 11:00:00 AM	6/11/2018 1:55:00 PM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	71	70.9	-	54.3	-
pH	pH units	0.1	6.0 - 9.5	7.24	7.35	7.48	7.41	7.55
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	4	4	2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	35	-	60
Turbidity	NTU	0.1	-	-	-	16.4	-	21.5
Ammonia, Total (as N)	mg/L	0.02	-	<0.02	<0.02	-	<0.02	-
Nitrate (as N)	mg/L	0.02	-	0.173	0.161	-	0.032	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2116590-4	L2120528-4	L2124774-4	L2126016-1	L2131286-7
	Sample Date & Time			6/18/2018 11:35:00 AM	6/25/2018 9:20:00 AM	7/3/2018 5:35:00 PM	7/9/2018 9:05:00 AM	7/16/2018 3:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	122	-	177	-	182
pH	pH units	0.1	6.0 - 9.5	7.72	7.92	7.85	7.7	7.85
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	2	<2.0
Total Dissolved Solids	mg/L	10	-	-	96	-	100	-
Turbidity	NTU	0.1	-	-	1.54	-	0.63	-
Ammonia, Total (as N)	mg/L	0.02	-	0.041	-	<0.020	-	0.024
Nitrate (as N)	mg/L	0.02	-	0.126	-	0.17	-	0.229
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2136320-12	L2145426-8	L2148365-18	L2152561-3	L2157682-8
	Sample Date & Time			7/24/2018 8:30:00 AM	8/10/2018 10:30:00 AM	8/13/2018 10:20:00 AM	8/23/2018 10:50:00 AM	8/28/2018 9:50:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	177	-	181	-
pH	pH units	0.1	6.0 - 9.5	7.84	7.92	7.84	7.92	7.91
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	114	90	105	81	123
Turbidity	NTU	0.1	-	0.44	7.33	3.45	1.77	0.72
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.279	-	0.259	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.20
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2160173-8	L2163303-6
	Sample Date & Time			9/4/2018 11:30:00 AM	9/10/2018 2:50:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	198	-
pH	pH units	0.1	6.0 - 9.5	7.97	8.05
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	151	120
Turbidity	NTU	0.1	-	0.6	0.5
Ammonia, Total (as N)	mg/L	0.02	-	0.075	-
Nitrate (as N)	mg/L	0.02	-	0.227	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2107717-15	L2112089-14	L2116590-14	L2120528-14	L2124774-15
	Sample Date & Time			6/4/2018 2:25:00 PM	6/11/2018 2:50:00 PM	6/18/2018 3:30:00 PM	6/25/2018 10:10:00 AM	7/4/2018 9:55:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	405	-	438	-	661
pH	pH units	0.1	6.0 - 9.5	7.87	7.92	7.91	8.13	7.95
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	4.2	<2.0	8.2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	197	-	419	-
Turbidity	NTU	0.1	-	-	2.01	-	1.05	-
Ammonia, Total (as N)	mg/L	0.02	-	0.239	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	1.64	-	2.36	-	2.85
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2126016-11	L2131286-2	L2136320-7	L2145426-6	L2148365-7
	Sample Date & Time			7/9/2018 10:45:00 AM	7/16/2018 5:15:00 PM	7/23/2018 4:35:00 PM	8/10/2018 9:10:00 AM	8/13/2018 11:20:05 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	858	-	781	-
pH	pH units	0.1	6.0 - 9.5	7.82	7.89	8.1	7.98	7.93
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	490	-	647	545	677
Turbidity	NTU	0.1	-	2.54	-	1.4	0.9	0.24
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	3.86	-	4.17	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.21
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C03	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2153239-2	L2153239-3	L2157682-14	L2160173-2	L2163303-15
	Sample Date & Time			8/24/2018 10:45:00 AM	8/24/2018 10:45:00 AM	8/28/2018 10:35:00 AM	9/4/2018 9:25:00 AM	9/11/2018 12:10:00 PM
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	1020	<3.0	-	1230	-
pH	pH units	0.1	6.0 - 9.5	8.01	5.77	8.09	7.98	7.94
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	3.1	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	725	<20	786	901	1050
Turbidity	NTU	0.1	-	0.21	<0.10	0.54	0.22	0.18
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	4.93	<0.020	-	5.98	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2098315-6	L2101788-5	L2107717-14	L2112089-10	L2116590-10
	Sample Date & Time			5/21/2018 4:55:00 PM	5/28/2018 10:25:00 AM	6/4/2018 1:55:00 PM	6/11/2018 2:35:00 PM	6/18/2018 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	348	-	279	-	516
pH	pH units	0.1	6.0 - 9.5	7.7	7.75	7.88	7.99	8.1
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	13.6	6.4	2.7	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	100	-	179	-
Turbidity	NTU	0.1	-	-	22.2	-	9.23	-
Ammonia, Total (as N)	mg/L	0.02	-	0.564	-	0.23	-	0.122
Nitrate (as N)	mg/L	0.02	-	0.726	-	0.784	-	1.83
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D02	MS-C-D
	ALS Laboratory Sample ID			L2120528-10	L2124774-10	L2126016-6	L2126016-4	L2132023-8
	Sample Date & Time			6/25/2018 9:55:00 AM	7/4/2018 9:40:00 AM	7/9/2018 10:30:00 AM	7/9/2018 10:30:00 AM	7/18/2018 1:40:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	671	-	-	798
pH	pH units	0.1	6.0 - 9.5	8.25	8.14	8.16	5.69	8.37
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	428	-	433	<20	-
Turbidity	NTU	0.1	-	2.94	-	1.9	<0.10	-
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	-	<0.020
Nitrate (as N)	mg/L	0.02	-	-	2.19	-	-	3.23
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2136320-2	L2145426-10	L2148365-8	L2152561-2	L2157682-9
	Sample Date & Time			7/23/2018 4:25:00 PM	8/10/2018 9:00:00 AM	8/13/2018 11:10:00 AM	8/23/2018 4:35:00 PM	8/28/2018 10:20:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	684	-	888	-
pH	pH units	0.1	6.0 - 9.5	8.33	8.34	8.29	8.36	8.26
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	3	2	2.8	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	559	450	490	575	597
Turbidity	NTU	0.1	-	5.13	5.47	5.77	2.34	1.82
Ammonia, Total (as N)	mg/L	0.02	-	-	0.02	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	3.87	-	4.33	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.22
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-D

Analyte	Sample ID			MS-C-D02	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2157682-7	L2160173-9	L2163303-14
	Sample Date & Time			8/28/2018 10:20:00 AM	9/4/2018 9:10:00 AM	9/11/2018 11:40:00 AM
	QA/QC Sample Type			Field Blank	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	957	-
pH	pH units	0.1	6.0 - 9.5	6	8.22	8.38
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	11	652	760
Turbidity	NTU	0.1	-	0.2	1.5	1
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	4.8	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E03	MS-C-E
	ALS Laboratory Sample ID			L2098315-5	L2101788-4	L2107717-8	L2107717-9	L2112089-7
	Sample Date & Time			5/21/2018 4:10:00 PM	5/28/2018 10:15:00 AM	6/4/2018 11:50:00 AM	6/4/2018 11:50:00 AM	6/11/2018 2:25:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	206	-	180	<3.0	-
pH	pH units	0.1	6.0 - 9.5	7.67	7.54	7.78	6.08	8
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	**42.8**	16.8	5.3	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	76	-	-	163
Turbidity	NTU	0.1	-	-	26.3	-	-	2.98
Ammonia, Total (as N)	mg/L	0.02	-	0.251	-	0.041	<0.02	-
Nitrate (as N)	mg/L	0.02	-	0.39	-	0.419	<0.02	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits

TABLE 7.1.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E01	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2112089-5	L2116590-5	L2120528-5	L2124774-5	L2126016-2
	Sample Date & Time			6/11/2018 2:25:00 PM	6/18/2018 2:35:00 PM	6/25/2018 5:35:00 PM	7/4/2018 9:00:00 AM	7/9/2018 10:15:00 AM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	430	-	635	-
pH	pH units	0.1	6.0 - 9.5	7.99	8.03	8.25	8.1	7.93
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	9.7	<2.0	4.5	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	171	-	357	-	395
Turbidity	NTU	0.1	-	6.21	-	2.13	-	3.47
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	1.21	-	1.7	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits

TABLE 7.1.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2131286-1	L2136320-9	L2145426-9	L2148365-11	L2152561-1
	Sample Date & Time			7/16/2018 4:35:00 PM	7/23/2018 4:10:00 PM	8/10/2018 7:50:00 AM	8/13/2018 10:55:00 AM	8/23/2018 4:05:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	629	-	1380	-	1380
pH	pH units	0.1	6.0 - 9.5	8.14	8.21	7.66	7.83	7.97
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	25.2	<2.0	<2.0	2.8	<2.0
Total Dissolved Solids	mg/L	10	-	-	508	1200	1130	1040
Turbidity	NTU	0.1	-	-	1.76	2.93	1.42	0.61
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	0.334	-	0.154
Nitrate (as N)	mg/L	0.02	-	1.8	-	4.69	-	5.75
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits

TABLE 7.1.23
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2160173-7	L2163303-13
	Sample Date & Time			9/4/2018 8:55:00 AM	9/11/2018 10:50:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	1250	-
pH	pH units	0.1	6.0 - 9.5	8.05	7.9
Total Suspended Solids[2]	mg/L	2	Grab 30 and Average 15	<2.0	2
Total Dissolved Solids	mg/L	10	-	928	970
Turbidity	NTU	0.1	-	0.47	0.27
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	5.44	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Average TSS for May exceeded maximum average TSS concentration discharge limits

TABLE 7.1.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F02	MS-C-F	MS-C-F03
	ALS Laboratory Sample ID			L2107717-2	L2112089-9	L2112089-8	L2116590-9	L2116590-8
	Sample Date & Time			6/4/2018 5:35:00 PM	6/11/2018 5:45:00 PM	6/11/2018 5:45:00 PM	6/18/2018 12:10:00 PM	6/18/2018 12:10:00 PM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	Travel Blank
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	50.7	-	-	167	<3.0
pH	pH units	0.1	6.0 - 9.5	7.38	7.58	6.15	7.7	5.85
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.1	2	<2.0	4.1	<2.0
Total Dissolved Solids	mg/L	13	-	-	61	<10	-	-
Turbidity	NTU	0.1	-	-	24.8	0.8	-	-
Ammonia, Total (as N)	mg/L	0.02	-	<0.02	-	-	<0.020	0.021
Nitrate (as N)	mg/L	0.02	-	0.033	-	-	0.215	<0.020
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2120528-9	L2124774-9	L2126016-5	L2131286-8	L2136320-8
	Sample Date & Time			6/25/2018 2:10:00 PM	7/4/2018 1:45:00 PM	7/9/2018 12:15:00 PM	7/16/2018 4:15:00 PM	7/23/2018 5:05:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	205	-	197	-
pH	pH units	0.1	6.0 - 9.5	7.91	7.99	7.92	8.02	8.07
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	3.2	<2.0
Total Dissolved Solids	mg/L	13	-	151	-	105	-	133
Turbidity	NTU	0.1	-	7.61	-	1.74	-	3.25
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	0.022	-
Nitrate (as N)	mg/L	0.02	-	-	0.183	-	0.295	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F01	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2145426-11	L2145426-12	L2148365-2	L2152564-1	L2157682-18
	Sample Date & Time			8/10/2018 6:05:00 PM	8/10/2018 6:05:00 PM	8/13/2018 6:10:00 PM	8/22/2018 12:10:00 PM	8/27/2018 6:10:00 PM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	189	188	-	195	-
pH	pH units	0.1	6.0 - 9.5	7.96	7.97	7.89	7.93	7.98
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	3.6	3.2	4	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	105	95	100	80	110
Turbidity	NTU	0.1	-	28.2	32.8	17	6.98	4.48
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	0.026	-
Nitrate (as N)	mg/L	0.02	-	0.378	0.396	-	0.327	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.24
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F02
	ALS Laboratory Sample ID			L2160173-4	L2163303-11	L2163303-12
	Sample Date & Time			9/4/2018 11:00:00 AM	9/11/2018 9:30:00 AM	9/11/2018 9:30:00 AM
	QA/QC Sample Type			N/A	N/A	Field Blank
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	205	-	-
pH	pH units	0.1	6.0 - 9.5	8.03	8.11	5.87
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	113	140	<20
Turbidity	NTU	0.1	-	4.18	2.39	<0.10
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	-
Nitrate (as N)	mg/L	0.02	-	0.285	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.25
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G01	MS-C-G
	ALS Laboratory Sample ID			L2107717-12	L2120528-15	L2124774-14	L2124774-8	L2126016-10
	Sample Date & Time			6/4/2018 5:00:00 PM	6/25/2018 11:45:00 AM	7/4/2018 11:30:00 AM	7/4/2018 11:30:00 AM	7/9/2018 3:45:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	77.9	152	162	160	-
pH	pH units	0.1	6.0 - 9.5	7.62	8.07	7.99	7.98	7.9
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	2.6	6.9	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	-	-	105
Turbidity	NTU	0.1	-	-	-	-	-	0.55
Ammonia, Total (as N)	mg/L	0.02	-	0.187	<0.020	<0.020	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.277	0.093	0.198	0.202	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.25
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G02	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2131286-5	L2131286-4	L2136320-3	L2145415-5	L2148365-3
	Sample Date & Time			7/16/2018 9:45:00 AM	7/16/2018 9:45:00 AM	7/23/2018 2:00:00 PM	8/9/2018 2:40:00 PM	8/13/2018 5:15:00 PM
	QA/QC Sample Type			N/A	Field Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	170	<3.0	-	177	-
pH	pH units	0.1	6.0 - 9.5	7.89	6.1	8	8.21	7.96
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	116	105	119
Turbidity	NTU	0.1	-	-	-	0.8	0.23	0.22
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.551	<0.020	-	1.25	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Baffinland

TABLE 7.1.25
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G03
	ALS Laboratory Sample ID			L2152561-5	L2157682-16	L2160173-3	L2163303-8	L2163303-9
	Sample Date & Time			8/23/2018 12:10:00 PM	8/27/2018 4:50:00 PM	9/3/2018 3:35:00 PM	9/11/2018 8:40:00 AM	9/11/2018 8:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	194	-	221	-	-
pH	pH units	0.1	6.0 - 9.5	8	8	8.01	8.08	5.79
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	70	112	114	143	45
Turbidity	NTU	0.1	-	1.86	0.26	0.33	0.14	0.1
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	0.021	-	-
Nitrate (as N)	mg/L	0.02	-	1.27	-	3.01	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2107717-13	L2112089-13	L2116590-13	L2120528-13	L2124774-13
	Sample Date & Time			6/4/2018 4:15:00 PM	6/11/2018 5:10:00 PM	6/19/2018 9:45:00 AM	6/25/2018 12:00:00 PM	7/4/2018 11:50:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	59.6	-	126	-	185
pH	pH units	0.1	6.0 - 9.5	7.58	7.76	7.93	8.08	7.98
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	33	-	109	-
Turbidity	NTU	0.1	-	-	13.3	-	0.88	-
Ammonia, Total (as N)	mg/L	0.02	-	0.028	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.112	-	0.473	-	0.106
Oil and Grease, Total	mg/L	2	-					
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MC-C-H01	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2124774-7	L2126016-9	L2131286-3	L2136320-4	L2145415-3
	Sample Date & Time			7/4/2018 11:50:00 AM	7/9/2018 4:10:00 PM	7/16/2018 9:10:00 AM	7/23/2018 2:20:00 PM	8/9/2018 3:20:00 PM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	186	-	175	-	192
pH	pH units	0.1	6.0 - 9.5	8	8.12	8.13	8.12	8.23
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	95	-	142	105
Turbidity	NTU	0.1	-	-	0.51	-	0.82	0.19
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.114	-	0.027	-	0.246
Oil and Grease, Total	mg/L	2	-					
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2148365-1	L2152561-6	L2152561-7	L2157682-12	L2160173-11
	Sample Date & Time			8/13/2018 5:40:00 PM	8/23/2018 11:40:00 AM	8/23/2018 11:40:00 AM	8/27/2018 5:10:00 PM	9/3/2018 4:00:00 PM
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	216	215	-	230
pH	pH units	0.1	6.0 - 9.5	8.13	8.21	8.2	8.13	8.17
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	121	125	95	118	126
Turbidity	NTU	0.1	-	0.22	1.84	1.55	0.26	0.62
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	-	0.057	0.057	-	0.033
Oil and Grease, Total	mg/L	2	-					
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

TABLE 7.1.26
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MS-C-H

Analyte	Sample ID			MS-C-H
	ALS Laboratory Sample ID			L2163303-10
	Sample Date & Time			9/11/2018 9:00:00 AM
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Conductivity	umhos/cm	3	-	-
pH	pH units	0.1	6.0 - 9.5	8.2
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0
Total Dissolved Solids	mg/L	10	-	150
Turbidity	NTU	0.1	-	0.18
Ammonia, Total (as N)	mg/L	0.02	-	-
Nitrate (as N)	mg/L	0.02	-	-
Oil and Grease, Total	mg/L	2	-	
	-	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

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TABLE 7.1.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2103396-1	L2107717-1	L2112089-2	L2116590-2	L2120528-2
	Sample Date & Time			5/29/2018 8:40:00 AM	6/4/2018 8:15:00 AM	6/11/2018 10:45:00 AM	6/18/2018 9:25:00 AM	6/25/2018 10:35:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	53.8	86.2	-	170	-
pH	pH units	0.1	6.0 - 9.5	7.5	7.64	7.84	8.01	8.08
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.1	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	-	-	40	-	82
Turbidity	NTU	0.1	-	-	-	5.36	-	0.57
Ammonia, Total (as N)	mg/L	0.02	-	0.125	0.031	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.574	0.101	-	0.033	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A01	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2120528-7	L2124774-2	L2127409-7	L2131286-12	L2136320-1
	Sample Date & Time			6/25/2018 10:35:00 AM	7/4/2018 5:10:00 PM	7/10/2018 12:15:00 PM	7/16/2018 11:38:00 AM	7/23/2018 9:15:00 AM
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	179	-	233	-
pH	pH units	0.1	6.0 - 9.5	8.08	8.15	8.15	8.16	8.18
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	89	-	118	-	173
Turbidity	NTU	0.1	-	0.84	-	0.46	-	0.31
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.020	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.021	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01
	ALS Laboratory Sample ID			L2145415-4	L2148365-17	L2152564-4	L2157682-5	L2157682-4
	Sample Date & Time			8/9/2018 12:10:00 PM	8/13/2018 9:25:00 AM	8/22/2018 10:50:00 AM	8/28/2018 8:25:00 AM	8/28/2018 8:25:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	231	-	269	-	-
pH	pH units	0.1	6.0 - 9.5	8.26	8.14	8.18	8.16	8.17
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	7	<2.0
Total Dissolved Solids	mg/L	13	-	140	157	141	174	183
Turbidity	NTU	0.1	-	0.27	0.43	0.31	0.21	0.28
Ammonia, Total (as N)	mg/L	0.02	-	0.047	-	0.036	-	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-	<0.020	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.27
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2160173-12	L2163303-1
	Sample Date & Time			9/5/2018 2:50:00 PM	9/10/2018 1:10:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	291	-
pH	pH units	0.1	6.0 - 9.5	8.21	8.23
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	155	155
Turbidity	NTU	0.1	-	0.45	0.14
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Non-Lethal	Non-lethal	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B02	MQ-C-B
	ALS Laboratory Sample ID			L2112089-1	L2116590-1	L2116590-7	L2120528-1
	Sample Date & Time			6/11/2018 11:15:00 AM	6/18/2018 10:30:00 AM	6/18/2018 10:30:00 AM	6/25/2018 3:00:00 PM
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	-	167	<3.0	-
pH	pH units	0.1	6.0 - 9.5	7.74	7.89	5.91	8.11
Total Suspended Solids	mg/L	2	Grab 30, Average 15	8	22.3	<2.0	2.2
Total Dissolved Solids	mg/L	10	-	48	-	-	148
Turbidity	NTU	0.1	-	35.8	-	-	7.6
Ammonia, Total (as N)	mg/L	0.02	-	-	0.58	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	2.85	<0.020	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B02	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2120528-8	L2124774-1	L2127409-6	L2131286-11
	Sample Date & Time			6/25/2018 3:00:00 PM	7/3/2018 4:15:00 PM	7/10/2018 12:40:00 PM	7/16/2018 12:30:00 PM
	QA/QC Sample Type			Field Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	-	209	-	296
pH	pH units	0.1	6.0 - 9.5	6.04	8.03	8.15	8.18
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	11.1	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	<10	-	129	-
Turbidity	NTU	0.1	-	0.69	-	3.97	-
Ammonia, Total (as N)	mg/L	0.02	-	-	0.181	-	0.222
Nitrate (as N)	mg/L	0.02	-	-	1.31	-	3.23
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B01	MQ-C-B	MQ-C-B02	MQ-C-B
	ALS Laboratory Sample ID			L2131286-13	L2132023-6	L2132023-7	L2136320-5
	Sample Date & Time			7/16/2018 12:30:00 PM	7/18/2018 2:10:00 PM	7/18/2018 2:10:00 PM	7/23/2018 3:55:00 PM
	QA/QC Sample Type			Field Duplicate	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	297	320	3.7	-
pH	pH units	0.1	6.0 - 9.5	8.16	8.26	6.12	8.2
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.2	5.6	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	-	-	-	230
Turbidity	NTU	0.1	-	-	-	-	2.49
Ammonia, Total (as N)	mg/L	0.02	-	0.234	0.314	<0.020	-
Nitrate (as N)	mg/L	0.02	-	3.22	4.24	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	Non-lethal	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2145415-6	L2145415-7	L2148365-19	L2148408-1
	Sample Date & Time			8/9/2018 5:10:00 PM	8/9/2018 5:10:00 PM	8/14/2018 2:15:00 PM	8/15/2018 2:55:00 PM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3	-	291	289	-	368
pH	pH units	0.1	6.0 - 9.5	8.28	8.27	8.21	8.2
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2	2.4	2	<2.0
Total Dissolved Solids	mg/L	10	-	175	180	210	223
Turbidity	NTU	0.1	-	5.25	4.87	1.28	1.75
Ammonia, Total (as N)	mg/L	0.02	-	0.278	0.258	-	3.42
Nitrate (as N)	mg/L	0.02	-	3.47	3.46	-	5.79
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	Non-lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.28
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01
	ALS Laboratory Sample ID			L2152564-3	L2157682-10	L2160173-10	L2163303-3	L2163303-4
	Sample Date & Time			8/22/2018 11:45:00 AM	8/28/2018 9:05:00 AM	9/3/2018 3:05:00 PM	9/10/2018 2:00:00 PM	9/10/2018 2:00:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	354	-	375	-	-
pH	pH units	0.1	6.0 - 9.5	8.16	8.13	8.13	8.2	8.21
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	198	239	201	210	196
Turbidity	NTU	0.1	-	1.11	0.99	2.24	0.68	0.63
Ammonia, Total (as N)	mg/L	0.02	-	0.258	-	0.189	-	-
Nitrate (as N)	mg/L	0.02	-	4.61	-	4.51	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-
Acute Lethality[2,3]	N/A		Non-Lethal	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Baffinland

TABLE 7.1.29
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2098315-4	L2101788-3	L2107717-3	L2112089-3	L2116590-3
	Sample Date & Time			5/21/2018 2:05:00 PM	5/28/2018 1:55:00 PM	6/4/2018 9:00:00 AM	6/11/2018 10:55:00 AM	6/19/2018 4:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	264	-	192	-	157
pH	pH units	0.1	6.0 - 9.5	7.67	7.71	7.89	7.8	8.39
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	25.2	**36.4**	3.9	4.2	2.9
Total Dissolved Solids	mg/L	10	-	-	86	-	95	-
Turbidity	NTU	0.1	-	-	70.1	-	33.8	-
Ammonia, Total (as N)	mg/L	0.02	-	0.173	-	0.129	-	0.288
Nitrate (as N)	mg/L	0.02	-	0.682	-	0.579	-	1.43
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	Non-Lethal

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Average TSS for May exceeded maximum average TSS concentration discharge limits
[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.29
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D01	MQ-C-D
	ALS Laboratory Sample ID			L2120528-3	L2124774-3	L2127409-5	L2127409-1	L2131286-14
	Sample Date & Time			6/25/2018 3:30:00 PM	7/3/2018 3:50:00 PM	7/10/2018 12:20:00 PM	7/10/2018 12:20:00 PM	7/16/2018 11:50:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	183	-	-	237
pH	pH units	0.1	6.0 - 9.5	8.02	7.97	8.03	8.01	8.2
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	7.5	2.8	7.2	10	5.6
Total Dissolved Solids	mg/L	10	-	137	-	119	126	-
Turbidity	NTU	0.1	-	44.7	-	21.5	22	-
Ammonia, Total (as N)	mg/L	0.02	-	-	0.349	-	-	0.294
Nitrate (as N)	mg/L	0.02	-	-	1.89	-	-	3.34
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Average TSS for May exceeded maximum average TSS concentration discharge limits
[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.29
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2136320-6	L2145415-8	L2148365-13	L2152564-2	L2157682-15
	Sample Date & Time			7/23/2018 9:55:00 AM	8/9/2018 12:20:00 PM	8/13/2018 9:35:00 AM	8/22/2018 11:10:00 PM	8/28/2018 8:40:00 AM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	306	-	335	-
pH	pH units	0.1	6.0 - 9.5	8.07	8.26	8.11	8.07	8.09
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	2.1	6.4	9.6	3.2	<2.0
Total Dissolved Solids	mg/L	10	-	183	195	190	176	196
Turbidity	NTU	0.1	-	4.74	38	17.7	11.2	7.53
Ammonia, Total (as N)	mg/L	0.02	-	-	0.268	-	0.12	-
Nitrate (as N)	mg/L	0.02	-	-	3.85	-	3.5	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Average TSS for May exceeded maximum average TSS concentration discharge limits
[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

TABLE 7.1.29
BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2018 QIA AND NWB ANNUAL REPORT FOR OPERATIONS
WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2160173-1	L2163303-2
	Sample Date & Time			9/3/2018 2:40:00 PM	9/10/2018 1:25:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	358	-
pH	pH units	0.1	6.0 - 9.5	8.11	8.16
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	187	210
Turbidity	NTU	0.1	-	5.75	3.14
Ammonia, Total (as N)	mg/L	0.02	-	0.131	-
Nitrate (as N)	mg/L	0.02	-	3.72	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Non-Lethal	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11
[2] Average TSS for May exceeded maximum average TSS concentration discharge limits
[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13)
[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

ATTACHMENT 7

2019 QIA-NWB Annual Report for Operations

- Table 7.0 Water Licence Water Quality Monitoring Locations - 2019
- Table 7.1 Water Quality Results for Water Licence Monitoring Location

Table 7.0: Water Licence Water Quality Monitoring Locations - 2019

Monitoring Station	Description	Location (UTM; NAD83 Zone 17W)		Location		Status in 2019
		Easting	Northing	Latitude	Longitude	
Milne Port						
MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52" N	80° 35' 4" W	Inactive
MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00" N	80° 23' 09" W	Active
MP-01	Milne Port Sewage Treatment Plant	503209	7976485	71° 53' 18" N	80° 54' 27" W	Active
MP-01B	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 03" N	80° 53' 44" W	Active
MP-01B	Milne Port 380 Person Sewage Treatment Plant	503375	7975184	71° 53' 02" N	80° 53' 25" W	Active
MP-03	Milne Port Bulk Fuel Storage Facility (stormwater)	503638	7976272	71° 52' 11" N	80° 53' 43" W	Active
MP-04	Milne Port Landfarm Facility	503710	7975574	71° 52' 49" N	80° 53' 35" W	Active
MP-04A	Milne Port Contaminated Snow Containment Facility	503862	7975482	71° 52' 45.8" N	80° 53' 19.4" W	Active
MP-MRY-04	Milne Port Exploration Phase Sewage Treatment Plant	503462	7975764	71° 52' 55" N	80° 54" 01" W	Inactive[1]
MP-MRY-04A	Milne Port Exploration Phase PWSP	503344	7976118	71° 53' 06" N	80° 54' 13" W	Inactive[1]
MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 15" N	80° 54' 00" W	Active
MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14" N	80° 54' 36" W	Active
MP-MRY-7	Milne Port Exploration Phase Bladder Fuel Storage Facility (stormwater)	503309	7976097	71° 53' 06" N	80° 54' 17" W	Inactive[1]
MP-MRY-12	Milne Port 2008 Bulk Sample Program - Stockpile (surface drainage/seepage)	503357	7976453	71° 53' 17" N	80° 54' 11" W	Inactive[2]
MP-C-A	Surface water drainage downstream of Milne Port infrastructure.	503214	7976483	71° 53' 18" N	80° 54' 27" W	Inactive[2]
MP-C-B (New)		502835	7975735	71° 52' 54" N	80° 55' 06" W	Active
MP-C-B01 (New)		502979	7975333	71° 52' 41" N	80° 54' 51" W	Active
MP-C-B		503191	7975396	71° 52' 43" N	80° 54' 29" W	Inactive[2]
MP-C-B01		503242	7975558	71° 52' 48" N	80° 54' 24" W	Inactive[2]
MP-C-C		503436	7975427	71° 52' 44" N	80° 54' 04" W	Inactive[2]
MP-C-D		503651	7976363	71° 53' 14" N	80° 53' 41" W	Inactive[2]
MP-C-E		503736	7976346	71° 53' 14" N	80° 53' 32" W	Active
MP-C-F		503922	7976304	71° 53' 12" N	80° 53' 13" W	Active
MP-C-G		502939	7976238	71° 53' 10" N	80° 54' 55" W	Inactive[2]
MP-C-H		504113	7976509	71° 53' 19" N	80° 52' 53" W	Active
MP-Q1-01 (New)	Surface water drainage downstream of the Q1 Quarry.	503839	7974467	71° 52' 13" N	80° 53' 22" W	Active
MP-Q1-02 (New)		503828	7975396	71° 52' 43" N	80° 53' 23" W	Active
MP-Q1-01	Surface water drainage downstream of the Q1 Quarry.	503828	7975062	71° 52' 32" N	80° 53' 23" W	Inactive[2]
MP-Q1-02		503811	7975272	71° 52' 39" N	80° 53' 25" W	Inactive[2]
Mine Site						
MS-MRY-1	Fresh Water Intake at Camp Lake	557793	7914684	71° 19' 38.6" N	79° 22' 57" W	Active
MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	79° 17' 5.6" W	Active

Notes:

[1]Exploration Phase infrastructure decommissioned.

[2]No surface water flows at location in 2019.

Table 7.0: Water Licence Water Quality Monitoring Locations - 2019

Monitoring Station	Description	Location (UTM; NAD83 Zone 17W)		Location		Status in 2019
		Easting	Northing	Latitude	Longitude	
Mine Site Cont'd						
MS-01B	Mine Site Sewage Treatment Plant No. 2	560794	7913235	71° 18’ 49.2” N	79° 17’ 58.8” W	Active
MS-02	Mine Site Mobile Maintenance Buildings (meltwater)	561638	7913222	71° 18' 48" N	79° 16' 34" W	Active
MS-03	Mine Site Bulk Fuel Storage Facility (stormwater)	561258	7913304	71° 18' 51" N	79° 17' 12" W	Active
MS-MRY-4	Mine Site Exploration Camp Sewage Treatment Plant	558141	7914427	71° 19' 30" N	79° 22' 22.6" W	Inactive[1]
MS-MRY-4A, B, C	Mine Site PWSPs	558470	7914237	71° 19' 23.6" N	79° 21' 50" W	Active
MS-MRY-6	Mine Site Exploration Camp Bulk Fuel Storage Facility (MS-HWB-7)	558341	7914508	71° 19' 41" N	79° 22' 17" W	Active
MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 41" N	79° 16' 51" W	Active
MS-08	Waste Rock Facility - Surface Water Management Pond	563492	7916273	71° 20' 25" N	79° 13' 18" W	Active
MS-MRY-9	Mine Site 2008 Bulk Sample Program - Open Pit (surface drainage/seepage)	561083	7915084	71° 19' 49" N	79° 17' 25" W	Active
MS-MRY-10	Mine Site 2008 Bulk Sample Program - Stockpile (surface drainage/seepage)	563488	7915197	71° 19' 50" N	79° 13' 22" W	Inactive[2]
MS-MRY-11	Mine Site 2008 Bulk Sample Program - Ore Crushing Area (surface drainage/seepage)	560690	7913350	71° 18' 53" N	79° 18' 09" W	Inactive[2]
MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (surface drainage/seepage)	560754	7912484	71° 18' 25" N	79° 18' 5" W	Active
MS-MRY-13B		560642	7912527	71° 18'27" N	79° 18' 16" W	
MS-C-A	Surface water drainage downstream of Mine Site infrastructure.	561263	7913571	71° 19' 00" N	79° 17' 11" W	Active
MS-C-B		561454	7913537	71° 18' 58" N	79° 16' 52" W	Active
MS-C-C		561110	7913199	71° 18' 48" N	79° 17' 27" W	Active
MS-C-D		561008	7913280	71° 18' 50" N	79° 17' 37" W	Active
MS-C-E		560980	7913388	71° 18' 54" N	79° 17' 40" W	Active
MS-C-F		561797	7913278	71° 18' 49'' N	79° 16' 17'' W	Active
MS-C-G		561813	7911830	71° 18' 03" N	79° 16' 20" W	Active
MS-C-H		561162	7912067	71° 18" 11" N	79° 17' 25" W	Active
MQ-C-A	Surface water drainage downstream of QMR2 Quarry.	559489	7914408	71° 19' 28'' N	79° 20' 07'' W	Active
MQ-C-B		560076	7913888	71° 19' 11'' N	79° 19' 09'' W	Active
MQ-C-D		559422	7914223	71° 19' 23'' N	79° 20' 14'' W	Active
MQ-C-E	Surface water drainage downstream of D1Q2 Quarry.	563351	7912902	71° 18' 36" N	79° 13' 42" W	Active

Notes:

[1]Exploration Phase infrastructure decommissioned.

[2]No surface water flows at location in 2019.

Table 7.1.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L2222169-1	L2222169-4	L2235207-1	L2241571-1	L2254045-1
	Sample Date & Time			2019-01-16 13:45	2019-01-16 13:45	2019-02-19 13:45	2019-03-06 14:45	2019-04-03 14:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
pH	pH units	0.10	6.0 - 9.5	7.25	7.23	7.98	7.55	7.60
Total Suspended Solids	mg/L	2.0	120	2.7	3.0	12.2	4.9	11.6
Alkalinity, Total (as CaCO3)	mg/L	10	-	68	65	248	167	208
Ammonia, Total (as N)	mg/L	0.020	-	0.143	0.161	0.063	1.10	0.248
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.90	1.60	1.79	2.78	2.82
Phosphorus, Total	mg/L	0.030	-	7.76	7.75	10.7	8.73	8.41
Fecal Coliforms	CFU/100 mL	0	10,000	0	2	2	1	10
BOD	mg/L	2.0	100	<2.0	2.1	2.4	2.8	3.4
COD	mg/L	10	-	38	36	51	49	43
Oil and Grease, Total	mg/L	2.0	-	3.5	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.1.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L2267056-1	L2285297-1	L2302455-1	L2323369-1	L2342488-1	L2364110-1
	Sample Date & Time			2019-05-01 14:45	2019-06-03 14:45	2019-07-01 14:45	2019-08-05 11:00	2019-09-04 13:05	2019-10-08 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.10	6.0 - 9.5	7.50	7.94	7.54	7.22	8.02	7.95
Total Suspended Solids	mg/L	2.0	120	10.0	40.4	<2.0	8.8	<2.0	2.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	128	215	95	78	213	173
Ammonia, Total (as N)	mg/L	0.020	-	0.292	3.63	4.06	0.105	0.047	0.221
Total Kjeldahl Nitrogen	mg/L	0.15	-	2.52	8.17	3.46	1.88	1.03	1.71
Phosphorus, Total	mg/L	0.030	-	9.02	12.7	12.6	10.3	8.98	7.70
Fecal Coliforms	CFU/100 mL	0	10,000	1	150	0	4	0	0
BOD	mg/L	2.0	100	4.3	6.6	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	51	97	49	74	51	47
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.1.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01
	ALS Laboratory Sample ID			L2382037-1	L2382037-3	L2392269-1
	Sample Date & Time			2019-11-12 13:45	2019-11-12 13:45	2019-12-03 14:50
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]			
pH	pH units	0.10	6.0 - 9.5	7.77	7.70	8.05
Total Suspended Solids	mg/L	2.0	120	3.5	2.1	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	148	147	196
Ammonia, Total (as N)	mg/L	0.020	-	0.028	0.080	0.028
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.20	<0.15	1.38
Phosphorus, Total	mg/L	0.030	-	8.35	8.24	6.90
Fecal Coliforms	CFU/100 mL	0	10,000	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0
COD	mg/L	10	-	45	41	41
Oil and Grease, Total	mg/L	2.0	-	5.3	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.1.2: Water Quality Results for Water Licence Monitoring Location - MP-01A

Analyte	Sample ID			MP-01A
	ALS Laboratory Sample ID			L2325882-1
	Sample Date & Time			2019-08-08 14:00
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.10	6.0 - 9.5	7.57
Total Suspended Solids	mg/L	2.0	120	13.6
Alkalinity, Total (as CaCO3)	mg/L	10	-	245
Ammonia, Total (as N)	mg/L	0.050	-	5.21
Total Kjeldahl Nitrogen	mg/L	0.30	-	9.51
Phosphorus, Total	mg/L	0.0030	-	0.256
Fecal Coliforms	CFU/100mL	0	10,000	23
BOD	mg/L	2.0	100	3.8
COD	mg/L	10	-	117
Oil and Grease, Total	mg/L	2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B	MP-01B	MP-01B	MP-01B	MP-01B01	MP-01B
	ALS Laboratory Sample ID			L2323361-1	L2357790-1	L2363292-1	L2382051-1	L2382051-3	L2392275-1
	Sample Date & Time			2019-08-05 14:30	2019-09-30 13:00	2019-10-08 14:45	2019-11-12 14:45	2019-11-12 14:45	2019-12-03 14:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.10	6.0 - 9.5	7.39	6.69	7.93	7.76	7.69	7.46
Total Suspended Solids	mg/L	2.0	120	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	66	126	120	153	153	68
Ammonia, Total (as N)	mg/L	0.010	-	0.123	0.113	0.026	0.031	0.027	0.047
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.87	1.35	<0.15	<0.15	<0.15	0.37
Phosphorus, Total	mg/L	0.030	-	9.14	6.54	7.68	11.4	12.0	14.8
Fecal Coliforms	CFU/100mL	0	10,000	0	0	0	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	49	47	56	38	37	36
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.4: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID			MP-03
	ALS Laboratory Sample ID			L2324693-1
	Sample Date & Time			2019-08-06 10:45
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.10	-	8.23
Total Suspended Solids	mg/L	2.0	-	3.6
Total Dissolved Solids	mg/L	20	-	396
Turbidity	NTU	0.10	-	2.85
Ammonia, Total (as N)	mg/L	0.010	-	0.016
Phosphorus, Total	mg/L	0.0030	-	0.0098
Arsenic (As)-Total	mg/L	0.00010	-	0.00039
Copper (Cu)-Total	mg/L	0.0010	-	0.0015
Lead (Pb)-Total	mg/L	0.000050	0.001	0.000180
Nickel (Ni)-Total	mg/L	0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.0030	-	0.0070
Oil and Grease, Total	mg/L	2.0	15	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.50	370	<0.50
Ethylbenzene	ug/L	0.50	90	<0.50
Toluene	ug/L	0.50	2	<0.50
o-Xylene	ug/L	0.50	-	<0.50
m+p-Xylenes	ug/L	1.0	-	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	99.9
1,4-Difluorobenzene	%	Surrogate	-	100.1
F1 (C6-C10)	ug/L	100	-	<100
F1-BTEX	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	<100
F3 (C16-C34)	ug/L	250	-	<250
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380
Chrom. to baseline at nC50	-	-	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	95
3,4-Dichlorotoluene	%	Surrogate	-	102.7

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.1.5: Water Quality Results for Water Licence Monitoring Location - MP-04A

Analyte	Sample ID			MP-04A
	ALS Laboratory Sample ID			L2344783-1
	Sample Date & Time			2019-09-08 9:00
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.10	6.0 - 9.0	8.02
Total Suspended Solids	mg/L	2.0	15	2.4
Total Dissolved Solids	mg/L	20	-	871
Turbidity	NTU	0.10	-	5.22
Lead (Pb)-Total	mg/L	0.00050	0.001	**0.00117**
Oil and Grease, Total	mg/L	2.0	15	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.50	370	<0.50
Ethylbenzene	ug/L	0.50	90	<0.50
Toluene	ug/L	0.50	2	<0.50
o-Xylene	ug/L	0.50	-	<0.50
m+p-Xylenes	ug/L	1.0	-	<1.0
Xylenes (Total)	ug/L	1.1	-	<1.1
4-Bromofluorobenzene	%	Surrogate	-	89.3
1,4-Difluorobenzene	%	Surrogate	-	95.5
F1 (C6-C10)	ug/L	100	-	<100
F1-BTEX	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	<100
F3 (C16-C34)	ug/L	250	-	330
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380
Chrom. to baseline at nC50	-	-	-	YES
2-Bromobenzotrifluoride	%	Surrogate	-	99.1
3,4-Dichlorotoluene	%	Surrogate	-	97.1

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.1.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2274745-4	L2275930-2	L2282753-4	L2285267-4	L2288074-3	L2293523-5
	Sample Date & Time			2019-05-15 12:05	2019-05-20 10:10	2019-05-27 9:40	2019-06-02 11:30	2019-06-08 9:20	2019-06-16 15:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3.0	-	430	-	507	441	-	763
pH	pH units	0.10	6.0 - 9.5	8.07	8.17	8.08	8.21	8.21	8.34
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	13.5	7.2	<2.0	2.7	4.8	<2.0
Total Dissolved Solids	mg/L	20	-	213	268	319	261	302	702
Turbidity	NTU	0.10	-	31.0	15.5	6.34	10.9	12.6	2.62
Ammonia, Total (as N)	mg/L	0.010	-	1.32	-	0.348	0.388	-	0.82
Nitrate (as N)	mg/L	0.020	-	1.40	-	0.928	1.17	-	3.32
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2297692-2	L2310726-1	L2315697-4	L2320852-3
	Sample Date & Time			2019-06-23 10:00	2019-07-14 17:50	2019-07-21 18:00	2019-07-29 8:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3.0	-	-	1010	751	-
pH	pH units	0.10	6.0 - 9.5	8.16	8.18	8.29	8.30
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	3.2
Total Dissolved Solids	mg/L	20	-	579	691	471	448
Turbidity	NTU	0.10	-	0.92	3.62	1.99	2.46
Ammonia, Total (as N)	mg/L	0.010	-	-	1.95	0.77	-
Nitrate (as N)	mg/L	0.020	-	-	9.50	9.07	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2324618-5	L2328230-1	L2333397-4	L2335484-1
	Sample Date & Time			2019-08-05 18:15	2019-08-11 9:40	2019-08-18 12:55	2019-08-25 12:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3.0	-	772	-	821	-
pH	pH units	0.10	6.0 - 9.5	8.31	8.24	8.24	8.24
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	3.3	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	470	569	547	524
Turbidity	NTU	0.10	-	1.09	1.73	1.60	1.37
Ammonia, Total (as N)	mg/L	0.010	-	0.146	-	0.231	-
Nitrate (as N)	mg/L	0.020	-	5.54	-	5.09	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.6: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2340522-4	L2344702-4	L2349204-2	L2352509-2	L2359618-2
	Sample Date & Time			2019-09-01 11:20	2019-09-08 9:45	2019-09-15 10:00	2019-09-22 9:45	2019-10-03 9:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	936	-	1030	-	927
pH	pH units	0.10	6.0 - 9.5	8.24	8.06	8.04	7.84	8.07
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	615	559	620	625	508
Turbidity	NTU	0.10	-	1.07	1.08	0.59	0.63	0.85
Ammonia, Total (as N)	mg/L	0.010	-	0.518	-	0.124	-	0.296
Nitrate (as N)	mg/L	0.020	-	5.98	-	4.45	-	6.91
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2274745-3	L2275930-1	L2282753-3	L2285267-3	L2288074-2	L2293523-4
	Sample Date & Time			2019-05-15 11:25	2019-05-20 9:45	2019-05-27 9:15	2019-06-02 11:10	2019-06-08 9:00	2019-06-16 15:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3.0	-	431	-	413	313	-	650
pH	pH units	0.10	6.0 - 9.5	8.02	8.16	7.84	8.16	8.16	8.30
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	5.2	2.8	12.3	<2.0	4.4	<2.0
Total Dissolved Solids	mg/L	20	-	219	248	274	199	324	505
Turbidity	NTU	0.10	-	11.7	4.92	18.9	1.79	4.33	1.87
Ammonia, Total (as N)	mg/L	0.010	-	0.341	-	0.167	0.017	-	1.10
Nitrate (as N)	mg/L	0.020	-	0.163	-	0.091	<0.020	-	3.28
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2297692-1	L2310726-2	L2315697-5	L2320852-5	L2324618-4
	Sample Date & Time			2019-06-23 9:25	2019-07-15 8:05	2019-07-21 18:25	2019-07-29 8:55	2019-08-05 14:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	-	1480	1610	-	1750
pH	pH units	0.10	6.0 - 9.5	8.16	8.01	7.98	8	7.91
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	2.5	2.8	<2.0
Total Dissolved Solids	mg/L	20	-	704	1180	1100	1080	1230
Turbidity	NTU	0.10	-	2.70	2.11	0.94	1.33	0.77
Ammonia, Total (as N)	mg/L	0.010	-	-	2.48	4.06	-	1.50
Nitrate (as N)	mg/L	0.020	-	-	12.6	11.2	-	6.19
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0103	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2328230-2	L2333397-2	L2333397-3	L2335484-2	L2340522-2
	Sample Date & Time			2019-08-11 10:00	2019-08-18 12:35	2019-08-18 12:35	2019-08-25 12:15	2019-09-01 10:55
	QA/QC Sample Type			N/A	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	-	1860	<3.0	-	1870
pH	pH units	0.10	6.0 - 9.5	7.70	7.57	5.64	7.88	8.07
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	3.1	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	1450	1440	11	1250	1410
Turbidity	NTU	0.10	-	0.23	0.22	0.11	0.74	0.70
Ammonia, Total (as N)	mg/L	0.010	-	-	0.235	<0.010	-	1.98
Nitrate (as N)	mg/L	0.020	-	-	7.14	<0.020	-	4.85
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B0101	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2340522-3	L2344702-2	L2349204-1	L2352509-1	L2359618-1
	Sample Date & Time			2019-09-01 10:55	2019-09-08 9:35	2019-09-15 9:50	2019-09-22 9:30	2019-10-03 9:25
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	1880	-	1820	-	1690
pH	pH units	0.10	6.0 - 9.5	8.05	7.89	7.93	7.67	7.94
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	1380	1010	1240	1100	959
Turbidity	NTU	0.10	-	0.70	0.27	1.36	0.35	0.40
Ammonia, Total (as N)	mg/L	0.010	-	1.99	-	0.86	-	1.12
Nitrate (as N)	mg/L	0.020	-	5.08	-	3.51	-	9.24
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	<2.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H
	ALS Laboratory Sample ID			L2274745-1	L2282753-1	L2285267-1	L2285267-2	L2288074-1
	Sample Date & Time			2019-05-15 10:30	2019-05-27 8:05	2019-06-02 9:05	2019-06-02 9:05	2019-06-08 8:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	1160	509	112	112	-
pH	pH units	0.10	6.0 - 9.5	7.90	7.80	7.91	7.78	7.81
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	15.6	2.3	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	559	280	59	64	62
Turbidity	NTU	0.10	-	47.7	5.59	1.04	1.17	0.52
Ammonia, Total (as N)	mg/L	0.010	-	0.325	0.613	<0.010	0.016	-
Nitrate (as N)	mg/L	0.020	-	0.750	1.79	0.021	0.021	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H01	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2293523-1	L2293523-2	L2297692-3	L2303582-3	L2305896-1
	Sample Date & Time			2019-06-16 10:25	2019-06-16 10:25	2019-06-23 14:15	2019-06-30 15:00	2019-07-07 9:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	158	158	-	277	285
pH	pH units	0.10	6.0 - 9.5	8.14	8.14	8.11	8.10	8.31
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	90	85	118	170	152
Turbidity	NTU	0.10	-	0.76	0.49	0.49	0.40	0.32
Ammonia, Total (as N)	mg/L	0.010	-	0.028	0.045	-	0.538	0.017
Nitrate (as N)	mg/L	0.020	-	0.058	0.054	-	0.888	0.238
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H
	ALS Laboratory Sample ID			L2310138-4	L2315697-1	L2320852-1	L2320852-2	L2324618-1
	Sample Date & Time			2019-07-14 16:40	2019-07-21 14:30	2019-07-29 7:55	2019-07-29 7:55	2019-08-05 10:20
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	-	328	-	-	364
pH	pH units	0.10	6.0 - 9.5	8.39	8.27	8.31	8.32	8.15
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	9.6	2.8	<2.0
Total Dissolved Solids	mg/L	20	-	167	180	192	189	218
Turbidity	NTU	0.10	-	0.44	0.51	0.51	0.71	0.40
Ammonia, Total (as N)	mg/L	0.010	-	-	0.057	-	-	0.038
Nitrate (as N)	mg/L	0.020	-	-	0.746	-	-	0.379
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2328230-5	L2333397-5	L2335484-5	L2340522-1	L2344702-1
	Sample Date & Time			2019-08-11 16:15	2019-08-18 13:40	2019-08-25 15:30	2019-09-01 9:45	2019-09-08 9:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	-	403	-	381	-
pH	pH units	0.10	6.0 - 9.5	8.31	8.28	8.30	8.23	8.19
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	205	248	227	235	25
Turbidity	NTU	0.10	-	0.23	0.34	0.42	0.39	0.18
Ammonia, Total (as N)	mg/L	0.010	-	-	0.018	-	0.024	-
Nitrate (as N)	mg/L	0.020	-	-	0.144	-	0.185	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.8: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H01	MP-C-H
	ALS Laboratory Sample ID			L2349204-3	L2352509-3	L2352509-4	L2359618-3
	Sample Date & Time			2019-09-15 10:50	2019-09-22 10:20	2019-09-22 10:20	2019-10-03 8:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3.0	-	404	-	-	352
pH	pH units	0.10	6.0 - 9.5	8.20	8.15	8.15	8.25
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	4.7
Total Dissolved Solids	mg/L	20	-	228	232	228	193
Turbidity	NTU	0.10	-	0.21	0.19	0.17	2.71
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	-	-	0.015
Nitrate (as N)	mg/L	0.020	-	0.144	-	-	0.203
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.9: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05	MP-05
	ALS Laboratory Sample ID			L2324889-1	L2344778-1
	Sample Date & Time			2019-08-07 14:55	2019-09-09 13:50
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	0.50	-	555	366
pH	pH units	0.10	6.0 - 9.5	8.34	8.17
Total Suspended Solids	mg/L	2.0	15.0	<2.0	2.3
Total Dissolved Solids	mg/L	20	-	990	746
Turbidity	NTU	0.10	-	4.81	5.47
Alkalinity, Total (as CaCO3)	mg/L	10	-	173	196
Ammonia, Total (as N)	mg/L	0.010	-	0.152	0.093
Chloride (Cl)	mg/L	0.50	-	228	213
Fluoride (F)	mg/L	0.020	-	0.205	0.32
Nitrate (as N)	mg/L	0.020	-	5.86	5.70
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.71	0.37
Phosphorus, Total	mg/L	0.0030	-	0.0058	0.0072
Sulfate (SO4)	mg/L	0.30	-	248	120
Dissolved Organic Carbon	mg/L	0.50	-	4.26	4.38
Total Organic Carbon	mg/L	0.50	-	5.00	5.40
Aluminum (Al)-Total	mg/L	0.0050	-	0.0567	0.0828
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00022	0.00026
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	0.50	-	105	74.2
Copper (Cu)-Total	mg/L	0.0010	0.30	0.0017	0.0020
Iron (Fe)-Total	mg/L	0.050	-	0.087	0.129
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000183	0.000133
Magnesium (Mg)-Total	mg/L	0.050	-	73.7	44.3
Manganese (Mn)-Total	mg/L	0.00050	-	0.0941	0.0365
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00358	0.00389
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00151	0.00183
Potassium (K)-Total	mg/L	0.050	-	10.8	11.1
Selenium (Se)-Total	mg/L	0.000050	-	0.000451	0.000203
Sodium (Na)-Total	mg/L	0.050	-	84.2	104
Thallium (Tl)-Total	mg/L	0.000010	-	0.000017	0.000014
Uranium (U)-Total	mg/L	0.000010	-	0.0292	0.0282
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0091	0.0119
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0148	0.0211
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00022	0.00027
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	105	72.4
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00150	0.00171
Iron (Fe)-Dissolved	mg/L	0.010	-	0.014	0.016
Lead (Pb)-Dissolved	mg/L	0.000050	-	0.000068	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	71.0	45.0
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0812	0.0295
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00360	0.00380
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00120	0.00097
Potassium (K)-Dissolved	mg/L	0.050	-	10.4	11.4
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000495	0.000190
Sodium (Na)-Dissolved	mg/L	0.50	-	79.2	105
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000017	0.000015
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0297	0.0263
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0076	0.0108
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.9: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-0501	MP-05
	ALS Laboratory Sample ID			L2344778-2	L2359617-1
	Sample Date & Time			2019-09-09 13:50	2019-10-02 17:55
	QA/QC Sample Type			Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	0.50	-	370	414
pH	pH units	0.10	6.0 - 9.5	8.24	8.26
Total Suspended Solids	mg/L	2.0	15.0	2.2	11.2
Total Dissolved Solids	mg/L	20	-	728	636
Turbidity	NTU	0.10	-	5.20	8.33
Alkalinity, Total (as CaCO3)	mg/L	10	-	196	198
Ammonia, Total (as N)	mg/L	0.010	-	0.102	0.323
Chloride (Cl)	mg/L	0.50	-	206	162
Fluoride (F)	mg/L	0.020	-	0.31	0.19
Nitrate (as N)	mg/L	0.020	-	5.49	3.52
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.47	0.60
Phosphorus, Total	mg/L	0.0030	-	0.0112	<0.030
Sulfate (SO4)	mg/L	0.30	-	116	164
Dissolved Organic Carbon	mg/L	0.50	-	4.33	4.10
Total Organic Carbon	mg/L	0.50	-	5.01	3.70
Aluminum (Al)-Total	mg/L	0.0050	-	0.0835	0.106
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00029	0.00027
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	0.0000067
Calcium (Ca)-Total	mg/L	0.50	-	74.4	83.1
Copper (Cu)-Total	mg/L	0.0010	0.30	0.0019	0.0014
Iron (Fe)-Total	mg/L	0.050	-	0.125	0.198
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000124	0.000224
Magnesium (Mg)-Total	mg/L	0.050	-	44.6	51.9
Manganese (Mn)-Total	mg/L	0.00050	-	0.0357	0.202
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00388	0.00399
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00124	0.00137
Potassium (K)-Total	mg/L	0.050	-	11.1	8.70
Selenium (Se)-Total	mg/L	0.000050	-	0.000170	0.000199
Sodium (Na)-Total	mg/L	0.050	-	104	69.9
Thallium (Tl)-Total	mg/L	0.000010	-	0.000013	0.000015
Uranium (U)-Total	mg/L	0.000010	-	0.0278	0.0684
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0115	0.0086
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0243	0.0072
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00025	0.00025
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	74.1	81.5
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00175	0.00116
Iron (Fe)-Dissolved	mg/L	0.010	-	0.020	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	0.000054	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	45.0	51.1
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0297	0.181
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00396	0.00430
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00106	0.00116
Potassium (K)-Dissolved	mg/L	0.050	-	11.4	9.28
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000197	0.000239
Sodium (Na)-Dissolved	mg/L	0.50	-	106	71.7
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000016	0.000015
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0262	0.0660
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0107	0.0072
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.10: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L2329025-1	L2359796-1
	Sample Date & Time			2019-08-13 13:15	2019-09-30 18:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Hardness (as CaCO3)	mg/L	0.50	-	575	430
pH	pH units	0.10	6.0 - 9.5	8.25	8.11
Total Suspended Solids	mg/L	2.0	15.0	<2.0	4.9
Total Dissolved Solids	mg/L	20	-	1040	697
Turbidity	NTU	0.10	-	1.97	9.58
Alkalinity, Total (as CaCO3)	mg/L	10	-	113	165
Ammonia, Total (as N)	mg/L	0.010	-	0.075	0.239
Chloride (Cl)	mg/L	0.50	-	198	173
Fluoride (F)	mg/L	0.020	-	0.166	0.18
Nitrate (as N)	mg/L	0.020	-	3.81	3.88
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.76	0.56
Phosphorus, Total	mg/L	0.0030	-	0.0053	0.0093
Sulfate (SO4)	mg/L	0.30	-	343	230
Dissolved Organic Carbon	mg/L	0.50	-	4.64	3.40
Total Organic Carbon	mg/L	0.50	-	3.99	4.33
Aluminum (Al)-Total	mg/L	0.0050	-	0.0411	0.175
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00019	0.00028
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050	0.0000058
Calcium (Ca)-Total	mg/L	0.50	-	91.9	77.7
Copper (Cu)-Total	mg/L	0.0010	0.30	<0.0010	0.0013
Iron (Fe)-Total	mg/L	0.050	-	0.063	0.332
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000089	0.000452
Magnesium (Mg)-Total	mg/L	0.050	-	90.1	56.6
Manganese (Mn)-Total	mg/L	0.00050	-	0.120	0.151
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00405	0.00344
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00123	0.00140
Potassium (K)-Total	mg/L	0.050	-	10.5	8.63
Selenium (Se)-Total	mg/L	0.000050	-	0.000772	0.000288
Sodium (Na)-Total	mg/L	0.050	-	78.7	69.0
Thallium (Tl)-Total	mg/L	0.000010	-	0.000020	0.000015
Uranium (U)-Total	mg/L	0.000010	-	0.0268	0.0497
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0030	0.0057
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0121	0.0099
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00017	0.00021
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	87.6	74.5
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00084	0.00101
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	86.7	59.2
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.0743	0.132
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00414	0.00356
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00101	0.00102
Potassium (K)-Dissolved	mg/L	0.050	-	10.3	8.91
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000872	0.000368
Sodium (Na)-Dissolved	mg/L	0.50	-	76.2	69.6
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000018	0.000013
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0258	0.0514
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0018	0.0035
Oil and Grease, Total	mg/L	2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.10: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06
	ALS Laboratory Sample ID			L2359798-1
	Sample Date & Time			2019-10-02 13:25
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
Hardness (as CaCO3)	mg/L	0.50	-	440
pH	pH units	0.10	6.0 - 9.5	8.24
Total Suspended Solids	mg/L	2.0	15.0	2.2
Total Dissolved Solids	mg/L	20	-	668
Turbidity	NTU	0.10	-	8.77
Alkalinity, Total (as CaCO3)	mg/L	10	-	161
Ammonia, Total (as N)	mg/L	0.010	-	0.255
Chloride (Cl)	mg/L	0.50	-	163
Fluoride (F)	mg/L	0.020	-	0.21
Nitrate (as N)	mg/L	0.020	-	3.65
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.72
Phosphorus, Total	mg/L	0.0030	-	0.0067
Sulfate (SO4)	mg/L	0.30	-	216
Dissolved Organic Carbon	mg/L	0.50	-	3.26
Total Organic Carbon	mg/L	0.50	-	4.21
Aluminum (Al)-Total	mg/L	0.0050	-	0.129
Arsenic (As)-Total	mg/L	0.00010	0.50	0.00025
Cadmium (Cd)-Total	mg/L	0.0000050	-	0.0000066
Calcium (Ca)-Total	mg/L	0.50	-	76.9
Copper (Cu)-Total	mg/L	0.0010	0.30	0.0011
Iron (Fe)-Total	mg/L	0.050	-	0.192
Lead (Pb)-Total	mg/L	0.000050	0.20	0.000273
Magnesium (Mg)-Total	mg/L	0.050	-	54.6
Manganese (Mn)-Total	mg/L	0.00050	-	0.135
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00354
Nickel (Ni)-Total	mg/L	0.00050	0.50	0.00118
Potassium (K)-Total	mg/L	0.050	-	8.37
Selenium (Se)-Total	mg/L	0.000050	-	0.000304
Sodium (Na)-Total	mg/L	0.050	-	66.3
Thallium (Tl)-Total	mg/L	0.000010	-	0.000014
Uranium (U)-Total	mg/L	0.000010	-	0.0489
Zinc (Zn)-Total	mg/L	0.0030	0.50	0.0045
Aluminum (Al)-Dissolved	mg/L	0.0050	-	0.0103
Arsenic (As)-Dissolved	mg/L	0.00010	-	0.00021
Cadmium (Cd)-Dissolved	mg/L	0.000010	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.050	-	76.4
Copper (Cu)-Dissolved	mg/L	0.00020	-	0.00106
Iron (Fe)-Dissolved	mg/L	0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	60.6
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.135
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00351
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00108
Potassium (K)-Dissolved	mg/L	0.050	-	8.99
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000352
Sodium (Na)-Dissolved	mg/L	0.50	-	71.2
Thallium (Tl)-Dissolved	mg/L	0.000010	-	0.000012
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0509
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0036
Oil and Grease, Total	mg/L	2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.11: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2274745-2	L2275930-3	L2275930-4	L2282753-8	L2285267-7
	Sample Date & Time			2019-05-15 11:05	2019-05-20 13:00	2019-05-20 13:00	2019-05-28 10:35	2019-06-02 11:05
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	167	-	-	121	166
pH	pH units	0.10	6.0 - 9.5	7.96	7.91	7.86	7.75	7.88
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	10.0	10.4	11.6	12.4	3.3
Total Dissolved Solids	mg/L	20	-	114	97	146	73	98
Turbidity	NTU	0.10	-	24.9	24.5	23.9	16.3	9.69
Ammonia, Total (as N)	mg/L	0.010	-	0.71	-	-	0.158	0.172
Nitrate (as N)	mg/L	0.020	-	1.17	-	-	0.090	0.309
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.11: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01
	ALS Laboratory Sample ID			L2288074-4	L2283523-3	L2297692-5	L2297692-6	L2303582-1
	Sample Date & Time			2019-06-08 9:55	2019-06-16 14:00	2019-06-23 14:10	2019-06-23 16:10	2019-06-30 13:55
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	-	284	-	-	314
pH	pH units	0.10	6.0 - 9.5	7.96	7.89	7.80	7.78	7.72
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	3.6	<2.0	<2.0	<2.0	2.6
Total Dissolved Solids	mg/L	20	-	138	197	324	330	230
Turbidity	NTU	0.10	-	11.1	4.55	1.64	1.67	5.41
Ammonia, Total (as N)	mg/L	0.010	-	-	0.161	-	-	0.123
Nitrate (as N)	mg/L	0.020	-	-	0.623	-	-	0.402
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.11: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2305896-4	L2310138-1	L2310138-2	L2315697-2	L2320852-6
	Sample Date & Time			2019-07-08 9:55	2019-07-14 15:40	2019-07-14 15:40	2019-07-21 17:15	2019-07-29 10:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3.0	-	311	-	-	279	-
pH	pH units	0.10	6.0 - 9.5	7.95	7.75	7.75	7.81	8.05
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	2.4	2.0	<2.0	2.0
Total Dissolved Solids	mg/L	20	-	210	148	149	200	136
Turbidity	NTU	0.10	-	2.55	3.41	3.55	1.82	2.40
Ammonia, Total (as N)	mg/L	0.010	-	0.061	-	-	0.027	-
Nitrate (as N)	mg/L	0.020	-	0.332	-	-	0.265	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-0201	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2297692-7	L2303582-2	L2305896-2	L2305896-3	L2310138-3	L2315697-3
	Sample Date & Time			2019-06-23 17:10	2019-06-30 14:15	2019-07-07 11:40	2019-07-07 11:40	2019-07-14 16:00	2019-07-21 17:30
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3.0	-	760	959	783	782	-	948
pH	pH units	0.10	6.0 - 9.5	8.12	8.01	8.20	8.20	8.07	7.92
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	6.4	2.1	16.7	5.3	5.2	2.9
Total Dissolved Solids	mg/L	20	-	537	658	486	491	576	615
Turbidity	NTU	0.10	-	4.52	2.58	15.1	4.99	8.05	3.78
Ammonia, Total (as N)	mg/L	0.010	-	1.7	2.34	1.12	1.17	-	1.86
Nitrate (as N)	mg/L	0.020	-	12.9	16.0	8.04	8.02	-	16.2
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-0201	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2328230-6	L2333397-1	L2335484-3	L2335484-4	L2340522-5	L2344702-5
	Sample Date & Time			2019-08-12 14:25	2019-08-18 11:10	2019-08-25 13:15	2019-08-25 13:15	2019-09-02 14:35	2019-09-10 11:05
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3.0	-	524	495	-	-	518	-
pH	pH units	0.10	6.0 - 9.5	8.14	8.05	8.13	8.14	8.04	7.89
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	3.1	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	325	299	257	282	316	289
Turbidity	NTU	0.10	-	3.60	2.01	2.24	2.37	1.46	1.03
Ammonia, Total (as N)	mg/L	0.010	-	1.18	1.32	-	-	0.611	-
Nitrate (as N)	mg/L	0.020	-	4.22	3.02	-	-	2.69	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-		Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-0201	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2349204-4	L2349204-5	L2352509-5	L2359618-4
	Sample Date & Time			2019-09-15 12:25	2019-09-15 12:25	2019-09-22 11:15	2019-10-03 14:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
Conductivity	umhos/cm	3.0	-	499	499	-	484
pH	pH units	0.10	6.0 - 9.5	7.92	7.92	7.75	7.91
Total Suspended Solids	mg/L	2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	294	286	278	267
Turbidity	NTU	0.10	-	0.91	0.67	0.74	0.89
Ammonia, Total (as N)	mg/L	0.010	-	1.03	1.02	-	0.070
Nitrate (as N)	mg/L	0.020	-	2.41	2.41	-	5.00
Oil and Grease, Total	mg/L	2.0	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.13: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MS-01	MS-0101	MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2222163-1	L2222163-3	L2235199-1	L2241574-1	L2254030-1	L2267065-1
	Sample Date & Time			1-16-19 15:00	1-16-19 15:00	2-19-19 15:00	2019-03-06 15:00	2019-04-03 15:00	2019-05-01 15:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.43	7.43	7.39	7.25	7.32	7.31
Total Suspended Solids	mg/L	2	35	10.8	10.7	7.2	31.6	8.7	5.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	75	81	68	76	110	73
Ammonia, Total (as N)	mg/L	0.02	4	0.179	0.221	0.092	0.048	0.12	2.42
Total Kjeldahl Nitrogen	mg/L	0.15	-	1	1.22	0.45	0.84	1.93	3.09
Phosphorus, Total	mg/L	0.003	4	0.667	0.727	1.36	0.509	1.05	1.23
Fecal Coliforms	CFU/100 mL	0	1,000	37	110	18	53	26	27
BOD	mg/L	2	30	3.7	2.4	3.8	3.2	3.5	2.7
COD	mg/L	10	-	39	41	46	24	35	41
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.13: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MS-01	MS-01	MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2285306-1	L2302440-1	L2322707-1	L2342484-1	L2362257-1	L2382044-1
	Sample Date & Time			2019-06-03 15:00	2019-07-01 15:00	2019-08-05 15:00	2019-09-04 15:00	2019-10-07 15:00	2019-11-12 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.66	7.49	7.62	7.4	7.38	7.28
Total Suspended Solids	mg/L	2	35	4.8	<2.0	10.8	24.9	12.8	2.4
Alkalinity, Total (as CaCO3)	mg/L	10	-	84	83	70	47	59	43
Ammonia, Total (as N)	mg/L	0.02	4	0.124	0.12	0.101	0.168	0.094	0.076
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.74	<0.15	2.06	1.54	4.9	<0.15
Phosphorus, Total	mg/L	0.003	4	1.36	1.39	0.899	1.06	1.46	1.29
Fecal Coliforms	CFU/100 mL	0	1,000	16	2	3	2	2	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	2.5	1.46	<2.0
COD	mg/L	10	-	36	28	46	46	45	34
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.13: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MS-01	MS-01
	ALS Laboratory Sample ID			L2382044-3	L2392265-1
	Sample Date & Time			2019-11-12 15:00	2019-12-03 15:00
	QA/QC Sample Type			Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]		
pH	pH units	0.1	6.0 - 9.5	7.35	7.40
Total Suspended Solids	mg/L	2	35	2.7	4.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	44	61
Ammonia, Total (as N)	mg/L	0.02	4	0.076	0.074
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	1.04
Phosphorus, Total	mg/L	0.003	4	1.35	1.58
Fecal Coliforms	CFU/100 mL	0	1,000	1	69
BOD	mg/L	2	30	<2.0	<2.0
COD	mg/L	10	-	33	36
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.14: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2222158-1	L2235218-1	L2241567-1	L2254037-1	L2267060-1	L2274869-1
	Sample Date & Time			1-16-19 14:45	2-19-19 14:45	2019-03-06 14:00	2019-04-03 14:45	2019-05-01 13:00	2019-05-15 14:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	7.6	7.56	7.15	7.65	7.99	7.9
Total Suspended Solids	mg/L	2	35	<2.0	8.3	<2.0	3.3	10.1	15.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	78	55	48	107	179	125
Ammonia, Total (as N)	mg/L	0.02	4	0.503	0.101	0.012	0.06	**9.45**	0.088
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.09	0.77	<0.15	1.1	9.68	<0.15
Phosphorus, Total	mg/L	0.003	4	0.918	1.06	1.31	1.23	0.553	0.859
Fecal Coliforms	CFU/100 mL	0	1,000	87	24	0	3	19	2
BOD	mg/L	2	30	<2.0	2	<2.0	<2.0	9.1	<2.0
COD	mg/L	10	-	17	25	36	19	33	38
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.14: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2289708-1	L2307790-1	L2322712-1	L2342490-1	L2362250-1	L2382042-1
	Sample Date & Time			2019-06-11 23:30	2019-07-10 14:30	2019-08-05 14:30	2019-09-04 14:30	2019-10-07 15:00	2019-11-12 14:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
pH	pH units	0.1	6.0 - 9.5	8.13	7.9	8.24	7.6	7.9	7.14
Total Suspended Solids	mg/L	2	35	2.3	<2.0	8.4	<2.0	5.8	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	215	180	231	84	192	38
Ammonia, Total (as N)	mg/L	0.02	4	0.074	0.061	0.027	0.04	0.073	**47**
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.43	<0.15	<0.15	0.65	<1.5	40.2
Phosphorus, Total	mg/L	0.003	4	0.956	1.02	0.996	0.507	3.54	0.0193
Fecal Coliforms	CFU/100 mL	0	1,000	0	0	8	0	3	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	24	21	43	28	54	29
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.14: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B
	ALS Laboratory Sample ID			L2395372-1	L2392256-1
	Sample Date & Time			2019-11-30 13:55	2019-12-03 15:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
pH	pH units	0.1	6.0 - 9.5	8.28	6.64
Total Suspended Solids	mg/L	2	35	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	174	14
Ammonia, Total (as N)	mg/L	0.02	4	0.181	0.117
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	0.84
Phosphorus, Total	mg/L	0.003	4	1.16	0.109
Fecal Coliforms	CFU/100 mL	0	1,000	-	0
BOD	mg/L	2	30	<2.0	<2.0
COD	mg/L	10	-	24	15
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.15: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-0601
	ALS Laboratory Sample ID			L2338795-1	L2339844-1	L2339844-2
	Sample Date & Time			2019-08-29 17:30	2019-09-02 15:15	2019-09-02 15:15
	QA/QC Sample Type			N/A	N/A	Field Duplicate
	Units	LOR	Water Licence & MDMER Criteria[1]			
Conductivity	umhos/cm	3	-	2220	2210	2210
Hardness (as CaCO3)	mg/L	10	-	1430	1410	1420
pH	pH units	0.1	6.0 - 9.5	7.01	7.08	7.03
Total Suspended Solids	mg/L	2	15	4.7	2.7	<2.0
Total Dissolved Solids	mg/L	13	-	1960	2010	2020
Turbidity	NTU	0.1	-	6.43	7.92	7.72
Acidity (as CaCO3)	mg/L	2	-	35.1	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	<10	<10
Ammonia, Total (as N)	mg/L	0.02	-	2.72	2.61	2.55
Chloride (Cl)	mg/L	0.5	-	26.9	28.1	28.2
Fluoride (F)	mg/L	0.02	-	<0.10	<0.20	<0.20
Nitrate (as N)	mg/L	0.02	-	10.2	10.5	10.3
Total Kjeldahl Nitrogen	mg/L	0.15	-	3.06	2.18	2.32
Phosphorus, Total	mg/L	0.003	-	<0.0030	<0.0030	<0.0030
Sulfate (SO4)	mg/L	0.3	-	1390	1500	1440
Cyanide, Total	mg/L	0.002	1	<20	<0.0020	<2.0
Dissolved Organic Carbon	mg/L	0.5	-	0.59	0.63	<0.50
Total Organic Carbon	mg/L	0.5	-	1.65	0.92	0.79
Acidity (as CaCO3)	mg/L	2	-	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	<0.050	<0.050	<0.050
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0213	0.0196	0.0199
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	0.000339	0.000337	0.000289
Calcium (Ca)-Total	mg/L	0.5	-	106	107	107
Cesium (Cs)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0895	0.0842	0.0833
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	<0.010	<0.010
Iron (Fe)-Total	mg/L	0.05	-	0.14	0.15	0.15
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.057	0.061	0.06
Magnesium (Mg)-Total	mg/L	0.05	-	280	280	279
Manganese (Mn)-Total	mg/L	0.0005	-	14.1	13.8	14
Mercury (Hg)-Total	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0969	0.0944	0.0936
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	11.7	11.7	11.5
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0155	0.0157	0.0153
Selenium (Se)-Total	mg/L	0.00005	-	0.00223	0.00219	0.00201
Silicon (Si)-Total	mg/L	0.1	-	2.2	2.2	2.2
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	6.91	6.83	6.84
Strontium (Sr)-Total	mg/L	0.001	-	0.198	0.203	0.197
Sulfur (S)-Total	mg/L	0.5	-	471	465	468
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.00015	0.00013	0.00013
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00012	<0.00010	<0.00010
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0020	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.050	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0245	0.0199	0.021
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	<0.10	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.000367	0.000338	0.000375
Calcium (Ca)-Dissolved	mg/L	0.05	-	105	107	107
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0881	0.0816	0.0836
Copper (Cu)-Dissolved	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.15: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06	MS-06	MS-0601
	ALS Laboratory Sample ID			L2338795-1	L2339844-1	L2339844-2
	Sample Date & Time			2019-08-29 17:30	2019-09-02 15:15	2019-09-02 15:15
	QA/QC Sample Type			N/A	N/A	Field Duplicate
	Units	LOR	Water Licence & MDMER Criteria[1]			
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.10	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	0.061	0.063	0.06
Magnesium (Mg)-Dissolved	mg/L	0.05	-	283	277	281
Manganese (Mn)-Dissolved	mg/L	0.0005	-	14.1	14.1	14.1
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0965	0.0918	0.0942
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.50	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	11.7	11.4	11.6
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0159	0.0153	0.0148
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00256	0.00232	0.002
Silicon (Si)-Dissolved	mg/L	0.05	-	2.2	2.11	2.19
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	7.08	6.81	6.9
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.201	0.2	0.196
Sulfur (S)-Dissolved	mg/L	0.5	-	475	480	471
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.00015	0.00013	0.00013
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00013	<0.00010	<0.00010
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.02	0.013	0.012
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.0020	<0.0020	<0.0020
Ra-226	Bq/L	0.0038	0.37	0.013	0.023	0.021
Acute Lethality [2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.16: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-0801	MS-08	MS-08
	ALS Laboratory Sample ID			L2293039-1	L2293039-2	L2305882-1	L2322602-1
	Sample Date & Time			2019-06-17 9:25	2019-06-17 9:25	2019-07-08 14:50	2019-08-05 16:50
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]				
Conductivity	umhos/cm	3	-	712	714	4440	6620
Hardness (as CaCO3)	mg/L	10	-	375	378	3150	5570
pH	pH units	0.1	6.0 - 9.5	6.7	6.71	7.5	8.07
Total Suspended Solids	mg/L	2	15	10.8	9.6	12	6.8
Total Dissolved Solids	mg/L	13	-	561	457	4670	7990
Turbidity	NTU	0.1	-	20.3	19.9	14.1	8.2
Acidity (as CaCO3)	mg/L	2	-	4.8	3.5	9.3	6.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	<10	18	10
Ammonia, Total (as N)	mg/L	0.02	-	0.425	0.428	7.4	8.65
Chloride (Cl)	mg/L	0.5	-	1.38	1.39	9.5	20.1
Fluoride (F)	mg/L	0.02	-	0.034	0.033	0.11	0.12
Nitrate (as N)	mg/L	0.02	-	1.76	1.77	14.2	27.9
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.67	0.63	3.75	8.73
Phosphorus, Total	mg/L	0.003	-	0.0096	0.0055	<0.0030	<0.0030
Sulfate (SO4)	mg/L	0.3	-	375	377	3130	5470
Cyanide, Total	mg/L	0.002	1	<0.20	0.0026	0.021	0.0366
Dissolved Organic Carbon	mg/L	0.5	-	0.99	0.92	3.05	3.22
Total Organic Carbon	mg/L	0.5	-	1.64	1.33	3.65	3.54
Aluminum (Al)-Total	mg/L	0.005	-	0.531	0.479	<0.050	<0.050
Antimony (Sb)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00011	<0.00010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0136	0.0138	0.0337	0.0307
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	0.015	0.014	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000588	0.0000605	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	21.6	21.5	305	662
Cesium (Cs)-Total	mg/L	0.00001	-	0.000048	0.000045	<0.00010	0.00013
Chromium (Cr)-Total	mg/L	0.0005	-	0.0013	0.00114	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0405	0.0403	0.0271	0.0157
Copper (Cu)-Total	mg/L	0.001	0.3	0.0024	0.0021	<0.010	<0.010
Iron (Fe)-Total	mg/L	0.05	-	2.65	2.31	4.5	1.98
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000453	0.000403	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.0084	0.008	0.05	0.094
Magnesium (Mg)-Total	mg/L	0.05	-	81	81	646	1030
Manganese (Mn)-Total	mg/L	0.0005	-	2.79	2.61	14.7	16.3
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000536	0.000533	<0.00050	0.00059
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0419	0.0421	0.0252	0.0139
Phosphorus (P)-Total	mg/L	0.05	-	<0.050	<0.050	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	2.16	2.14	6.18	7.98
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00307	0.00299	0.0104	0.0152
Selenium (Se)-Total	mg/L	0.00005	-	0.00113	0.00114	0.00622	0.00852
Silicon (Si)-Total	mg/L	0.1	-	1.69	1.62	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	<0.000050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	0.971	0.962	4.51	6.97
Strontium (Sr)-Total	mg/L	0.001	-	0.0421	0.042	0.663	1.25
Sulfur (S)-Total	mg/L	0.5	-	131	131	1180	1980
Tellurium (Te)-Total	mg/L	0.0002	-	<0.00020	<0.00020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	0.000026	0.000025	0.00014	0.00012
Thorium (Th)-Total	mg/L	0.0001	-	0.00045	0.00036	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	0.0243	0.0234	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.000407	0.000351	0.00032	0.00037
Vanadium (V)-Total	mg/L	0.0005	-	0.0009	0.00084	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.007	0.0062	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	0.00065	0.00065	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.0050	<0.0050	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0116	0.0118	0.031	0.0295
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	0.014	0.014	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	0.0000617	0.0000604	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	22.3	22.6	290	652
Cesium (Cs)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.00010	0.00013
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.00050	<0.00050	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0381	0.0378	0.0207	0.0143
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00107	0.00108	0.0064	0.0061
Iron (Fe)-Dissolved	mg/L	0.01	-	1.1	1.13	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	0.0077	0.0074	0.048	0.087
Magnesium (Mg)-Dissolved	mg/L	0.05	-	77.5	78.2	589	956
Manganese (Mn)-Dissolved	mg/L	0.0005	-	2.56	2.57	13	16
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.0003	0.000342	<0.00050	0.00054
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0391	0.039	0.0192	0.0121
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.050	<0.050	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	1.86	1.87	5.56	7.85
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00194	0.00188	0.0092	0.0145
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00125	0.0012	0.00581	0.00812
Silicon (Si)-Dissolved	mg/L	0.05	-	0.65	0.634	<0.50	0.67
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	0.921	0.914	3.93	6.3
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.0397	0.0406	0.612	1.27
Sulfur (S)-Dissolved	mg/L	0.5	-	130	132	1060	1820
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.00020	<0.00020	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000019	0.000018	0.00013	0.00012
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.00030	<0.00030	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000135	0.000131	0.00018	0.00033
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.00050	<0.00050	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0054	0.0058	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.00020	<0.00020	<0.0020	<0.0020
Ra-226	Bq/L	0.0045	0.37	0.0097	0.011	0.041	0.091
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.16: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-0801	MS-08	MS-08
	ALS Laboratory Sample ID			L2322602-2	L2339839-1	L2357232-1
	Sample Date & Time			2019-08-05 16:50	2019-09-02 14:25	2019-10-01 9:15
	QA/QC Sample Type			Field Duplicate	N/A	N/A
	Units	LOR	Water Licence and MDMER Criteria[1]			
Conductivity	umhos/cm	3	-	6610	3180	5040
Hardness (as CaCO3)	mg/L	10	-	5530	2350	3990
pH	pH units	0.1	6.0 - 9.5	8.13	8.47	8.79
Total Suspended Solids	mg/L	2	15	6.4	10	6
Total Dissolved Solids	mg/L	13	-	7940	3190	5620
Turbidity	NTU	0.1	-	8.35	9.32	4.52
Acidity (as CaCO3)	mg/L	2	-	5.1	5	2.3
Alkalinity, Total (as CaCO3)	mg/L	10	-	10	63	39
Ammonia, Total (as N)	mg/L	0.02	-	9.14	1.43	3.79
Chloride (Cl)	mg/L	0.5	-	20	11	17.2
Fluoride (F)	mg/L	0.02	-	0.15	<0.40	<0.20
Nitrate (as N)	mg/L	0.02	-	27.6	10.4	16.7
Total Kjeldahl Nitrogen	mg/L	0.15	-	8.21	1.31	4.38
Phosphorus, Total	mg/L	0.003	-	<0.0030	0.0036	<0.0030
Sulfate (SO4)	mg/L	0.3	-	5400	2490	4070
Cyanide, Total	mg/L	0.002	1	0.024	<0.0020	0.0128
Dissolved Organic Carbon	mg/L	0.5	-	3.37	2.9	3.82
Total Organic Carbon	mg/L	0.5	-	3.87	3.51	4.16
Aluminum (Al)-Total	mg/L	0.005	-	0.193	0.092	0.082
Antimony (Sb)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	0.0265	0.015	0.012
Beryllium (Be)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01	-	<0.10	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.00001	-	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	529	199	507
Cesium (Cs)-Total	mg/L	0.00001	-	0.00011	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0129	0.0366	0.005
Copper (Cu)-Total	mg/L	0.001	0.3	<0.010	<0.010	<0.010
Iron (Fe)-Total	mg/L	0.05	-	1.68	0.96	0.42
Lead (Pb)-Total	mg/L	0.00005	0.2	0.00068	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	0.074	0.026	0.03
Magnesium (Mg)-Total	mg/L	0.05	-	792	462	664
Manganese (Mn)-Total	mg/L	0.0005	-	12.6	9.41	1.12
Mercury (Hg)-Total	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00056	0.00082	0.00141
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0131	0.0442	0.0071
Phosphorus (P)-Total	mg/L	0.05	-	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	6.59	7.38	6.91
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0122	0.0078	0.0082
Selenium (Se)-Total	mg/L	0.00005	-	0.00613	0.00525	0.00642
Silicon (Si)-Total	mg/L	0.1	-	<1.0	1.1	<1.0
Silver (Ag)-Total	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	10.3	5.64	6.41
Strontium (Sr)-Total	mg/L	0.001	-	1	0.337	1.58
Sulfur (S)-Total	mg/L	0.5	-	1510	781	1350
Tellurium (Te)-Total	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001	-	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001	-	0.0014	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	<0.0030	0.006	0.0037
Tungsten (W)-Total	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00047	0.00397	0.0019
Vanadium (V)-Total	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.06	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.0020	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005	-	<0.050	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0289	0.0151	0.0117
Beryllium (Be)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.01	-	<0.10	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	656	201	509
Cesium (Cs)-Dissolved	mg/L	0.00001	-	0.00014	<0.00010	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0143	0.0328	0.0046
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.0061	0.0036	0.005
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.10	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001	-	0.087	0.024	0.033
Magnesium (Mg)-Dissolved	mg/L	0.05	-	944	449	661
Manganese (Mn)-Dissolved	mg/L	0.0005	-	15.7	8.84	1.1
Mercury (Hg)-Dissolved	mg/L	0.00001	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00057	0.00082	0.00156
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0123	0.0404	0.0067
Phosphorus (P)-Dissolved	mg/L	0.05	-	<0.50	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	7.81	7.44	6.97
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0144	0.0074	0.0079
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00853	0.00467	0.0069
Silicon (Si)-Dissolved	mg/L	0.05	-	0.68	0.92	<0.50
Silver (Ag)-Dissolved	mg/L	0.00005	-	<0.00050	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.5	-	6.3	5.61	6.41
Strontium (Sr)-Dissolved	mg/L	0.001	-	1.3	0.333	1.63
Sulfur (S)-Dissolved	mg/L	0.5	-	1830	769	1370
Tellurium (Te)-Dissolved	mg/L	0.0002	-	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.00012	<0.00010	<0.00010
Thorium (Th)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.0003	-	<0.0030	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.0010	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00035	0.00381	0.00185
Vanadium (V)-Dissolved	mg/L	0.0005	-	<0.0050	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.010	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0003	-	<0.0020	<0.0020	<0.0020
Ra-226	Bq/L	0.0045	0.37	0.076	0.02	0.018
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	Not Acutely Toxic	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2289720-8	L2293069-12	L2299117-16
	Sample Date & Time			6/9/2019 15:30	6/17/2019 16:05	6/23/2019 12:15
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	30.9	-	43.5
pH	pH units	0.1	6.0 - 9.5	7.68	7.79	7.86
Total Suspended Solids	mg/L	2	15	3.3	<2.0	2.3
Total Dissolved Solids	mg/L	20	-	38	39	53
Turbidity	NTU	0.1	-	6.07	5.19	1.76
Alkalinity, Total (as CaCO3)	mg/L	10	-	<50	-	50
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	-	0.013
Chloride (Cl)	mg/L	0.5	-	0.6	-	0.58
Fluoride (F)	mg/L	0.02	-	<0.020	-	<0.020
Nitrate (as N)	mg/L	0.02	-	0.026	-	<0.020
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.24	-	<0.15
Phosphorus, Total	mg/L	0.003	-	0.0081	-	0.0099
Sulfate (SO4)	mg/L	0.3	-	2.03	-	2.57
Dissolved Organic Carbon	mg/L	0.5	-	1.67	-	2.83
Total Organic Carbon	mg/L	0.5	-	2.67	-	2.95
Aluminum (Al)-Total	mg/L	0.005	-	0.113	-	0.0930
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	-	<0.00010
Cadmium (Cd)-Total	mg/L	0.000005	-	<0.0000050	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.5	-	5.99	-	8.48
Copper (Cu)-Total	mg/L	0.001	0.3	0.0015	-	0.0018
Iron (Fe)-Total	mg/L	0.01	-	0.187	-	0.123
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000146	-	0.000110
Magnesium (Mg)-Total	mg/L	0.05	-	3.94	-	5.51
Manganese (Mn)-Total	mg/L	0.0005	-	0.00335	-	0.00187
Mercury (Hg)-Total	mg/L	0.000005	-	<0.000010	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000181	-	0.000214
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00051	-	0.00056
Potassium (K)-Total	mg/L	0.05	-	0.858	-	1.02
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.05	-	0.285	-	0.346
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010
Uranium (U)-Total	mg/L	0.00001	-	0.000354	-	0.000478
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0068	-	0.0092
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	5.96	-	8.35
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.0012	-	0.00161
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	3.88	-	5.49
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00062	-	<0.00050
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.000010	-	<0.000010
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000164	-	0.000202
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	-	<0.00050
Potassium (K)-Dissolved	mg/L	0.05	-	0.838	-	1.03
Selenium (Se)-Dissolved	mg/L	0.00005	-	<0.000050	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.5	-	<0.50	-	<0.50
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	-	<0.000010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000309	-	0.000430
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010	-	<0.0010
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2303454-13	L2305271-1	L2311077-8
	Sample Date & Time			7/1/2019 10:30	7/7/2019 8:35	7/15/2019 14:00
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	-	42.5	-
pH	pH units	0.1	6.0 - 9.5	7.78	7.81	7.92
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	21	59	68
Turbidity	NTU	0.1	-	1.23	0.79	0.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	47	-
Ammonia, Total (as N)	mg/L	0.01	-	-	<0.010	-
Chloride (Cl)	mg/L	0.5	-	-	0.56	-
Fluoride (F)	mg/L	0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.116	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	<0.15	-
Phosphorus, Total	mg/L	0.003	-	-	0.0033	-
Sulfate (SO4)	mg/L	0.3	-	-	2.31	-
Dissolved Organic Carbon	mg/L	0.5	-	-	2.04	-
Total Organic Carbon	mg/L	0.5	-	-	2.44	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0213	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.5	-	-	9.00	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0023	-
Iron (Fe)-Total	mg/L	0.01	-	-	<0.050	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	5.60	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00077	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.000010	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.000659	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	<0.00050	-
Potassium (K)-Total	mg/L	0.05	-	-	1.59	-
Selenium (Se)-Total	mg/L	0.00005	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.05	-	-	0.401	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000015	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00100	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0090	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	8.21	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00212	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	5.34	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	<0.000010	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.000585	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	1.57	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	<0.000050	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	<0.50	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	0.000011	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.000909	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	<0.0010	-
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-9
	ALS Laboratory Sample ID			L2314537-15	L2320848-1	L2323293-14
	Sample Date & Time			7/22/2019 13:25	7/31/2019 15:15	8/6/2019 12:35
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	61.1	67.2	73.7
pH	pH units	0.1	6.0 - 9.5	8.06	8.13	8.10
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	94	165	98
Turbidity	NTU	0.1	-	0.52	0.4	0.35
Alkalinity, Total (as CaCO3)	mg/L	10	-	61	68	71
Ammonia, Total (as N)	mg/L	0.01	-	0.019	<0.010	<0.010
Chloride (Cl)	mg/L	0.5	-	0.64	1.04	1.14
Fluoride (F)	mg/L	0.02	-	<0.020	<0.020	<0.020
Nitrate (as N)	mg/L	0.02	-	0.032	0.051	0.055
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.36	<0.15	<0.15
Phosphorus, Total	mg/L	0.003	-	0.0068	0.0038	0.0032
Sulfate (SO4)	mg/L	0.3	-	3.03	4.17	4.19
Dissolved Organic Carbon	mg/L	0.5	-	2.31	1.82	1.95
Total Organic Carbon	mg/L	0.5	-	2.96	2.14	2.09
Aluminum (Al)-Total	mg/L	0.005	-	0.0275	0.0212	0.0176
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	<0.00010
Cadmium (Cd)-Total	mg/L	0.000005	-	<0.0000050	0.0000052	<0.0000050
Calcium (Ca)-Total	mg/L	0.5	-	12	14	13.80
Copper (Cu)-Total	mg/L	0.001	0.3	0.0028	0.0024	0.0024
Iron (Fe)-Total	mg/L	0.01	-	<0.050	<0.050	<0.050
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000065	<0.000050	<0.000050
Magnesium (Mg)-Total	mg/L	0.05	-	7.69	8.32	8.93
Manganese (Mn)-Total	mg/L	0.0005	-	0.00102	0.00062	0.00069
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000884	0.000842	0.001030
Nickel (Ni)-Total	mg/L	0.0005	0.5	<0.00050	<0.00050	<0.00050
Potassium (K)-Total	mg/L	0.05	-	1.95	1.82	2.23
Selenium (Se)-Total	mg/L	0.00005	-	0.000054	<0.000050	0.000072
Sodium (Na)-Total	mg/L	0.05	-	0.516	0.554	0.623
Thallium (Tl)-Total	mg/L	0.00001	-	0.000011	0.000016	0.000015
Uranium (U)-Total	mg/L	0.00001	-	0.00231	0.00296	0.00391
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0091	0.0105	0.0088
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	12.3	12.9	14.50
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00259	0.00237	0.00235
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	7.35	8.54	9.12
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00056	<0.00050	0.00065
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000775	0.000797	0.001090
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	<0.00050	<0.00050
Potassium (K)-Dissolved	mg/L	0.05	-	2.08	2.01	2.19
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000055	0.000066	<0.000050
Sodium (Na)-Dissolved	mg/L	0.5	-	0.52	0.57	0.61
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000014	0.000011	0.000015
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00217	0.00275	0.003560
Zinc (Zn)-Dissolved	mg/L	0.001	-	<0.0010	<0.0010	<0.0010
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	Not Acutely Toxic

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-9
	ALS Laboratory Sample ID			L2328316-11	L2333390-1	L2335474-13
	Sample Date & Time			8/11/2019 14:15	8/18/2019 12:05	8/25/2019 14:05
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	-	81.5	-
pH	pH units	0.1	6.0 - 9.5	8.06	8.04	8.13
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	86	99	97
Turbidity	NTU	0.1	-	0.47	0.19	0.23
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	80	-
Ammonia, Total (as N)	mg/L	0.01	-	-	<0.010	-
Chloride (Cl)	mg/L	0.5	-	-	1.87	-
Fluoride (F)	mg/L	0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.093	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	0.22	-
Phosphorus, Total	mg/L	0.003	-	-	0.0075	-
Sulfate (SO4)	mg/L	0.3	-	-	7.35	-
Dissolved Organic Carbon	mg/L	0.5	-	-	1.72	-
Total Organic Carbon	mg/L	0.5	-	-	2.11	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0154	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.5	-	-	15.7	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0022	-
Iron (Fe)-Total	mg/L	0.01	-	-	<0.050	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	10.1	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00089	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00142	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	<0.00050	-
Potassium (K)-Total	mg/L	0.05	-	-	2.57	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000112	-
Sodium (Na)-Total	mg/L	0.05	-	-	0.735	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000015	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.00647	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0077	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	15.9	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00213	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	10.1	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.00069	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00137	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	2.56	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.000114	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	0.75	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	0.000013	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.00613	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	<0.0010	-
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-9	MS-MRY-901	MS-MRY-9
	ALS Laboratory Sample ID			L2340254-1	L2340254-2	L2343852-1
	Sample Date & Time			9/1/2019 9:10	9/1/2019 9:10	9/8/2019 9:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	102	101	-
pH	pH units	0.1	6.0 - 9.5	8.07	8.06	8.07
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	114	97	140
Turbidity	NTU	0.1	-	0.39	0.29	0.18
Alkalinity, Total (as CaCO3)	mg/L	10	-	90	90	-
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	<0.010	-
Chloride (Cl)	mg/L	0.5	-	3.33	3.32	-
Fluoride (F)	mg/L	0.02	-	<0.020	<0.020	-
Nitrate (as N)	mg/L	0.02	-	0.139	0.128	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.18	<0.15	-
Phosphorus, Total	mg/L	0.003	-	0.0044	0.0036	-
Sulfate (SO4)	mg/L	0.3	-	9.30	9.30	-
Dissolved Organic Carbon	mg/L	0.5	-	1.93	1.64	-
Total Organic Carbon	mg/L	0.5	-	3.66	2.03	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0131	0.0154	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	<0.0000050	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.5	-	18.8	18.6	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0019	0.002	-
Iron (Fe)-Total	mg/L	0.01	-	<0.050	<0.050	-
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	12.3	12.3	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.00071	0.00075	-
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00152	0.00151	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	<0.00050	<0.00050	-
Potassium (K)-Total	mg/L	0.05	-	2.57	2.59	-
Selenium (Se)-Total	mg/L	0.00005	-	0.00013	0.000125	-
Sodium (Na)-Total	mg/L	0.05	-	0.858	0.859	-
Thallium (Tl)-Total	mg/L	0.00001	-	0.000016	0.000015	-
Uranium (U)-Total	mg/L	0.00001	-	0.00954	0.0094	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0105	0.0065	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	20.1	19.5	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.002	0.00195	-
Iron (Fe)-Dissolved	mg/L	0.01	-	<0.010	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	12.7	12.6	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00071	0.00056	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00143	0.00143	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	2.72	2.58	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00017	0.000197	-
Sodium (Na)-Dissolved	mg/L	0.5	-	0.88	0.88	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	0.000015	0.000015	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.0089	0.00948	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.001	<0.0010	-
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-901	MS-MRY-9	MS-MRY-9
	ALS Laboratory Sample ID			L2343852-2	L2348232-5	L2353430-1
	Sample Date & Time			9/8/2019 9:00	9/15/2019 16:35	9/22/2019 11:00
	QA/QC Sample Type			Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	-	114	-
pH	pH units	0.1	6.0 - 9.5	8.05	8.17	8.16
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	2.0
Total Dissolved Solids	mg/L	20	-	147	137	119
Turbidity	NTU	0.1	-	0.2	0.18	0.23
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	113	-
Ammonia, Total (as N)	mg/L	0.01	-	-	<0.010	-
Chloride (Cl)	mg/L	0.5	-	-	4.94	-
Fluoride (F)	mg/L	0.02	-	-	<0.020	-
Nitrate (as N)	mg/L	0.02	-	-	0.128	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	<0.15	-
Phosphorus, Total	mg/L	0.003	-	-	0.0057	-
Sulfate (SO4)	mg/L	0.3	-	-	12.5	-
Dissolved Organic Carbon	mg/L	0.5	-	-	3.03	-
Total Organic Carbon	mg/L	0.5	-	-	2.64	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0119	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	-	0.0000055	-
Calcium (Ca)-Total	mg/L	0.5	-	-	21.6	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.002	-
Iron (Fe)-Total	mg/L	0.01	-	-	0.012	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	14.5	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00078	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00207	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	<0.00050	-
Potassium (K)-Total	mg/L	0.05	-	-	2.9	-
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000168	-
Sodium (Na)-Total	mg/L	0.05	-	-	0.989	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.000017	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.0156	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.005	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	<0.000010	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	22.1	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00182	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	14.4	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00202	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	2.86	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.000223	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	0.97	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	0.000016	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.0146	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	<0.0010	-
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.17: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-9	MS-MRY-901	MS-MRY-9
	ALS Laboratory Sample ID			L2357435-1	L2357435-2	L2359622-1
	Sample Date & Time			9/30/2019 14:40	9/30/2019 14:40	10/3/2019 17:20
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]			
Hardness	mg/L	0.5	-	-	-	87.6
pH	pH units	0.1	6.0 - 9.5	8.01	8.02	8.13
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	87	70	100
Turbidity	NTU	0.1	-	0.33	0.39	0.34
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	82
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010
Chloride (Cl)	mg/L	0.5	-	-	-	3.02
Fluoride (F)	mg/L	0.02	-	-	-	0.024
Nitrate (as N)	mg/L	0.02	-	-	-	0.142
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	<0.15
Phosphorus, Total	mg/L	0.003	-	-	-	0.0045
Sulfate (SO4)	mg/L	0.3	-	-	-	6.76
Dissolved Organic Carbon	mg/L	0.5	-	-	-	1.71
Total Organic Carbon	mg/L	0.5	-	-	-	1.91
Aluminum (Al)-Total	mg/L	0.005	-	-	-	0.0249
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	<0.00010
Cadmium (Cd)-Total	mg/L	0.000005	-	-	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.5	-	-	-	16
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	0.0023
Iron (Fe)-Total	mg/L	0.01	-	-	-	0.027
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	<0.000050
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	10.9
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	0.00072
Mercury (Hg)-Total	mg/L	0.000005	-	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	0.00164
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	<0.00050
Potassium (K)-Total	mg/L	0.05	-	-	-	2.39
Selenium (Se)-Total	mg/L	0.00005	-	-	-	0.000106
Sodium (Na)-Total	mg/L	0.05	-	-	-	0.832
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	0.000012
Uranium (U)-Total	mg/L	0.00001	-	-	-	0.00855
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	0.0074
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	<0.00010
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	<0.000010
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	16.9
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	0.00213
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	11
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	<0.00050
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	0.00145
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	<0.00050
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	2.24
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	0.000136
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	0.76
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	0.000013
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	0.00782
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	<0.0010
Acute Lethality[2,3]	-	-	Not acutely toxic	-	-	-

Notes:

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.18: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2276031-11	L2275986-12	L2282031-2	L2283686-1	L2293069-8	L2299117-15	L2303454-8	L2311077-16
	Sample Date & Time			2019-05-15 16:10	2019-05-20 14:10	2019-05-27 10:00	2019-06-02 9:20	2019-06-17 11:50	2019-06-23 13:15	2019-06-30 15:15	2019-07-16 11:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]								
Conductivity	umhos/cm	3	-	165	-	248	-	-	329	-	476
pH	pH units	0.1	6.0 - 9.5	7.84	8.06	8.01	8.06	8.35	8.14	8.14	8.09
Total Suspended Solids	mg/L	2	15	2.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	108	129	134	205	185	188	206	297
Turbidity	NTU	0.1	-	-	0.85	-	0.33	0.43	-	0.55	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	75	-	99	-	-	144	-	178
Dissolved Organic Carbon	mg/L	1	-	3.11	-	3.63	-	-	6.16	-	4.82
Total Organic Carbon	mg/L	1	-	3.45	-	4.24	-	-	6.49	-	5.25
Aluminum (Al)-Total	mg/L	0.005	-	0.108	-	0.0073	-	-	0.0064	-	0.0066
Antimony (Sb)-Total	mg/L	0.0001	-	0.00024	-	0.00014	-	-	<0.00010	-	0.00019
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00016	-	0.00011	-	-	0.00015	-	0.0002
Barium (Ba)-Total	mg/L	0.0002	-	0.0123	-	0.0146	-	-	0.0195	-	0.0307
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	<0.00010	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-	<0.000050	-	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.04	-	0.022	-	-	0.022	-	0.029
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000077	-	<0.0000050	-	-	<0.0000050	-	0.0000072
Calcium (Ca)-Total	mg/L	0.5	-	14.9	-	21.1	-	-	29.8	-	41.9
Chromium (Cr)-Total	mg/L	0.0005	-	0.00053	-	<0.00050	-	-	<0.00050	-	<0.00050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0001	-	<0.00010	-	-	<0.00010	-	<0.00010
Copper (Cu)-Total	mg/L	0.001	0.3	0.0013	-	0.0011	-	-	0.0012	-	0.0014
Iron (Fe)-Total	mg/L	0.05	-	0.143	-	<0.010	-	-	0.012	-	0.014
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000104	-	<0.000050	-	-	<0.000050	-	<0.000050
Lithium (Li)-Total	mg/L	0.001	-	0.0018	-	0.0018	-	-	0.0026	-	0.0029
Magnesium (Mg)-Total	mg/L	0.05	-	10.2	-	14.9	-	-	21.9	-	32.2
Manganese (Mn)-Total	mg/L	0.0005	-	0.00261	-	0.00061	-	-	0.0015	-	0.00405
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-	<0.000010	-	<0.000010
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000699	-	0.00051	-	-	0.000438	-	0.000346
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00648	-	0.00642	-	-	0.00834	-	0.00954
Potassium (K)-Total	mg/L	0.05	-	1.77	-	1.74	-	-	1.72	-	1.66
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-	<0.000050	-	0.000056
Silicon (Si)-Total	mg/L	0.1	-	1.87	-	2.21	-	-	3.33	-	4.54
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	-	-	<0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	1.8	-	2.97	-	-	4.59	-	7.36
Strontium (Sr)-Total	mg/L	0.001	-	0.0142	-	0.018	-	-	0.0267	-	0.0343
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	-	-	<0.000010	-	0.000013
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	-	-	<0.00010	-	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	0.00391	-	<0.00030	-	-	<0.00030	-	<0.00030
Tungsten (W)-Total	mg/L	0.0001	-	0.00012	-	<0.00010	-	-	<0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.00016	-	0.000321	-	-	0.000839	-	0.00106
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	-	-	<0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	0.0042	-	<0.0030	-	-	<0.0030	-	0.0041
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	<0.00030	-	-	<0.00030	-	<0.00030
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen	-	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	0.0021	-	<0.0010	-	-	<0.0010	-	0.0029
F1 (C6-C10)	ug/L	100	-	<100	-	<100	-	-	<100	-	<100
F2 (C10-C16)	ug/L	100	-	<100	-	<100	-	-	<100	-	<100
F3 (C16-C34)	ug/L	250	-	<250	-	<250	-	-	<250	-	<250
F4 (C34-C50)	ug/L	250	-	<250	-	<250	-	-	<250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	<380	-	-	<380	-	<380

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7.

Table 7.1.19: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2276031-10	L2275986-11	L2282031-1	L2299117-14	L2303454-7	L2305271-7	L2314537-12	L2321730-5	L2323293-13
	Sample Date & Time			2019-05-15 15:30	2019-05-20 13:45	2019-05-27 9:15	2019-06-23 12:35	2019-06-30 14:55	2019-07-07 10:35	2019-07-21 9:50	2019-07-31 10:15	2019-08-06 9:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]									
Conductivity	umhos/cm	3	-	359	-	303	543	-	725	1090	-	1300
pH	pH units	0.1	6.0 - 9.5	8.1	8.23	8.05	8.19	8.38	8.23	8.12	8.17	8.11
Total Suspended Solids	mg/L	2	15	2.5	<2.0	<2.0	<2.0	2.4	<2.0	6.4	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	263	135	187	408	351	402	707	746	838
Turbidity	NTU	0.1	-	-	0.68	-	-	0.67	0.48	-	0.42	0.51
Alkalinity, Total (as CaCO3)	mg/L	10	-	91	-	91	128	-	155	153	-	147
Dissolved Organic Carbon	mg/L	1	-	4.32	-	3.73	6.39	-	5.98	5.46	-	4.52
Total Organic Carbon	mg/L	1	-	4.84	-	4.58	6.65	-	6.64	5.3	-	4.75
Aluminum (Al)-Total	mg/L	0.005	-	0.0238	-	0.0077	0.0182	-	0.0216	0.0054	-	0.0093
Antimony (Sb)-Total	mg/L	0.0001	-	0.00015	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010
Arsenic (As)-Total	mg/L	0.0001	0.5	0.00018	-	0.00013	0.00016	-	0.00016	0.00015	-	0.00016
Barium (Ba)-Total	mg/L	0.0002	-	0.0242	-	0.0176	0.0311	-	0.051	0.0798	-	0.103
Beryllium (Be)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	<0.000050	-	<0.000050	<0.000050	-	<0.000050
Boron (B)-Total	mg/L	0.01	-	0.041	-	0.019	0.066	-	0.088	0.107	-	0.192
Cadmium (Cd)-Total	mg/L	0.00001	-	0.0000085	-	<0.0000050	0.0000055	-	0.000008	0.0000076	-	0.0000116
Calcium (Ca)-Total	mg/L	0.5	-	32.2	-	28.3	52	-	71.3	113	-	142
Chromium (Cr)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	<0.00050	-	<0.00050	<0.00050	-	0.00059
Cobalt (Co)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010
Copper (Cu)-Total	mg/L	0.001	0.3	0.0015	-	0.0012	0.0014	-	0.0016	0.0019	-	0.0015
Iron (Fe)-Total	mg/L	0.05	-	0.046	-	0.014	0.02	-	0.048	0.021	-	0.029
Lead (Pb)-Total	mg/L	0.00005	0.2	<0.000050	-	<0.000050	<0.000050	-	<0.000050	<0.000050	-	<0.000050
Lithium (Li)-Total	mg/L	0.001	-	0.0064	-	0.0044	0.0133	-	0.019	0.0255	-	0.0444
Magnesium (Mg)-Total	mg/L	0.05	-	17.9	-	17.5	26.2	-	35.5	48.3	-	54.7
Manganese (Mn)-Total	mg/L	0.0005	-	0.00122	-	0.00055	0.0006	-	0.00137	0.00088	-	0.00098
Mercury (Hg)-Total	mg/L	0.00001	-	<0.000010	-	<0.000010	<0.000010	-	<0.000010	<0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000529	-	0.000336	0.00032	-	0.000287	0.000247	-	0.000236
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00735	-	0.00684	0.00788	-	0.00898	0.00933	-	0.00883
Potassium (K)-Total	mg/L	0.05	-	1.81	-	1.35	1.65	-	1.99	2.44	-	3.05
Selenium (Se)-Total	mg/L	0.00005	-	0.000052	-	<0.000050	0.000051	-	0.000086	0.000066	-	0.000076
Silicon (Si)-Total	mg/L	0.1	-	2.06	-	2.54	3.29	-	4.76	4.36	-	4.74
Silver (Ag)-Total	mg/L	0.00005	-	<0.000050	-	<0.000050	<0.000050	-	<0.000050	<0.000050	-	<0.000050
Sodium (Na)-Total	mg/L	0.5	-	5.31	-	4.78	10	-	14.5	18.7	-	26.3
Strontium (Sr)-Total	mg/L	0.001	-	0.0344	-	0.0263	0.0561	-	0.0786	0.145	-	0.189
Thallium (Tl)-Total	mg/L	0.00001	-	0.000014	-	<0.000010	<0.000010	-	0.000015	0.000013	-	0.000018
Tin (Sn)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010
Titanium (Ti)-Total	mg/L	0.0003	-	0.00115	-	2019-05-15 15:30	0.00056	-	0.00096	<0.00030	-	0.00031
Tungsten (W)-Total	mg/L	0.0001	-	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010
Uranium (U)-Total	mg/L	0.00001	-	0.000638	-	0.000609	0.00189	-	0.00192	0.00332	-	0.00351
Vanadium (V)-Total	mg/L	0.0005	-	<0.00050	-	<0.00050	<0.00050	-	<0.00050	<0.00050	-	<0.00050
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	-	<0.0030	<0.0030	-	<0.0030	<0.0030	-	<0.0030
Zirconium (Zr)-Total	mg/L	0.0003	-	<0.00030	-	<0.00030	<0.00030	-	<0.00030	<0.00030	-	<0.00030
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	0.002	-	<0.0010	<0.0010	-	0.0017	0.0013	-	<0.0010
F1 (C6-C10)	ug/L	100	-	<100	-	<100	<100	-	<100	<100	-	<100
F2 (C10-C16)	ug/L	100	-	<100	-	<100	<100	-	<100	<100	-	<100
F3 (C16-C34)	ug/L	250	-	<250	-	<250	<250	-	<250	<250	-	<250
F4 (C34-C50)	ug/L	250	-	<250	-	<250	<250	-	<250	<250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	<380	<380	-	<380	<380	-	<380

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7.

Table 7.1.19: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2328316-15	L2333390-3	L2335474-3	L2340254-8	L2343852-6	L2348232-7	L2353430-3	L2357435-8	L2359622-8
	Sample Date & Time			2019-08-11 16:10	2019-08-18 10:10	2019-08-25 10:20	2019-09-02 9:50	2019-09-09 11:20	2019-09-16 13:20	2019-09-22 12:50	2019-09-30 13:35	2019-10-03 9:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]									
Conductivity	umhos/cm	3	-	-	1410	-	1970	-	1670	-	-	1430
pH	pH units	0.1	6.0 - 9.5	8.16	8.03	8	7.94	7.96	7.86	7.89	7.99	8.08
Total Suspended Solids	mg/L	2	15	<2.0	<2.0	<2.0	<2.0	6.7	<2.0	<2.0	2.8	<2.0
Total Dissolved Solids	mg/L	10	-	1260	1050	1180	1120	1070	1110	748	892	899
Turbidity	NTU	0.1	-	0.3	-	0.26	-	0.8	-	0.23	0.23	0.18
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	160	-	192	-	218	-	-	234
Dissolved Organic Carbon	mg/L	1	-	-	4.5	-	6.56	-	8.72	-	-	6.09
Total Organic Carbon	mg/L	1	-	-	4.53	-	6.42	-	8.15	-	-	7.45
Aluminum (Al)-Total	mg/L	0.005	-	-	<0.0050	-	<0.050	-	<0.050	-	-	<0.050
Antimony (Sb)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.0010	-	<0.0010	-	-	<0.0010
Arsenic (As)-Total	mg/L	0.0001	0.5	-	0.00016	-	<0.0010	-	<0.0010	-	-	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	-	0.104	-	0.157	-	0.135	-	-	0.0894
Beryllium (Be)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.0010	-	<0.0010	-	-	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005	-	-	<0.000050	-	<0.00050	-	<0.00050	-	-	<0.00050
Boron (B)-Total	mg/L	0.01	-	-	0.335	-	1.14	-	3.83	-	-	2.69
Cadmium (Cd)-Total	mg/L	0.00001	-	-	0.000011	-	<0.000050	-	<0.000050	-	-	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	-	147	-	219	-	204	-	-	152
Chromium (Cr)-Total	mg/L	0.0005	-	-	<0.00050	-	<0.0050	-	<0.0050	-	-	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	-	0.0001	-	<0.0010	-	<0.0010	-	-	<0.0010
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0012	-	<0.010	-	<0.010	-	-	<0.010
Iron (Fe)-Total	mg/L	0.05	-	-	0.026	-	<0.10	-	<0.10	-	-	<0.10
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	-	<0.00050	-	<0.00050	-	-	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	-	0.0559	-	0.074	-	0.066	-	-	0.034
Magnesium (Mg)-Total	mg/L	0.05	-	-	52.9	-	65.4	-	61.5	-	-	58.3
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00136	-	<0.0050	-	<0.0050	-	-	<0.0050
Mercury (Hg)-Total	mg/L	0.00001	-	-	<0.0000050	-	<0.0000050	-	<0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.000295	-	<0.00050	-	0.00076	-	-	0.00074
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00852	-	0.0112	-	0.0121	-	-	0.013
Potassium (K)-Total	mg/L	0.05	-	-	3.17	-	4.13	-	4.22	-	-	4.21
Selenium (Se)-Total	mg/L	0.00005	-	-	0.000087	-	<0.00050	-	<0.00050	-	-	<0.00050
Silicon (Si)-Total	mg/L	0.1	-	-	4.67	-	4.5	-	4.8	-	-	5
Silver (Ag)-Total	mg/L	0.00005	-	-	<0.000050	-	<0.00050	-	<0.00050	-	-	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	-	28.1	-	36.8	-	40.3	-	-	30.9
Strontium (Sr)-Total	mg/L	0.001	-	-	0.208	-	0.396	-	0.478	-	-	0.319
Thallium (Tl)-Total	mg/L	0.00001	-	-	0.00002	-	<0.00010	-	<0.00010	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.0010	-	<0.0010	-	-	<0.0010
Titanium (Ti)-Total	mg/L	0.0003	-	-	<0.00030	-	<0.0030	-	<0.0030	-	-	<0.0030
Tungsten (W)-Total	mg/L	0.0001	-	-	<0.00010	-	<0.0010	-	<0.0010	-	-	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	-	0.00555	-	0.0183	-	0.0273	-	-	0.0195
Vanadium (V)-Total	mg/L	0.0005	-	-	<0.00050	-	<0.0050	-	<0.0050	-	-	<0.0050
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-	<0.030	-	<0.030	-	-	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.00030	-	<0.0020	-	<0.0020	-	-	<0.0020
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	<0.0010	-	0.0023	-	<0.0010	-	-	0.0032
F1 (C6-C10)	ug/L	100	-	-	<100	-	<100	-	<100	-	-	<100
F2 (C10-C16)	ug/L	100	-	-	<100	-	<100	-	<100	-	-	<100
F3 (C16-C34)	ug/L	250	-	-	<250	-	<250	-	<250	-	-	<250
F4 (C34-C50)	ug/L	250	-	-	<250	-	<250	-	<250	-	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380	-	<380	-	<380	-	-	<380

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7.

Table 7.1.20: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A01
	ALS Laboratory Sample ID			L2276031-4	L2275986-4	L2282031-8	L2283686-11	L2289720-6	L2289720-7
	Sample Date & Time			2019-05-15 10:10	2019-05-20 9:40	2019-05-27 14:15	2019-06-02 14:15	2019-06-09 14:15	2019-06-09 14:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	76.7	-	96	-	113	114
pH	pH units	0.1	6.0 - 9.5	7.27	7.66	7.73	7.79	7.83	7.8
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4.1	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	61	29	64	68	62	62
Turbidity	NTU	0.1	-	30.1	15.2	7.55	5.9	3.46	2.77
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	0.017	-	0.014	<0.010
Nitrate (as N)	mg/L	0.02	-	0.091	-	0.045	-	0.077	0.077
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.1.20: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A01	MS-C-A	MS-C-A01	MS-C-A	MS-C-A01
	ALS Laboratory Sample ID			L2293069-9	L2293069-10	L2299117-3	L2299117-4	L2303454-9	L2303454-10
	Sample Date & Time			2019-06-17 12:30	2019-06-17 12:30	2019-06-23 12:40	2019-06-23 12:40	2019-06-30 16:25	2019-06-30 16:25
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Field Duplicate	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	-	152	152	-	-
pH	pH units	0.1	6.0 - 9.5	7.81	7.81	7.96	7.59	7.86	7.86
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	87	75	90	93	89	73
Turbidity	NTU	0.1	-	3.3	3.24	1.47	1.55	0.74	0.75
Ammonia, Total (as N)	mg/L	0.02	-	-	-	0.047	<0.010	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.127	0.124	-	-
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	<2.0	-	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.1.20: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2305271-10	L2311077-4	L2314537-13	L2321730-12	L2323293-7	L2328316-7
	Sample Date & Time			2019-07-07 10:40	2019-07-15 15:15	2019-07-21 11:20	2019-07-31 13:50	2019-08-05 12:35	2019-08-11 10:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	173	-	174	-	199	-
pH	pH units	0.1	6.0 - 9.5	7.87	7.91	7.97	8.07	7.91	7.99
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<10	<2.0	<2.0	2.4	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	113	102	86	108	109	156
Turbidity	NTU	0.1	-	0.49	2.22	0.58	1.34	0.54	0.29
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	<.010	-	<.010	-
Nitrate (as N)	mg/L	0.02	-	0.149	-	0.109	-	0.159	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.1.20: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2333390-12	L2335474-6	L2340254-9	L2343852-12	L2348232-9	L2353430-9
	Sample Date & Time			2019-08-18 15:30	2019-08-25 11:25	2019-09-02 12:00	2019-09-09 8:15	2019-09-16 9:50	2019-09-23 8:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	223	-	258	-	274	-
pH	pH units	0.1	6.0 - 9.5	7.97	7.97	7.96	7.9	7.94	8.01
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	136	126	156	201	185	146
Turbidity	NTU	0.1	-	0.32	0.4	0.3	0.32	0.25	0.23
Ammonia, Total (as N)	mg/L	0.02	-	<.010	-	0.013	-	0.012	-
Nitrate (as N)	mg/L	0.02	-	0.209	-	0.306	-	0.321	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.1.20: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A01	MS-C-A
	ALS Laboratory Sample ID			L2357435-9	L2357435-15	L2359622-9
	Sample Date & Time			2019-09-30 14:10	2019-09-30 14:10	2019-10-03 10:30
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	-	233
pH	pH units	0.1	6.0 - 9.5	7.95	7.95	8.04
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	124	133	144
Turbidity	NTU	0.1	-	0.41	0.37	0.36
Ammonia, Total (as N)	mg/L	0.02	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	0.29
Oil and Grease, Total	mg/L	2	-	-	-	<2.0
	-	-	No Visible Sheen	-	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.1.21: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2276031-5	L2275986-6	L2282031-9	L2283686-12	L2289720-9	L2293069-11
	Sample Date & Time			2019-05-15 10:45	2019-05-20 10:25	2019-05-27 14:45	2019-06-02 14:45	2019-06-10 9:15	2019-06-17 13:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	75.1	-	101	-	145	-
pH	pH units	0.1	6.0 - 9.5	7.41	7.59	7.57	7.34	7.64	7.77
Total Suspended Solids	mg/L	2	Grab 30, Average 15	3.5	2	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	60	41	68	73	74	74
Turbidity	NTU	0.1	-	29.2	16.1	4.62	2.32	7.16	3.53
Ammonia, Total (as N)	mg/L	0.02	-	0.013	-	0.033	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	0.088	-	0.037	-	0.116	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.21: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2299117-5	L2303454-11	L2305271-11	L2311077-5	L2314537-9	L2321730-13
	Sample Date & Time			2019-06-23 13:20	2019-06-30 17:00	2019-07-07 11:10	2019-07-15 14:40	2019-07-21 11:50	2019-07-31 14:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	159	-	179	-	177	-
pH	pH units	0.1	6.0 - 9.5	7.94	7.77	7.74	7.91	7.94	8.04
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	98	81	115	94	100	114
Turbidity	NTU	0.1	-	2.06	0.91	0.56	2.75	0.74	0.41
Ammonia, Total (as N)	mg/L	0.02	-	0.024	-	<.010	-	0.011	-
Nitrate (as N)	mg/L	0.02	-	0.146	-	0.178	-	0.129	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.21: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2323293-8	L2328316-8	L2333390-13	L2335474-7	L2340254-10	L2343852-13
	Sample Date & Time			2019-08-05 12:50	2019-08-11 10:40	2019-08-18 16:00	2019-08-25 11:50	2019-09-02 12:25	2019-09-09 8:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	203	-	233	-	269	-
pH	pH units	0.1	6.0 - 9.5	7.87	7.94	7.89	7.83	7.85	7.79
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	2.9
Total Dissolved Solids	mg/L	10	-	107	129	135	136	170	206
Turbidity	NTU	0.1	-	0.35	0.34	0.4	0.5	0.36	0.32
Ammonia, Total (as N)	mg/L	0.02	-	<.010	-	<0.010	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	0.185	-	0.278	-	0.369	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.21: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B01	MS-C-B	MS-C-B01	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2348232-10	L2348232-11	L2353430-10	L2353430-11	L2357435-10	L2359622-10
	Sample Date & Time			2019-09-16 10:20	2019-09-16 10:20	2019-09-23 8:55	2019-09-23 8:55	2019-09-30 14:40	2019-10-03 11:30
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	290	287	-	-	-	240
pH	pH units	0.1	6.0 - 9.5	7.8	7.78	7.93	7.92	7.89	7.72
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	184	193	169	139	132	139
Turbidity	NTU	0.1	-	0.33	0.31	0.29	0.29	0.39	0.47
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	<0.010	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	0.402	0.402	-	-	-	0.334
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	-	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.22: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2276031-9	L2275986-10	L2282031-12	L2293069-18	L2299117-10	L2303454-6
	Sample Date & Time			2019-05-15 14:00	2019-05-20 13:00	2019-05-27 16:20	2019-06-16 15:10	2019-06-23 14:55	2019-06-30 13:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	636	-	910	-	1860	-
pH	pH units	0.1	6.0 - 9.5	7.82	7.63	7.75	7.7	7.88	7.48
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.3	8.4	5.2	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	423	559	642	830	1500	1400
Turbidity	NTU	0.1	-	1.31	4.31	5.39	0.5	0.73	0.39
Ammonia, Total (as N)	mg/L	0.02	-	0.238	-	0.021	-	0.743	-
Nitrate (as N)	mg/L	0.02	-	1.05	-	2.1	-	20.9	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.22: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2305271-9	L2311077-14	L2314537-2	L2321730-8	L2323293-6	L2328316-6
	Sample Date & Time			2019-07-07 12:30	2019-07-16 14:00	2019-07-21 13:45	2019-07-31 11:30	2019-08-05 10:55	2019-08-11 9:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	1530	-	1320	-	1190	-
pH	pH units	0.1	6.0 - 9.5	7.71	7.88	7.98	8.06	7.91	8.02
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	1180	909	962	896	840	991
Turbidity	NTU	0.1	-	0.32	0.58	0.54	0.31	0.66	0.37
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	0.047	-	<.010	-
Nitrate (as N)	mg/L	0.02	-	11.8	-	11.9	-	11.7	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.22: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2333390-11	L2335474-10	L2340254-7	L2357435-7	L2359622-7
	Sample Date & Time			2019-08-18 14:50	2019-08-25 15:55	2019-09-02 11:35	2019-09-30 17:20	2019-10-03 13:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	1280	-	1390	1380	1410
pH	pH units	0.1	6.0 - 9.5	8.05	8.03	7.99	7.96	8.03
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	4.4	4.5
Total Dissolved Solids	mg/L	10	-	960	952	1030	1010	1020
Turbidity	NTU	0.1	-	0.37	0.2	0.58	0.5	3.7
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	<0.010	<0.010	<0.010
Nitrate (as N)	mg/L	0.02	-	14.4	-	16.7	13.2	14.7
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.23: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2276031-8	L2275986-9	L2293069-17	L2299117-9	L2303454-5	L2305271-8
	Sample Date & Time			2019-05-15 13:45	2019-05-20 12:40	2019-06-16 14:45	2019-06-23 14:40	2019-06-30 13:45	2019-07-07 12:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	323	-	-	1130	-	1460
pH	pH units	0.1	6.0 - 9.5	7.88	8.01	8.34	8.24	8.39	8.32
Total Suspended Solids	mg/L	2	Grab 30, Average 15	9.2	3.6	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	203	145	509	804	1040	1130
Turbidity	NTU	0.1	-	13.9	13.8	2.04	2.76	2.59	2.87
Ammonia, Total (as N)	mg/L	0.02	-	0.215	-	-	0.204	-	0.02
Nitrate (as N)	mg/L	0.02	-	0.589	-	-	10.4	-	11.4
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.23: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D01	MS-C-D
	ALS Laboratory Sample ID			L2311077-12	L2314537-8	L2321730-7	L2323293-4	L2323293-5	L2328316-5
	Sample Date & Time			2019-07-16 13:45	2019-07-21 13:30	2019-07-31 11:10	2019-08-05 10:25	2019-08-05 10:25	2019-08-11 9:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	1170	-	1130	1130	-
pH	pH units	0.1	6.0 - 9.5	8.21	8.37	8.38	8.26	8.26	8.3
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.8	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	830	814	814	780	785	890
Turbidity	NTU	0.1	-	7.07	3.73	2.88	1.29	1.37	2.05
Ammonia, Total (as N)	mg/L	0.02	-	-	0.025	-	0.018	0.012	-
Nitrate (as N)	mg/L	0.02	-	-	9.48	-	9.57	9.57	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	2.1	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.23: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2333390-10	L2335474-9	L2340254-6	L2343852-8	L2348232-3	L2353430-5
	Sample Date & Time			2019-08-18 14:30	2019-08-25 12:40	2019-09-02 11:20	2019-09-08 12:00	2019-09-15 15:10	2019-09-22 14:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	1150	-	1120	-	1100	-
pH	pH units	0.1	6.0 - 9.5	8.34	8.34	8.25	8.3	8.33	8.29
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	4.1	11.6	2	2.6	3.6
Total Dissolved Solids	mg/L	10	-	856	822	774	8.24	794	853
Turbidity	NTU	0.1	-	1.41	6.71	23.6	5.35	3.49	5.48
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	<0.010	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	9.49	-	10.7	-	9.41	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.23: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2357435-6	L2359622-6
	Sample Date & Time			2019-09-30 17:05	2019-10-03 13:10
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	-	1160
pH	pH units	0.1	6.0 - 9.5	8.12	8.17
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.8	<2.0
Total Dissolved Solids	mg/L	10	-	849	812
Turbidity	NTU	0.1	-	4.73	3.35
Ammonia, Total (as N)	mg/L	0.02	-	-	0.018
Nitrate (as N)	mg/L	0.02	-	-	11.7
Oil and Grease, Total	mg/L	2	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.24: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2276031-7	L2275986-8	L2282031-11	L2283686-10	L2289720-5	L2293069-16
	Sample Date & Time			2019-05-15 13:00	2019-05-20 12:20	2019-05-27 15:55	2019-06-02 13:40	2019-06-09 12:40	2019-06-16 14:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	233	-	371	-	879	-
pH	pH units	0.1	6.0 - 9.5	7.84	7.9	7.97	7.96	8.08	8.15
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	18.9	<2.0	<2.0	15.6	7.6	<2.0
Total Dissolved Solids	mg/L	10	-	145	159	231	446	631	430
Turbidity	NTU	0.1	-	27.3	1.17	3.74	3.61	3.64	0.57
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	-	<0.010	-	0.184	-
Nitrate (as N)	mg/L	0.02	-	0.494	-	0.793	-	0.844	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.24: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E03	MS-C-E
	ALS Laboratory Sample ID			L2299117-7	L2303454-4	L2305271-12	L2305271-13	L2311077-13
	Sample Date & Time			2019-06-23 14:20	2019-06-30 13:25	2019-07-07 11:50	2019-07-07 11:50	2019-07-16 13:20
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	832	-	1350	<3.0	-
pH	pH units	0.1	6.0 - 9.5	8.17	8.08	8.01	5.83	8.03
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	9.9	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	603	851	1020	<20	872
Turbidity	NTU	0.1	-	1.68	0.73	0.68	<0.10	0.92
Ammonia, Total (as N)	mg/L	0.02	-	0.033	-	<.010	<.010	-
Nitrate (as N)	mg/L	0.02	-	4.62	-	7.31	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.24: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2314537-7	L2321730-6	L2323293-3	L2328316-4	L2333390-9	L2335474-8
	Sample Date & Time			2019-07-21 13:00	2019-07-21 10:45	2019-08-05 9:55	2019-08-11 9:25	2019-08-18 14:00	2019-08-25 12:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	1170	-	1190	-	1270	-
pH	pH units	0.1	6.0 - 9.5	8.1	8.14	7.98	8.08	8.07	8.04
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	2	2	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	878	937	888	1020	999	908
Turbidity	NTU	0.1	-	0.61	0.48	1.57	0.43	0.32	1.1
Ammonia, Total (as N)	mg/L	0.02	-	<.010	-	<.010	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	6.12	-	7.15	-	8.95	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.24: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2340254-5	L2343852-7	L2348232-2	L2353430-4	L2357435-5	L2359622-5
	Sample Date & Time			2019-09-02 11:00	2019-09-08 11:50	2019-09-15 14:35	2019-09-22 14:25	2019-09-30 17:05	2019-10-03 12:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	1240	-	1170	-	-	1290
pH	pH units	0.1	6.0 - 9.5	7.94	7.9	7.81	7.95	7.85	7.95
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	4	4.2	<2.0	2.4	6.8	<2.0
Total Dissolved Solids	mg/L	10	-	885	920	869	875	965	972
Turbidity	NTU	0.1	-	0.96	1.04	0.55	1.1	1.11	0.41
Ammonia, Total (as N)	mg/L	0.02	-	<0.020	-	<0.010	-	-	0.013
Nitrate (as N)	mg/L	0.02	-	11.3	-	9.51	-	-	11.2
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.25: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2276031-6	L2275986-7	L2282031-10	L2283686-5	L2289720-1	L2293069-19
	Sample Date & Time			2019-05-15 11:30	2019-05-20 11:00	2019-05-27 15:25	2019-06-02 11:05	2019-06-09 10:00	2019-06-16 16:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	72.7	-	102	-	118	-
pH	pH units	0.1	6.0 - 9.5	7.46	7.65	7.68	7.73	7.76	7.81
Total Suspended Solids	mg/L	2	Grab 30, Average 15	8.2	3.2	<2.0	2	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	66	32	63	62	60	90
Turbidity	NTU	0.1	-	39.5	22.2	17.7	14	8.78	9.04
Ammonia, Total (as N)	mg/L	0.02	-	0.017	-	0.035	-	0.025	-
Nitrate (as N)	mg/L	0.02	-	0.088	-	0.058	-	0.061	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.25: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F01	MS-C-F	MS-C-F	MS-C-F	MS-C-F01	MS-C-F
	ALS Laboratory Sample ID			L2293069-20	L2299117-6	L2303454-12	L2305271-2	L2305271-3	L2311077-6
	Sample Date & Time			2019-06-16 16:05	2019-06-23 13:55	2019-06-30 17:25	2019-07-07 8:35	2019-07-07 8:35	2019-07-15 16:15
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	158	-	193	192	-
pH	pH units	0.1	6.0 - 9.5	7.8	7.98	8.03	8.1	8.1	7.94
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	100	97	74	120	110	96
Turbidity	NTU	0.1	-	9.44	6.81	3.62	3	3.26	5.28
Ammonia, Total (as N)	mg/L	0.02	-	-	0.022	-	<.010	0.012	-
Nitrate (as N)	mg/L	0.02	-	-	0.128	-	0.132	0.135	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.25: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F01	MS-C-F	MS-C-F01	MS-C-F	MS-C-F	MS-C-F01
	ALS Laboratory Sample ID			L2311077-7	L2314537-4	L2314537-5	L2321730-14	L2323293-9	L2323293-10
	Sample Date & Time			2019-07-15 16:15	2019-07-21 11:00	2019-07-21 11:00	2019-07-31 15:20	2019-08-05 13:25	2019-08-05 13:25
	QA/QC Sample Type			Field Duplicate	N/A	Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	177	177	-	205	206
pH	pH units	0.1	6.0 - 9.5	7.95	8.08	8.08	8.15	8.11	8.1
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	103	102	110	120	117	122
Turbidity	NTU	0.1	-	5.19	2.14	1.43	1.02	0.85	1.06
Ammonia, Total (as N)	mg/L	0.02	-	-	<.010	<.010	-	<.010	0.027
Nitrate (as N)	mg/L	0.02	-	-	0.144	0.147	-	0.185	0.18
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.25: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F01	MS-C-F	MS-C-F01	MS-C-F
	ALS Laboratory Sample ID			L2328316-9	L2333390-7	L2333390-8	L2335474-4	L2335474-5	L2340254-4
	Sample Date & Time			2019-08-11 11:10	2019-08-18 12:30	2019-08-18 12:30	2019-08-25 11:00	2019-08-25 11:00	2019-09-02 8:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	246	246	-	-	274
pH	pH units	0.1	6.0 - 9.5	8.13	8.09	8.09	8.2	8.19	8.12
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.7	<2.0	<2.0	2	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	121	151	151	158	145	140
Turbidity	NTU	0.1	-	2	0.7	0.72	1.2	1.46	0.73
Ammonia, Total (as N)	mg/L	0.02	-	-	<.010	<.010	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	0.263	0.259	-	-	0.356
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0	-	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.25: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F01	MS-C-F	MS-C-F	MS-C-F01
	ALS Laboratory Sample ID			L2343852-3	L2343852-4	L2357435-4	L2359622-4	L2359622-15
	Sample Date & Time			2019-09-08 10:25	2019-09-08 10:25	2019-09-30 15:30	2019-10-03 12:20	2019-10-03 12:20
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	-	-	228	236	236
pH	pH units	0.1	6.0 - 9.5	8.1	8.14	7.86	7.96	7.99
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	3.2	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	161	163	108	140	138
Turbidity	NTU	0.1	-	0.56	0.57	1.44	0.84	0.88
Ammonia, Total (as N)	mg/L	0.02	-	-	-	<0.010	<0.010	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	0.33	0.326	0.345
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.26: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G01	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2276031-12	L2275986-14	L2275986-15	L2282031-13	L2283686-2	L2289720-10
	Sample Date & Time			2019-05-15 16:15	2019-05-20 15:30	2019-05-20 15:30	2019-05-28 8:15	2019-06-02 9:50	2019-06-10 10:30
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	86.6	-	-	72.6	-	126
pH	pH units	0.1	6.0 - 9.5	7.56	7.66	7.66	7.58	7.65	7.74
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.2	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	59	48	28	57	43	62
Turbidity	NTU	0.1	-	7.12	7.12	6.99	4.68	3.6	2.17
Ammonia, Total (as N)	mg/L	0.02	-	0.027	-	-	<0.010	-	0.016
Nitrate (as N)	mg/L	0.02	-	0.086	-	-	0.059	-	0.161
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.26: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2293069-6	L2299117-2	L2303454-16	L2305271-4	L2311077-10	L2314537-10
	Sample Date & Time			2019-06-17 10:05	2019-06-23 10:40	2019-06-30 15:15	2019-07-07 9:10	2019-07-16 10:00	2019-07-21 8:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	167	-	207	-	261
pH	pH units	0.1	6.0 - 9.5	8.06	7.85	7.6	7.58	8.02	7.88
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	95	92	96	124	128	161
Turbidity	NTU	0.1	-	1.13	0.8	0.15	0.16	0.33	0.26
Ammonia, Total (as N)	mg/L	0.02	-	-	0.014	-	<.010	-	0.347
Nitrate (as N)	mg/L	0.02	-	-	0.312	-	2.47	-	9.34
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.26: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G01	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2321730-1	L2323293-11	L2328316-1	L2328316-2	L2333390-4	L2335474-1
	Sample Date & Time			2019-07-31 16:25	2019-08-05 14:20	2019-08-11 8:15	2019-08-11 8:15	2019-08-18 11:20	2019-08-25 8:30
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	283	-	-	319	-
pH	pH units	0.1	6.0 - 9.5	7.93	7.79	7.82	7.85	7.73	7.6
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	4.1
Total Dissolved Solids	mg/L	13	-	196	163	234	225	210	194
Turbidity	NTU	0.1	-	0.19	0.17	0.13	0.19	0.3	0.32
Ammonia, Total (as N)	mg/L	0.02	-	-	1.81	-	-	2.06	-
Nitrate (as N)	mg/L	0.02	-	-	10.8	-	-	12.5	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.26: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G01	MS-C-G
	ALS Laboratory Sample ID			L2340254-3	L2343852-5	L2348232-1	L2353430-6	L2353430-7	L2357435-3
	Sample Date & Time			2019-09-02 16:00	2019-09-08 10:40	2019-09-15 14:05	2019-09-22 15:20	2019-09-22 15:20	2019-09-30 15:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	262	-	255	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.7	7.74	7.51	7.95	7.9	7.78
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	137	149	159	126	115	116
Turbidity	NTU	0.1	-	0.21	0.16	0.22	0.16	0.18	0.31
Ammonia, Total (as N)	mg/L	0.02	-	1.05	-	549	-	-	-
Nitrate (as N)	mg/L	0.02	-	5.53	-	4.02	-	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.26: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2359622-2	L2361700-1
	Sample Date & Time			2019-10-03 8:15	2019-10-07 9:55
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	246	-
pH	pH units	0.1	6.0 - 9.5	7.89	8.04
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	137	136
Turbidity	NTU	0.1	-	0.31	0.25
Ammonia, Total (as N)	mg/L	0.02	-	0.227	-
Nitrate (as N)	mg/L	0.02	-	3.06	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.27: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H01	MS-C-H	MS-C-H	MS-C-H	MS-C-H01
	ALS Laboratory Sample ID			L2276031-13	L2276031-14	L2275986-13	L2282031-14	L2283686-3	L2283686-4
	Sample Date & Time			2019-05-15 17:20	2019-05-15 17:20	2019-05-20 15:00	2019-05-28 8:40	2019-06-02 10:20	2019-06-02 10:20
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	63.6	64.1	-	98	-	-
pH	pH units	0.1	6.0 - 9.5	7.56	7.58	7.75	7.73	7.77	7.76
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.3	2.1	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	51	44	59	52	80	60
Turbidity	NTU	0.1	-	7.39	7.66	3.11	4.87	3.2	3.26
Ammonia, Total (as N)	mg/L	0.02	-	0.04	0.019	-	0.01	-	-
Nitrate (as N)	mg/L	0.02	-	0.224	0.224	-	0.029	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.27: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2289720-11	L2293069-7	L2299117-1	L2303454-15	L2305271-5	L2311077-11
	Sample Date & Time			2019-06-10 11:10	2019-06-17 10:35	2019-06-23 10:00	2019-06-30 11:30	2019-07-07 9:40	2019-07-16 10:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	164	-	194	-	241	-
pH	pH units	0.1	6.0 - 9.5	7.77	7.9	8	7.81	7.8	8.16
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	78	97	109	119	135	143
Turbidity	NTU	0.1	-	1.37	0.63	0.66	0.42	0.38	0.46
Ammonia, Total (as N)	mg/L	0.02	-	0.026	-	<0.010	-	<.010	-
Nitrate (as N)	mg/L	0.02	-	0.19	-	0.055	-	0.053	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.27: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2314537-11	L2321730-2	L2321730-3	L2323293-12	L2328316-3
	Sample Date & Time			2019-07-21 9:05	2019-07-30 17:05	2019-07-30 17:05	2019-08-05 14:50	2019-08-11 8:45
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	247	-	-	250	-
pH	pH units	0.1	6.0 - 9.5	7.88	8.28	8.26	8.27	8.2
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	150	142	140	131	181
Turbidity	NTU	0.1	-	0.5	0.19	0.27	0.27	0.44
Ammonia, Total (as N)	mg/L	0.02	-	<.010	-	-	0.012	-
Nitrate (as N)	mg/L	0.02	-	0.022	-	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.27: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H01	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2333390-5	L2333390-6	L2335474-2	L2357435-14	L2359622-2
	Sample Date & Time			2019-08-18 11:55	2019-08-18 11:55	2019-08-25 9:45	2019-09-30 13:00	2019-10-03 8:55
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	266	265	-	254	262
pH	pH units	0.1	6.0 - 9.5	8.27	8.24	8.29	8.18	8.21
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	152	170	147	132	146
Turbidity	NTU	0.1	-	0.6	0.46	0.51	0.25	0.3
Ammonia, Total (as N)	mg/L	0.02	-	<0.010	<0.010	-	<0.010	<0.010
Nitrate (as N)	mg/L	0.02	-	<0.020	<0.020	-	0.047	0.044
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A
	ALS Laboratory Sample ID			L2274857-1	L2275986-2	L2282031-5	L2283686-6	L2283686-7	L2289720-2
	Sample Date & Time			2019-05-15 15:00	2019-05-20 8:40	2019-05-27 12:05	2019-06-02 11:35	2019-06-02 11:35	2019-06-09 11:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	62.7	-	86.6	-	-	75.2
pH	pH units	0.1	6.0 - 9.5	7.33	7.82	7.78	7.85	7.82	7.77
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4.2	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	45	40	48	63	65	38
Turbidity	NTU	0.1	-	31.3	2.64	1.33	5.76	5.54	21.7
Ammonia, Total (as N)	mg/L	0.02	-	0.012	-	<0.010	-	-	0.018
Nitrate (as N)	mg/L	0.02	-	0.044	-	<0.020	-	-	0.029
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01
	ALS Laboratory Sample ID			L2293069-13	L2299117-12	L2311077-1	L2311077-17	L2314537-13	L2314537-14
	Sample Date & Time			2019-06-17 17:05	2019-06-23 11:00	2019-07-15 14:15	2019-07-16 9:05	2019-07-21 14:10	2019-07-21 14:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	169	228	-	255	-	-
pH	pH units	0.1	6.0 - 9.5	8.12	8.2	8.19	8.18	8.28	8.27
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	92	132	147	171	172	163
Turbidity	NTU	0.1	-	0.71	0.89	0.5	0.43	0.36	0.36
Ammonia, Total (as N)	mg/L	0.02	-	0.022	0.146	-	<.010	-	-
Nitrate (as N)	mg/L	0.02	-	0.039	<0.020	-	<.020	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A01	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2321730-9	L2321730-10	L2323293-15	L2328316-13	L2333390-16	L2335474-11
	Sample Date & Time			2019-07-31 13:00	2019-07-31 13:00	2019-08-06 14:35	2019-08-11 15:15	2019-08-18 18:00	2019-08-25 14:05
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	-	312	-	356	-
pH	pH units	0.1	6.0 - 9.5	8.31	8.3	8.27	8.29	8.19	8.23
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	162	157	181	184	199	209
Turbidity	NTU	0.1	-	0.34	0.28	0.27	0.29	0.29	0.28
Ammonia, Total (as N)	mg/L	0.02	-	-	-	<0.010	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	-	-	<0.020	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	-	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A01	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A
	ALS Laboratory Sample ID			L2335474-12	L2340254-14	L2343852-10	L2348232-4	L2348232-12	L2353430-13
	Sample Date & Time			2019-08-25 14:05	2019-09-02 15:10	2019-09-08 13:50	2019-09-15 16:20	2019-09-15 16:20	2019-09-23 9:55
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	418	-	434	431	-
pH	pH units	0.1	6.0 - 9.5	8.22	8.13	8.18	8.22	8.22	8.22
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	208	256	269	245	280	218
Turbidity	NTU	0.1	-	0.21	0.18	0.16	0.16	0.14	0.12
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.010	-	<0.010	<0.010	-
Nitrate (as N)	mg/L	0.02	-	-	<0.020	-	<0.020	<0.020	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.28: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A01
	ALS Laboratory Sample ID			L2357435-13	L2359622-13	L2359622-14
	Sample Date & Time			2019-09-30 16:35	2019-10-03 8:35	2019-10-03 8:35
	QA/QC Sample Type			N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	390	392
pH	pH units	0.1	6.0 - 9.5	8.17	8.24	8.24
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	200	220	219
Turbidity	NTU	0.1	-	0.25	0.25	0.15
Ammonia, Total (as N)	mg/L	0.02	-	-	<0.010	<0.010
Nitrate (as N)	mg/L	0.02	-	-	0.027	0.026
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2276031-3	L2275986-3	L2282031-6	L2282031-7	L2283686-9	L2292257-1
	Sample Date & Time			2019-05-15 9:30	2019-05-20 9:05	2019-05-27 12:40	2019-05-27 12:40	2019-06-02 12:20	2019-06-13 15:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	86.4	-	112	112	-	280
pH	pH units	0.1	6.0 - 9.5	7.84	7.79	7.85	7.86	8.1	8
Total Suspended Solids	mg/L	2	Grab 30, Average 15	**130**	2.4	**78.4**	**50.2**	**93.2**	12.4
Total Dissolved Solids	mg/L	10	-	108	28	74	72	127	161
Turbidity	NTU	0.1	-	274	4.64	55.9	54.4	48	15.6
Ammonia, Total (as N)	mg/L	0.02	-	0.059	-	0.059	0.037	-	1.91
Nitrate (as N)	mg/L	0.02	-	0.181	-	0.345	0.361	-	6.23
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2293069-15	L2299117-13	L2303454-3	L2305271-6	L2311077-9	L2314537-1
	Sample Date & Time			2019-06-17 17:35	2019-06-23 11:30	2019-06-30 11:10	2019-07-07 9:45	2019-07-16 9:25	2019-07-21 14:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	279	-	927	-	441
pH	pH units	0.1	6.0 - 9.5	8.04	8.14	8.06	7.92	8.19	8.35
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4	9.1	4	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	321	177	415	547	206	244
Turbidity	NTU	0.1	-	8.19	28.2	6.43	3.51	1.65	1.01
Ammonia, Total (as N)	mg/L	0.02	-	-	0.733	-	3.9	-	0.776
Nitrate (as N)	mg/L	0.02	-	-	3.4	-	29.3	-	7.48
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2321730-11	L2323293-2	L2328316-16	L2333390-14	L2335474-16	L2340254-11
	Sample Date & Time			2019-07-31 13:20	2019-08-05 9:25	2019-08-11 16:45	2019-08-18 16:50	2018-08-25 14:45	2019-09-02 13:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	-	432	-	555	-	594
pH	pH units	0.1	6.0 - 9.5	8.43	8.2	8.39	8.3	8.34	8.23
Total Suspended Solids	mg/L	2	Grab 30, Average 15	2.4	3.6	<2.0	<2.0	2.4	<2.0
Total Dissolved Solids	mg/L	10	-	231	241	321	329	269	348
Turbidity	NTU	0.1	-	0.27	1.97	1.33	1.73	3.13	1.07
Ammonia, Total (as N)	mg/L	0.02	-	-	0.618	-	0.678	-	0.493
Nitrate (as N)	mg/L	0.02	-	-	5.98	-	8.08	-	6.02
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.29: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2341841-1	L2343852-9	L2348232-8	L2353430-8	L2357435-11	L2359622-11
	Sample Date & Time			2019-09-04 14:45	2019-09-08 13:15	2019-09-16 9:00	2019-09-22 16:30	2019-09-30 15:50	2019-10-03 9:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	563	-	578	-	-	469
pH	pH units	0.1	6.0 - 9.5	8.31	8.21	8.13	8.14	8.16	8.14
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	5.4	<2.0	3.2	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	360	365	320	322	269	267
Turbidity	NTU	0.1	-	1.54	1.66	1.71	1.04	2.13	1.77
Ammonia, Total (as N)	mg/L	0.02	-	0.588	-	0.278	-	-	0.204
Nitrate (as N)	mg/L	0.02	-	6.72	-	4.45	-	-	3.15
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.1.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D01	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2276031-1	L2276031-2	L2275986-1	L2282031-3	L2283686-8	L2289720-3
	Sample Date & Time			2019-05-15 8:50	2019-05-15 8:50	2019-05-20 8:25	2019-05-27 11:25	2019-06-02 11:45	2019-06-09 11:55
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	200	198	-	236	-	226
pH	pH units	0.1	6.0 - 9.5	7.87	7.86	8.01	7.99	8.1	8.05
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	20.6	20.4	**47.6**	9.4	26.8	5.2
Total Dissolved Solids	mg/L	10	-	130	128	123	132	140	121
Turbidity	NTU	0.1	-	80.9	82.9	82.1	45.8	44.9	20.3
Ammonia, Total (as N)	mg/L	0.02	-	0.046	0.048	-	0.067	-	0.062
Nitrate (as N)	mg/L	0.02	-	1.31	1.31	-	1.63	-	1.22
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D01	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2289720-4	L2293069-14	L2299117-11	L2303454-1	L2305806-1	L2311077-3
	Sample Date & Time			2019-06-09 11:55	2019-06-17 17:00	2019-06-23 10:20	2019-06-30 10:25	2019-07-08 16:15	2019-07-15 14:25
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	226	-	243	-	347	-
pH	pH units	0.1	6.0 - 9.5	8.05	8.07	7.97	7.91	7.8	8.12
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	5.8	8.8	5.6	6.4	12	3.6
Total Dissolved Solids	mg/L	10	-	117	137	153	167	216	214
Turbidity	NTU	0.1	-	19.4	33.1	25.1	14.5	6.25	9.43
Ammonia, Total (as N)	mg/L	0.02	-	0.041	-	0.467	-	0.185	-
Nitrate (as N)	mg/L	0.02	-	1.22	-	2.77	-	2.25	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2314537-6	L2321730-4	L2323293-1	L2328316-12	L2333390-15	L2335474-15
	Sample Date & Time			2019-07-21 14:20	2019-07-30 18:00	2019-08-05 8:55	2019-08-11 15:30	2019-08-18 17:30	2019-08-25 14:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	358	-	390	-	427	-
pH	pH units	0.1	6.0 - 9.5	8.28	8.34	8.11	8.25	8.29	8.22
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	<2.0	2	<2.0	2.1	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	213	215	162	243	253	251
Turbidity	NTU	0.1	-	5.62	0.28	3.03	2.43	2.38	4.3
Ammonia, Total (as N)	mg/L	0.02	-	0.409	-	0.271	-	0.202	-
Nitrate (as N)	mg/L	0.02	-	4.96	-	4.56	-	4.91	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality[3,4]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2340254-12	L2343852-11	L2348232-6	L2353430-12	L2357435-12	L2359622-12
	Sample Date & Time			2019-09-02 14:40	2019-09-08 14:00	2019-09-15 16:45	2019-09-23 9:25	2019-09-30 16:15	2019-10-03 15:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	471	-	499	-	-	488
pH	pH units	0.1	6.0 - 9.5	8.15	8.2	8.06	8.04	8.08	8.13
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	2.3	<2.0	<2.0	<2.0	4	3.4
Total Dissolved Solids	mg/L	10	-	297	321	282	281	238	284
Turbidity	NTU	0.1	-	3.92	3.6	2.95	2.83	8.1	7.61
Ammonia, Total (as N)	mg/L	0.02	-	0.196	-	0.198	-	-	0.139
Nitrate (as N)	mg/L	0.02	-	4.78	-	4.62	-	-	4.02
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	-	No Visible Sheen
Acute Lethality[3,4]	N/A		Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.30: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D01
	ALS Laboratory Sample ID			L2361700-2	L2361700-3
	Sample Date & Time			2019-10-07 12:40	2019-10-07 12:40
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.02	8.06
Total Suspended Solids[2]	mg/L	2	Grab 30, Average 15	3.6	2.5
Total Dissolved Solids	mg/L	10	-	285	306
Turbidity	NTU	0.1	-	6.07	6.5
Ammonia, Total (as N)	mg/L	0.02	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-
	-	-	No Visible Sheen	-	-
Acute Lethality[3,4]	N/A		Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.31: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2332433-1	L2337046-1	L2339824-1	L2341830-1	L2345586-1	L2348247-1
	Sample Date & Time			2019-08-20 15:05	2019-08-27 10:10	2019-08-31 5:15	2019-09-04 14:10	2019-09-11 14:55	2019-09-16 8:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]						
Conductivity	umhos/cm	3	-	836	-	832	792	812	805
pH	pH units	0.1	6.0 - 9.5	7.98	7.96	8.03	7.96	7.95	8.00
Total Suspended Solids	mg/L	2	Grab 30, Average 15	4.8	<2.0	<2.0	<2.0	2.5	2.2
Total Dissolved Solids	mg/L	10	-	526	738	596	478	692	512
Turbidity	NTU	0.1	-	2.19	2.59	2.99	2.44	6.94	7.82
Ammonia, Total (as N)	mg/L	0.02	-	0.026	-	0.015	0.016	<0.010	0.019
Nitrate (as N)	mg/L	0.02	-	6.68	-	6.21	6.42	6.27	6.11
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.31: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2353431-1	L2357574-1
	Sample Date & Time			2019-09-22 10:15	2019-09-30 16:15
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.99	7.88
Total Suspended Solids	mg/L	2	Grab 30, Average 15	11.6	2.8
Total Dissolved Solids	mg/L	10	-	483	477
Turbidity	NTU	0.1	-	15.10	7.45
Ammonia, Total (as N)	mg/L	0.02	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-
	-	-	No Visible Sheen	-	-
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.1.32: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID			MS-SN-01	MS-SN-0101	MS-SN-01	MS-SN-01	MS-SN-01
	ALS Laboratory Sample ID			L2274859-1	L2274859-2	L2277436-1	L2285476-1	L2289700-1
	Sample Date & Time			14/5/2019 5:55:00 PM	14/5/2019 5:55:00 PM	21/5/2019 10:10:00 AM	3/6/2019 9:15:00 AM	9/6/2019 6:55:00 PM
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	63.1	62.8	-	135	197
pH	pH units	0.1	6.0 - 9.5	7.46	7.56	7.89	7.58	8.12
Total Suspended Solids	mg/L	2	Grab 30, Average 15	**44.5**	**49.1**	<2.0	10.4	<2.0
Total Dissolved Solids	mg/L	20	-	38	38	113	58	102
Turbidity	NTU	0.1	-	68.7	71.3	9.01	17.7	5.34
Ammonia, Total (as N)	mg/L	0.01	-	0.025	0.032	-	0.096	<0.010
Nitrate (as N)	mg/L	0.02	-	0.045	0.062	-	0.284	0.13
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.1.32: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID			MS-SN-01	MS-SN-01	MS-SN-01
	ALS Laboratory Sample ID			L2294140-3	L2299102-1	L2303455-1
	Sample Date & Time			6/18/2019 2:30:00 PM	6/23/2019 3:05:00 PM	7/1/2019 8:45:00 AM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	-	212	-
pH	pH units	0.1	6.0 - 9.5	8.09	7.81	8.12
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	95	116	118
Turbidity	NTU	0.1	-	5.62	1.87	0.46
Ammonia, Total (as N)	mg/L	0.01	-	-	0.248	-
Nitrate (as N)	mg/L	0.02	-	-	0.057	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-
	-	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for May exceeded maximum average TSS concentration discharge limits.

Table 7.1.33: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Analyte	Sample ID			MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02
	ALS Laboratory Sample ID			L2278591-1	L2285476-2	L2289700-2	L2294140-1	L2299102-2
	Sample Date & Time			22/5/2019 9:10:00 AM	3/6/2019 2:40:00 PM	9/6/2019 4:25:00 PM	18/6/2019 1:35:00 PM	6/23/2019 5:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]					
Conductivity	umhos/cm	3	-	155	243	264	-	237
pH	pH units	0.1	6.0 - 9.5	7.86	8.07	8.12	8.17	7.47
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	4.7	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	79	136	135	132	126
Turbidity	NTU	0.1	-	11.1	3.3	0.69	0.66	0.56
Ammonia, Total (as N)	mg/L	0.01	-	0.019	0.026	0.013	-	0.08
Nitrate (as N)	mg/L	0.02	-	0.437	0.171	0.11	-	0.119
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

MS-SN-02	MS-SN-0201
L2303455-2	L2303455-3
6/30/2019 3:50:00 PM	6/30/2019 3:50:00 PM
N/A	Field Duplicate
-	-
8.21	8.21
<2.0	<2.0
120	127
2.12	2.02
-	-
-	-
-	-
-	-

Table 7.1.34: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Analyte	Sample ID			TR-SN-01	TR-SN-01	TR-SN-01
	ALS Laboratory Sample ID			L2279553-1	L2289715-1	L2292326-1
	Sample Date & Time			25/5/2019 4:00:00 PM	9/6/2019 2:00:00 PM	14/6/2019 3:35:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	181	99.4	-
pH	pH units	0.1	6.0 - 9.5	8.1	7.94	7.94
Total Suspended Solids	mg/L	2	Grab 30, Average 15	**255**	3.1	<2.0
Total Dissolved Solids	mg/L	20	-	164	55	51
Turbidity	NTU	0.1	-	288	2.29	1.38
Ammonia, Total (as N)	mg/L	0.01	-	0.011	<0.010	-
Nitrate (as N)	mg/L	0.02	-	0.315	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.35: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Analyte	Sample ID			TR-SN-02	TR-SN-02
	ALS Laboratory Sample ID			L2289715-2	L2292326-2
	Sample Date & Time			9/6/2019 2:55:00 PM	14/6/2019 2:50:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	119	-
pH	pH units	0.1	6.0 - 9.5	7.97	8.01
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	61	75
Turbidity	NTU	0.1	-	0.76	0.32
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.36: Water Quality Results for Water Licence Monitoring Location - TR-SN-03

Analyte	Sample ID			TR-SN-03	TR-SN-03
	ALS Laboratory Sample ID			L2279553-2	L2292326-3
	Sample Date & Time			26/5/2019 1:30:00 PM	14/6/2019 2:05:00 PM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	202	-
pH	pH units	0.1	6.0 - 9.5	8.18	8.43
Total Suspended Solids	mg/L	2	Grab 30, Average 15	**41.8**	7.6
Total Dissolved Solids	mg/L	20	-	150	151
Turbidity	NTU	0.1	-	109	47.7
Ammonia, Total (as N)	mg/L	0.01	-	0.038	-
Nitrate (as N)	mg/L	0.02	-	0.276	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.37: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Analyte	Sample ID			TR-SN-04	TR-SN-04	TR-SN-04
	ALS Laboratory Sample ID			L2289715-3	L2292326-4	L2299109-2
	Sample Date & Time			9/6/2019 4:50:00 PM	14/6/2019 12:45:00 PM	23/6/2019 9:15:00 PM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	113	-	106
pH	pH units	0.1	6.0 - 9.5	7.56	7.45	7.67
Total Suspended Solids	mg/L	2	Grab 30, Average 15	5.7	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	68	66	48
Turbidity	NTU	0.1	-	32.1	10.7	8.42
Ammonia, Total (as N)	mg/L	0.01	-	0.017	-	0.02
Nitrate (as N)	mg/L	0.02	-	<0.020	-	0.036
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.38: Water Quality Results for Water Licence Monitoring Location - TR-SN-05

Analyte	Sample ID			TR-SN-05	TR-SN-05	TR-SN-05
	ALS Laboratory Sample ID			L2289715-4	L2292326-5	L2299109-1
	Sample Date & Time			9/6/2019 5:25:00 PM	14/6/2019 12:15:00 PM	23/6/2019 10:25:00 AM
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]			
Conductivity	umhos/cm	3	-	79.5	-	108
pH	pH units	0.1	6.0 - 9.5	7.72	7.72	7.28
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	8.2
Total Dissolved Solids	mg/L	20	-	45	60	54
Turbidity	NTU	0.1	-	3.19	1.37	37
Ammonia, Total (as N)	mg/L	0.01	-	0.017	-	0.107
Nitrate (as N)	mg/L	0.02	-	0.024	-	0.292
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.1.39: Water Quality Results for Water Licence Monitoring Location - TR-SN-06

Analyte	Sample ID			TR-SN-06	TR-SN-06
	ALS Laboratory Sample ID			L2289715-5	L2292326-6
	Sample Date & Time			9/6/2019 5:55:00 PM	14/6/2019 11:05:00 AM
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria[1]		
Conductivity	umhos/cm	3	-	55.2	-
pH	pH units	0.1	6.0 - 9.5	7.66	7.24
Total Suspended Solids	mg/L	2	Grab 30, Average 15	**32.1**	<2.0
Total Dissolved Solids	mg/L	20	-	35	30
Turbidity	NTU	0.1	-	4.25	1.01
Ammonia, Total (as N)	mg/L	0.01	-	0.011	-
Nitrate (as N)	mg/L	0.02	-	<0.020	-
Oil and Grease, Total	mg/L	2	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2]Average TSS for June exceeded maximum average TSS concentration discharge limits.

ATTACHMENT 8

2020 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2020
- Table 7.2 Water Quality Results for Water Licence Monitoring Location

Table 7.1: Water Quality Monitoring Locations - 2020

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2020
			Easting	Northing	Latitude	Longitude	
Milne Port							
SNP	MP-01	Milne Port Sewage Treatment Plant (STP)	503792	7976006	71° 53' 02.6" N	-80° 53' 26.6" W	Active
SNP	MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 02.9" N	-80° 53' 43.9" W	Active
SNP	MP-01B	Milne Port 380 Person Sewage Treatment Plant (STP)	503375	7975184	71° 52' 36.1" N	-80° 54' 10.0" W	Active
SNP	MP-02	Milne Port Maintenance Shop (oily water)	503785	7976209	71° 53' 09.2" N	-80° 53' 27.3" W	Inactive [2]
SNP	MP-03	Milne Port Bulk Fuel Storage Facility (stormwater)	503638	7976272	71° 53' 11.2" N	-80° 53' 42.5" W	Active
SNP	MP-04	Milne Port Landfarm Facility	503710	7975574	71° 52' 48.7" N	-80° 53' 35.2" W	Active
SNP	MP-04A	Milne Port Landfarm Facility (Contaminated Snow Containment Berm)	503862	7975482	71° 52' 45.7" N	-80° 53' 19.4" W	Active
SNP	MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 14.8" N	-80° 54' 00.0" W	Active
SNP	MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14.2" N	-80° 54' 35.7" W	Active
SNP	MP-C-A	Surface water drainage downstream of Milne Port infrastructure.	503214	7976483	71° 53' 18.1" N	-80° 54' 26.5" W	Inactive [2]
SNP	MP-C-B		502836	7975732	71° 52' 53.8" N	-80° 55' 05.8" W	Active
SNP	MP-C-B01		502979	7975333	71° 52' 41.0" N	-80° 54' 51.0" W	Active
SNP	MP-C-C		503436	7975427	71° 52' 44.0" N	-80° 54' 03.6" W	Inactive [2]
SNP	MP-C-D		503651	7976363	71° 53' 14.2" N	-80° 53' 41.2" W	Inactive [2]
SNP	MP-C-E		503736	7976346	71° 53' 13.6" N	-80° 53' 32.3" W	Inactive [2]
SNP	MP-C-F		503922	7976304	71° 53' 12.2" N	-80° 53' 13.1" W	Inactive [2]
SNP	MP-C-H		504114	7976417	71° 53' 15.9" N	-80° 52' 53.1" W	Active
SNP	MP-C-J		502940	7974760	71° 52' 22.5" N	-80° 54' 55.2" W	Active
SNP	MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52.3" N	-80° 35' 03.7" W	Inactive
SNP	MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00.4" N	-80° 23' 08.5" W	Active
SNP	MP-Q1-01	Surface water drainage downstream of the Q1 Quarry.	503839	7974467	71° 52' 13.0" N	-80° 53' 22.0" W	Active
SNP	MP-Q1-02		503828	7975396	71° 52' 42.9" N	-80° 53' 23.0" W	Active
Other	MP-Q1-P1	Milne Port Recycled Water for Dust Suppression	503822	7974661	71° 52' 19.3" N	-80° 53' 23.8" W	Active
Mine Site							
SNP	MQ-C-A	Surface water drainage downstream of QMR2 Quarry.	559489	7914408	71° 19' 28.2" N	-79° 20' 06.9" W	Active
SNP	MQ-C-B	Surface water drainage downstream of QMR2 Quarry.	560076	7913888	71° 19' 10.9" N	-79° 19' 09.2" W	Active
SNP	MQ-C-D	Surface water drainage downstream of QMR2 Quarry.	559422	7914223	71° 19' 22.3" N	-79° 20' 14.1" W	Active
SNP	MQ-C-E	Surface water drainage downstream of D1Q2 Quarry.	563351	7912902	71° 18' 36.0" N	-79° 13' 42.5" W	Inactive [2]
SNP	MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	-79° 17' 05.6" W	Active
SNP	MS-01A	Mine Site Polishing Waste Stabilization Ponds (PWSPs)	-	-	-	-	Inactive [3]

Notes:

[1] Exploration Phase infrastructure decommissioned.

[2] No surface water flows at location in 2020.

[3] Not constructed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Monitoring

Table 7.1: Water Quality Monitoring Locations - 2020

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2020
			Easting	Northing	Latitude	Longitude	
SNP	MS-01B	Mine Site Sewage Treatment Plant No. 2	560794	7913235	71° 18' 49.1" N	-79° 17' 58.8" W	Active
SNP	MS-02	Mine Site Mobile Maintenance Buildings (meltwater)	561638	7913222	71° 18' 48.0" N	-79° 16' 33.9" W	Inactive
SNP	MS-03	Mine Site Bulk Fuel Storage Facility (stormwater)	561258	7913304	71° 18' 51.0" N	-79° 17' 11.9" W	Active
SNP	MS-04	Mine Site Fuel Unloading Station (stormwater)	-	-	-	-	Inactive [3]
SNP	MS-05	Mine Site Landfarm Facility (stormwater)	-	-	-	-	Inactive [3]
SNP	MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 40.9" N	-79° 16' 50.9" W	Active
SNP	MS-07	Run of Mine Ore Stockpile Pond - Surface Water Management Pond	563583	7913074	71° 18' 41.4" N	-79° 13' 18.6" W	Active
SNP	MS-08	Waste Rock Facility - Surface Water Management Pond	563218	7916802	71° 20' 24.7" N	-79° 13' 18.3" W	Active
SNP	MS-C-A	Surface water drainage downstream of Mine Site infrastructure.	561263	7913571	71° 18' 59.6" N	-79° 17' 10.6" W	Active
SNP	MS-C-B	Surface water drainage downstream of Mine Site infrastructure.	561454	7913537	71° 18' 58.3" N	-79° 16' 51.5" W	Active
SNP	MS-C-C	Surface water drainage downstream of Mine Site infrastructure.	561110	7913199	71° 18' 47.7" N	-79° 17' 27.1" W	Active
SNP	MS-C-D	Surface water drainage downstream of Mine Site infrastructure.	561008	7913280	71° 18' 50.4" N	-79° 17' 37.1" W	Active
SNP	MS-C-E	Surface water drainage downstream of Mine Site infrastructure.	560980	7913388	71° 18' 53.9" N	-79° 17' 39.6" W	Active
SNP	MS-C-F	Surface water drainage downstream of Mine Site infrastructure.	561797	7913278	71° 18' 49.6" N	-79° 16' 17.7" W	Active
SNP	MS-C-G	Surface water drainage downstream of Mine Site infrastructure.	561813	7911830	71° 18' 02.9" N	-79° 16' 20.3" W	Active
SNP	MS-C-H	Surface water drainage downstream of Mine Site infrastructure.	561162	7912067	71° 18' 11.1" N	-79° 17' 25.1" W	Active
Other	HR-CD-05	Mine Site Haul Road Drainage	563812	7913140	71° 18' 43.3" N	79° 12' 55.4" W	Active
Other	MS-RW-01	Mine Site Recycled Water Pond 1	559348	7914222	71° 19' 22.3" N	79° 20' 21.6" W	Active
Other	MS-RW-02	Mine Site Recycled Water Pond 2	559555	7913950	71° 19' 13.4" N	79° 20' 01.6" W	Active
SNP	MS-MRY-1	Fresh Water Intake at Camp Lake	557779	7914722	71° 19' 39.8" N	-79° 22' 58.2" W	Active
SNP	MS-MRY-4	Mine Site Exploration Camp Sewage Treatment Plant	558134	7914459	71° 19' 31.0" N	-79° 22' 23.2" W	Inactive [1]
SNP	MS-MRY-4A	Mine Site Polishing Waste Stabilization Ponds (PWSPs)	558549	7914112	71° 19' 19.4" N	-79° 21' 42.3" W	Active
SNP	MS-MRY-4B	Mine Site Polishing Waste Stabilization Ponds (PWSPs)	558438	7914310	71° 19' 25.9" N	-79° 21' 53.0" W	Active
SNP	MS-MRY-4C	Mine Site Polishing Waste Stabilization Ponds (PWSPs)	558508	7914264	71° 19' 24.4" N	-79° 21' 46.1" W	Active
SNP	MS-MRY-6	Mine Site Exploration Camp Bulk Fuel Storage Facility (MS-HWB-7)	558341	7914508	71° 19' 32.4" N	-79° 22' 02.2" W	Active
SNP	MS-MRY-9	Mine Site 2008 Bulk Sample Program - Open Pit (surface drainage/seepage)	561083	7915084	71° 19' 48.5" N	-79° 17' 24.5" W	Active
SNP	MS-MRY-10	Deposit No. 1 – Downstream Surface Water Drainage	563820	7914620	71° 19' 31.0" N	-79° 12' 50.2" W	Active
SNP	MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (surface drainage/seepage)	560754	7912484	71° 18' 25.0" N	-79° 18' 04.9" W	Active
SNP	MS-MRY-13B	Mine Site Non-Hazardous Waste Landfill Facility (surface drainage/seepage)	560642	7912527	71° 18' 26.4" N	-79° 18' 16.1" W	Active
SSPM	MS-SN-01	Mine Site Weatherhaven Snow Stockpile	558052	7914303	71° 19' 26.1" N	79° 22' 31.9" W	Active
SSPM	MS-SN-02	Mine Site Landfill Access Road Snow Stockpile	561097	7912884	71° 18' 37.6" N	79° 17' 29.4" W	Active
SSPM	MS-SN-03	Mine Site Warehouse Snow Stockpile	559803	7913756	71° 19' 06.9" N	79° 19' 37.1" W	Active

Notes:

[1] Exploration Phase infrastructure decommissioned.

[2] No surface water flows at location in 2020.

[3] Not constructed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Monitoring

Table 7.1: Water Quality Monitoring Locations - 2020

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2020
			Easting	Northing	Latitude	Longitude	
Tote Road							
SSPM	TR-SN-01	Tote Road Snow Stockpile KM37	521756	7948884	71° 38' 23.8" N	80° 22' 52.2" W	Active
SSPM	TR-SN-02	Tote Road Snow Stockpile KM63	529396	7926786	71° 26' 27.7" N	80° 10' 20.9" W	Active
SSPM	TR-SN-03	Tote Road Snow Stockpile KM77	538726	7920503	71° 23' 00.1" N	79° 54' 47.0" W	Active
SSPM	TR-SN-04	Tote Road Snow Stockpile KM86	547040	7919654	71° 22' 27.3" N	-79° 40' 49.0" W	Active
SSPM	TR-SN-05	Tote Road Snow Stockpile KM92	551307	7916785	71° 20' 51.7" N	79° 33' 45.2" W	Active
SSPM	TR-SN-KM92.5	Tote Road KM 92.5 Snow Stockpile Runoff	551877	7916027	71° 20' 26.8" N	79° 32' 49.5" W	Active
SNP	TR-BP-01	Tote Road Borrow Pit (KM97 Borrow)	556021	7914684	71° 19' 40.1" N	-79° 25' 55.4" W	Active
TRMP	CV-167	Approximately located at KM6	505519	7972462	71° 51' 08.2" N	-80° 50' 28.5" W	Active
TRMP	CV-154-A	Approximately located at KM9.5	507620	7970076	71° 49' 51.0" N	-80° 46' 51.8" W	Active
TRMP	CV-128	Approximately located at KM17	513556	7965889	71° 47' 34.9"N	-80° 36' 40.6"W	Active
TRMP	CV-129	Approximately located at KM15	512381	7966783	71° 48' 03.9"N	-80° 38' 41.3"W	Active
TRMP	CV-115	Approximately located at KM28	519222	7958135	71° 43' 23.2"N	-80° 27' 03.0"W	Active
TRMP	CV-112	Approximately located at KM33	521033	7954935	71° 41' 39.3"N	-80° 24' 00.0"W	Active
TRMP	CV-106	Approximately located at KM33	521663	7953392	71° 40' 49.3"N	-80° 22' 57.0"W	Active
TRMP	CV-099	Approximately located at KM37	521886	7948843	71° 38' 22.4"N	-80° 22' 38.9"W	Active
TRMP	CV-093	Approximately located at KM42	522927	7945093	71° 36' 21.1"N	-80° 20' 56.4"W	Active
TRMP	CV-078	Approximately located at KM51	525852	7936787	71° 31' 51.9"N	-80° 16' 07.8"W	Active
TRMP	CV-072-C	Approximately located at KM54	526897	7934576	71° 30' 40.1"N	-80° 14' 24.2"W	Active
TRMP	CV-060	Approximately located at KM58	527622	7930342	71° 28' 23.2"N	-80° 13' 16.0"W	Active
TRMP	BG-50	Approximately located at KM63	529294	7926852	71° 26' 29.8"N	-80° 10' 31.1"W	Active
TRMP	CV-040	Approximately located at KM71.5	535168	7920326	71° 22' 56.4"N	-80° 00' 46.7"W	Active
TRMP	BG-32	Approximately located at KM78	540729	7921597	71° 23' 34.2"N	-79° 51' 22.6"W	Active
TRMP	CV-217	Approximately located at KM80	542321	7922189	71° 23' 52.4"N	-79° 48' 40.5"W	Active
TRMP	BG-30	Approximately located at KM84.5	546070	7919844	71° 22' 34.2"N	-79° 42' 26.6"W	Active
TRMP	BG-24	Approximately located at KM88	548766	7918878	71° 22' 01.1"N	-79° 37' 56.6"W	Active
TRMP	CV-001	Approximately located at KM94.1	553544	7914897	71° 19' 49.0"N	-79° 30' 04.3"W	Active
TRMP	CV-223	Approximately located at KM97.5	555705	7914676	71° 19' 40.1"N	-79° 26' 27.3"W	Active

Notes:

[1] Exploration Phase infrastructure decommissioned.

[2] No surface water flows at location in 2020.

[3] Not constructed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Monitoring

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L2406386-1	L2406386-2	L2416532-1	L2424382-1	L2435599-1	L2447380-1	L2459428-1	L2471882-1
	Sample Date & Time			2020-01-15 13:45	2020-01-15 13:45	2020-02-11 13:45	2020-03-03 13:15	2020-04-07 13:15	2020-05-12 8:15	2020-06-09 13:15	2020-07-07 13:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
pH	pH units	0.10	6.0 - 9.5	7.52	7.52	7.93	7.91	7.78	7.53	7.75	8.26
Total Suspended Solids	mg/L	2.0/3.0	120	11.2	8.0	5.4	7.3	4.1	14.4	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	98	99	580	109	69	89	122	1290
Ammonia, Total (as N)	mg/L	0.010/0.050	-	0.096	0.094	0.064	0.041	0.090	0.472	0.110	0.037
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.95	1.43	1.42	2.31	<0.15	1.23	0.96	0.66
Phosphorus, Total	mg/L	0.0030/0.0045	-	8.61	8.82	8.16	7.55	11.6	10.7	9.03	0.314
Fecal Coliforms	CFU/100 mL	0	10,000	0	1	0	3	0	100	0	0
BOD	mg/L	2.0	100	2.6	<2.0	<2.0	2.4	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	51	47	52	58	48	52	39	25
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-01	MP-01	MP-01	MP-01	MP-0101	MP-01
	ALS Laboratory Sample ID			L2485369-1	L2495474-2	L2505075-2	L2516997-2	L2526083-2	L2526083-3	L2541330-2
	Sample Date & Time			2020-08-05 13:15	2020-08-23 8:15	2020-09-16 13:30	2020-10-13 13:15	2020-11-04 13:30	2020-11-04 13:30	2020-12-14 13:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	7.80	7.48	7.71	7.46	7.69	7.75	7.53
Total Suspended Solids	mg/L	2.0/3.0	120	<3.0	1.3	<3.0	<3.0	<3.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	77	42.8	72	61	88	90	55
Ammonia, Total (as N)	mg/L	0.010/0.050	-	0.047	0.0207	0.104	0.086	0.020	0.020	0.051
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.39	1.10	0.73	5.00	1.34	1.19	1.02
Phosphorus, Total	mg/L	0.0030/0.0045	-	12.1	10.2	8.93	12.8	9.30	9.18	12.6
Fecal Coliforms	CFU/100 mL	0	10,000	0	0	0	0	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	26	42	29	23	34	31	35
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01A

Analyte	Sample ID			MP-01A
	ALS Laboratory Sample ID			L2486009-1
	Sample Date & Time			2020-08-09 10:00
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
pH	pH units	0.10	6.0 - 9.5	8.15
Total Suspended Solids	mg/L	1.0	120	15.7
Alkalinity, Total (as CaCO3)	mg/L	10	-	210
Ammonia, Total (as N)	mg/L	0.13	-	5.58
Total Kjeldahl Nitrogen	mg/L	0.25	-	9.68
Phosphorus, Total	mg/L	0.020	-	0.345
Fecal Coliforms	CFU/100mL	1	10,000	<1
BOD	mg/L	2.0	100	2.0
COD	mg/L	20	-	108
Oil and Grease, Total	mg/L	5.0	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B
	ALS Laboratory Sample ID			L2451062-2	L2459427-1	L2471849-1	L2485422-1	L2490574-1	L2505065-2
	Sample Date & Time			2020-05-24 7:00	2020-06-09 13:30	2020-07-07 13:30	2020-08-05 13:45	2020-08-18 14:00	2020-09-16 13:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.10	6.0 - 9.5	7.71	7.27	7.39	8.31	8.31	7.80
Total Suspended Solids	mg/L	1.0 - 3.0	120	<1.0	<2.0	<2.0	<3.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	10/1.0	-	71.8	33	61	297	316	272
Ammonia, Total (as N)	mg/L	010/0.00	-	0.0397	0.374	0.078	0.028	0.014	7.43
Total Kjeldahl Nitrogen	mg/L	0.15/0.25	-	3.14	0.89	1.53	1.21	<1.5	15.7
Phosphorus, Total	mg/L	0/0.030/0	-	8.56	2.61	12.7	7.33	8.35	16.3
Fecal Coliforms	CFU/100mL	0/1	10,000	<1	30	7	1	4600	**18900**
BOD	mg/L	2.0/3.0	100	3.0	4.7	<2.0	<2.0	2.2	4.2
COD	mg/L	10/20	-	31	23	34	38	40	61
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B	MP-01B	MP-01B	MP-01B	MP-01B01
	ALS Laboratory Sample ID			L2511265-1	L2517060-2	L2526112-2	L2541325-2	L2541325-3
	Sample Date & Time			9/30/2020 13:45	2020-10-13 13:45	2020-11-04 13:45	2020-12-15 12:45	2020-12-15 12:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]					
pH	pH units	0.10	6.0 - 9.5	-	7.46	8.62	7.97	8.06
Total Suspended Solids	mg/L	1.0 - 3.0	120	-	4.8	<3.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	10/1.0	-	-	58	592	128	117
Ammonia, Total (as N)	mg/L	010/0.00	-	-	0.099	0.156	<0.010	0.076
Total Kjeldahl Nitrogen	mg/L	0.15/0.25	-	-	2.20	1.24	1.06	2.87
Phosphorus, Total	mg/L	0/0.030/0	-	-	7.93	6.12	9.48	9.86
Fecal Coliforms	CFU/100mL	0/1	10,000	0	10	3	0	0
BOD	mg/L	2.0/3.0	100	-	<2.0	<2.0	<3.0	<2.0
COD	mg/L	10/20	-	-	26	40	40	78
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.4: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID			MP-03	MP-03	MP-03	MP-03	MP-0301	MP-03
	ALS Laboratory Sample ID			L2468252-1	L2484293-1	L2482714-1	L2482801-1	L2482801-2	L2495157-1
	Sample Date & Time			2020-06-27 15:35	2020-07-30 19:54	2020-07-31 9:20	2020-07-31 15:10	2020-07-31 15:10	2020-08-26 10:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.10	-	8.04	8.39	8.36	8.35	8.37	8.35
Total Suspended Solids	mg/L	1.0	-	<1.0	6.0	9.3	14.9	14.5	26.9
Total Dissolved Solids	mg/L	20	-	200	299	292	325	317	495
Turbidity	NTU	0.10	-	0.91	7.01	8.89	15.0	13.9	24.6
Ammonia, Total (as N)	mg/L	0.010	-	0.596	0.036	-	-	-	0.243
Phosphorus, Total	mg/L	0.0030	-	0.0046	0.014	-	-	-	0.0246
Arsenic (As)-Total	mg/L	0.00010	-	0.00029	<0.0010	-	-	-	0.00088
Copper (Cu)-Total	mg/L	0.0010	-	0.00058	<0.0050	-	-	-	0.00425
Lead (Pb)-Total	mg/L	0.000050	0.001	0.000056	0.000740	-	-	-	**0.00117**
Nickel (Ni)-Total	mg/L	0.00050	-	<0.00050	<0.0050	-	-	-	0.00144
Zinc (Zn)-Total	mg/L	0.0030	-	<0.0030	<0.030	-	-	-	0.0139
Oil and Grease, Total	mg/L	2.0/5.0	15	<5.0	<2.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.00050	370	<0.00050	<0.00050	-	-	-	<0.00050
Ethylbenzene	mg/L	0.00050	90	<0.00050	<0.00050	-	-	-	<0.00050
Toluene	mg/L	00045/0.000	2	<0.00045	<0.00050	-	-	-	<0.00045
F1 (C6-C10)	mg/L	0.1	-	<0.10	<0.10	-	-	-	<0.10
F2 (C10-C16)	mg/L	0.3	-	<0.30	0.28	-	-	-	2.01
F3 (C16-C34)	mg/L	0.30/0.25	-	<0.30	<0.25	-	-	-	1.28
F4 (C34-C50)	mg/L	0.30/0.25	-	<0.30	<0.25	-	-	-	<0.30
Total Hydrocarbons (C6-C50)	mg/L	0.3	-	<0.30	<0.38	-	-	-	3.29

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.2.5: Water Quality Results for Water Licence Monitoring Location - MP-04

Analyte	Sample ID			MP-04
	ALS Laboratory Sample ID			L2504399-1
	Sample Date & Time			2020-09-06 12:20
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
pH	pH units	0.10	6.0 - 9.0	8.25
Total Suspended Solids	mg/L	2.0	15	5.8
Total Dissolved Solids	mg/L	20	-	733
Turbidity	NTU	0.10	-	6.07
Lead (Pb)-Total	mg/L	0.00050	0.001	0.000111
Oil and Grease, Total	mg/L	2.0	15	<2.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	0.50	370	<0.5
Ethylbenzene	ug/L	0.50	90	<0.5
Toluene	ug/L	0.50	2	<0.5
F1 (C6-C10)	ug/L	100	-	<100
F2 (C10-C16)	ug/L	100	-	400
F3 (C16-C34)	ug/L	250	-	<250
F4 (C34-C50)	ug/L	250	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	400

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-04A

Analyte	Sample ID			MP-04A
	ALS Laboratory Sample ID			L2496368-1
	Sample Date & Time			2020-08-29 18:00
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
pH	pH units	0.10	6.0 - 9.0	7.8
Total Suspended Solids	mg/L	1.0	15	<1.0
Total Dissolved Solids	mg/L	20	-	941
Turbidity	NTU	0.10	-	1.55
Lead (Pb)-Total	mg/L	0.00050	0.001	0.000157
Oil and Grease, Total	mg/L	5.0	15	<5.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.0005	370	<0.00050
Ethylbenzene	mg/L	0.0005	90	<0.00050
Toluene	mg/L	0.0050	2	0.00077
F1 (C6-C10)	mg/L	0.1	-	<0.10
F2 (C10-C16)	mg/L	0.3	-	<0.30
F3 (C16-C34)	mg/L	0.25	-	0.92
F4 (C34-C50)	mg/L	0.3	-	<0.30
Total Hydrocarbons (C6-C50)	mg/L	0.38	-	0.92

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2453047-1	L2454616-1	L2459408-1	L2461573-1	L2466718-2	L2467735-2	L2471866-2	L2478539-4
	Sample Date & Time			2020-05-25 14:35	2020-06-01 9:40	2020-06-08 9:40	2020-06-15 15:10	2020-06-22 9:55	2020-06-29 10:50	2020-07-06 10:15	2020-07-20 13:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3.0	-	309	-	476	-	-	-	550	586
pH	pH units	0.10	6.0 - 9.5	7.93	8.07	8.16	8.21	8.21	8.30	8.15	8.33
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	13.4	7.9	3.3	3.7	2.9	2.0	2.0	<2.0
Total Dissolved Solids	mg/L	10	-	168	200	266	190	242	275	289	356
Turbidity	NTU	0.10	-	45.7	19.8	6.97	10.9	11.9	4.63	1.25	2.36
Ammonia, Total (as N)	mg/L	0.010	-	0.487	-	0.192	-	-	-	0.021	0.267
Nitrate (as N)	mg/L	0.020	-	0.552	-	1.01	-	-	-	4.00	5.01
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	-	-	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2480180-3	L2484595-1	L2486374-1	L2490512-1	L2493980-1	L2499492-2	L2500073-3	L2504436-4
	Sample Date & Time			2020-07-27 9:05	2020-08-03 9:30	2020-08-10 10:50	2020-08-17 12:20	2020-08-24 13:20	2020-09-01 10:40	2020-09-07 12:35	2020-09-14 16:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3.0	-	-	776	-	-	-	523	-	960
pH	pH units	0.10	6.0 - 9.5	8.26	8.33	8.25	8.24	9.19	8.32	8.27	8.35
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	5.1	<3.0	<2.0	<2.0	<2.0	<3.0	<2.0	<3.0
Total Dissolved Solids	mg/L	10	-	401	438	453	499	221	260	541	533
Turbidity	NTU	0.10	-	2.1	1.69	0.82	3.00	0.93	2.15	0.16	0.74
Ammonia, Total (as N)	mg/L	0.010	-	-	0.132	-	-	-	0.077	-	0.101
Nitrate (as N)	mg/L	0.020	-	-	6.12	-	-	-	2.64	-	4.26
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B0101	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2454616-2	L2459408-2	L2459408-6	L2461573-2	L2466718-3	L2467735-3
	Sample Date & Time			2020-06-01 10:10	2020-06-08 9:55	2020-06-08 9:55	2020-06-15 15:25	2020-06-22 10:05	2020-06-29 11:00
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3.0	-	-	707	705	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.08	8.16	8.17	8.23	8.25	8.28
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	4.1	2.3	3.3	2.9	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	294	409	402	260	359	339
Turbidity	NTU	0.10	-	7.76	4.67	4.60	3.71	0.86	1.08
Ammonia, Total (as N)	mg/L	0.010	-	-	0.061	0.052	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	1.18	1.2	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2471866-3	L2476158-2	L2478539-3	L2480180-1	L2484595-2	L2486374-2
	Sample Date & Time			2020-07-06 10:30	2020-07-13 12:20	2020-07-20 11:45	2020-07-27 7:50	2020-08-03 9:50	2020-08-10 11:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3.0	-	749	-	944	-	1300	-
pH	pH units	0.10	6.0 - 9.5	8.27	8.12	8.1	8.07	8.22	8.03
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	2.1	<2.0	<2.0	<2.0	<3.0	4.6
Total Dissolved Solids	mg/L	20	-	459	558	649	639	909	775
Turbidity	NTU	0.10	-	0.61	0.73	0.82	0.47	0.35	0.26
Ammonia, Total (as N)	mg/L	0.010	-	0.552	-	0.706	-	0.283	-
Nitrate (as N)	mg/L	0.020	-	7.82	-	5.75	-	3.19	-
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B01

Analyte	Sample ID			MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01	MP-C-B01
	ALS Laboratory Sample ID			L2490512-2	L2493980-2	L2499492-3	L2500073-4	L2504436-3	L2506231-3
	Sample Date & Time			2020-08-17 12:10	2020-08-24 9:35	2020-09-01 10:50	2020-09-07 13:05	2020-09-14 16:25	2020-09-21 14:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3.0	-	-	-	1470	-	1520	-
pH	pH units	0.10	6.0 - 9.5	8.15	8.01	8.24	8.15	8.13	7.49
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	2.0	2.0	<3.0	<2.0	<3.0	<2.0
Total Dissolved Solids	mg/L	20	-	812	711	1200	976	963	811
Turbidity	NTU	0.10	-	0.6	0.23	0.87	0.15	0.79	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.096	-	0.026	-
Nitrate (as N)	mg/L	0.020	-	-	-	1.71	-	1.80	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2454616-3	L2459408-3	L2461573-3	L2466718-1	L2467735-1	L2471866-1	L2476158-5	L2478539-1	L2480180-2	L2484595-6
	Sample Date & Time			2020-06-01 8:35	2020-06-08 8:40	2020-06-15 14:45	2020-06-22 9:30	2020-06-29 10:25	2020-07-06 12:15	2020-07-13 14:35	2020-07-20 8:40	2020-07-27 8:30	2020-08-03 16:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]										
Conductivity	umhos/cm	3.0	-	-	314	-	-	-	232	-	331	-	396
pH	pH units	0.10	6.0 - 9.5	8.01	7.95	7.94	8.05	8.17	8.17	8.37	8.21	8.25	8.32
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	**38.5**	4.8	<2.0	<2.0	2.6	<2.0	<2.0	15.8	2.6	<3.0
Total Dissolved Solids	mg/L	20	-	158	164	66	91	95	116	235	198	236	206
Turbidity	NTU	0.10	-	76.7	9.37	1.15	0.61	2.83	1.63	6.46	23.7	1.97	0.81
Ammonia, Total (as N)	mg/L	0.010	-	-	0.083	-	-	-	0.017	-	0.135	-	0.014
Nitrate (as N)	mg/L	0.020	-	-	0.582	-	-	-	0.272	-	1.48	-	0.428
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	91.9	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2486374-4	L2490512-4	L2493980-5	L2499492-5	L2500073-1	L2500073-2	L2504436-1	L2506231-1
	Sample Date & Time			2020-08-10 10:30	2020-08-17 11:25	2020-08-24 11:50	2020-09-01 10:05	2020-09-07 11:50	2020-09-07 11:50	2020-09-14 11:30	2020-09-21 10:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3.0	-	-	-	-	402	-	-	413	-
pH	pH units	0.10	6.0 - 9.5	8.32	8.22	8.25	8.36	8.27	8.30	8.32	8.08
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0	<3.0	<2.0
Total Dissolved Solids	mg/L	20	-	208	297	387	179	214	214	205	229
Turbidity	NTU	0.10	-	0.45	0.99	0.22	0.76	0.19	0.19	0.43	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	<0.010	-	-	<0.010	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.234	-	-	0.145	-
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<2.0	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J01	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2454615-1	L2454615-2	L2457745-1	L2466718-4	L2467735-4	L2471866-4	L2476158-6	L2478539-2
	Sample Date & Time			2020-06-01 10:25	2020-06-01 10:25	2020-06-08 13:15	2020-06-22 10:20	2020-06-29 11:05	2020-07-06 14:40	2020-07-13 16:15	2020-07-20 11:05
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3.0	-	-	-	-	403	-	504	-	529
pH	pH units	0.10	6.0 - 9.5	7.98	7.97	8.15	8.36	8.28	8.03	8.13	8.11
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	4.2	4.2	2.9	<2.0	3.2	2.6	<2.0	<2.0
Total Dissolved Solids	mg/L	20	-	200	190	247	215	209	246	360	312
Turbidity	NTU	0.10	-	5.88	5.89	2.49	0.53	0.54	0.32	<0.10	0.34
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	<0.010	-	<0.010	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.03	-	0.065	-	0.364
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<2.0	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2480180-4	L2484595-3	L2486374-3	L2490512-3	L2493980-4	L2499492-4	L2500073-5	L2504436-2
	Sample Date & Time			2020-07-27 9:35	8/3/2020 11:00	2020-08-10 11:50	2020-08-17 12:35	2020-08-24 13:00	2020-09-01 11:00	2020-09-07 14:10	2020-09-14 12:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3.0	-	-	527	-	-	-	452	-	499
pH	pH units	0.10	6.0 - 9.5	7.88	8.05	8.44	8.31	8.31	8.41	8.18	8.22
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	<2.0	<3.0	<2.0	<2.0	2.4	<3.0	<2.0	<3.0
Total Dissolved Solids	mg/L	20	-	297	276	254	257	164	203	276	255
Turbidity	NTU	0.10	-	0.45	0.52	1.00	1.06	0.69	0.98	0.19	1.09
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-	<0.010	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	0.292	-	-	-	<0.020	-	0.032
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05	MP-05
	ALS Laboratory Sample ID			L2484674-1	L2504433-1
	Sample Date & Time			2020-08-04 8:30	2020-09-14 10:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Hardness (as CaCO3)	mg/L	0.50	-	779	533
pH	pH units	0.10	6.0 - 9.5	8.10	8.38
Total Suspended Solids	mg/L	3.0	15.0	<3.0	4.0
Total Dissolved Solids	mg/L	20	-	1170	887
Turbidity	NTU	0.10	-	2.53	4.92
Alkalinity, Total (as CaCO3)	mg/L	10	-	171	212
Ammonia, Total (as N)	mg/L	0.010	-	0.124	0.068
Chloride (Cl)	mg/L	0.50	-	161	199
Fluoride (F)	mg/L	0.020	-	0.24	0.21
Nitrate (as N)	mg/L	0.020	-	6.42	3.95
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.43	0.53
Phosphorus, Total	mg/L	0.0030	-	0.0053	0.0039
Sulfate (SO4)	mg/L	0.30	-	524	232
Dissolved Organic Carbon	mg/L	0.50	-	5.49	5.99
Total Organic Carbon	mg/L	0.50	-	5.89	8.21
Aluminum (Al)-Total	mg/L	0.005/0.05	-	<0.050	0.0485
Arsenic (As)-Total	mg/L	0.0001/0.001	0.50	<0.0010	0.00027
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.000050	<0.0000050
Calcium (Ca)-Total	mg/L	0.50	-	113	93.2
Copper (Cu)-Total	mg/L	0.0050	0.30	<0.0050	0.0018
Iron (Fe)-Total	mg/L	0.10	-	<0.10	0.132
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.20	<0.00050	0.000096
Magnesium (Mg)-Total	mg/L	0.050	-	112	67
Manganese (Mn)-Total	mg/L	0.00050	-	0.945	0.134
Mercury (Hg)-Total	mg/L	0.0000050	-	0.0000051	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00476	0.00329
Nickel (Ni)-Total	mg/L	0.0005/0.005	0.50	<0.0050	0.00234
Potassium (K)-Total	mg/L	0.050	-	10.00	9.35
Selenium (Se)-Total	mg/L	0.000050	-	0.00119	0.000323
Sodium (Na)-Total	mg/L	0.050	-	61.6	84.1
Thallium (Tl)-Total	mg/L	0.000010	-	<0.00010	0.000012
Uranium (U)-Total	mg/L	0.000010	-	0.0917	0.0627
Zinc (Zn)-Total	mg/L	0.003/0.03	0.50	<0.030	0.0077
Aluminum (Al)-Dissolved	mg/L	0.0500	-	<0.050	0.0073
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	0.0003
Cadmium (Cd)-Dissolved	mg/L	0.000005/0.00005	-	<0.000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	119	97.1
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	0.00185
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.10	0.027
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	117	70.5
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.895	0.134
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00474	0.00327
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.0056	0.0023
Potassium (K)-Dissolved	mg/L	0.050	-	10.5	9.79
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.00106	0.000458
Sodium (Na)-Dissolved	mg/L	0.50	-	64.2	88.2
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	0.000014
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0940	0.0613
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.018	0.0068
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-0501
	ALS Laboratory Sample ID			L2504433-2
	Sample Date & Time			2020-09-14 10:00
	QA/QC Sample Type			Field Duplicate
	Units	LOR	Water Licence Criteria [1]	
Hardness (as CaCO3)	mg/L	0.50	-	525
pH	pH units	0.10	6.0 - 9.5	8.39
Total Suspended Solids	mg/L	3.0	15.0	5.6
Total Dissolved Solids	mg/L	20	-	884
Turbidity	NTU	0.10	-	5.39
Alkalinity, Total (as CaCO3)	mg/L	10	-	212
Ammonia, Total (as N)	mg/L	0.010	-	0.069
Chloride (Cl)	mg/L	0.50	-	204
Fluoride (F)	mg/L	0.020	-	0.18
Nitrate (as N)	mg/L	0.020	-	3.99
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.57
Phosphorus, Total	mg/L	0.0030	-	0.0068
Sulfate (SO4)	mg/L	0.30	-	238
Dissolved Organic Carbon	mg/L	0.50	-	6.17
Total Organic Carbon	mg/L	0.50	-	8.53
Aluminum (Al)-Total	mg/L	0.005/0.05	-	0.0891
Arsenic (As)-Total	mg/L	0.0001/0.001	0.50	0.00029
Cadmium (Cd)-Total	mg/L	0.0000050	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.50	-	92.2
Copper (Cu)-Total	mg/L	0.0050	0.30	0.00199
Iron (Fe)-Total	mg/L	0.10	-	0.226
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.20	0.000131
Magnesium (Mg)-Total	mg/L	0.050	-	67.9
Manganese (Mn)-Total	mg/L	0.00050	-	0.138
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00319
Nickel (Ni)-Total	mg/L	0.0005/0.005	0.50	0.0025
Potassium (K)-Total	mg/L	0.050	-	9.52
Selenium (Se)-Total	mg/L	0.000050	-	0.000343
Sodium (Na)-Total	mg/L	0.050	-	84.9
Thallium (Tl)-Total	mg/L	0.000010	-	0.000013
Uranium (U)-Total	mg/L	0.000010	-	0.0615
Zinc (Zn)-Total	mg/L	0.003/0.03	0.50	0.0084
Aluminum (Al)-Dissolved	mg/L	0.0500	-	0.0083
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	0.00028
Cadmium (Cd)-Dissolved	mg/L	0.000005/0.00005	-	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	97.7
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	0.00189
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	0.029
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	68.1
Manganese (Mn)-Dissolved	mg/L	0.00050	-	0.133
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00334
Nickel (Ni)-Dissolved	mg/L	0.00050	-	0.00231
Potassium (K)-Dissolved	mg/L	0.050	-	9.63
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000343
Sodium (Na)-Dissolved	mg/L	0.50	-	86.7
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	0.000012
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0607
Zinc (Zn)-Dissolved	mg/L	0.0010	-	0.0072
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06	MP-06	MP-06	MP-06
	ALS Laboratory Sample ID			L2466563-1	L2478536-1	L2489339-1	L2504432-1
	Sample Date & Time			2020-06-23 13:50	2020-07-21 10:00	2020-08-15 17:10	2020-09-14 9:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Hardness (as CaCO3)	mg/L	0.50	-	465	1040	649	686
pH	pH units	0.10	6.0 - 9.5	8.00	8.23	8.03	7.95
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0	<2.0	3.8
Total Dissolved Solids	mg/L	20	-	720	1500	1040	1010
Turbidity	NTU	0.10	-	1.65	4.49	1.55	2.38
Alkalinity, Total (as CaCO3)	mg/L	10	-	76	123	80	80
Ammonia, Total (as N)	mg/L	0.010	-	0.367	0.297	0.017	<0.010
Chloride (Cl)	mg/L	0.50	-	140	144	89.9	90.7
Fluoride (F)	mg/L	0.020	-	0.14	0.21	0.14	0.11
Nitrate (as N)	mg/L	0.020	-	2.91	6.28	4.92	5.09
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.03	0.66	0.44	0.2
Phosphorus, Total	mg/L	0.0030	-	0.0049	<0.0030	<0.0030	<0.0030
Sulfate (SO4)	mg/L	0.30	-	318	809	564	576
Dissolved Organic Carbon	mg/L	0.50	-	3.84	4.04	1.75	2.16
Total Organic Carbon	mg/L	0.50	-	4.35	4.45	2.3	3.96
Aluminum (Al)-Total	mg/L	0.0050	-	0.0192	0.091	<0.050	0.0226
Arsenic (As)-Total	mg/L	0.0001/0.001	0.50	0.00018	<0.0010	<0.0010	0.0012
Cadmium (Cd)-Total	mg/L	0.000005/0.00005	-	0.0000082	<0.000050	<0.000050	<0.000005
Calcium (Ca)-Total	mg/L	0.50	-	59.1	127	86.8	79.3
Copper (Cu)-Total	mg/L	0.0050	0.30	0.001	<0.0050	<0.0050	<0.00050
Iron (Fe)-Total	mg/L	0.01/0.1	-	0.021	0.12	<0.10	0.053
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.20	<0.000050	<0.00050	<0.00050	<0.00005
Magnesium (Mg)-Total	mg/L	0.050	-	76.6	165	125	119
Manganese (Mn)-Total	mg/L	0.00050	-	1.220	3.51	0.615	0.048
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050	<0.0000050	<0.000005
Molybdenum (Mo)-Total	mg/L	0.000050	-	0.00433	0.00505	0.00278	0.00212
Nickel (Ni)-Total	mg/L	0.0050	0.50	0.00705	0.00960	<0.0050	0.00128
Potassium (K)-Total	mg/L	0.050	-	8.19	10.7	6.96	7.14
Selenium (Se)-Total	mg/L	0.000050	-	0.000607	0.00201	0.00147	0.00135
Sodium (Na)-Total	mg/L	0.050	-	57.1	55.1	38.6	36.8
Thallium (Tl)-Total	mg/L	0.00001/0.0001	-	0.000021	<0.00010	<0.00010	0.000017
Uranium (U)-Total	mg/L	0.000010	-	0.0372	0.0942	0.0394	0.0353
Zinc (Zn)-Total	mg/L	0.003/0.03	0.50	0.0245	<0.030	<0.030	<0.0030
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	0.0068	<0.050	<0.050	<0.050
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	0.00017	<0.0010	<0.0010	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.00001/0.00005	-	0.000012	<0.000050	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	59	130	77.7	81.5
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	0.00079	<0.0020	<0.0020	<0.0020
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.010	<0.10	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.000050	<0.00050	<0.00050	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.050	-	77	172	110	117
Manganese (Mn)-Dissolved	mg/L	0.00050	-	1.21	3.35	0.498	0.0315
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	0.0000058	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	0.00431	0.00519	0.00262	0.00214
Nickel (Ni)-Dissolved	mg/L	0.0005/0.005	-	0.00673	0.009	<0.0050	<0.0050
Potassium (K)-Dissolved	mg/L	0.050	-	8.6	10.8	6.44	6.35
Selenium (Se)-Dissolved	mg/L	0.000050	-	0.000714	0.0018	0.00135	0.00119
Sodium (Na)-Dissolved	mg/L	0.50	-	58.3	55.9	34.9	37.1
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	0.000021	<0.00010	<0.00010	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010	-	0.0371	0.0927	0.0348	0.0354
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	0.0029	<0.010	<0.010	<0.010
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01
	ALS Laboratory Sample ID			L2454616-4	L2459408-5	L2461573-5	L2466718-7	L2467735-5	L2467735-6	L2471866-5
	Sample Date & Time			2020-06-01 11:30	2020-06-09 9:15	2020-06-15 17:00	2020-06-22 12:10	2020-06-29 11:50	2020-06-29 11:50	2020-07-06 11:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3.0	-	-	147	-	-	-	-	202
pH	pH units	0.10	6.0 - 9.5	7.97	7.97	7.96	8.05	7.91	7.95	8.07
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	16.7	13.0	15.8	<2.0	3.3	5.1	7.7
Total Dissolved Solids	mg/L	20	-	122	99	72	119	107	107	96
Turbidity	NTU	0.10	-	37.9	39.1	15.2	2.87	2.92	2.78	3.89
Ammonia, Total (as N)	mg/L	0.010	-	-	0.162	-	-	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	0.596	-	-	-	-	0.452
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101
	ALS Laboratory Sample ID			L2476158-4	L2478539-5	L2480180-6	L2484595-4	L2484595-5
	Sample Date & Time			2020-07-13 13:20	2020-07-20 15:00	2020-07-27 11:50	2020-08-03 12:00	2020-08-03 12:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3.0	-	-	205	-	248	249
pH	pH units	0.10	6.0 - 9.5	8.00	7.91	7.94	7.98	7.96
Total Suspended Solids	mg/L	2.0/3.0	Grab 30, Average 15	2.5	5.8	2.9	<3.0	<3.0
Total Dissolved Solids	mg/L	20	-	130	205	123	152	151
Turbidity	NTU	0.10	-	3.82	12.6	4.33	2.49	2.44
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	0.017	0.018
Nitrate (as N)	mg/L	0.020	-	-	0.274	-	0.723	0.721
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.14: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2459408-4	L2461573-4	L2466718-9	L2467735-7	L2471866-6	L2476158-3	L2478540-1
	Sample Date & Time			2020-06-09 8:45	2020-06-15 17:20	2020-06-22 11:40	2020-06-29 13:40	2020-07-07 7:50	2020-07-13 12:35	2020-07-21 8:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3.0	-	191	-	-	-	555	-	586
pH	pH units	0.10	6.0 - 9.5	7.99	8.04	8.11	8.04	8.05	7.98	7.97
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30, Average 15	16.7	19.5	**57.0**	8.3	<2.0	<2.0	24.1
Total Dissolved Solids	mg/L	20	-	126	154	290	248	347	422	378
Turbidity	NTU	0.10	-	50.7	25.1	99.8	14.6	1.94	1.6	35.8
Ammonia, Total (as N)	mg/L	0.010	-	0.179	-	-	-	3.91	-	3.95
Nitrate (as N)	mg/L	0.020	-	1.54	-	-	-	19.9	-	20.3
Oil and Grease, Total	mg/L	2.0	-	<2.0	-	-	-	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.14: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2480180-7	L2484595-7	L2486374-5	L2490512-5	L2493980-6	L2499492-1	L2500073-6
	Sample Date & Time			2020-07-27 12:10	2020-08-03 9:20	2020-08-10 14:10	2020-08-17 10:50	2020-08-24 11:15	2020-09-02 9:20	2020-09-07 16:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3.0	-	-	619	-	-	-	451	-
pH	pH units	0.10	6.0 - 9.5	7.96	8.06	8.13	8.04	8.02	8.19	8.24
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30, Average 15	2.1	<3.0	<2.0	14.9	<2.0	<3.0	<2.0
Total Dissolved Solids	mg/L	20	-	369	375	247	266	486	232	250
Turbidity	NTU	0.10	-	3.03	1.09	1.46	8.87	0.68	1.02	1.23
Ammonia, Total (as N)	mg/L	0.010	-	-	0.628	-	-	-	0.066	-
Nitrate (as N)	mg/L	0.020	-	-	19.6	-	-	-	4.41	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.15: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01	MS-0101	MS-01	MS-01	MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2406388-1	L2406388-2	L2414018-1	L2424375-1	L2435755-1	L2447382-1	L2459438-1	L2471923-1
	Sample Date & Time			2020-01-15 15:00	2020-01-15 15:00	2020-02-04 15:00	2020-03-03 15:00	2020-04-07 15:00	2020-05-12 15:00	2020-06-09 15:00	2020-07-07 15:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
pH	pH units	0.1	6.0 - 9.5	7.75	7.77	7.78	7.45	8.11	7.54	7.65	7.69
Total Suspended Solids	mg/L	2.0/3.0	35	6.4	6.2	4.5	2.1	3.2	2.0	2.8	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	108	110	100	49	109	58	58	65
Ammonia, Total (as N)	mg/L	0.01	4	0.115	0.113	0.386	0.206	0.340	0.086	0.135	0.859
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.38	1.20	0.36	1.46	0.98	1.19	0.34	5.5
Phosphorus, Total	mg/L	0.003	4	1.10	1.10	0.991	0.818	1.54	1.72	1.43	1.65
Fecal Coliforms	CFU/100 mL	0	1,000	110	80	41	1	0	0	0	1
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	<2.0	<2.0
COD	mg/L	10	-	42	44	43	44	47	30	32	41
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.15: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-01	MS-01	MS-0101	MS-01
	ALS Laboratory Sample ID			L2485339-1	L2504195-1	L2516989-1	L2526115-1	L2526115-3	L2540878-1
	Sample Date & Time			2020-08-05 15:00	2020-09-16 15:00	2020-10-13 15:00	2020-11-04 15:00	2020-11-04 15:00	2020-12-15 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.1	6.0 - 9.5	7.42	7.59	7.59	7.60	7.63	7.71
Total Suspended Solids	mg/L	2.0/3.0	35	3.4	<2.0	<3.0	<3.0	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	58	58	51	63	68	43
Ammonia, Total (as N)	mg/L	0.01	4	0.024	0.026	0.174	0.100	0.103	0.94
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.28	0.39	0.810	4.80	0.610	1.48
Phosphorus, Total	mg/L	0.003	4	1.03	1.70	0.296	0.675	0.660	0.839
Fecal Coliforms	CFU/100 mL	0	1,000	0	0	0	0	0	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	34	33	21	26	30	35
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.16: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B01	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2406402-1	L2414001-1	L2414001-3	L2424379-1	L2435598-1	L2446562-1	L2459469-1	L2466572-1
	Sample Date & Time			2020-01-15 15:00	2020-02-04 15:00	2020-02-04 15:00	2020-03-03 15:00	2020-04-07 14:15	2020-05-12 14:25	2020-06-09 14:50	2020-06-23 14:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
pH	pH units	0.1	6.0 - 9.5	8.01	7.29	7.36	8.25	8.72	8.11	**5.34**	8.17
Total Suspended Solids	mg/L	2.0/3.0	35	<2.0	<2.0	<2.0	<2.0	17.7	<2.0	<2.0	<2.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	174	43	44	218	413	212	<10	162
Ammonia, Total (as N)	mg/L	0.02	4	0.059	0.132	0.71	0.337	0.099	0.064	**14.9**	0.20
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.09	0.45	0.98	1.05	1.53	0.90	13.4	0.20
Phosphorus, Total	mg/L	0.003	4	1.54	0.0216	0.0195	0.135	3.00	0.978	0.184	1.59
Fecal Coliforms	CFU/100 mL	0	1,000	**1300**	0	0	0	**2600**	0	0	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	<2.0	<2.0
COD	mg/L	10	-	38	26	33	25	62	19	68	27
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.16: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2471925-1	L2485392-1	L2504318-1	L2517025-1	L2526128-1	L2540886-1
	Sample Date & Time			2020-07-07 14:30	2020-08-05 14:30	2020-09-16 14:30	2020-10-13 15:40	2020-11-04 15:30	2020-12-15 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.1	6.0 - 9.5	6.55	8.64	7.87	8.27	7.93	7.18
Total Suspended Solids	mg/L	2.0/3.0	35	<2.0	<3.0	4.0	3.3	<3.0	<3.0
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	555	109	218	110	19
Ammonia, Total (as N)	mg/L	0.02	4	0.035	0.579	0.118	0.047	0.078	0.181
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	1.87	0.81	3.60	0.840	1.12
Phosphorus, Total	mg/L	0.003	4	0.265	0.892	0.675	0.261	1.06	0.559
Fecal Coliforms	CFU/100 mL	0	1,000	0	12	0	0	1	0
BOD	mg/L	2	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
COD	mg/L	10	-	15	37	35	11	27	20
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<5.0	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.17: Water Quality Results for Water Licence Monitoring Location - MS-03

Analyte	Sample ID			MS-03	MS-0301	MS-03	MS-0301	MS-03	MS-0301	MS-03
	ALS Laboratory Sample ID			L2478360-1	L2478360-2	L2482115-1	L2482115-2	L2484837-1	L2484837-2	L2482800-1
	Sample Date & Time			2020-07-22 17:45	2020-07-22 17:45	2020-07-30 17:45	2020-07-30 17:45	2020-07-31 16:55	2020-07-31 16:55	2020-08-01 17:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Field Duplicate	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	8.42	8.40	8.28	8.33	-	-	8.24
Total Suspended Solids	mg/L	2.0	-	2.6	2.5	<2.0	<2.0	-	-	<2.0
Total Dissolved Solids	mg/L	10	-	162	157	206	206	-	-	215
Turbidity	NTU	0.10	-	12.6	12.8	6.54	6.65	-	-	4.21
Lead (Pb)-Total [2]	mg/L	0.000050	0.001	**0.00105**	0.000811	0.000465	0.000313	0.000316	0.000320	0.000247
Oil and Grease, Total	mg/L	5.0	15.0	<5.0	<5.0	<5.0	<5.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.00050	0.370	<0.00050	<0.00050	<0.00050	<0.00050	-	-	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050	<0.00050	<0.00050	<0.00050	-	-	<0.00050
Toluene	mg/L	0.00045/0.0005	0.002	<0.00050	<0.00050	<0.00045	<0.00045	-	-	<0.00050
F1 (C6-C10)	mg/L	0.10	-	<0.10	<0.10	<0.10	<0.10	-	-	<0.10
F2 (C10-C16)	mg/L	0.10/0.30	-	<0.10	<0.10	<0.30	<0.30	-	-	<0.10
F3 (C16-C34)	mg/L	0.25/0.30	-	<0.25	<0.25	<0.30	<0.30	-	-	<0.25
F4 (C34-C50)	mg/L	0.25/0.30	-	<0.25	<0.25	<0.30	<0.30	-	-	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.30/0.38	-	<0.38	<0.38	<0.30	<0.30	-	-	<0.38

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

[2] The results of an external laboratory analysis of a stormwater discharge grab sample collected on July 22, 2020 had a total lead concentration of 0.00105 mg/L, but the field duplicate sample collected at the same time had a total lead concentration of 0.000811 indicating that the elevated lead in the July 22, 2020 sample was the result of sampling error or external laboratory error.

Table 7.2.18: Water Quality Results for Water Licence Monitoring Location - MS-03B

Analyte	Sample ID			MS-03B	MS-03B	MS-03B01
	ALS Laboratory Sample ID			L2486012-1	L2491466-1	L2491466-2
	Sample Date & Time			2020-08-09 11:35	2020-08-18 16:05	2020-08-18 16:05
	QA/QC Sample Type			N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]			
pH	pH units	0.10	6.0 - 9.5	8.18	8.18	8.18
Total Suspended Solids	mg/L	1.0	-	<1.0	5.2	5.2
Total Dissolved Solids	mg/L	10	-	318	266	285
Turbidity	NTU	0.10	-	1.15	5.12	5.04
Lead (Pb)-Total	mg/L	0.000050	0.001	0.000258	0.00095	0.000910
Oil and Grease, Total	mg/L	5.0	15.0	<5.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.00050	0.370	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00045/0.0005	0.002	<0.00045	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.10	-	<0.10	<0.10	<0.10
F2 (C10-C16)	mg/L	0.10/0.30	-	<0.30	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25/0.30	-	<0.30	<0.25	<0.25
F4 (C34-C50)	mg/L	0.25/0.30	-	<0.30	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.30/0.38	-	<0.30	<0.38	<0.38

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

Table 7.2.19: Water Quality Results for Water Licence Monitoring Location - MS-MRY-04B

Analyte	Sample ID			MS-MRY-04B	MS-MRY-04B	MS-MRY-04B	MS-MRY-04B
	ALS Laboratory Sample ID			L2465602-12	L2463012-1	L2463013-1	L2463618-1
	Sample Date & Time			2020-06-16 15:45	2020-06-17 8:00	2020-06-18 8:00	2020-06-19 7:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]				
pH	pH units	0.10	6.0 - 9.5	7.14	7.36	7.24	7.19
Total Suspended Solids	mg/L	2.0	35	20.5	20.4	22.0	21.3
Total Dissolved Solids	mg/L	10	-	103	118	107	-
Turbidity	NTU	0.100	-	8.40	9.67	9.42	9.32
Ammonia, Total (as N)	mg/L	0.025	4	1.74	-	-	-
Phosphorus, Total	mg/L	0.020	4	0.444	-	-	-
Fecal Coliforms	CFU/100 mL	0	1,000	Sample Hold Time Exceedance [4]	-	-	-
BOD	mg/L	2	30	Sample Hold Time Exceedance [4]	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	-	-	Not Acutely Toxic	Sample Hold Time Exceedance [4]	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[4] Due to an unexpected flight delay during transport of an effluent sample collected from the MS-MRY-04B discharge for water quality and acute lethality analysis on June 18, 2020, the sample was not received at the external laboratory within the allowable sample hold times for the results of the acute lethality (5 day maximum), BOD (4 day maximum) and Faecal Coliform (48 hour maximum) analyses to be valid. Upon receipt of notification from the external laboratory of the hold time exceedance on June 24, 2020, the discharge from the MS-MRY-04B pond had ceased preventing resampling from being possible.

Table 7.2.20: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06	MS-06
	ALS Laboratory Sample ID			L2485407-1	L2485989-1
	Sample Date & Time			2020-08-04 11:15	2020-08-09 10:05
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]		
Conductivity	umhos/cm	3	-	1590	1740
Hardness (as CaCO3)	mg/L	10	-	917	-
pH	pH units	0.1	6.0 - 9.5	7.26	7.28
Total Suspended Solids	mg/L	2	15	6.0	1.9
Total Dissolved Solids	mg/L	13	-	1520	1500
Turbidity	NTU	0.1	-	7.08	3.85
Acidity (as CaCO3)	mg/L	2	-	2.3	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	13	-
Ammonia, Total (as N)	mg/L	0.02	-	0.272	0.169
Chloride (Cl)	mg/L	0.5	-	22.8	-
Fluoride (F)	mg/L	0.02	-	<0.10	-
Nitrate (as N)	mg/L	0.02	-	14.9	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.82	-
Phosphorus, Total	mg/L	0.003	-	0.0302	-
Sulfate (SO4)	mg/L	0.3	-	952	-
Dissolved Organic Carbon	mg/L	0.5	-	1.17	-
Total Organic Carbon	mg/L	0.5	-	2.06	-
Aluminum (Al)-Total	mg/L	0.005	-	0.068	0.0267
Antimony (Sb)-Total	mg/L	0.0001/0.001	-	<0.0010	<0.00020
Arsenic (As)-Total	mg/L	0.0001-0.001	0.5	<0.0010	<0.00020
Barium (Ba)-Total	mg/L	0.0001	-	0.0164	0.0163
Beryllium (Be)-Total	mg/L	0.0001/0.001	-	<0.0010	<0.00020
Bismuth (Bi)-Total	mg/L	0.00005/0.0005	-	<0.00050	<0.00010
Boron (B)-Total	mg/L	0.01/0.1	-	<0.10	0.048
Cadmium (Cd)-Total	mg/L	0.000005	-	0.000206	0.000166
Calcium (Ca)-Total	mg/L	0.05	-	77.9	76.8
Cesium (Cs)-Total	mg/L	0.00001/0.0001	-	<0.00010	0.000038
Chromium (Cr)-Total	mg/L	0.0002-0.005	-	<0.0050	<0.00020
Cobalt (Co)-Total	mg/L	0.0001/0.01	-	0.01	0.00899
Copper (Cu)-Total	mg/L	0.0005-0.005	0.3	<0.0050	<0.0010
Iron (Fe)-Total	mg/L	0.01	-	0.16	0.068
Lead (Pb)-Total	mg/L	0.000005-0.0005	0.2	<0.00050	<0.00010
Lithium (Li)-Total	mg/L	0.001	-	0.037	0.0372
Magnesium (Mg)-Total	mg/L	0.05	-	197	213
Manganese (Mn)-Total	mg/L	0.0005	-	7.87	8.08
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	0.00122
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00113	0.0349
Nickel (Ni)-Total	mg/L	0.0005/0.10	0.5	0.0361	<0.10
Phosphorus (P)-Total	mg/L	0.05/0.50	-	<0.50	12.6
Potassium (K)-Total	mg/L	0.05	-	11.3	0.0238
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0222	0.00236
Selenium (Se)-Total	mg/L	0.00005	-	0.0021	1.72
Silicon (Si)-Total	mg/L	0.00002/0.10	-	1.7	<0.000020
Silver (Ag)-Total	mg/L	0.00005/0.0005	-	<0.00050	9.97
Sodium (Na)-Total	mg/L	0.05	-	8.98	0.131
Strontium (Sr)-Total	mg/L	0.001	-	0.128	359
Sulfur (S)-Total	mg/L	0.00040/0.50	-	325	<0.00040
Tellurium (Te)-Total	mg/L	0.0002/0.002	-	<0.0020	0.000093
Thallium (Tl)-Total	mg/L	0.00001/0.0002	-	0.0001	<0.00020
Thorium (Th)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00020
Tin (Sn)-Total	mg/L	0.0001/0.001	-	<0.0010	0.00078
Titanium (Ti)-Total	mg/L	0.0002-0.003	-	<0.0030	<0.00020
Tungsten (W)-Total	mg/L	0.0001/0.001	-	<0.0010	0.0023
Uranium (U)-Total	mg/L	0.00001/0.001	-	0.00269	<0.0010
Vanadium (V)-Total	mg/L	0.0005-0.006	-	<0.0050	<0.0060
Zinc (Zn)-Total	mg/L	0.0004-0.03	0.5	<0.030	<0.00040
Zirconium (Zr)-Total	mg/L	0.0002	-	<0.0020	-
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	<0.050	-
Antimony (Sb)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0149	-
Beryllium (Be)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-
Bismuth (Bi)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-
Boron (B)-Dissolved	mg/L	0.01/0.1	-	<0.10	-
Cadmium (Cd)-Dissolved	mg/L	0.000005	-	0.000205	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	67.9	-
Cesium (Cs)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-
Chromium (Cr)-Dissolved	mg/L	0.0005/0.005	-	<0.0050	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0088	-
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.10	-
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-
Lithium (Li)-Dissolved	mg/L	0.001	-	0.015	-
Magnesium (Mg)-Dissolved	mg/L	0.005	-	182	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	7.36	-
Mercury (Hg)-Dissolved	mg/L	0.0000005	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00121	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0324	-

Table 7.2.20: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06	MS-06
	ALS Laboratory Sample ID			L2485407-1	L2485989-1
	Sample Date & Time			2020-08-04 11:15	2020-08-09 10:05
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence and MMER Criteria[1]		
Phosphorus (P)-Dissolved	mg/L	0.05/0.5	-	<0.50	-
Potassium (K)-Dissolved	mg/L	0.05	-	10.2	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0198	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00209	-
Silicon (Si)-Dissolved	mg/L	0.05	-	1.31	-
Silver (Ag)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-
Sodium (Na)-Dissolved	mg/L	0.05	-	7.91	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.119	-
Sulfur (S)-Dissolved	mg/L	0.5	-	281	-
Tellurium (Te)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-
Thorium (Th)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-
Tin (Sn)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-
Titanium (Ti)-Dissolved	mg/L	0.0003/0.003	-	<0.0030	-
Tungsten (W)-Dissolved	mg/L	0.0001	-	<0.0010	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00243	-
Vanadium (V)-Dissolved	mg/L	0.0005/0.005	-	<0.0050	-
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	<0.010	-
Zirconium (Zr)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-
Ra-226	Bq/L	0.0067/0.0095	0.37	<0.0095	0.01
Acute Lethality [2,3]	N/A		Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.21: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-0801	MS-08
	ALS Laboratory Sample ID			L2467079-1	L2468306-1	L2469875-1	L2469875-2	L2476393-1
	Sample Date & Time			2020-06-28 10:15	2020-06-30 16:35	2020-07-05 10:00	2020-07-05 10:00	2020-07-18 9:15
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3.0	-	473	-	739	744	1370
Hardness (as CaCO3)	mg/L	0.50	-	225	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.16	7.20	7.24	7.26	7.61
Total Suspended Solids	mg/L	2.0/4.0	15	3.9	<2.0	7.0	6.8	5.7
Total Dissolved Solids	mg/L	10	-	343	348	585	599	1090
Turbidity	NTU	0.1	-	4.67	2.96	8.36	9.13	7.86
Acidity (as CaCO3)	mg/L	2.0	-	2.9	-	<2.0	2.7	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	10.6	-	15.4	15.8	-
Ammonia, Total (as N)	mg/L	0.01	-	0.609	-	0.917	0.942	1.63
Bromide (Br)	mg/L	0.05	-	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	3.54	-	5.9	6.1	-
Fluoride (F)	mg/L	0.02/0.1	-	0.053	-	<0.10	<0.10	-
Nitrate (as N)	mg/L	0.02	-	3.85	-	7.03	7.07	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.965	-	1.37	1.45	-
Phosphorus, Total	mg/L	0.003	-	<0.0020	-	0.0062	0.0402	-
Sulfate (SO4)	mg/L	0.3	-	200	-	329	331	-
Dissolved Organic Carbon	mg/L	0.5	-	1.59	-	1.48	1.85	-
Total Organic Carbon	mg/L	0.5	-	1.27	-	1.38	1.58	-
Aluminum (Al)-Total	mg/L	0.05	-	0.0853	-	0.223	0.160	0.175
Antimony (Sb)-Total	mg/L	0.0001-0.001	-	<0.00010	-	<0.00010	<0.00010	<0.0010
Arsenic (As)-Total	mg/L	0.0001-0.001	0.5	<0.00010	-	<0.00010	<0.00010	<0.0010
Barium (Ba)-Total	mg/L	0.0001	-	0.00934	-	0.0144	0.0136	0.0230
Beryllium (Be)-Total	mg/L	0.0001-0.001	-	<0.00010	-	<0.00010	<0.00010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005-0.0005	-	<0.000050	-	<0.000050	<0.000050	<0.00050
Boron (B)-Total	mg/L	0.01/0.1	-	0.012	-	0.017	0.017	<0.10
Cadmium (Cd)-Total	mg/L	0.000005/0.00005	-	0.0000375	-	0.0000432	0.0000489	<0.000050
Calcium (Ca)-Total	mg/L	0.05	-	18.1	-	28.3	29.1	54.9
Cesium (Cs)-Total	mg/L	0.00001-0.0001	-	0.000013	-	0.000027	0.000023	<0.00010
Chromium (Cr)-Total	mg/L	0.0005-0.005	-	0.00016	-	0.00054	0.00032	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0149	-	0.0187	0.0186	0.0208
Copper (Cu)-Total	mg/L	0.0005/0.005	0.3	0.00151	-	0.00184	0.00182	<0.0050
Iron (Fe)-Total	mg/L	0.01/0.1	-	0.178	-	0.628	0.501	0.47
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.2	0.000151	-	0.000255	0.000255	<0.00050
Lithium (Li)-Total	mg/L	0.001/0.01	-	0.0060	-	0.0091	0.0089	<0.010
Magnesium (Mg)-Total	mg/L	0.005	-	45.7	-	70.9	70.4	144
Manganese (Mn)-Total	mg/L	0.0005	-	0.962	-	1.46	1.45	2.07
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00129	-	0.00173	0.00162	0.00203
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0203	-	0.0245	0.0245	0.0298
Phosphorus (P)-Total	mg/L	0.05/0.1	-	<0.050	-	<0.050	<0.050	<0.50
Potassium (K)-Total	mg/L	0.05	-	2.98	-	4.18	4.10	5.84
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00257	-	0.00417	0.00388	0.0063
Selenium (Se)-Total	mg/L	0.00005	-	0.000926	-	0.00141	0.00134	0.00249
Silicon (Si)-Total	mg/L	0.1	-	0.79	-	1.29	1.15	1.50
Silver (Ag)-Total	mg/L	0.00001-0.0005	-	<0.000010	-	<0.000010	<0.000010	<0.00050
Sodium (Na)-Total	mg/L	0.05	-	1.39	-	2.21	2.21	3.59
Strontium (Sr)-Total	mg/L	0.001	-	0.0354	-	0.0492	0.0467	0.098
Sulfur (S)-Total	mg/L	0.5	-	74.5	-	116	118	224
Tellurium (Te)-Total	mg/L	0.0002-0.002	-	<0.00020	-	<0.00020	<0.00020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001/0.0001	-	0.000011	-	0.000022	0.000022	<0.00010
Thorium (Th)-Total	mg/L	0.0001-0.001	-	<0.00010	-	0.00015	0.00016	<0.0010
Tin (Sn)-Total	mg/L	0.0001-0.001	-	<0.00010	-	<0.00010	<0.00010	0.0015
Titanium (Ti)-Total	mg/L	0.0003/0.003	-	0.00386	-	0.0102	0.00696	0.0052
Tungsten (W)-Total	mg/L	0.0001-0.001	-	<0.00010	-	<0.00010	<0.00010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.000525	-	0.00132	0.00131	0.00282
Vanadium (V)-Total	mg/L	0.0005-0.005	-	<0.00050	-	<0.00050	<0.00050	<0.0050
Zinc (Zn)-Total	mg/L	0.003-0.03	0.5	<0.0030	-	0.0034	<0.0030	<0.030
Zirconium (Zr)-Total	mg/L	0.0002-0.002	-	<0.00020	-	0.00030	0.00024	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	0.0036	-	0.0018	0.0016	-
Antimony (Sb)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.00833	-	0.0122	0.0119	-
Beryllium (Be)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Bismuth (Bi)-Dissolved	mg/L	0.00005/0.0005	-	<0.000050	-	<0.000050	<0.000050	-
Boron (B)-Dissolved	mg/L	0.01/0.1	-	0.012	-	0.017	0.017	-
Cadmium (Cd)-Dissolved	mg/L	0.00005	-	0.0000337	-	0.0000366	0.0000368	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	18.9	-	29.3	28.0	-
Cesium (Cs)-Dissolved	mg/L	0.00001/0.0001	-	<0.000010	-	<0.000010	<0.000010	-
Chromium (Cr)-Dissolved	mg/L	0.0001-0.005	-	<0.00010	-	<0.00010	<0.00010	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0141	-	0.0175	0.0175	-
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	0.00106	-	0.00113	0.00109	-
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.010	-	<0.010	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.000050	-	<0.000050	<0.000050	-
Lithium (Li)-Dissolved	mg/L	0.001/0.01	-	0.0059	-	0.0077	0.0077	-
Magnesium (Mg)-Dissolved	mg/L	0.005	-	43.3	-	72.8	70.8	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.907	-	1.34	1.35	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00121	-	0.00149	0.00148	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0190	-	0.0223	0.0222	-
Phosphorus (P)-Dissolved	mg/L	0.05/0.5	-	<0.050	-	<0.050	<0.050	-
Potassium (K)-Dissolved	mg/L	0.05	-	2.78	-	3.85	3.85	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.00221	-	0.00325	0.00321	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.000863	-	0.00121	0.00137	-
Silicon (Si)-Dissolved	mg/L	0.05	-	0.641	-	0.875	0.834	-
Silver (Ag)-Dissolved	mg/L	0.00001-0.0005	-	<0.000010	-	<0.000010	<0.000010	-
Sodium (Na)-Dissolved	mg/L	0.05	-	1.41	-	2.25	2.17	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.0340	-	0.0446	0.0452	-
Sulfur (S)-Dissolved	mg/L	0.5	-	68.7	-	111	107	-
Tellurium (Te)-Dissolved	mg/L	0.0002/0.002	-	<0.00020	-	<0.00020	<0.00020	-
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	<0.000010	-	0.000012	0.000013	-
Thorium (Th)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Tin (Sn)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Titanium (Ti)-Dissolved	mg/L	0.0003/0.003	-	<0.00030	-	<0.00030	<0.00030	-
Tungsten (W)-Dissolved	mg/L	0.0001/0.001	-	<0.00010	-	<0.00010	<0.00010	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000391	-	0.000845	0.000855	-
Vanadium (V)-Dissolved	mg/L	0.0005/0.005	-	<0.00050	-	<0.00050	<0.00050	-
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	0.0022	-	0.0017	0.0016	-
Zirconium (Zr)-Dissolved	mg/L	0.0002/0.002	-	<0.00020	-	<0.00020	<0.00020	-
Ra-226	Bq/L	0.0045-0.0097	-	<0.0070	-	0.0081	<0.0091	0.017
Acute Lethality[2,3]	N/A	N/A	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.21: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-0801	MS-08	MS-08	MS-0801
	ALS Laboratory Sample ID			L2476393-2	L2479178-1	L2480818-1	L2480818-2
	Sample Date & Time			2020-07-18 9:15	2020-07-21 11:20	2020-07-28 14:10	2020-07-28 14:10
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3.0	-	1370	1690	2250	2150
Hardness (as CaCO3)	mg/L	0.50	-	-	961	-	-
pH	pH units	0.1	6.0 - 9.5	7.60	7.37	7.68	7.70
Total Suspended Solids	mg/L	2.0/4.0	15	4.5	<4.0	3.3	5.9
Total Dissolved Solids	mg/L	10	-	1090	1420	1980	1990
Turbidity	NTU	0.1	-	7.80	3.88	2.94	3.42
Acidity (as CaCO3)	mg/L	2.0	-	-	2.7	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	30	-	-
Ammonia, Total (as N)	mg/L	0.01	-	1.65	1.69	1.65	1.70
Bromide (Br)	mg/L	0.05	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	-	15.3	-	-
Fluoride (F)	mg/L	0.02/0.1	-	-	<0.10	-	-
Nitrate (as N)	mg/L	0.02	-	-	22.5	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	1.79	-	-
Phosphorus, Total	mg/L	0.003	-	-	<0.0030	-	-
Sulfate (SO4)	mg/L	0.3	-	-	890	-	-
Dissolved Organic Carbon	mg/L	0.5	-	-	2.73	-	-
Total Organic Carbon	mg/L	0.5	-	-	2.82	-	-
Aluminum (Al)-Total	mg/L	0.05	-	0.223	<0.050	0.0862	0.0864
Antimony (Sb)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.0010	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.0001-0.001	0.5	<0.0010	<0.0010	<0.00020	<0.00020
Barium (Ba)-Total	mg/L	0.0001	-	0.0229	0.0244	0.033	0.0339
Beryllium (Be)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.0010	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L	0.00005-0.0005	-	<0.00050	<0.00050	<0.00010	<0.00010
Boron (B)-Total	mg/L	0.01/0.1	-	<0.10	<0.10	0.036	0.036
Cadmium (Cd)-Total	mg/L	0.000005/0.00005	-	<0.000050	0.000065	0.000058	0.000063
Calcium (Ca)-Total	mg/L	0.05	-	55.4	74.9	109	108
Cesium (Cs)-Total	mg/L	0.00001-0.0001	-	<0.00010	<0.00010	<0.000020	0.00002
Chromium (Cr)-Total	mg/L	0.0005-0.005	-	<0.0050	<0.0050	<0.00020	<0.00020
Cobalt (Co)-Total	mg/L	0.0001	-	0.021	0.0257	0.0303	0.0301
Copper (Cu)-Total	mg/L	0.0005/0.005	0.3	<0.0050	<0.0050	0.0029	0.0024
Iron (Fe)-Total	mg/L	0.01/0.1	-	0.55	<0.10	0.346	0.343
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.2	<0.00050	<0.00050	0.00013	0.00014
Lithium (Li)-Total	mg/L	0.001/0.01	-	<0.010	<0.010	0.0139	0.0144
Magnesium (Mg)-Total	mg/L	0.005	-	144	198	288	295
Manganese (Mn)-Total	mg/L	0.0005	-	2.08	2.80	3.33	3.38
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00218	0.00221	0.00268	0.00261
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0271	0.0334	0.0403	0.0402
Phosphorus (P)-Total	mg/L	0.05/0.1	-	<0.50	<0.50	<0.10	<0.10
Potassium (K)-Total	mg/L	0.05	-	5.96	7.02	9.51	8.93
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0057	0.0055	0.00788	0.00773
Selenium (Se)-Total	mg/L	0.00005	-	0.00241	0.00361	0.00499	0.00522
Silicon (Si)-Total	mg/L	0.1	-	1.50	1.60	1.92	1.91
Silver (Ag)-Total	mg/L	0.00001-0.0005	-	<0.00050	<0.00050	0.000021	<0.000020
Sodium (Na)-Total	mg/L	0.05	-	3.59	4.53	6.90	6.77
Strontium (Sr)-Total	mg/L	0.001	-	0.101	0.101	0.122	0.121
Sulfur (S)-Total	mg/L	0.5	-	222	306	456	461
Tellurium (Te)-Total	mg/L	0.0002-0.002	-	<0.0020	<0.0020	<0.00040	<0.00040
Thallium (Tl)-Total	mg/L	0.00001/0.0001	-	<0.00010	<0.00010	0.000039	0.000036
Thorium (Th)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.0010	<0.00020	<0.00020
Tin (Sn)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.0010	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L	0.0003/0.003	-	0.0059	<0.0030	0.00421	0.00414
Tungsten (W)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.0010	<0.00020	<0.00020
Uranium (U)-Total	mg/L	0.00001	-	0.00280	0.00424	0.00574	0.00561
Vanadium (V)-Total	mg/L	0.0005-0.005	-	<0.0050	<0.0050	<0.0010	<0.0010
Zinc (Zn)-Total	mg/L	0.003-0.03	0.5	<0.030	<0.030	<0.0060	<0.0060
Zirconium (Zr)-Total	mg/L	0.0002-0.002	-	<0.0020	<0.0020	<0.00040	<0.00040
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	-	<0.050	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	-	0.0238	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005/0.0005	-	-	<0.00050	-	-
Boron (B)-Dissolved	mg/L	0.01/0.1	-	-	<0.10	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	68.6	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001/0.0001	-	-	<0.00010	-	-
Chromium (Cr)-Dissolved	mg/L	0.0001-0.005	-	-	<0.0050	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	-	0.0252	-	-
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	-	0.002	-	-
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	-	0.29	-	-
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	-	<0.00050	-	-
Lithium (Li)-Dissolved	mg/L	0.001/0.01	-	-	0.01	-	-
Magnesium (Mg)-Dissolved	mg/L	0.005	-	-	192	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	2.67	-	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	<0.0000050	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.00226	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.0337	-	-
Phosphorus (P)-Dissolved	mg/L	0.05/0.5	-	-	<0.50	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	6.36	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	-	0.0056	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	0.00363	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	-	1.46	-	-
Silver (Ag)-Dissolved	mg/L	0.00001-0.0005	-	-	<0.00050	-	-
Sodium (Na)-Dissolved	mg/L	0.05	-	-	4.53	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	-	0.097	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	-	283	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002/0.002	-	-	<0.0020	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	-	<0.00010	-	-
Thorium (Th)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Tin (Sn)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003/0.003	-	-	<0.0030	-	-
Tungsten (W)-Dissolved	mg/L	0.0001/0.001	-	-	<0.0010	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.00408	-	-
Vanadium (V)-Dissolved	mg/L	0.0005/0.005	-	-	<0.0050	-	-
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	-	<0.010	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0002/0.002	-	-	<0.0020	-	-
Ra-226	Bq/L	0.0045-0.0097	-	0.018	<0.0097	0.022	0.022
Acute Lethality[2,3]	N/A	N/A	Not Acutely Toxic	-	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.21: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-08	MS-0801
	ALS Laboratory Sample ID			L2485445-1	L2486007-1	L2491370-1	L2491370-2
	Sample Date & Time			2020-08-04 13:10	2020-08-09 9:20	2020-08-18 11:10	2020-08-18 11:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3.0	-	2110	2230	2890	2880
Hardness (as CaCO3)	mg/L	0.50	-	1360	-	1710	1730
pH	pH units	0.1	6.0 - 9.5	7.42	7.73	7.80	7.84
Total Suspended Solids	mg/L	2.0/4.0	15	3.8	3.8	7.2	8.4
Total Dissolved Solids	mg/L	10	-	1850	2690	2730	2760
Turbidity	NTU	0.1	-	1.74	1.30	3.02	2.68
Acidity (as CaCO3)	mg/L	2.0	-	2.7	-	3.1	3.2
Alkalinity, Total (as CaCO3)	mg/L	10	-	38	-	30	30
Ammonia, Total (as N)	mg/L	0.01	-	1.46	1.33	2.87	2.88
Bromide (Br)	mg/L	0.05	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	18.7	-	15.7	16.3
Fluoride (F)	mg/L	0.02/0.1	-	<0.10	-	0.13	0.19
Nitrate (as N)	mg/L	0.02	-	26.9	-	21.7	22.4
Total Kjeldahl Nitrogen	mg/L	0.15	-	1.63	-	3.82	2.55
Phosphorus, Total	mg/L	0.003	-	<0.0030	-	<0.0030	<0.0030
Sulfate (SO4)	mg/L	0.3	-	1190	-	1850	1900
Dissolved Organic Carbon	mg/L	0.5	-	2.84	-	4.14	3.16
Total Organic Carbon	mg/L	0.5	-	2.64	-	2.85	2.90
Aluminum (Al)-Total	mg/L	0.05	-	<0.050	0.0144	<0.050	<0.050
Antimony (Sb)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00020	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0001-0.001	0.5	<0.0010	<0.00020	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0001	-	0.0307	0.0305	0.0120	0.0125
Beryllium (Be)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00020	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005-0.0005	-	<0.00050	<0.00010	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.01/0.1	-	<0.10	0.035	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.000005/0.00005	-	0.000069	0.000063	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.05	-	100	98.2	175	182
Cesium (Cs)-Total	mg/L	0.00001-0.0001	-	<0.00010	<0.000020	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0005-0.005	-	<0.0050	<0.00020	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0296	0.0283	0.0110	0.0116
Copper (Cu)-Total	mg/L	0.0005/0.005	0.3	<0.0050	0.0013	<0.0050	<0.0050
Iron (Fe)-Total	mg/L	0.01/0.1	-	0.120	0.102	0.57	0.58
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.2	<0.00050	<0.00010	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.001/0.01	-	0.014	0.0134	0.012	0.013
Magnesium (Mg)-Total	mg/L	0.005	-	272	272	355	374
Manganese (Mn)-Total	mg/L	0.0005	-	3.41	3.39	1.74	1.85
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00231	0.00228	0.00081	0.00088
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0398	0.0377	0.0138	0.0145
Phosphorus (P)-Total	mg/L	0.05/0.1	-	<0.50	<0.10	<0.50	<0.50
Potassium (K)-Total	mg/L	0.05	-	7.76	8.33	6.33	6.55
Rubidium (Rb)-Total	mg/L	0.0002	-	0.00660	0.00689	0.0062	0.0063
Selenium (Se)-Total	mg/L	0.00005	-	0.00476	0.00476	0.00281	0.00275
Silicon (Si)-Total	mg/L	0.1	-	1.60	1.58	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00001-0.0005	-	<0.00050	<0.000020	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.05	-	5.82	5.87	5.01	5.09
Strontium (Sr)-Total	mg/L	0.001	-	0.129	0.126	0.808	0.801
Sulfur (S)-Total	mg/L	0.5	-	429	443	622	631
Tellurium (Te)-Total	mg/L	0.0002-0.002	-	<0.0020	<0.00040	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001/0.0001	-	<0.00010	0.000033	<0.00010	<0.00010
Thorium (Th)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00020	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0001-0.001	-	<0.0010	0.00022	0.0058	0.0057
Titanium (Ti)-Total	mg/L	0.0003/0.003	-	<0.0030	<0.00060	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00020	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00574	0.00588	0.00109	0.00108
Vanadium (V)-Total	mg/L	0.0005-0.005	-	<0.0050	<0.0010	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.003-0.03	0.5	<0.030	<0.0060	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0002-0.002	-	<0.0020	<0.00040	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	<0.050	-	<0.050	<0.050
Antimony (Sb)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0301	-	0.0117	0.0116
Beryllium (Be)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.01/0.1	-	<0.10	-	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.00005	-	0.000053	-	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.05	-	97.8	-	167	171
Cesium (Cs)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-	<0.00010	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.0001-0.005	-	<0.0050	-	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0283	-	0.0097	0.0097
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	<0.0020	<0.0020
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.10	-	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.001/0.01	-	0.013	-	0.010	0.012
Magnesium (Mg)-Dissolved	mg/L	0.005	-	270	-	314	317
Manganese (Mn)-Dissolved	mg/L	0.0005	-	3.37	-	1.60	1.62
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00241	-	0.00083	0.00081
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0392	-	0.0137	0.0133
Phosphorus (P)-Dissolved	mg/L	0.05/0.5	-	<0.50	-	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.05	-	7.78	-	5.95	5.93
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0069	-	0.0062	0.0060
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00461	-	0.00254	0.00254
Silicon (Si)-Dissolved	mg/L	0.05	-	1.67	-	<0.50	<0.50
Silver (Ag)-Dissolved	mg/L	0.00001-0.0005	-	<0.00050	-	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.05	-	6.00	-	4.31	4.26
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.131	-	0.737	0.759
Sulfur (S)-Dissolved	mg/L	0.5	-	426	-	541	543
Tellurium (Te)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-	<0.00010	<0.00010
Thorium (Th)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	0.0052	0.0052
Titanium (Ti)-Dissolved	mg/L	0.0003/0.003	-	<0.0030	-	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00566	-	0.00100	0.00093
Vanadium (V)-Dissolved	mg/L	0.0005/0.005	-	<0.0050	-	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	<0.010	-	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	<0.0020	<0.0020
Ra-226	Bq/L	0.0045-0.0097	-	0.012	0.013	<0.0064	0.0078
Acute Lethality[2,3]	N/A	N/A	Not Acutely Toxic	-	-	Not acutely toxic	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.21: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08	MS-08	MS-0801	MS-08
	ALS Laboratory Sample ID			L2491605-1	L2493959-1	L2493959-2	L2496738-1
	Sample Date & Time			2020-08-19 10:30	2020-08-24 14:15	2020-08-24 14:15	2020-08-31 11:35
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3.0	-	1800	1890	1890	3790
Hardness (as CaCO3)	mg/L	0.50	-	1050	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.75	7.81	7.81	8.49
Total Suspended Solids	mg/L	2.0/4.0	15	11.2	8.0	8.4	10.7
Total Dissolved Solids	mg/L	10	-	1650	1640	1710	4250
Turbidity	NTU	0.1	-	13.0	13.1	13.1	11.5
Acidity (as CaCO3)	mg/L	2.0	-	3.0	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	10	-	47	-	-	-
Ammonia, Total (as N)	mg/L	0.01	-	0.106	0.72	0.68	6.91
Bromide (Br)	mg/L	0.05	-	-	-	-	-
Chloride (Cl)	mg/L	0.5	-	14.3	-	-	-
Fluoride (F)	mg/L	0.02/0.1	-	<0.10	-	-	-
Nitrate (as N)	mg/L	0.02	-	20.9	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	<0.15	-	-	-
Phosphorus, Total	mg/L	0.003	-	0.0057	-	-	-
Sulfate (SO4)	mg/L	0.3	-	950	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	1.83	-	-	-
Total Organic Carbon	mg/L	0.5	-	1.77	-	-	-
Aluminum (Al)-Total	mg/L	0.05	-	0.350	0.365	0.275	0.100
Antimony (Sb)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00010	<0.00010	<0.0010
Arsenic (As)-Total	mg/L	0.0001-0.001	0.5	<0.0010	0.00015	0.00013	<0.0010
Barium (Ba)-Total	mg/L	0.0001	-	0.0254	0.0239	0.0251	0.0191
Beryllium (Be)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00010	<0.00010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00005-0.0005	-	<0.00050	<0.000050	<0.000050	<0.00050
Boron (B)-Total	mg/L	0.01/0.1	-	<0.10	0.029	0.028	<0.10
Cadmium (Cd)-Total	mg/L	0.000005/0.00005	-	<0.000050	0.0000505	0.0000465	0.000065
Calcium (Ca)-Total	mg/L	0.05	-	89.9	89.0	89.7	339
Cesium (Cs)-Total	mg/L	0.00001-0.0001	-	<0.00010	0.000019	0.000016	0.00015
Chromium (Cr)-Total	mg/L	0.0005-0.005	-	<0.0050	0.00176	0.00135	<0.0050
Cobalt (Co)-Total	mg/L	0.0001	-	0.0190	0.0184	0.0185	0.0423
Copper (Cu)-Total	mg/L	0.0005/0.005	0.3	<0.0050	0.00144	0.00136	0.0256
Iron (Fe)-Total	mg/L	0.01/0.1	-	0.62	0.621	0.510	3.91
Lead (Pb)-Total	mg/L	0.00005/0.0005	0.2	<0.00050	0.000128	0.000113	<0.00050
Lithium (Li)-Total	mg/L	0.001/0.01	-	0.012	0.0111	0.0113	0.089
Magnesium (Mg)-Total	mg/L	0.005	-	234	202	207	502
Manganese (Mn)-Total	mg/L	0.0005	-	2.41	2.31	2.24	11.5
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.00235	0.00225	0.00226	<0.00050
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0282	0.0262	0.0265	0.0324
Phosphorus (P)-Total	mg/L	0.05/0.1	-	<0.50	<0.050	<0.050	<0.50
Potassium (K)-Total	mg/L	0.05	-	6.82	6.63	6.66	7.58
Rubidium (Rb)-Total	mg/L	0.0002	-	0.0062	0.00518	0.00537	0.0165
Selenium (Se)-Total	mg/L	0.00005	-	0.00378	0.00408	0.00404	0.00640
Silicon (Si)-Total	mg/L	0.1	-	1.9	1.86	1.74	<1.0
Silver (Ag)-Total	mg/L	0.00001-0.0005	-	<0.00050	<0.000010	<0.000010	<0.00050
Sodium (Na)-Total	mg/L	0.05	-	4.96	4.85	4.69	5.81
Strontium (Sr)-Total	mg/L	0.001	-	0.118	0.106	0.107	1.16
Sulfur (S)-Total	mg/L	0.5	-	355	364	365	949
Tellurium (Te)-Total	mg/L	0.0002-0.002	-	<0.0020	<0.00020	<0.00020	<0.0020
Thallium (Tl)-Total	mg/L	0.00001/0.0001	-	<0.00010	0.000026	0.000025	0.00031
Thorium (Th)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00010	<0.00010	<0.0010
Tin (Sn)-Total	mg/L	0.0001-0.001	-	<0.0010	0.00018	0.00019	<0.0010
Titanium (Ti)-Total	mg/L	0.0003/0.003	-	0.0066	<0.0090	0.00667	<0.0030
Tungsten (W)-Total	mg/L	0.0001-0.001	-	<0.0010	<0.00010	<0.00010	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	0.00527	0.00510	0.00505	0.00032
Vanadium (V)-Total	mg/L	0.0005-0.005	-	<0.0050	0.00058	0.00054	<0.0050
Zinc (Zn)-Total	mg/L	0.003-0.03	0.5	<0.030	<0.0030	0.0032	<0.030
Zirconium (Zr)-Total	mg/L	0.0002-0.002	-	<0.0020	0.00021	<0.00020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.005/0.05	-	<0.050	-	-	-
Antimony (Sb)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Barium (Ba)-Dissolved	mg/L	0.0001	-	0.0240	-	-	-
Beryllium (Be)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Bismuth (Bi)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-	-	-
Boron (B)-Dissolved	mg/L	0.01/0.1	-	<0.10	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00005	-	<0.000050	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	82.0	-	-	-
Cesium (Cs)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-	-	-
Chromium (Cr)-Dissolved	mg/L	0.0001-0.005	-	<0.0050	-	-	-
Cobalt (Co)-Dissolved	mg/L	0.0001	-	0.0173	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01/0.1	-	<0.10	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005/0.0005	-	<0.00050	-	-	-
Lithium (Li)-Dissolved	mg/L	0.001/0.01	-	<0.010	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.005	-	206	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	2.19	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.00225	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	0.0259	-	-	-
Phosphorus (P)-Dissolved	mg/L	0.05/0.5	-	<0.50	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	6.40	-	-	-
Rubidium (Rb)-Dissolved	mg/L	0.0002	-	0.0053	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	0.00341	-	-	-
Silicon (Si)-Dissolved	mg/L	0.05	-	1.27	-	-	-
Silver (Ag)-Dissolved	mg/L	0.00001-0.0005	-	<0.00050	-	-	-
Sodium (Na)-Dissolved	mg/L	0.05	-	4.50	-	-	-
Strontium (Sr)-Dissolved	mg/L	0.001	-	0.112	-	-	-
Sulfur (S)-Dissolved	mg/L	0.5	-	309	-	-	-
Tellurium (Te)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001/0.0001	-	<0.00010	-	-	-
Thorium (Th)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Tin (Sn)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Titanium (Ti)-Dissolved	mg/L	0.0003/0.003	-	<0.0030	-	-	-
Tungsten (W)-Dissolved	mg/L	0.0001/0.001	-	<0.0010	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.00460	-	-	-
Vanadium (V)-Dissolved	mg/L	0.0005/0.005	-	<0.0050	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001/0.01	-	<0.010	-	-	-
Zirconium (Zr)-Dissolved	mg/L	0.0002/0.002	-	<0.0020	-	-	-
Ra-226	Bq/L	0.0045-0.0097	-	0.011	-	-	0.034
Acute Lethality[2,3]	N/A	N/A	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.22: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-0901	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-0901	MS-MRY-09
	ALS Laboratory Sample ID			L2459150-1	L2459150-2	L2463019-1	L2466533-1	L2468355-1	L2471945-8	L2475703-1	L2475703-2	L2479664-1
	Sample Date & Time			2020-06-10 9:30	2020-06-10 9:30	2020-06-18 10:10	2020-06-23 13:35	2020-07-01 16:35	2020-07-06 12:45	2020-07-15 8:30	2020-07-15 8:30	2020-04-24 8:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]									
Hardness	mg/L	0.5	-	10.4	10.4	-	39.3	-	46.4	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.25	7.10	7.45	7.67	7.89	7.67	7.97	7.89	7.90
Total Suspended Solids	mg/L	2.0/3.0	15	<2.0	<2.0	2.5	<2.0	3.9	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	18	<10	66	34	65	41	73	84	79
Turbidity	NTU	0.1	-	5.40	5.32	1.38	1.31	1.11	0.55	0.89	0.89	0.32
Alkalinity, Total (as CaCO3)	mg/L	10	-	<10	<10	-	37	-	45	-	-	-
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	<0.010	-	<0.010	-	<0.010	-	-	-
Chloride (Cl)	mg/L	0.5	-	0.67	0.67	-	1.18	-	1.23	-	-	-
Fluoride (F)	mg/L	0.02	-	<0.020	<0.020	-	<0.020	-	<0.020	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.083	0.055	-	0.035	-	0.098	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	0.22	<0.15	-	0.32	-	<0.15	-	-	-
Phosphorus, Total	mg/L	0.003	-	<0.0030	<0.0030	-	0.0045	-	0.0039	-	-	-
Sulfate (SO4)	mg/L	0.3	-	0.99	1.00	-	2.01	-	2.76	-	-	-
Dissolved Organic Carbon	mg/L	0.5	-	2.07	2.44	-	2.60	-	2.47	-	-	-
Total Organic Carbon	mg/L	0.5	-	3.64	3.79	-	2.53	-	2.89	-	-	-
Aluminum (Al)-Total	mg/L	0.005	-	0.0606	0.0649	-	0.0586	-	0.0285	-	-	-
Arsenic (As)-Total	mg/L	0.0001	0.5	<0.00010	<0.00010	-	<0.00010	-	<0.00010	-	-	-
Cadmium (Cd)-Total	mg/L	0.000005	-	0.0000071	0.0000067	-	0.0000065	-	<0.0000050	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	1.92	1.94	-	7.99	-	9.11	-	-	-
Copper (Cu)-Total	mg/L	0.001	0.3	0.0012	0.0011	-	0.0016	-	0.0023	-	-	-
Iron (Fe)-Total	mg/L	0.01	-	0.096	0.108	-	0.074	-	0.035	-	-	-
Lead (Pb)-Total	mg/L	0.00005	0.2	0.000081	0.000076	-	0.000086	-	<0.000050	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	1.33	1.33	-	4.88	-	5.74	-	-	-
Manganese (Mn)-Total	mg/L	0.0005	-	0.00317	0.00316	-	0.00157	-	0.00092	-	-	-
Mercury (Hg)-Total	mg/L	0.000005	-	0.0000071	<0.0000050	-	<0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	0.000116	0.000116	-	0.000285	-	0.000665	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.00054	<0.00050	-	<0.00050	-	<0.00050	-	-	-
Potassium (K)-Total	mg/L	0.05	-	0.582	0.572	-	1.02	-	1.54	-	-	-
Selenium (Se)-Total	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050	-	0.000053	-	-	-
Sodium (Na)-Total	mg/L	0.05	-	0.293	0.289	-	0.408	-	0.471	-	-	-
Thallium (Tl)-Total	mg/L	0.00001	-	<0.000010	<0.000010	-	0.000015	-	0.000012	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.000155	0.000158	-	0.000649	-	0.00144	-	-	-
Zinc (Zn)-Total	mg/L	0.003	0.5	<0.0030	<0.0030	-	<0.0030	-	<0.0030	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	0.0172	0.0199	-	0.0086	-	0.0074	-	-	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	<0.00010	<0.00010	-	<0.00010	-	<0.00010	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010	-	<0.000010	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	2.03	2.01	-	7.64	-	9.10	-	-	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	0.00103	0.00098	-	0.00144	-	0.00226	-	-	-
Iron (Fe)-Dissolved	mg/L	0.01	-	0.020	0.024	-	<0.010	-	<0.010	-	-	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050	-	<0.000050	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	1.30	1.30	-	4.92	-	5.76	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	0.00177	0.00182	-	<0.00050	-	0.00124	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	<0.0000050	<0.0000050	-	<0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	0.000115	0.000115	-	0.000268	-	0.000644	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	<0.00050	<0.00050	-	<0.00050	-	<0.00050	-	-	-
Potassium (K)-Dissolved	mg/L	0.05	-	0.564	0.556	-	0.994	-	1.52	-	-	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	<0.000050	<0.000050	-	<0.000050	-	0.000052	-	-	-
Sodium (Na)-Dissolved	mg/L	0.5	-	<0.50	<0.50	-	<0.50	-	<0.50	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	<0.000010	<0.000010	-	<0.000010	-	<0.000010	-	-	-
Uranium (U)-Dissolved	mg/L	0.00001	-	0.000117	0.000114	-	0.000553	-	0.00136	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	0.0024	<0.0010	-	<0.0010	-	<0.0010	-	-	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.2.22: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-0901	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2480169-4	L2480169-8	L2485627-1	L2486375-16	L2489338-16	L2493952-16	L2499077-1	L2509827-1
	Sample Date & Time			2020-07-27 16:30	2020-07-27 16:30	2020-08-05 8:45	2020-08-10 16:45	2020-08-16 17:05	2020-08-23 8:35	2020-09-02 16:00	2020-09-11 8:50
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Hardness	mg/L	0.5	-	-		75.4			-	102	-
pH	pH units	0.1	6.0 - 9.5	7.97	8.00	7.78	8.08	8.07	8.13	7.99	8.05
Total Suspended Solids	mg/L	2.0/3.0	15	<2.0	<2.0	<3.0	<2.0	<2.0	<2.0	<2.0	2.0
Total Dissolved Solids	mg/L	10	-	60	81	73	108	98	102	138	112
Turbidity	NTU	0.1	-	0.30	0.32	0.28	0.15	0.14	0.13	<0.10	0.22
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	86	-	-	-	94	-
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010	-	-	-	<0.010	-
Chloride (Cl)	mg/L	0.5	-	-	-	2.15	-	-	-	3.35	-
Fluoride (F)	mg/L	0.02	-	-	-	0.024	-	-	-	0.024	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.127	-	-	-	0.134	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	-	0.38	-	-	-	<0.15	-
Phosphorus, Total	mg/L	0.003	-	-	-	0.0032	-	-	-	<0.0030	-
Sulfate (SO4)	mg/L	0.3	-	-	-	5.22	-	-	-	7.03	-
Dissolved Organic Carbon	mg/L	0.5	-	-	-	2.10	-	-	-	7.23	-
Total Organic Carbon	mg/L	0.5	-	-	-	2.80	-	-	-	3.03	-
Aluminum (Al)-Total	mg/L	0.005	-	-	-	0.0158	-	-	-	0.0143	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	-	<0.00010	-	-	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	-	-	<0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-	15.3	-	-	-	19.3	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	-	0.00227	-	-	-	0.00219	-
Iron (Fe)-Total	mg/L	0.01	-	-	-	0.016	-	-	-	0.015	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	-	<0.000050	-	-	-	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-	9.2	-	-	-	12.4	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	-	0.0008	-	-	-	0.00081	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	-	<0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-	0.00157	-	-	-	0.00165	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-	<0.00050	-	-	-	<0.00050	-
Potassium (K)-Total	mg/L	0.05	-	-	-	2.44	-	-	-	2.44	-
Selenium (Se)-Total	mg/L	0.00005	-	-	-	0.000085	-	-	-	0.000125	-
Sodium (Na)-Total	mg/L	0.05	-	-	-	0.745	-	-	-	0.88	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	-	0.000014	-	-	-	0.000017	-
Uranium (U)-Total	mg/L	0.00001	-	-	-	0.00629	-	-	-	0.012	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	-	<0.0030	-	-	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	-	0.006	-	-	-	0.0058	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	-	<0.00010	-	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.00001	-	-	-	<0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	-	14.8	-	-	-	20.8	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	-	0.00225	-	-	-	0.00193	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	-	<0.010	-	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	-	<0.000050	-	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	-	9.3	-	-	-	12	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	-	0.0006	-	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	-	<0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	-	0.00153	-	-	-	0.00169	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	-	<0.00050	-	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	-	2.39	-	-	-	2.59	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	-	0.000128	-	-	-	0.000127	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	-	0.723	-	-	-	0.876	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	-	0.000014	-	-	-	0.000015	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	-	0.00618	-	-	-	0.0117	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	-	<0.0010	-	-	-	<0.0010	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No visible sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.2.23: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2463019-2	L2467027-1	L2468355-3	L2480812-1	L2482851-2	L2486375-1	L2489338-1	L2493952-1	L2497354-1	L2509827-1
	Sample Date & Time			2020-06-18 15:10	2020-06-24 10:55	2020-07-01 18:45	2020-07-28 15:15	2020-08-03 10:25	2020-08-10 8:35	2020-08-16 8:15	2020-08-24 15:30	2020-09-01 9:35	2020-09-11 8:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]										
Hardness	mg/L	0.5	-	-	81.2	-	191	212	-	-	-	212	-
pH	pH units	0.1	6.0 - 9.5	7.66	7.87	8.19	8.32	8.37	8.31	8.27	8.34	8.34	8.05
Total Suspended Solids	mg/L	2	15	4.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0
Total Dissolved Solids	mg/L	0.1	-	57	93	122	210	192	220	231	223	237	112
Turbidity	NTU	0.01/0.1	-	4.25	0.27	<0.10	0.13	<0.10	<0.10	<0.1	<0.10	<0.10	0.22
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	73	-	172	216	-	-	-	176	-
Ammonia, Total (as N)	mg/L	0.005/0.01	-	-	<0.010	-	<0.0050	<0.010	-	-	-	<0.010	-
Chloride (Cl)	mg/L	0.5	-	-	2.95	-	16.6	17.6	-	-	-	26.0	-
Fluoride (F)	mg/L	0.02	-	-	0.026	-	0.041	0.040	-	-	-	0.040	-
Nitrate (as N)	mg/L	0.02	-	-	0.068	-	0.0310	0.038	-	-	-	<0.020	-
Total Kjeldahl Nitrogen	mg/L	0.15	-	-	<0.15	-	0.121	0.27	-	-	-	0.17	-
Phosphorus, Total	mg/L	0.003	-	-	0.0063	-	0.0037	<0.0030	-	-	-	<0.0030	-
Sulfate (SO4)	mg/L	0.3	-	-	4.17	-	14.4	15.1	-	-	-	15.7	-
Dissolved Organic Carbon	mg/L	0.5	-	-	1.70	-	2.38	2.78	-	-	-	3.53	-
Total Organic Carbon	mg/L	0.5	-	-	3.20	-	2.11	3.25	-	-	-	3.48	-
Aluminum (Al)-Total	mg/L	0.005	-	-	0.0123	-	0.0116	0.0167	-	-	-	0.0055	-
Arsenic (As)-Total	mg/L	0.0001	0.5	-	<0.00010	-	0.00011	<0.00010	-	-	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.000005	-	-	<0.0000050	-	<0.0000050	<0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.5	-	-	16.7	-	39.8	40.5	-	-	-	40.8	-
Copper (Cu)-Total	mg/L	0.001	0.3	-	0.0011	-	0.00132	0.00136	-	-	-	0.00126	-
Iron (Fe)-Total	mg/L	0.01	-	-	0.013	-	0.014	0.022	-	-	-	<0.010	-
Lead (Pb)-Total	mg/L	0.00005	0.2	-	<0.000050	-	<0.000050	<0.000050	-	-	-	<0.000050	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	9.22	-	22.4	26.1	-	-	-	26.2	-
Manganese (Mn)-Total	mg/L	0.0005	-	-	0.00058	-	0.00046	0.00054	-	-	-	<0.00050	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050	-	<0.0000050	<0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.000258	-	0.000413	0.000427	-	-	-	0.000406	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.00058	-	<0.00050	0.00078	-	-	-	0.00069	-
Potassium (K)-Total	mg/L	0.05	-	-	1.27	-	2.25	2.15	-	-	-	1.67	-
Selenium (Se)-Total	mg/L	0.00005	-	-	<0.000050	-	<0.000050	<0.000050	-	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.05	-	-	1.02	-	4.41	5.3	-	-	-	5.94	-
Thallium (Tl)-Total	mg/L	0.00001	-	-	<0.000010	-	<0.000010	<0.000010	-	-	-	<0.000010	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.000563	-	0.00246	0.00295	-	-	-	0.00313	-
Zinc (Zn)-Total	mg/L	0.003	0.5	-	<0.0030	-	<0.0030	<0.0030	-	-	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.005	-	-	0.0113	-	0.0047	<0.0050	-	-	-	<0.0050	-
Arsenic (As)-Dissolved	mg/L	0.0001	-	-	<0.00010	-	<0.00010	0.00011	-	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.000005/0.00001	-	-	<0.000010	-	<0.0000050	<0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	0.05	-	-	16.7	-	39.1	40.6	-	-	-	43.1	-
Copper (Cu)-Dissolved	mg/L	0.0002	-	-	0.00104	-	0.00131	0.00134	-	-	-	0.00121	-
Iron (Fe)-Dissolved	mg/L	0.01	-	-	0.012	-	<0.010	<0.010	-	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	<0.000050	<0.000050	-	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.05	-	-	9.59	-	22.6	26.9	-	-	-	25.3	-
Manganese (Mn)-Dissolved	mg/L	0.0005	-	-	0.00062	-	0.00026	<0.00050	-	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.000005	-	-	<0.0000050	-	<0.0000050	<0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.00005	-	-	0.000296	-	0.000426	0.000425	-	-	-	0.000405	-
Nickel (Ni)-Dissolved	mg/L	0.0005	-	-	0.00054	-	0.00052	0.00051	-	-	-	0.00071	-
Potassium (K)-Dissolved	mg/L	0.05	-	-	1.33	-	2.22	2.25	-	-	-	1.79	-
Selenium (Se)-Dissolved	mg/L	0.00005	-	-	<0.000050	-	<0.000050	0.000063	-	-	-	<0.000050	-
Sodium (Na)-Dissolved	mg/L	0.5	-	-	1.02	-	4.24	5.47	-	-	-	5.59	-
Thallium (Tl)-Dissolved	mg/L	0.00001	-	-	<0.000010	-	<0.000010	<0.000010	-	-	-	<0.000010	-
Uranium (U)-Dissolved	mg/L	0.00001	-	-	0.000564	-	0.0024	0.00282	-	-	-	0.00315	-
Zinc (Zn)-Dissolved	mg/L	0.001	-	-	0.0028	-	0.0017	<0.0010	-	-	-	<0.0010	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.2.24: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A01
	ALS Laboratory Sample ID			L2457153-4	L2457153-5
	Sample Date & Time			2020-06-05 10:35	2020-06-05 10:35
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.66	7.67
Total Suspended Solids	mg/L	2	15	<2.0	2.1
Total Dissolved Solids	mg/L	10	-	85	75
Turbidity	NTU	0.1	-	22.6	22.8
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	-
Total Organic Carbon	mg/L	1	-	-	-
Aluminum (Al)-Total	mg/L	0.05	-	-	-
Antimony (Sb)-Total	mg/L	0.001	-	-	-
Arsenic (As)-Total	mg/L	0.001	0.5	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-
Beryllium (Be)-Total	mg/L	0.001	-	-	-
Bismuth (Bi)-Total	mg/L	0.0005	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-
Cadmium (Cd)-Total	mg/L	0.00005	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-
Chromium (Cr)-Total	mg/L	0.005	-	-	-
Cobalt (Co)-Total	mg/L	0.001	-	-	-
Copper (Cu)-Total	mg/L	0.005	0.3	-	-
Iron (Fe)-Total	mg/L	0.1	-	-	-
Lead (Pb)-Total	mg/L	0.0005	0.2	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-
Manganese (Mn)-Total	mg/L	0.005	-	-	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-
Selenium (Se)-Total	mg/L	0.0005	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-
Silver (Ag)-Total	mg/L	0.0005	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-
Thallium (Tl)-Total	mg/L	0.0001	-	-	-
Tin (Sn)-Total	mg/L	0.001	-	-	-
Titanium (Ti)-Total	mg/L	0.003	-	-	-
Tungsten (W)-Total	mg/L	0.001	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-
Vanadium (V)-Total	mg/L	0.005	-	-	-
Zinc (Zn)-Total	mg/L	0.03	0.5	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	-
F1 (C6-C10)	ug/L	100	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.24: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2460443-8	L2466533-10
	Sample Date & Time			2020-06-13 11:30	2020-06-22 16:55
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	1500
pH	pH units	0.1	6.0 - 9.5	7.40	7.75
Total Suspended Solids	mg/L	2	15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	400	1120
Turbidity	NTU	0.1	-	1.71	0.49
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	127
Dissolved Organic Carbon	mg/L	1	-	-	9.72
Total Organic Carbon	mg/L	1	-	-	10.5
Aluminum (Al)-Total	mg/L	0.05	-	-	<0.050
Antimony (Sb)-Total	mg/L	0.001	-	-	<0.0010
Arsenic (As)-Total	mg/L	0.001	0.5	-	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	-	0.129
Beryllium (Be)-Total	mg/L	0.001	-	-	<0.0010
Bismuth (Bi)-Total	mg/L	0.0005	-	-	<0.00050
Boron (B)-Total	mg/L	0.01	-	-	2.37
Cadmium (Cd)-Total	mg/L	0.00005	-	-	0.000055
Calcium (Ca)-Total	mg/L	0.5	-	-	219
Chromium (Cr)-Total	mg/L	0.005	-	-	<0.0050
Cobalt (Co)-Total	mg/L	0.001	-	-	<0.0010
Copper (Cu)-Total	mg/L	0.005	0.3	-	<0.0050
Iron (Fe)-Total	mg/L	0.1	-	-	<0.10
Lead (Pb)-Total	mg/L	0.0005	0.2	-	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	-	0.015
Magnesium (Mg)-Total	mg/L	0.05	-	-	64.9
Manganese (Mn)-Total	mg/L	0.005	-	-	<0.0050
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00500
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.0227
Potassium (K)-Total	mg/L	0.05	-	-	11.3
Selenium (Se)-Total	mg/L	0.0005	-	-	<0.00050
Silicon (Si)-Total	mg/L	0.1	-	-	2.9
Silver (Ag)-Total	mg/L	0.0005	-	-	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	-	21.1
Strontium (Sr)-Total	mg/L	0.001	-	-	0.451
Thallium (Tl)-Total	mg/L	0.0001	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.001	-	-	<0.0010
Titanium (Ti)-Total	mg/L	0.003	-	-	<0.0030
Tungsten (W)-Total	mg/L	0.001	-	-	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	-	0.00674
Vanadium (V)-Total	mg/L	0.005	-	-	<0.0050
Zinc (Zn)-Total	mg/L	0.03	0.5	-	0.037
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.0020
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	0.0021
F1 (C6-C10)	ug/L	100	-	-	<100
F2 (C10-C16)	ug/L	100	-	-	<100
F3 (C16-C34)	ug/L	250	-	-	<250
F4 (C34-C50)	ug/L	250	-	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.24: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2468308-3	L2471945-15
	Sample Date & Time			2020-06-30 9:10	2020-07-07 9:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	1420
pH	pH units	0.1	6.0 - 9.5	7.69	7.94
Total Suspended Solids	mg/L	2	15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	762	947
Turbidity	NTU	0.1	-	0.15	0.19
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	157
Dissolved Organic Carbon	mg/L	1	-	-	8.69
Total Organic Carbon	mg/L	1	-	-	7.52
Aluminum (Al)-Total	mg/L	0.05	-	-	<0.050
Antimony (Sb)-Total	mg/L	0.001	-	-	<0.0010
Arsenic (As)-Total	mg/L	0.001	0.5	-	<0.0010
Barium (Ba)-Total	mg/L	0.0002	-	-	0.095
Beryllium (Be)-Total	mg/L	0.001	-	-	<0.0010
Bismuth (Bi)-Total	mg/L	0.0005	-	-	<0.00050
Boron (B)-Total	mg/L	0.01	-	-	1.83
Cadmium (Cd)-Total	mg/L	0.00005	-	-	<0.000050
Calcium (Ca)-Total	mg/L	0.5	-	-	150
Chromium (Cr)-Total	mg/L	0.005	-	-	<0.0050
Cobalt (Co)-Total	mg/L	0.001	-	-	<0.0010
Copper (Cu)-Total	mg/L	0.005	0.3	-	<0.0050
Iron (Fe)-Total	mg/L	0.1	-	-	<0.10
Lead (Pb)-Total	mg/L	0.0005	0.2	-	<0.00050
Lithium (Li)-Total	mg/L	0.001	-	-	0.018
Magnesium (Mg)-Total	mg/L	0.05	-	-	86.7
Manganese (Mn)-Total	mg/L	0.005	-	-	0.0067
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	0.00138
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.0202
Potassium (K)-Total	mg/L	0.05	-	-	4.19
Selenium (Se)-Total	mg/L	0.0005	-	-	<0.00050
Silicon (Si)-Total	mg/L	0.1	-	-	3.3
Silver (Ag)-Total	mg/L	0.0005	-	-	<0.00050
Sodium (Na)-Total	mg/L	0.5	-	-	15.9
Strontium (Sr)-Total	mg/L	0.001	-	-	0.182
Thallium (Tl)-Total	mg/L	0.0001	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.001	-	-	<0.0010
Titanium (Ti)-Total	mg/L	0.003	-	-	<0.0030
Tungsten (W)-Total	mg/L	0.001	-	-	<0.0010
Uranium (U)-Total	mg/L	0.00001	-	-	0.00425
Vanadium (V)-Total	mg/L	0.005	-	-	<0.0050
Zinc (Zn)-Total	mg/L	0.03	0.5	-	<0.030
Zirconium (Zr)-Total	mg/L	0.0003	-	-	<0.0020
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	<0.0010
F1 (C6-C10)	ug/L	100	-	-	<100
F2 (C10-C16)	ug/L	100	-	-	<100
F3 (C16-C34)	ug/L	250	-	-	<250
F4 (C34-C50)	ug/L	250	-	-	<250
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.24: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2473444-15	L2479073-7
	Sample Date & Time			2020-07-13 15:35	2020-07-23 11:20
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.09	7.91
Total Suspended Solids	mg/L	2	15	3.2	<2.0
Total Dissolved Solids	mg/L	10	-	1140	1060
Turbidity	NTU	0.1	-	0.30	0.19
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	-
Total Organic Carbon	mg/L	1	-	-	-
Aluminum (Al)-Total	mg/L	0.05	-	-	-
Antimony (Sb)-Total	mg/L	0.001	-	-	-
Arsenic (As)-Total	mg/L	0.001	0.5	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-
Beryllium (Be)-Total	mg/L	0.001	-	-	-
Bismuth (Bi)-Total	mg/L	0.0005	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-
Cadmium (Cd)-Total	mg/L	0.00005	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-
Chromium (Cr)-Total	mg/L	0.005	-	-	-
Cobalt (Co)-Total	mg/L	0.001	-	-	-
Copper (Cu)-Total	mg/L	0.005	0.3	-	-
Iron (Fe)-Total	mg/L	0.1	-	-	-
Lead (Pb)-Total	mg/L	0.0005	0.2	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-
Manganese (Mn)-Total	mg/L	0.005	-	-	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-
Selenium (Se)-Total	mg/L	0.0005	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-
Silver (Ag)-Total	mg/L	0.0005	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-
Thallium (Tl)-Total	mg/L	0.0001	-	-	-
Tin (Sn)-Total	mg/L	0.001	-	-	-
Titanium (Ti)-Total	mg/L	0.003	-	-	-
Tungsten (W)-Total	mg/L	0.001	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-
Vanadium (V)-Total	mg/L	0.005	-	-	-
Zinc (Zn)-Total	mg/L	0.03	0.5	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	-
F1 (C6-C10)	ug/L	100	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.24: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A01	MS-MRY-13A
	ALS Laboratory Sample ID			L2479073-8	L2480169-7
	Sample Date & Time			2020-07-23 11:20	2020-07-27 15:45
	QA/QC Sample Type			Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.91	7.94
Total Suspended Solids	mg/L	2	15	<2.0	2.5
Total Dissolved Solids	mg/L	10	-	1090	1060
Turbidity	NTU	0.1	-	0.19	0.43
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-
Dissolved Organic Carbon	mg/L	1	-	-	-
Total Organic Carbon	mg/L	1	-	-	-
Aluminum (Al)-Total	mg/L	0.05	-	-	-
Antimony (Sb)-Total	mg/L	0.001	-	-	-
Arsenic (As)-Total	mg/L	0.001	0.5	-	-
Barium (Ba)-Total	mg/L	0.0002	-	-	-
Beryllium (Be)-Total	mg/L	0.001	-	-	-
Bismuth (Bi)-Total	mg/L	0.0005	-	-	-
Boron (B)-Total	mg/L	0.01	-	-	-
Cadmium (Cd)-Total	mg/L	0.00005	-	-	-
Calcium (Ca)-Total	mg/L	0.5	-	-	-
Chromium (Cr)-Total	mg/L	0.005	-	-	-
Cobalt (Co)-Total	mg/L	0.001	-	-	-
Copper (Cu)-Total	mg/L	0.005	0.3	-	-
Iron (Fe)-Total	mg/L	0.1	-	-	-
Lead (Pb)-Total	mg/L	0.0005	0.2	-	-
Lithium (Li)-Total	mg/L	0.001	-	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	-
Manganese (Mn)-Total	mg/L	0.005	-	-	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00005	-	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	-
Potassium (K)-Total	mg/L	0.05	-	-	-
Selenium (Se)-Total	mg/L	0.0005	-	-	-
Silicon (Si)-Total	mg/L	0.1	-	-	-
Silver (Ag)-Total	mg/L	0.0005	-	-	-
Sodium (Na)-Total	mg/L	0.5	-	-	-
Strontium (Sr)-Total	mg/L	0.001	-	-	-
Thallium (Tl)-Total	mg/L	0.0001	-	-	-
Tin (Sn)-Total	mg/L	0.001	-	-	-
Titanium (Ti)-Total	mg/L	0.003	-	-	-
Tungsten (W)-Total	mg/L	0.001	-	-	-
Uranium (U)-Total	mg/L	0.00001	-	-	-
Vanadium (V)-Total	mg/L	0.005	-	-	-
Zinc (Zn)-Total	mg/L	0.03	0.5	-	-
Zirconium (Zr)-Total	mg/L	0.0003	-	-	-
Oil and Grease, Total	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	-
F1 (C6-C10)	ug/L	100	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.25: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B01	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2466533-11	L2468308-1	L2468308-2	L2471945-14	L2473444-14	L2479073-6	L2480169-6	L2485627-2	L2486375-3	L2489338-8
	Sample Date & Time			2020-06-22 17:30	2020-06-30 8:45	2020-06-30 8:45	2020-07-07 8:25	2020-07-13 15:20	2020-07-23 11:05	2020-07-27 15:35	2020-08-05 9:05	2020-08-10 11:05	2020-08-16 11:40
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]										
Conductivity	umhos/cm	3	-	1220	-	-	972	-	-	-	1610	-	-
pH	pH units	0.1	6.0 - 9.5	7.94	7.76	7.80	8.18	8.19	8.01	7.99	8.29	8.00	7.95
Total Suspended Solids	mg/L	2.0/3.0	15	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	<2.0	<3.0	3.8	3.0
Total Dissolved Solids	mg/L	10	-	902	400	545	611	767	840	868	1120	1400	1610
Turbidity	NTU	0.1	-	0.15	1.17	0.53	0.15	0.26	0.18	0.19	0.49	0.20	0.15
Alkalinity, Total (as CaCO3)	mg/L	10	-	114	-	-	133	-	-	-	214	-	-
Dissolved Organic Carbon	mg/L	1	-	6.84	-	-	6.26	-	-	-	8.39	-	-
Total Organic Carbon	mg/L	1	-	7.31	-	-	6.61	-	-	-	9.42	-	-
Aluminum (Al)-Total	mg/L	0.05	-	<0.050	-	-	<0.050	-	-	-	<0.050	-	-
Antimony (Sb)-Total	mg/L	0.001	-	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Arsenic (As)-Total	mg/L	0.001	0.5	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Barium (Ba)-Total	mg/L	0.0002	-	0.109	-	-	0.0649	-	-	-	0.0733	-	-
Beryllium (Be)-Total	mg/L	0.001	-	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Bismuth (Bi)-Total	mg/L	0.0005	-	<0.00050	-	-	<0.00050	-	-	-	<0.00050	-	-
Boron (B)-Total	mg/L	0.01	-	1.84	-	-	1.18	-	-	-	3.17	-	-
Cadmium (Cd)-Total	mg/L	0.00005	-	<0.000050	-	-	<0.000050	-	-	-	<0.000050	-	-
Calcium (Ca)-Total	mg/L	0.5	-	162	-	-	105	-	-	-	119	-	-
Chromium (Cr)-Total	mg/L	0.005	-	<0.0050	-	-	<0.0050	-	-	-	<0.0050	-	-
Cobalt (Co)-Total	mg/L	0.001	-	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Copper (Cu)-Total	mg/L	0.005	0.3	<0.0050	-	-	<0.0050	-	-	-	<0.0050	-	-
Iron (Fe)-Total	mg/L	0.1	-	<0.10	-	-	<0.10	-	-	-	<0.10	-	-
Lead (Pb)-Total	mg/L	0.0005	0.2	<0.00050	-	-	<0.00050	-	-	-	<0.00050	-	-
Lithium (Li)-Total	mg/L	0.001	-	0.014	-	-	0.020	-	-	-	0.026	-	-
Magnesium (Mg)-Total	mg/L	0.05	-	63.2	-	-	53.6	-	-	-	61.2	-	-
Manganese (Mn)-Total	mg/L	0.005	-	<0.0050	-	-	<0.0050	-	-	-	<0.0050	-	-
Mercury (Hg)-Total	mg/L	0.000005	-	<0.0000050	-	-	<0.0000050	-	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.0005	-	0.00220	-	-	0.00062	-	-	-	<0.00050	-	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	0.0169	-	-	0.0123	-	-	-	0.0128	-	-
Potassium (K)-Total	mg/L	0.05	-	7.51	-	-	3.00	-	-	-	2.58	-	-
Selenium (Se)-Total	mg/L	0.0005	-	<0.00050	-	-	<0.00050	-	-	-	<0.00050	-	-
Silicon (Si)-Total	mg/L	0.1	-	2.9	-	-	3.1	-	-	-	3.0	-	-
Silver (Ag)-Total	mg/L	0.0005	-	<0.00050	-	-	<0.00050	-	-	-	<0.00050	-	-
Sodium (Na)-Total	mg/L	0.5	-	18.0	-	-	14.9	-	-	-	18.4	-	-
Strontium (Sr)-Total	mg/L	0.001	-	0.274	-	-	0.131	-	-	-	0.161	-	-
Thallium (Tl)-Total	mg/L	0.0001	-	<0.00010	-	-	<0.00010	-	-	-	<0.00010	-	-
Tin (Sn)-Total	mg/L	0.001	-	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Titanium (Ti)-Total	mg/L	0.003	-	<0.0030	-	-	<0.0030	-	-	-	<0.0030	-	-
Tungsten (W)-Total	mg/L	0.001	-	<0.0010	-	-	<0.0010	-	-	-	<0.0010	-	-
Uranium (U)-Total	mg/L	0.00001	-	0.00443	-	-	0.00381	-	-	-	0.010	-	-
Vanadium (V)-Total	mg/L	0.005	-	<0.0050	-	-	<0.0050	-	-	-	<0.0050	-	-
Zinc (Zn)-Total	mg/L	0.03	0.5	<0.030	-	-	<0.030	-	-	-	<0.030	-	-
Zirconium (Zr)-Total	mg/L	0.002	-	<0.0020	-	-	<0.0020	-	-	-	<0.0020	-	-
Oil and Grease, Total	mg/L	5	-	-	-	-	-	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	0.0017	-	-	<0.0010	-	-	-	<0.0010	-	-
F1 (C6-C10)	ug/L	100	-	<100	-	-	<100	-	-	-	<100	-	-
F2 (C10-C16)	ug/L	100	-	<100	-	-	<100	-	-	-	<100	-	-
F3 (C16-C34)	ug/L	250	-	<250	-	-	<250	-	-	-	<250	-	-
F4 (C34-C50)	ug/L	250	-	<250	-	-	<250	-	-	-	<250	-	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	<380	-	-	<380	-	-	-	<380	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.25: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2493952-8	L2497354-5	L2499560-7
	Sample Date & Time			2020-08-23 11:10	2020-09-01 11:50	2020-09-07 10:50
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	3	-	-	2270	-
pH	pH units	0.1	6.0 - 9.5	8.03	8.05	7.95
Total Suspended Solids	mg/L	2.0/3.0	15	3.1	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	1810	1860	1500
Turbidity	NTU	0.1	-	0.15	<0.10	1.16
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	264	-
Dissolved Organic Carbon	mg/L	1	-	-	13.5	-
Total Organic Carbon	mg/L	1	-	-	13.3	-
Aluminum (Al)-Total	mg/L	0.05	-	-	<0.050	-
Antimony (Sb)-Total	mg/L	0.001	-	-	<0.0010	-
Arsenic (As)-Total	mg/L	0.001	0.5	-	<0.0010	-
Barium (Ba)-Total	mg/L	0.0002	-	-	0.144	-
Beryllium (Be)-Total	mg/L	0.001	-	-	<0.0010	-
Bismuth (Bi)-Total	mg/L	0.0005	-	-	<0.00050	-
Boron (B)-Total	mg/L	0.01	-	-	9.13	-
Cadmium (Cd)-Total	mg/L	0.00005	-	-	0.000090	-
Calcium (Ca)-Total	mg/L	0.5	-	-	318	-
Chromium (Cr)-Total	mg/L	0.005	-	-	<0.0050	-
Cobalt (Co)-Total	mg/L	0.001	-	-	0.0017	-
Copper (Cu)-Total	mg/L	0.005	0.3	-	<0.0050	-
Iron (Fe)-Total	mg/L	0.1	-	-	<0.10	-
Lead (Pb)-Total	mg/L	0.0005	0.2	-	<0.00050	-
Lithium (Li)-Total	mg/L	0.001	-	-	0.074	-
Magnesium (Mg)-Total	mg/L	0.05	-	-	114	-
Manganese (Mn)-Total	mg/L	0.005	-	-	<0.0050	-
Mercury (Hg)-Total	mg/L	0.000005	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.0005	-	-	0.00081	-
Nickel (Ni)-Total	mg/L	0.0005	0.5	-	0.0272	-
Potassium (K)-Total	mg/L	0.05	-	-	9.10	-
Selenium (Se)-Total	mg/L	0.0005	-	-	<0.00050	-
Silicon (Si)-Total	mg/L	0.1	-	-	5.1	-
Silver (Ag)-Total	mg/L	0.0005	-	-	<0.00050	-
Sodium (Na)-Total	mg/L	0.5	-	-	49.7	-
Strontium (Sr)-Total	mg/L	0.001	-	-	0.483	-
Thallium (Tl)-Total	mg/L	0.0001	-	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.001	-	-	<0.0010	-
Titanium (Ti)-Total	mg/L	0.003	-	-	<0.0030	-
Tungsten (W)-Total	mg/L	0.001	-	-	<0.0010	-
Uranium (U)-Total	mg/L	0.00001	-	-	0.0397	-
Vanadium (V)-Total	mg/L	0.005	-	-	<0.0050	-
Zinc (Zn)-Total	mg/L	0.03	0.5	-	<0.030	-
Zirconium (Zr)-Total	mg/L	0.002	-	-	<0.0020	-
Oil and Grease, Total	mg/L	5	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.001	-	-	0.002	-
F1 (C6-C10)	ug/L	100	-	-	<100	-
F2 (C10-C16)	ug/L	100	-	-	<100	-
F3 (C16-C34)	ug/L	250	-	-	<250	-
F4 (C34-C50)	ug/L	250	-	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	380	-	-	<380	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.2.26: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A01	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2460443-15	L2466533-13	L2466533-14	L2468308-10	L2471945-7
	Sample Date & Time			2020-06-13 13:35	2020-06-22 15:30	2020-06-22 15:30	2020-06-30 11:40	2020-07-06 11:25
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3	-	-	140	140	-	160
pH	pH units	0.1	6.0 - 9.5	7.57	7.82	7.82	7.82	8.16
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	12.3	2.9	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	91	105	59	76	72
Turbidity	NTU	0.1	-	46.3	25.3	26.4	9.75	2.54
Ammonia, Total (as N)	mg/L	0.01	-	-	0.013	<0.010	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	4.23	0.458	-	0.210
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.26: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A01	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2473444-10	L2473444-11	L2479073-2	L2480169-2	L2485411-4	L2486375-15
	Sample Date & Time			2020-07-13 14:10	2020-07-13 14:10	2020-07-23 9:00	2020-07-27 16:20	2020-08-04 11:00	2020-08-10 9:10
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	-	-	-	218	-
pH	pH units	0.1	6.0 - 9.5	8.01	8.03	7.86	7.90	7.59	7.91
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<3.0	<2.0
Total Dissolved Solids	mg/L	10	-	99	100	117	101	131	146
Turbidity	NTU	0.1	-	0.34	0.94	0.55	0.54	0.40	0.22
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	0.183	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.26: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A01	MS-C-A	MS-C-A	MS-C-A01
	ALS Laboratory Sample ID			L2489338-3	L2489338-4	L2493952-3	L2497354-11	L2497354-12
	Sample Date & Time			2020-08-16 9:30	2020-08-16 9:30	2020-08-23 13:05	2020-09-01 14:20	2020-09-01 14:20
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3	-	-	-	-	240	240
pH	pH units	0.1	6.0 - 9.5	7.91	7.90	8.14	8.16	8.17
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	132	128	148	136	133
Turbidity	NTU	0.1	-	0.21	0.22	0.23	0.20	0.21
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	<0.010	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	-	0.203	0.207
Oil and Grease, Total	mg/L	2	-	-	-	-	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.26: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A01	MS-C-A
	ALS Laboratory Sample ID			L2499560-10	L2499560-11	L2503076-9
	Sample Date & Time			2020-09-07 13:45	2020-09-07 13:45	2020-09-14 12:10
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	3	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.98	7.98	7.87
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	121	129	137
Turbidity	NTU	0.1	-	3.11	0.19	0.46
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.27: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2457153-9	L2460443-14	L2466533-15	L2468308-11	L2471945-11	L2473444-12	L2479073-3
	Sample Date & Time			2020-06-05 13:45	2020-06-13 13:45	2020-06-22 16:25	2020-06-30 12:20	2020-07-06 16:05	2020-07-13 14:40	2020-07-23 9:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	145	-	167	-	-
pH	pH units	0.1	6.0 - 9.5	7.47	7.61	7.79	7.81	7.18	7.92	7.76
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	2.1	9.9	7.6	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	70	95	87	86	93	107	111
Turbidity	NTU	0.1	-	14.7	42.9	24.8	10.2	2.69	1.01	0.63
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010	-	<0.010	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.381	-	0.220	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.27: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2480169-3	L2485411-5	L2486375-13	L2489338-5	L2493952-5	L2497354-13
	Sample Date & Time			2020-07-27 16:40	2020-08-04 11:25	2020-08-10 9:40	2020-08-16 9:50	2020-08-23 13:20	2020-09-01 14:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	226	-	-	-	253
pH	pH units	0.1	6.0 - 9.5	7.75	7.64	7.79	7.74	8.08	8.12
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<3.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	105	137	127	137	139	138
Turbidity	NTU	0.1	-	0.64	0.48	0.28	0.30	0.28	0.27
Ammonia, Total (as N)	mg/L	0.01	-	-	<0.010	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	0.211	-	-	-	0.248
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.27: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2499560-12	L2503076-10
	Sample Date & Time			2020-09-07 14:05	2020-09-14 12:20
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.88	7.74
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	138	147
Turbidity	NTU	0.1	-	0.25	0.22
Ammonia, Total (as N)	mg/L	0.01	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.28: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2457153-8	L2460443-7	L2466533-6	L2468308-9	L2471945-6	L2473444-7
	Sample Date & Time			2020-06-05 11:45	2020-06-13 11:00	2020-06-22 13:45	2020-06-30 11:10	2020-07-06 10:40	2020-07-13 12:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	-	917	-	1100	-
pH	pH units	0.1	6.0 - 9.5	7.83	7.68	7.88	7.87	8.05	7.99
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	**84.8**	2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	257	448	618	604	740	829
Turbidity	NTU	0.1	-	165	3.75	2.16	1.42	1.23	5.99
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.022	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	-	-	5.62	-	9.60	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.28: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2479073-12	L2480169-12	L2485627-5	L2486375-7	L2489338-11	L2493952-11
	Sample Date & Time			2020-07-23 12:15	2020-07-27 13:55	2020-08-05 10:40	2020-08-10 10:35	2020-08-16 12:25	2020-08-23 10:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	-	1220	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.83	7.86	8.32	7.98	7.99	8.14
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	<2.0	<2.0	<3.0	2.0	3.0	<2.0
Total Dissolved Solids	mg/L	10	-	805	834	857	880	918	920
Turbidity	NTU	0.1	-	0.93	0.83	0.55	0.36	0.88	0.24
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	11.5	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.29: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2457153-7	L2460443-6	L2466533-8	L2468308-8	L2471945-5	L2473444-6	L2479073-11
	Sample Date & Time			2020-06-05 11:25	2020-06-13 10:50	2020-06-22 13:20	2020-06-30 11:00	2020-07-06 10:20	2020-07-13 11:50	2020-07-23 12:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	556	-	874	-	-
pH	pH units	0.1	6.0 - 9.5	7.86	8.04	8.00	8.20	8.29	8.39	8.33
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	**72.8**	11.5	4.9	3.4	<2.0	<2.0	2.6
Total Dissolved Solids	mg/L	10	-	313	224	364	443	575	639	662
Turbidity	NTU	0.1	-	161	40.3	11.3	4.53	3.49	0.88	6.64
Ammonia, Total (as N)	mg/L	0.02	-	-	-	0.291	-	0.067	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	1.98	-	4.88	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.29: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2480169-11	L2485627-4	L2486375-6	L2489338-10	L2493952-10	L2497354-6	L2499560-6
	Sample Date & Time			2020-07-27 13:45	2020-08-05 10:20	2020-08-10 10:15	2020-08-16 12:15	08/23/2020 10:15	09/01/2020 11:20	2020-09-07 10:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	1180	-	-	-	1160	-
pH	pH units	0.1	6.0 - 9.5	8.37	8.43	8.38	8.38	8.33	8.37	8.31
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<3.0	7.9	18.0	<2.0	<2.0	4.4
Total Dissolved Solids	mg/L	10	-	634	811	855	846	894	858	776
Turbidity	NTU	0.1	-	4.85	4.63	4.76	10.2	14.4	6.88	8.06
Ammonia, Total (as N)	mg/L	0.02	-	-	0.028	-	-	-	0.020	-
Nitrate (as N)	mg/L	0.02	-	-	8.08	-	-	-	9.32	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.30: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E01	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2451387-1	L2457153-6	L2460443-4	L2460443-5	L2466533-3	L2468308-7	L2471945-4
	Sample Date & Time			2020-05-25 12:05	2020-06-05 11:15	2020-06-13 10:45	2020-06-13 10:45	2020-06-22 13:50	2020-06-30 10:50	2020-07-06 10:05
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	85.1	-	-	-	601	-	870
pH	pH units	0.1	6.0 - 9.5	7.68	7.83	7.90	7.91	8.01	7.99	7.95
Total Suspended Solids[2]	mg/L	2.0/3.0	Grab 30 and Average 15	4.4	**35.0**	2.1	<2.0	6.5	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	43	238	171	169	400	459	576
Turbidity	NTU	0.1	-	40.6	111	5.09	5.03	2.00	0.89	0.75
Ammonia, Total (as N)	mg/L	0.01	-	0.027	-	-	-	0.017	-	0.013
Nitrate (as N)	mg/L	0.02	-	0.123	-	-	-	1.85	-	3.89
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.30: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E01	MS-C-E
	ALS Laboratory Sample ID			L2473444-4	L2479073-10	L2480169-10	L2485627-3	L2486375-4	L2486375-5	L2489338-9
	Sample Date & Time			2020-07-13 11:35	2020-07-23 11:50	2020-07-27 13:35	2020-08-05 10:05	2020-08-10 10:10	2020-08-10 10:10	2020-08-16 12:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	-	1280	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.07	7.97	7.95	8.36	7.89	7.90	7.92
Total Suspended Solids[2]	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<3.0	3.4	2.6	<2.0
Total Dissolved Solids	mg/L	10	-	664	740	875	913	936	922	923
Turbidity	NTU	0.1	-	0.97	1.23	0.88	0.80	0.67	0.72	0.67
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	8.04	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.30: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E01	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2493952-9	L2497354-3	L2497354-4	L2499560-5	L2503076-5
	Sample Date & Time			08/23/2020 10:10	09/01/2020 11:05	09/01/2020 11:05	2020-09-07 10:05	2020-09-14 9:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3	-	-	1210	1210	-	-
pH	pH units	0.1	6.0 - 9.5	8.14	8.09	8.07	7.81	7.48
Total Suspended Solids[2]	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	955	924	923	992	906
Turbidity	NTU	0.1	-	1.76	0.63	0.6	1.66	0.33
Ammonia, Total (as N)	mg/L	0.01	-	-	0.033	<0.010	-	-
Nitrate (as N)	mg/L	0.02	-	-	9.34	9.14	-	-
Oil and Grease, Total	mg/L	2	-	-	<2.0	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.31: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2460443-12	L2466533-12	L2468308-12	L2471945-13	L2473444-13	L2479073-1	L2480169-1
	Sample Date & Time			2020-06-13 14:30	2020-06-22 15:00	2020-06-30 12:50	2020-07-06 16:35	2020-07-13 15:00	2020-07-23 8:40	2020-07-27 16:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	147	-	171	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.52	7.77	7.87	7.92	8.12	7.98	8.07
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	18.8	5.0	3.4	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	96	121	99	91	106	140	108
Turbidity	NTU	0.1	-	46.7	65.5	21.2	10.1	7.16	2.49	1.89
Ammonia, Total (as N)	mg/L	0.01	-	-	0.028	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	5.88	-	0.242	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.31: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F01	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L248411-3	L2486375-9	L2486375-14	L2489338-2	L2493952-2	L2497354-8	L2499560-13
	Sample Date & Time			2020-08-04 10:35	2020-08-10 8:50	2020-08-10 8:50	2020-08-16 9:15	2020-08-23 12:45	2020-09-01 8:35	2020-09-07 14:45
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	228	-	-	-	-	242	-
pH	pH units	0.1	6.0 - 9.5	7.40	8.20	8.16	8.15	8.16	8.18	8.16
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<3.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	132	155	147	142	147	136	136
Turbidity	NTU	0.1	-	1.29	1.01	1.05	0.73	0.78	0.59	0.67
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	-	-	-	-	<0.010	-
Nitrate (as N)	mg/L	0.02	-	0.217	-	-	-	-	0.230	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.31: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F01
	ALS Laboratory Sample ID			L2503076-7	L2503076-8
	Sample Date & Time			2020-09-14 11:50	2020-09-14 11:50
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	3	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.13	8.13
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	139	138
Turbidity	NTU	0.1	-	0.71	0.63
Ammonia, Total (as N)	mg/L	0.01	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.32: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G01	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2460443-9	L2466533-9	L2468308-4	L2471945-1	L2471945-2	L2473444-8	L2479073-9	L2480169-9	L2485627-6	L2486375-2
	Sample Date & Time			2020-06-13 12:00	2020-06-22 16:20	2020-06-30 9:40	2020-07-06 8:45	2020-07-06 8:45	2020-07-13 12:25	2020-07-23 10:00	2020-07-27 14:35	2020-08-05 11:25	2020-08-10 11:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]										
Conductivity	umhos/cm	3	-	-	96.0	-	210	211	-	-	-	268	-
pH	pH units	0.1	6.0 - 9.5	7.47	7.71	7.79	7.26	7.71	7.94	7.66	7.67	8.21	7.62
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0	<2.0
Total Dissolved Solids	mg/L	13	-	53	71	73	91	89	105	134	119	152	163
Turbidity	NTU	0.1	-	10.5	1.89	0.68	0.35	0.17	1.37	<0.10	<0.10	0.17	<0.10
Ammonia, Total (as N)	mg/L	0.01	-	-	0.020	-	<0.010	<0.010	-	-	-	0.117	-
Nitrate (as N)	mg/L	0.02	-	-	0.204	-	0.779	0.792	-	-	-	5.18	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.32: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G01	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2489338-6	L2493952-6	L2493952-7	L2497354-7	L2499560-8	L2503076-6
	Sample Date & Time			2020-08-16 10:35	2020-08-23 11:45	2020-08-23 11:45	2020-09-01 12:30	2020-09-07 11:30	2020-09-14 10:40
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	-	-	252	-	-
pH	pH units	0.1	6.0 - 9.5	7.65	8.05	7.96	8.08	7.82	7.76
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	163	140	148	149	145	148
Turbidity	NTU	0.1	-	<0.10	0.14	0.15	0.14	0.19	0.13
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	0.489	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	3.95	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.33: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H01	MS-C-H	MS-C-H01	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2457153-10	L2460443-10	L2460443-11	L2466533-5	L2466533-4	L2468308-5	L2468308-6	L2471945-3	L2473444-9
	Sample Date & Time			2020-06-05 14:40	2020-06-13 12:20	2020-06-13 12:20	2020-06-22 15:15	2020-06-22 15:15	2020-06-30 10:10	2020-06-30 10:10	2020-07-06 9:25	2020-07-13 12:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Field Duplicate	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	3	-	-	-	-	122	122	-	-	161	-
pH	pH units	0.1	6.0 - 9.5	7.39	7.59	7.63	7.77	7.81	7.92	7.91	7.87	8.14
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	31	65	79	78	76	72	70	69	108
Turbidity	NTU	0.1	-	16.2	6.16	6.42	0.98	1.11	0.98	1.00	0.38	<0.10
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	<0.010	0.011	-	-	0.012	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	0.082	0.089	-	-	0.089	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.33: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2479073-5	L2480169-5	L2485627-8	L2485627-9	L2486375-10	L2489338-7	L2493952-7	L2497354-2	L2499560-9
	Sample Date & Time			2020-07-23 10:30	2020-07-27 15:00	2020-08-05 11:50	2020-08-05 11:50	2020-08-10 12:05	2020-08-16 11:00	2020-08-23 12:15	2020-09-01 13:00	2020-09-07 11:55
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	3	-	-	-	278	276	-	-	-	267	-
pH	pH units	0.1	6.0 - 9.5	8.03	8.10	8.31	8.39	8.28	8.24	8.06	8.37	8.23
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<3.0	<3.0	<2.0	<2.0	<2.0	<2.0	2.8
Total Dissolved Solids	mg/L	10	-	130	122	143	143	162	150	137	140	160
Turbidity	NTU	0.1	-	0.24	0.44	0.39	0.47	0.33	0.32	0.27	0.22	0.97
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010	<0.010	-	-	-	0.026	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.028	0.031	-	-	-	0.051	-
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	<2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.34: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2457153-1	L2460443-1	L2466533-2	L2468308-13	L2471945-9	L2473444-1	L2479073-14	L2480169-14	L2485411-1
	Sample Date & Time			2020-06-05 8:40	2020-06-13 8:40	2020-06-22 9:30	2020-06-30 15:00	2020-07-06 15:10	2020-07-13 9:50	2020-07-23 13:30	2020-07-27 11:30	2020-08-04 9:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	3	-	-	-	184	-	253	-	-	-	364
pH	pH units	0.1	6.0 - 9.5	7.57	7.93	8.09	8.17	8.17	8.25	8.13	8.18	7.78
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<3.0
Total Dissolved Solids	mg/L	13	-	72	87	107	132	120	146	174	182	220
Turbidity	NTU	0.1	-	7.15	1.46	0.29	0.23	0.16	<0.10	0.12	<0.10	0.43
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010	-	<0.010	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	0.026	-	0.044	-	-	-	0.025
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.34: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2486375-11	L2489338-14	L2493952-14	L2493952-13	L2497354-10	L2499560-1	L2503076-1	L2507045-1
	Sample Date & Time			2020-08-10 13:55	2020-08-16 13:55	08/23/2020 9:15	08/23/2020 9:15	09/01/2020 9:30	2020-09-07 8:30	2020-09-14 8:25	2020-09-22 8:15
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3	-	-	-	-	-	409	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.17	8.15	8.20	8.19	8.30	8.17	8.11	7.90
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	13	-	215	217	222	219	230	216	228	239
Turbidity	NTU	0.1	-	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	0.21	<0.10
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	-	0.019	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-	<0.020	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.35: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2457153-3	L2460443-3	L2466533-16	L2467027-2	L2468308-15	L2471945-10	L2473444-3
	Sample Date & Time			2020-06-05 9:00	2020-06-13 10:20	2020-06-22 11:20	2020-06-24 13:55	2020-06-30 15:45	2020-07-06 15:35	2020-07-13 11:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	205	239	-	411	-
pH	pH units	0.1	6.0 - 9.5	7.81	7.75	7.82	7.89	8.06	8.14	8.18
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30 and Average 15	**327**	12.4	7.8	6.3	**150**	3.9	2.5
Total Dissolved Solids	mg/L	10	-	231	93	143	141	176	220	282
Turbidity	NTU	0.1	-	495	37.9	37.1	18.3	111	4.10	3.83
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.218	0.220	-	0.212	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.381	1.86	-	5.06	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.35: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B
	ALS Laboratory Sample ID			L2479073-13	L2480169-13	L2485627-10	L2486375-12	L2489338-12	L2489338-13	L2493952-12
	Sample Date & Time			2020-07-23 12:40	2020-07-27 12:00	2020-08-05 12:15	2020-08-10 14:30	2020-08-16 13:15	2020-08-16 13:15	08/23/2020 9:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	545	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.11	8.01	8.36	8.19	8.13	8.13	8.12
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30 and Average 15	2.9	2.9	<3.0	2.9	2.0	2.5	2.7
Total Dissolved Solids	mg/L	10	-	304	321	285	313	362	362	286
Turbidity	NTU	0.1	-	3.39	3.46	2.14	2.05	2.39	2.38	0.97
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.124	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	5.42	-	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.35: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B01
	ALS Laboratory Sample ID			L2499077-2	L2499560-3	L2499560-4	L2503076-4	L2503076-5
	Sample Date & Time			2020-09-02 16:00	2020-09-07 9:25	2020-09-07 9:25	2020-09-14 8:55	2020-09-14 8:55
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	3	-	850	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.17	8.10	8.05	7.71	7.70
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	294	308	306	281	272
Turbidity	NTU	0.1	-	1.37	1.48	2.00	1.27	1.26
Ammonia, Total (as N)	mg/L	0.01	-	0.065	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	5.83	-	-	-	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.36: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2460443-2	L2466533-7	L2468308-14	L2471945-16	L2473444-2	L2479073-15	L2480169-15	L2485411-2
	Sample Date & Time			2020-06-13 9:00	2020-06-22 10:05	2020-06-30 15:10	2020-07-07 13:10	2020-07-13 10:10	2020-07-23 13:10	2020-07-27 11:40	2020-08-04 9:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3	-	-	228	-	301	-	-	-	373
pH	pH units	0.1	6.0 - 9.5	7.71	8.03	8.03	8.01	8.29	8.36	8.21	7.78
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	22.3	3.5	8.5	6.4	7.1	2.5	<2.0	<3.0
Total Dissolved Solids	mg/L	10	-	105	159	136	168	127	187	184	225
Turbidity	NTU	0.1	-	55.1	24.0	18.1	14.8	10.6	2.19	1.25	2.44
Ammonia, Total (as N)	mg/L	0.01	-	-	0.083	-	0.100	-	-	-	0.028
Nitrate (as N)	mg/L	0.02	-	-	1.24	-	1.41	-	-	-	2.18
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	-	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.2.36: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2486375-8	L2489338-15	L2493952-15	L2497354-9	L2499560-2	L2503076-2	L2507045-2
	Sample Date & Time			2020-08-10 14:05	2020-08-16 14:05	08/23/2020 9:25	09/01/2020 10:10	2020-09-07 8:40	2020-09-14 8:40	2020-09-22 8:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	-	450	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.40	8.34	8.15	8.28	8.10	8.14	7.85
Total Suspended Solids	mg/L	2.0/3.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	230	232	250	248	229	253	300
Turbidity	NTU	0.1	-	2.06	2.31	3.88	2.66	8.71	3.29	2.09
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	0.042	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	2.32	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.2.37: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2459150-3	L2460443-13	L2467084-1	L2468355-2	L2471979-1	L2475703-3	L2477604-1	L2480169-18
	Sample Date & Time			2020-06-10 9:00	2020-06-13 15:00	2020-06-26 8:10	2020-07-01 17:50	2020-07-07 12:00	2020-07-13 8:15	2020-07-21 13:45	2020-07-27 11:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	3	-	70.6	-	-	-	577	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.17	7.22	7.60	7.59	7.69	7.99	7.94	7.86
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30 and Average 15	22.1	7.0	18.8	8.0	7.6	5.3	3.6	<2.0
Total Dissolved Solids	mg/L	10	-	66	61	319	315	489	468	437	494
Turbidity	NTU	0.1	-	56.5	47.4	23.7	16.4	14.1	1.98	2.42	1.76
Ammonia, Total (as N)	mg/L	0.01	-	0.011	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.02	-	0.545	-	-	-	4.13	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.2.37: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2482851-1	L2486376-1	L2496143-1	L2496122-1	L2499097-1	L2499558-1	L2504289-1
	Sample Date & Time			2020-08-03 12:00	2020-08-10 15:45	2020-08-16 18:05	2020-08-26 12:30	2020-09-02 15:00	2020-09-07 7:55	2020-09-16 9:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	661	-	-	-	694	-	-
pH	pH units	0.1	6.0 - 9.5	7.23	7.51	7.54	7.48	7.50	7.75	7.77
Total Suspended Solids [2]	mg/L	2.0/3.0	Grab 30 and Average 15	5.3	4.8	8.6	<2.0	2.0	<2.0	4.0
Total Dissolved Solids	mg/L	10	-	499	496	600	637	636	631	487
Turbidity	NTU	0.1	-	3.28	2.63	6.28	6.07	3.85	5.36	4.13
Ammonia, Total (as N)	mg/L	0.01	-	0.020	-	-	-	0.023	-	-
Nitrate (as N)	mg/L	0.02	-	2.95	-	-	-	1.68	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	-	-	<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A		Not Acutely Toxic	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.2.38: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID			MS-SN-01	MS-SN-0101	MS-SN-01	MS-SN-01
	ALS Laboratory Sample ID			L2455938-1	L2455938-2	L2463694-4	L2467028-1
	Sample Date & Time			2020-06-03 13:35	2020-06-03 13:35	2020-06-16 18:45	2020-06-24 9:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3	-	-	-	-	188
pH	pH units	0.1	6.0 - 9.5	7.59	7.59	7.71	8.03
Total Suspended Solids [2]	mg/L	2	Grab 30 and Average 15	6.6	5.8	**97.5**	<2.0
Total Dissolved Solids	mg/L	20	-	86	116	75	105
Turbidity	NTU	0.1	-	42.3	42.2	153	2.78
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	-	0.041
Oil and Grease, Total	mg/L	2	-	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.39: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Analyte	Sample ID			MS-SN-02	MS-SN-0201	MS-SN-02	MS-SN-0201	MS-SN-02	MS-SN-02
	ALS Laboratory Sample ID			L2448972-1	L2448972-2	L2451388-1	L2451388-2	L2463694-2	L2467028-2
	Sample Date & Time			2020-05-19 14:35	2020-05-19 14:35	2020-05-25	2020-05-25	2020-06-16 17:25	2020-06-24 10:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	-	-	74.2	76.0	-	130
pH	pH units	0.1	6.0 - 9.5	7.40	7.40	7.60	7.63	7.58	8.00
Total Suspended Solids	mg/L	2.0/4.0	Grab 30 and Average 15	2.4	<2.0	<2.0	<2.0	21.4	<4.0
Total Dissolved Solids	mg/L	20	-	21	25	39	48	80	82
Turbidity	NTU	0.1	-	15.8	15.3	18.6	18.6	78.9	30.1
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.033	0.033	-	0.012
Nitrate (as N)	mg/L	0.02	-	-	-	0.168	0.16	-	0.064
Oil and Grease, Total	mg/L	2	-	-	-	<2.0	<2.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.40: Water Quality Results for Water Licence Monitoring Location - MS-SN-03

Analyte	Sample ID			MS-SN-03	MS-SN-0301	MS-SN-03
	ALS Laboratory Sample ID			L2463694-4	L2463694-3	L2467028-3
	Sample Date & Time			2020-06-16 18:10	2020-06-16 18:10	2020-06-25 14:30
	QA/QC Sample Type			N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	3	-	-	-	131
pH	pH units	0.1	6.0 - 9.5	7.64	7.63	7.62
Total Suspended Solids [2]	mg/L	2	Grab 30 and Average 15	21.2	25.4	7.0
Total Dissolved Solids	mg/L	20	-	73	76	106
Turbidity	NTU	0.1	-	118	122	92.9
Ammonia, Total (as N)	mg/L	0.01	-	-	-	<0.010
Nitrate (as N)	mg/L	0.02	-	-	-	0.038
Oil and Grease, Total	mg/L	2	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.41: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Analyte	Sample ID			TR-SN-01
	ALS Laboratory Sample ID			L2459155-1
	Sample Date & Time			2020-06-08 15:05
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
Conductivity	umhos/cm	3	-	162
pH	pH units	0.1	6.0 - 9.5	8.01
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	**33.9**
Total Dissolved Solids	mg/L	20	-	99
Turbidity	NTU	0.1	-	14.7
Ammonia, Total (as N)	mg/L	0.01	-	0.028
Nitrate (as N)	mg/L	0.02	-	0.132
Oil and Grease, Total	mg/L	2	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.42: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Analyte	Sample ID			TR-SN-02	TR-SN-02	TR-SN-02
	ALS Laboratory Sample ID			L2459155-3	L2469724-2	L2468262-3
	Sample Date & Time			2020-06-09 13:35	2020-06-23 11:30	2020-06-27 11:20
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	3	-	62.7	199	195
pH	pH units	0.1	6.0 - 9.5	8.13	8.14	8.29
Total Suspended Solids [2]	mg/L	2	Grab 30 and Average 15	**174**	7.1	2.3
Total Dissolved Solids	mg/L	20	-	69	100	117
Turbidity	NTU	0.1	-	158	4.81	3.07
Ammonia, Total (as N)	mg/L	0.01	-	0.045	0.015	<0.0050
Nitrate (as N)	mg/L	0.02	-	0.073	0.171	0.203
Oil and Grease, Total	mg/L	2	-	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.43: Water Quality Results for Water Licence Monitoring Location - TR-SN-03

Analyte	Sample ID			TR-SN-03	TR-SN-03	TR-SN-03
	ALS Laboratory Sample ID			L2465600-1	L2469724-1	L2468262-2
	Sample Date & Time			2020-06-18 15:45	2020-06-23 10:30	2020-06-27 10:25
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	3	-		323	274
pH	pH units	0.1	6.0 - 9.5	8.21	8.19	8.26
Total Suspended Solids [2]	mg/L	2	Grab 30 and Average 15	**44.1**	12.7	**207**
Total Dissolved Solids	mg/L	20	-	141	159	216
Turbidity	NTU	0.1	-	70.9	18.7	247
Ammonia, Total (as N)	mg/L	0.01	-	0.0131	<0.010	0.0084
Nitrate (as N)	mg/L	0.02	-	0.293	0.059	0.0619
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.44: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Analyte	Sample ID			TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04	TR-SN-04
	ALS Laboratory Sample ID			L2459155-6	L2463693-1	L2468262-1	L2472904-1	L2474232-1
	Sample Date & Time			2020-06-10 10:45	2020-06-16 9:35	2020-06-27 19:55	2020-07-10 11:40	2020-07-12 11:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	2	-	170	-	97.1	-	-
pH	pH units	0.1	6.0 - 9.5	7.73	7.71	7.36	7.70	7.69
Total Suspended Solids [2]	mg/L	1.0/2.0	Grab 30 and Average 15	**231**	**367**	**348**	5.2	<2.0
Total Dissolved Solids	mg/L	20	-	129	78	208	177	206
Turbidity	NTU	0.1	-	279	546	653	35.0	19.3
Ammonia, Total (as N)	mg/L	0.005/0.01	-	0.168	-	0.071	-	-
Nitrate (as N)	mg/L	0.005	-	0.094	-	0.154	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.45: Water Quality Results for Water Licence Monitoring Location - TR-SN-05

Analyte	Sample ID			TR-SN-05
	ALS Laboratory Sample ID			L2459155-4
	Sample Date & Time			2020-06-10 9:50
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
Conductivity	umhos/cm	3	-	22.9
pH	pH units	0.1	6.0 - 9.5	7.05
Total Suspended Solids	mg/L	2	Grab 30 and Average 15	**84.5**
Total Dissolved Solids	mg/L	20	-	47
Turbidity	NTU	0.1	-	60.5
Ammonia, Total (as N)	mg/L	0.01	-	0.023
Nitrate (as N)	mg/L	0.02	-	0.051
Oil and Grease, Total	mg/L	2	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen

Notes:

Bold and highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.46: Water Quality Results for Water Licence Monitoring Location - TR-SN-KM92.5

Analyte	Sample ID			TR-SN-KM92.5	TR-SN-KM92.5	TR-SN-KM92.501	TR-SN-KM92.5
	ALS Laboratory Sample ID			L2459155-5	L2463693-2	L2463693-3	L2468262-4
	Sample Date & Time			2020-06-10 14:15	2020-06-16 14:05	2020-06-16 14:05	2020-06-27 20:30
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3	-	102	-	-	120
pH	pH units	0.1	6.0 - 9.5	7.51	7.56	7.58	7.48
Total Suspended Solids [2]	mg/L	2	Grab 30 and Average 15	**104**	**183**	174	**95.9**
Total Dissolved Solids	mg/L	20	-	101	98	71	169
Turbidity	NTU	0.1	-	207	303	316	234
Ammonia, Total (as N)	mg/L	0.01	-	<0.010	-	-	0.0125
Nitrate (as N)	mg/L	0.02	-	0.031	-	-	0.0678
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold and highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.47: Water Quality Results for Water Licence Monitoring Location - HR-CD-05

Analyte	Sample ID			HR-CD-05	HR-CD-0501	HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-0501
	ALS Laboratory Sample ID			L2457252-2	L2457252-1	L2457744-2	L2460910-4	L2464866-1	L2472905-1	L2472905-2
	Sample Date & Time			2020-06-06 10:30	2020-06-06 10:30	2020-06-08 9:30	2020-06-12 9:20	2020-06-23 8:50	2020-07-10 14:55	2020-07-10 14:55
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	-	115	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	7.94	7.93	7.66	7.63	8.10	8.32	8.36
Total Suspended Solids [2]	mg/L	2	Grab 30, Average 15	**35.6**	**33**	**40**	**242**	**32.9**	**70.9**	**88.7**
Total Dissolved Solids	mg/L	10	-	200	195	103	132	249	413	410
Turbidity	NTU	0.1	-	62.8	66.7	67.2	222	55.4	**125**	136
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.045	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	0.261	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<2.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.2.47: Water Quality Results for Water Licence Monitoring Location - HR-CD-05

Analyte	Sample ID			HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-05	HR-CD-05
	ALS Laboratory Sample ID			L2479663-1	L2480813-1	L2482850-1	L2487099-1	L2496141-1	L2492742-1	L2493963-1
	Sample Date & Time			2020-07-23 13:30	2020-07-28 16:15	2020-08-03 16:35	2020-08-10 9:15	2020-08-16 8:55	2020-08-21 17:05	08-24-2020 16:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	-	662	724	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.19	8.19	8.23	8.13	7.87	8.16	8.24
Total Suspended Solids [2]	mg/L	2	Grab 30, Average 15	11.8	15.2	12.4	<2.0	**113**	3.0	2.4
Total Dissolved Solids	mg/L	10	-	390	431	455	500	985	610	531
Turbidity	NTU	0.1	-	12	7.19	5.68	1.19	160	5.49	2.57
Ammonia, Total (as N)	mg/L	0.01	-	-	0.0213	0.011	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	1.55	1.84	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	<5.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.2.48: Water Quality Results for Water Licence Monitoring Location - MS-RW-01

Analyte	Sample ID			MS-RW-01	MS-RW-01	MS-RW-01	MS-RW-01	MS-RW-01	MS-RW-01	MS-RW-01
	ALS Laboratory Sample ID			L2457744-1	L2463014-1	L2467061-1	L2480167-1	L2480814-1	L2482852-1	L2486379-1
	Sample Date & Time			2020-06-08 10:20	2020-06-18 13:30	2020-06-24 14:40	2020-07-27 17:25	2020-07-28 17:50	2020-08-03 17:45	2020-08-10 14:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3	-	108	-	-	-	378	422	-
pH	pH units	0.1	6.0 - 9.5	7.48	7.68	8.09	7.94	7.83	8.09	8.18
Total Suspended Solids [2]	mg/L	2	Grab 30, Average 15	**77.3**	15.7	8.2	3.3	<2.0	2.2	3.3
Total Dissolved Solids	mg/L	10	-	86	130	195	211	220	230	265
Turbidity	NTU	0.1	-	149	74.5	14.2	9.31	7.72	7.56	**5.59**
Ammonia, Total (as N)	mg/L	0.01	-	0.022	-	-	-	0.105	0.045	-
Nitrate (as N)	mg/L	0.02	-	0.501	-	-	-	4	3.99	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	-	-	<5.0	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.48: Water Quality Results for Water Licence Monitoring Location - MS-RW-01

Analyte	Sample ID			MS-RW-01	MS-RW-01	MS-RW-01	MS-RW-01
	ALS Laboratory Sample ID			L2496142-2	L2496123-1	L2497355-1	L2499559-1
	Sample Date & Time			2020-08-16 14:35	2020-08-26 13:35	2020-09-01 9:50	2020-09-07 8:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3	-	-	-	515	-
pH	pH units	0.1	6.0 - 9.5	8.18	8.07	8.20	8.09
Total Suspended Solids [2]	mg/L	2	Grab 30, Average 15	2.4	<2.0	<2.0	2.8
Total Dissolved Solids	mg/L	10	-	220	309	295	313
Turbidity	NTU	0.1	-	3.74	16.7	7.78	7.13
Ammonia, Total (as N)	mg/L	0.01	-	-	-	0.466	-
Nitrate (as N)	mg/L	0.02	-	-	-	4.73	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.49: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID			MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
	ALS Laboratory Sample ID			L2471885-1	L2476176-1	L2478534-1	L2480178-1	L2484599-1	L2486377-1
	Sample Date & Time			2020-07-06 11:45	2020-07-13 13:10	2020-07-20 14:30	2020-07-27 11:55	2020-08-03 11:40	2020-08-10 14:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	3	-	338	-	332	-	333	-
pH	pH units	0.1	6.0 - 9.5	8.14	8.27	8.21	8.44	8.27	8.35
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	3.1	5.6	3.1	3.9
Total Dissolved Solids	mg/L	10	-	181	198	221	208	198	226
Turbidity	NTU	0.1	-	2.3	1.35	3.88	1.88	1.94	1.43
Ammonia, Total (as N)	mg/L	0.01	-	0.279	-	0.069	-	0.031	-
Nitrate (as N)	mg/L	0.02	-	0.54	-	0.445	-	0.333	-
Oil and Grease, Total	mg/L	2	-	<2.0	-	<2.0	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.49: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID			MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
	ALS Laboratory Sample ID			L2490510-1	L2494146-1	L2499599-1	L2500077-1
	Sample Date & Time			2020-08-17 11:00	2020-08-24 11:25	2020-09-01 11:55	2020-09-07 16:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	3	-	-	-	-	-
pH	pH units	0.1	6.0 - 9.5	8.22	8.19	8.28	8.28
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	<2.0	3.0	2
Total Dissolved Solids	mg/L	10	-	234	987	236	246
Turbidity	NTU	0.1	-	1.42	1.43	2.43	3.14
Ammonia, Total (as N)	mg/L	0.01	-	-	-	-	-
Nitrate (as N)	mg/L	0.02	-	-	-	-	-
Oil and Grease, Total	mg/L	2	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.50: Water Quality Results for Water Licence Monitoring Location - MS-RW-02

Analyte	Sample ID			MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02
	ALS Laboratory Sample ID			L2480167-2	L2480814-2	L2482852-2	L24686379-1	L2496142-1	L2496123-2	L2497355-2	L2499559-2
	Sample Date & Time			2020-07-27 17:10	2020-07-28 17:30	2020-08-03 17:15	2020-08-10 14:55	2020-08-16 13:40	2020-08-26 13:45	2020-09-01 10:45	2020-09-07 9:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	2	-	-	315	353	-	-	-	407	-
pH	pH units	0.1	6.0 - 9.5	8.08	8.11	8.27	8.34	8.12	8.17	8.22	8.22
Total Suspended Solids	mg/L	2	Grab 30, Average 15	<2.0	3.9	3.9	2.7	4.8	<2.0	2.1	2.4
Total Dissolved Solids	mg/L	10	-	170	167	191	198	278	243	220	230
Turbidity	NTU	0.1	-	2.28	2.07	2.93	2.2	5.94	2.64	3.45	3.63
Ammonia, Total (as N)	mg/L	0.005	-	-	0.0957	0.085	-	-	-	0.103	-
Nitrate (as N)	mg/L	0.005	-	-	1.51	1.07	-	-	-	1.21	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	<2.0	-	-	-	<2.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

ATTACHMENT 9

2021 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2021
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.5 Water Quality Results for Other Water Licence Monitoring Locations

Table 7.1: Water Quality Monitoring Locations - 2021

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2021
			Easting	Northing	Latitude	Longitude	
Milne Port							
SNP	MP-01	Milne Port Sewage Treatment Plant (STP)	530810	7975970	71° 52' 56.3" N	-80° 06' 44.3" W	Active
SNP	MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 02.9" N	-80° 53' 43.9" W	Active
SNP	MP-01B	Milne Port 380 Person Sewage Treatment Plant (STP)	503375	7975184	71° 52' 36.1" N	-80° 54' 10.0" W	Active
SNP	MP-02	Milne Port Maintenance Shop (Oily Water)	503785	7976209	71° 53' 09.2" N	-80° 53' 27.3" W	Inactive [2]
SNP	MP-03	Milne Port Bulk Fuel Storage Facility (Stormwater)	503638	7976272	71° 53' 11.2" N	-80° 53' 42.5" W	Active
SNP	MP-04	Milne Port Landfarm Facility	503710	7975574	71° 52' 48.7" N	-80° 53' 35.2" W	Active
SNP	MP-04A	Milne Port Landfarm Facility (Contaminated Snow Containment Berm)	503862	7975482	71° 52' 45.7" N	-80° 53' 19.4" W	Active
SNP	MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 14.8" N	-80° 54' 00.0" W	Active
SNP	MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14.2" N	-80° 54' 35.7" W	Active
SNP	MP-C-A	Surface Water Drainage Downstream of Milne Port Infrastructure	503214	7976483	71° 53' 18.1" N	-80° 54' 26.5" W	Inactive [2]
SNP	MP-C-B		502836	7975732	71° 52' 53.8" N	-80° 55' 05.8" W	Active
SNP	MP-C-K		502979	7975333	71° 52' 41.0" N	-80° 54' 51.0" W	Active
SNP	MP-C-C		503436	7975427	71° 52' 44.0" N	-80° 54' 03.6" W	Inactive [2]
SNP	MP-C-D		503651	7976363	71° 53' 14.2" N	-80° 53' 41.2" W	Inactive [2]
SNP	MP-C-E		503736	7976346	71° 53' 13.6" N	-80° 53' 32.3" W	Inactive [2]
SNP	MP-C-F		503922	7976304	71° 53' 12.2" N	-80° 53' 13.1" W	Inactive [2]
SNP	MP-C-H		504114	7976417	71° 53' 15.9" N	-80° 52' 53.1" W	Active
SNP	MP-C-J		502940	7974760	71° 52' 22.5" N	-80° 54' 55.2" W	Active
SNP	MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52.3" N	-80° 35' 03.7" W	Inactive [2]
SNP	MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00.4" N	-80° 23' 08.5" W	Active
SNP	MP-Q1-01	Surface Water Drainage Downstream of the Q1 Quarry	503839	7974467	71° 52' 13.0" N	-80° 53' 22.0" W	Active
SNP	MP-Q1-02		503828	7975396	71° 52' 42.9" N	-80° 53' 23.0" W	Active
Recycled Water	MP-Q1-P1	Milne Port Q1 Quarry Recycled Water for Dust Suppression	503822	7974661	71° 52' 19.3" N	-80° 53' 23.8" W	Active
Mine Site							
SNP	MQ-C-A	Surface Water Drainage Downstream of QMR2 Quarry	559489	7914408	71° 19' 28.2" N	-79° 20' 06.9" W	Active
SNP	MQ-C-B		560076	7913888	71° 19' 10.9" N	-79° 19' 09.2" W	Active
SNP	MQ-C-D		559422	7914223	71° 19' 22.3" N	-79° 20' 14.1" W	Active
SNP	MQ-C-E		563351	7912902	71° 18' 36.0" N	-79° 13' 42.5" W	Inactive [2]
SNP	MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	-79° 17' 05.6" W	Active
SNP	MS-01A	Mine Site Polishing Waste Stabilization Pond (PWSP)	-	-	-	-	Not Constructed [3]
SNP	MS-01B	Mine Site Sewage Treatment Plant No. 2	560794	7913235	71° 18' 49.1" N	-79° 17' 58.8" W	Active
SNP	MS-02	Mine Site Mobile Maintenance Buildings (Meltwater)	561638	7913222	71° 18' 48.0" N	-79° 16' 33.9" W	Not Constructed [3]
SNP	MS-03	Mine Site Bulk Fuel Storage Facility (Stormwater)	561258	7913304	71° 18' 51.0" N	-79° 17' 11.9" W	Active

Notes:

[1] Exploration Phase infrastructure decommissioned.

[2] No surface water flows at location in 2021.

[3] Not constructed.

[4] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2021

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2021
			Easting	Northing	Latitude	Longitude	
SNP	MS-03B	Mine Site Bulk Fuel Storage Facility (Stormwater)	560993	7913601	71° 19' 00.8" N	-79° 17' 37.8" W	Active
SNP	MS-04	Mine Site Fuel Unloading Station (Stormwater)	-	-	-	-	Inactive [2]
SNP	MS-05	Mine Site Landfarm Facility (Stormwater)	560828	7912726	71° 18' 32.7" N	-79° 17' 56.8" W	Active
SNP	MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 40.9" N	-79° 16' 50.9" W	Active
SNP	MS-07	Mine Site Run of Mine (ROM) Ore Stockpile Pond - Surface Water Management Pond	563583	7913074	71° 18' 41.4" N	-79° 13' 18.6" W	Active
SNP	MS-08	Mine Site Waste Rock Facility (WRF) - Surface Water Management Pond	563218	7916802	71° 20' 24.7" N	-79° 13' 18.3" W	Active
SNP	MS-09	Waste Rock Stockpile - East Pond	-	-	-	-	Not Constructed [3]
SNP	MS-10	Mine Site SDLT-1 Pond Ore Stockpile (Stormwater)	-	-	-	-	Not Constructed [3]
SNP	MS-11	Mine Site KM105 Pond (Stormwater)	-	-	-	-	Inactive [2]
SNP	MS-12	Mine Site Weatherhaven Camp (Stormwater)	-	-	-	-	Not Constructed [3]
SNP	MS-13	Mine Site Explosives Magazine Pond	-	-	-	-	Not Constructed [3]
SNP	MS-14	Mine Site Quarry QMR2 Pond/Sump	-	-	-	-	Not Constructed [3]
SNP	MS-C-A	Surface Water Drainage Downstream of Mine Site Infrastructure	561263	7913571	71° 18' 59.6" N	-79° 17' 10.6" W	Active
SNP	MS-C-B		561454	7913537	71° 18' 58.3" N	-79° 16' 51.5" W	Active
SNP	MS-C-C		561110	7913199	71° 18' 47.7" N	-79° 17' 27.1" W	Active
SNP	MS-C-D		561008	7913280	71° 18' 50.4" N	-79° 17' 37.1" W	Active
SNP	MS-C-E		560980	7913388	71° 18' 53.9" N	-79° 17' 39.6" W	Active
SNP	MS-C-F		561797	7913278	71° 18' 49.6" N	-79° 16' 17.7" W	Active
SNP	MS-C-G		561813	7911830	71° 18' 02.9" N	-79° 16' 20.3" W	Active
SNP	MS-C-H		561162	7912067	71° 18' 11.1" N	-79° 17' 25.1" W	Active
Recycled Water	HR-CD-05	Mine Site Haul Road KM105 Pond Recycled Water for Dust Suppression	563812	7913140	71° 18' 43.3" N	79° 12' 55.4" W	Inactive[2]
Recycled Water	MS-RW-01	Mine Site Flight Ops Pond (Pond 1) Recycled Water for Dust Suppression	559348	7914222	71° 19' 22.3" N	79° 20' 21.6" W	Active
Recycled Water	MS-RW-02	Mine Site Warehouse Pond (Pond 2) Recycled Water for Dust Suppression	559555	7913950	71° 19' 13.4" N	79° 20' 01.6" W	Active
SNP	MS-MRY-1	Fresh Water Intake at Camp Lake	557779	7914722	71° 19' 39.8" N	-79° 22' 58.2" W	Active
SNP	MS-MRY-04	Mine Site Exploration Camp Sewage Treatment Plant	558134	7914459	71° 19' 31.0" N	-79° 22' 23.2" W	Inactive [1]
SNP	MS-MRY-04A	Mine Site Polishing Waste Stabilization Pond (PWSP)	558549	7914112	71° 19' 19.4" N	-79° 21' 42.3" W	Active
SNP	MS-MRY-04B	Mine Site Polishing Waste Stabilization Pond (PWSP)	558438	7914310	71° 19' 25.9" N	-79° 21' 53.0" W	Active
SNP	MS-MRY-04C	Mine Site Polishing Waste Stabilization Pond (PWSP)	558508	7914264	71° 19' 24.4" N	-79° 21' 46.1" W	Active
SNP	MS-MRY-6	Hazardous Materials Storage Area (MS-HWB-7) (Stormwater)	558341	7914508	71° 19' 32.4" N	-79° 22' 02.2" W	Active
SNP	MS-MRY-09	Mine Site Deposit No.1 - Surface Water Drainage	561083	7915084	71° 19' 48.5" N	-79° 17' 24.5" W	Active
SNP	MS-MRY-10	Mine Site Deposit No. 1 - Surface Water Drainage	563820	7914620	71° 19' 31.0" N	-79° 12' 50.2" W	Active
SNP	MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560754	7912484	71° 18' 25.0" N	-79° 18' 04.9" W	Active
SNP	MS-MRY-13B	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560642	7912527	71° 18' 26.4" N	-79° 18' 16.1" W	Active
SSPM	MS-SN-01	Mine Site Weatherhaven Snow Stockpile	558052	7914303	71° 19' 26.1" N	79° 22' 31.9" W	Active

Notes:

[1] Exploration Phase infrastructure decommissioned.
[2] No surface water flows at location in 2021.
[3] Not constructed.
[4] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.
SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2021

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2021
			Easting	Northing	Latitude	Longitude	
SSPM	MS-SN-02	Mine Site Landfill Access Road Snow Stockpile	561097	7912884	71° 18' 37.6" N	79° 17' 29.4" W	Active
SSPM	MS-SN-03	Mine Site Warehouse Snow Stockpile	559803	7913756	71° 19' 06.9" N	79° 19' 37.1" W	Active
Tote Road							
SSPM	TR-SN-01	Tote Road Snow Stockpile KM37	521756	7948884	71° 38' 23.8" N	80° 22' 52.2" W	Active
SSPM	TR-SN-02	Tote Road Snow Stockpile KM63	529396	7926786	71° 26' 27.7" N	80° 10' 20.9" W	Active
SSPM	TR-SN-03	Tote Road Snow Stockpile KM77	538726	7920503	71° 23' 00.1" N	79° 54' 47.0" W	Active
SSPM	TR-SN-04	Tote Road Snow Stockpile KM86	547040	7919654	71° 22' 27.3" N	-79° 40' 49.0" W	Active
SSPM	TR-SN-05	Tote Road Snow Stockpile KM92	551307	7916785	71° 20' 51.7" N	79° 33' 45.2" W	Inactive [2]
SSPM	TR-SN-06	Tote Road Snow Stockpile KM97	555217	7914564	71° 19' 36.9" N	-79° 27' 16.6" W	Active
SSPM	TR-SN-07	Tote Road Snow Stockpile KM75	537681	7920369	71° 22' 56.4" N	-79° 56' 32.8" W	Active
Recycled Water	TR-BP-01	Tote Road KM97 Borrow Pond Recycled Water for Dust Suppression	556021	7914684	71° 19' 40.1" N	-79° 25' 55.4" W	Active
Recycled Water	TR-BP-02	Tote Road KM57 Borrow Pond Recycled Water for Dust Suppression	527171	7932085	71° 29' 19.6" N	-80° 13' 59.6" W	Active
TRMP	CV-167	Approximately located at KM6	505519	7972462	71° 51' 08.2" N	-80° 50' 28.5" W	Active
TRMP	CV-154-A[4]	Approximately located at KM9.5	507620	7970076	71° 49' 51.0" N	-80° 46' 51.8" W	Active
TRMP	CV-128	Approximately located at KM17	513556	7965889	71° 47' 34.9"N	-80° 36' 40.6"W	Active
TRMP	CV-129	Approximately located at KM15	512381	7966783	71° 48' 03.9"N	-80° 38' 41.3"W	Active
TRMP	CV-115	Approximately located at KM28	519222	7958135	71° 43' 23.2"N	-80° 27' 03.0"W	Active
TRMP	CV-112	Approximately located at KM33	521033	7954935	71° 41' 39.3"N	-80° 24' 00.0"W	Active
TRMP	CV-106	Approximately located at KM33	521663	7953392	71° 40' 49.3"N	-80° 22' 57.0"W	Active
TRMP	CV-099	Approximately located at KM37	521886	7948843	71° 38' 22.4"N	-80° 22' 38.9"W	Active
TRMP	CV-093	Approximately located at KM42	522927	7945093	71° 36' 21.1"N	-80° 20' 56.4"W	Active
TRMP	CV-078	Approximately located at KM51	525852	7936787	71° 31' 51.9"N	-80° 16' 07.8"W	Active
TRMP	CV-072-C[4]	Approximately located at KM54	526897	7934576	71° 30' 40.1"N	-80° 14' 24.2"W	Active
TRMP	CV-060	Approximately located at KM58	527622	7930342	71° 28' 23.2"N	-80° 13' 16.0"W	Active
TRMP	BG-50	Approximately located at KM63	529294	7926852	71° 26' 29.8"N	-80° 10' 31.1"W	Active
TRMP	CV-040	Approximately located at KM71.5	535168	7920326	71° 22' 56.4"N	-80° 00' 46.7"W	Active
TRMP	BG-32	Approximately located at KM78	540729	7921597	71° 23' 34.2"N	-79° 51' 22.6"W	Active
TRMP	CV-217	Approximately located at KM80	542321	7922189	71° 23' 52.4"N	-79° 48' 40.5"W	Active
TRMP	BG-30	Approximately located at KM84.5	546070	7919844	71° 22' 34.2"N	-79° 42' 26.6"W	Active
TRMP	BG-24	Approximately located at KM88	548766	7918878	71° 22' 01.1"N	-79° 37' 56.6"W	Active
TRMP	CV-001	Approximately located at KM94.1	553544	7914897	71° 19' 49.0"N	-79° 30' 04.3"W	Active
TRMP	CV-223	Approximately located at KM97.5	555705	7914676	71° 19' 40.1"N	-79° 26' 27.3"W	Active

Notes:

[1] Exploration Phase infrastructure decommissioned.

[2] No surface water flows at location in 2021.

[3] Not constructed.

[4] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
	ALS Laboratory Sample ID			L2550732-1	L2550732-2	L2558665-1	L2563942-1	L2579172-1	L2584925-1	L2597166-1	L2602461-1
	Sample Date & Time			2021-01-21 12:45	2021-01-21 12:45	2021-02-16 10:15	2021-03-04 11:30	2021-04-20 13:15	2021-05-06 11:30	2021-06-02 13:10	2021-06-15 13:10
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
pH	pH units	0.10	6.0 - 9.5	7.78	7.79	7.61	7.85	7.57	7.73	7.90	7.83
Total Suspended Solids	mg/L	3.0/1.0	120	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.031	0.030	0.053	0.025	0.04	0.027	0.023	0.072
Total Kjeldahl Nitrogen	mg/L	0.50/0.050/5.0	-	1.91	1.82	1.04	0.98	1.23	1.17	0.920	35.0
Phosphorus, Total	mg/L	0.030/0.0030/0.060	-	9.77	9.76	13.2	9.92	12.9	11.9	8.90	12.5
Fecal Coliforms	CFU/100 mL	0	10,000	0	0	0	7	45	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0	<2.0	4.8	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-01	MP-01	MP-0103	MP-01	MP-0103	MP-01	MP-0102
	ALS Laboratory Sample ID			L2611143-1	L2622710-1	L2637961-1	L2637961-3	L2640590-1	L2640590-3	L2648435-1	L2648435-3
	Sample Date & Time			2021-07-06 11:00	2021-08-03 13:00	2021-09-08 13:10	2021-09-08 13:10	2021-09-15 13:10	2021-09-15 13:00	2021-10-05 14:00	2021-10-05 14:00
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A	Travel Blank	N/A	Field Blank
	Units	LOR	Water Licence Criteria [1]								
pH	pH units	0.10	6.0 - 9.5	7.96	7.63	7.90	5.87	7.74	5.57	7.69	5.74
Total Suspended Solids	mg/L	3.0/1.0	120	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.049	0.025	0.050	<0.010	0.042	<0.010	0.035	<0.010
Total Kjeldahl Nitrogen	mg/L	0.50/0.050/5.0	-	3.60	5.30	6.85	<0.050	3.49	<0.050	1.15	<0.050
Phosphorus, Total	mg/L	0.030/0.0030/0.060	-	11.1	14.9	13.7	0.0035	10.9	<0.0030	6.57	<0.0030
Fecal Coliforms	CFU/100 mL	0	10,000	0	0	0	0	0	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID			MP-01	MP-0101	MP-01	MP-0103
	ALS Laboratory Sample ID			L2661884-1	L2661884-4	L2671157-1	L2671157-3
	Sample Date & Time			2021-11-10 13:10	2021-11-10 13:10	2021-12-08 13:10	2021-12-08 13:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Travel Blank
	Units	LOR	Water Licence Criteria [1]				
pH	pH units	0.10	6.0 - 9.5	7.86	7.87	8.07	5.32
Total Suspended Solids	mg/L	3.0/1.0	120	<1.0	<1.0	3.4	<1.0
Ammonia, Total (as N)	mg/L	0.010	-	0.031	0.036	0.027	0.013
Total Kjeldahl Nitrogen	mg/L	0.50/0.050/5.0	-	1.24	1.27	0.870	<0.050
Phosphorus, Total	mg/L	0.030/0.0030/0.060	-	11.1	11.1	8.58	<0.0030
Fecal Coliforms	CFU/100 mL	0	10,000	0	0	0	0
BOD	mg/L	2.0	100	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<5.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01A

Analyte	Sample ID			MP-01A	MP-01A
	ALS Laboratory Sample ID			L2632384-1	L2635378-1
	Sample Date & Time			2021-08-26 11:10	2021-09-01 15:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
pH	pH units	0.10	6.0 - 9.5	7.83	7.96
Total Suspended Solids	mg/L	1.0	120	11.5	13.0
Total Dissolved Solids	mg/L	20	-	587	-
Turbidity	NTU	0.10	-	2.39	-
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	273	-
Ammonia, Total (as N)	mg/L	1.0	-	6.1	6.7
Total Kjeldahl Nitrogen	mg/L	0.10/0.50	-	11.5	13.0
Phosphorus, Total	mg/L	0.0030	-	0.186	0.217
Fecal Coliforms	CFU/100mL	0	10,000	0	0
BOD	mg/L	3.0	100	<3.0	<3.0
COD	mg/L	10	-	122	120
Oil and Grease, Total	mg/L	5.0	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2, 3]	-	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B
	ALS Laboratory Sample ID			L2553158-1	L2558672-1	L2563947-1	L2579204-1	L2584928-1	L2597169-1	L2602482-1
	Sample Date & Time			2021-01-31 10:15	2021-02-16 13:30	2021-03-04 13:40	2021-04-20 13:30	2021-05-06 12:00	2021-06-02 13:15	2021-06-15 13:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	7.99	8.57	8.47	8.12	7.22	8.43	8.45
Total Suspended Solids	mg/L	1.0/3.0	120	<3.0	<3.0	3.5	8.0	<3.0	3.7	<1.0
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.50	-	0.0205	0.041	0.029	<0.010	0.0	0.018	0.038
Total Kjeldahl Nitrogen	mg/L	0.050	-	<0.050	1.26	2.40	1.20	0.550	5.20	0.730
Phosphorus, Total	mg/L	0.40/0.030/0.060/0.0030	-	9.57	7.25	7.62	10.5	15.3	3.61	6.96
Fecal Coliforms	CFU/100mL	1	10,000	<1	2	1	0	3	0	0
BOD	mg/L	2.0/3.0	100	3.0	3.1	<2.0	<2.0	<2.0	<2.0	<3.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B	MP-01B	MP-01B	MP-01B03	MP-01B	MP-01B03	MP-01B
	ALS Laboratory Sample ID			L2611174-1	L2622708-1	L2637988-1	L2637988-3	L2640599-1	L2640599-3	L2648442-1
	Sample Date & Time			2021-07-06 12:00	2021-08-03 12:30	2021-09-08 13:15	2021-09-08 13:00	2021-09-15 13:15	2021-09-15 13:00	2021-10-05 14:00
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	7.94	7.98	8.17	5.77	8.09	6.03	8.01
Total Suspended Solids	mg/L	1.0/3.0	120	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.50	-	0.023	<0.50	0.048	<0.010	0.051	0.024	0.013
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.850	3.90	0.885	<0.050	0.787	<0.050	<0.050
Phosphorus, Total	mg/L	0.40/0.030/0.060/0.0030	-	11.4	8.81	9.38	0.0073	5.56	<0.0030	9.73
Fecal Coliforms	CFU/100mL	1	10,000	2	0	4	0	4	0	1
BOD	mg/L	2.0/3.0	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID			MP-01B03	MP-01B	MP-01B01	MP-01B	MP-01B02
	ALS Laboratory Sample ID			L2648442-3	L2661878-1	L2661878-4	L2671142-1	L2671142-3
	Sample Date & Time			2021-10-05 14:00	2021-11-10 13:10	2021-11-10 13:10	2021-12-08 13:45	2021-12-08 13:40
	QA/QC Sample Type			Travel Blank	N/A	Field Duplicate	N/A	Field Blank
	Units	LOR	Water Licence Criteria [1]					
pH	pH units	0.10	6.0 - 9.5	5.99	8.29	8.22	7.80	6.30
Total Suspended Solids	mg/L	1.0/3.0	120	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.50	-	<0.010	0.043	0.044	0.024	<0.010
Total Kjeldahl Nitrogen	mg/L	0.050	-	<0.050	1.14	1.48	<0.050	<0.050
Phosphorus, Total	mg/L	0.40/0.030/0.060/0.0030	-	<0.0030	7.39	7.45	7.15	<0.0030
Fecal Coliforms	CFU/100mL	1	10,000	0	0	0	0	0
BOD	mg/L	2.0/3.0	100	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	<2.0	<2.0	<2.0
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [2,3]	N/A		Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.4: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID			MP-03	MP-03
	ALS Laboratory Sample ID			L2612302-1	L2631106-1
	Sample Date & Time			2021-07-09 13:20	2021-08-23 7:10
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
pH	pH units	0.10	-	8.07	8.47
Total Suspended Solids	mg/L	2.0	-	174	<2.0
Total Dissolved Solids	mg/L	10	-	535	343
Turbidity	NTU	0.10	-	185	1.88
Ammonia, Total (as N)	mg/L	0.0050/0.010	-	0.0369	0.162
Phosphorus, Total	mg/L	0.020/0.0030	-	0.072	0.0068
Arsenic (As)-Total	mg/L	0.00010	-	0.00101	0.00046
Copper (Cu)-Total	mg/L	0.0010/0.00050	-	0.00560	0.0023
Lead (Pb)-Total	mg/L	0.000050	0.001	**0.00656**	0.000347
Nickel (Ni)-Total	mg/L	0.00050	-	0.00279	0.00058
Zinc (Zn)-Total	mg/L	0.0030	-	0.0255	<0.0030
Benzene	mg/L	0.00050	0.37	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.09	<0.00050	<0.00050
Toluene	mg/L	0.00045/0.00050	0.002	<0.00045	<0.00050
F1 (C6-C10)	mg/L	0.10/0.025	-	<0.10	<0.025
F2 (C10-C16)	mg/L	0.10	-	3.62	<0.10
F3 (C16-C34)	mg/L	0.25	-	1.29	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.38/0.37	-	4.91	<0.37
Oil and Grease, Total	mg/L	5.0	15	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.2.5: Water Quality Results for Water Licence Monitoring Location - MP-04

Analyte	Sample ID			MP-04	MP-04	MP-04
	ALS Laboratory Sample ID			L2612836-1	L2632383-1	L2634815-1
	Sample Date & Time			2021-07-12 14:20	2021-08-26 8:50	2021-09-01 10:30
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
pH	pH units	0.10	6.0 - 9.0	7.97	7.83	8.10
Total Suspended Solids	mg/L	1.0/2.0	15	**17.3**	1.6	2.6
Total Dissolved Solids	mg/L	10/20	-	616	902	785
Turbidity	NTU	0.10	-	10.8	4.66	5.43
Lead (Pb)-Total	mg/L	0.00005/0.00050	0.001	0.000124	0.000285	<0.00050
Benzene	mg/L	0.00050	0.370	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.002	<0.00050	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.025	-	<0.025	<0.025	<0.025
F2 (C10-C16)	mg/L	0.10	-	0.35	0.36	0.39
F3 (C16-C34)	mg/L	0.25	-	<0.25	<0.25	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.37	-	<0.37	<0.37	0.39
Oil and Grease, Total	mg/L	5.0	15	<5.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-04A

Analyte	Sample ID			MP-04A	MP-04A
	ALS Laboratory Sample ID			L2622824-1	L2629905-1
	Sample Date & Time			2021-08-02 8:15	2021-08-20 14:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
pH	pH	0.10	6.0 - 9.0	6.58	7.12
Total Suspended Solids	mg/L	2.0	15	8.2	**19.8**
Total Dissolved Solids	mg/L	10/20	-	1990	1170
Turbidity	NTU	0.10	-	4.81	4.75
Lead (Pb)-Total	mg/L	0.00050/0.000050	0.001	**0.00403**	0.000237
Benzene	mg/L	0.00050	0.370	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050	<0.00050
Toluene	mg/L	0.00050/0.00045	0.002	<0.00050	<0.00045
F1 (C6-C10)	mg/ml	0.025/0.10	-	<0.025	<0.10
F2 (C10-C16)	mg/L	0.10	-	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25	-	0.30	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/ml	0.37/0.38	-	<0.37	<0.38
Oil and Grease, Total	mg/L	5.0	15	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05	MP-05
	ALS Laboratory Sample ID			L2606851-1	L2611194-1
	Sample Date & Time			2021-06-26 7:20	2021-07-05 15:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Hardness (as CaCO3)	mg/L	0.50/1.3	-	349	508
pH	pH units	0.10	6.0 - 9.5	8.27	8.32
Total Suspended Solids	mg/L	1.0/2.0	15	4.4	<1.0
Total Dissolved Solids	mg/L	10/20	-	613	833
Turbidity	NTU	0.10	-	14.9	6.81
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	118	137
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.10	-	0.0481	0.096
Chloride (Cl)	mg/L	2.5/0.50	-	137	139
Fluoride (F)	mg/L	0.10/0.020	-	0.20	0.20
Nitrate (as N)	mg/L	0.020/0.10	-	3.01	4.28
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.434	0.730
Phosphorus, Total	mg/L	0.0020/0.0030	-	0.0145	0.0067
Sulfate (SO4)	mg/L	1.5/0.30	-	172	306
Dissolved Organic Carbon	mg/L	0.50	-	4.46	3.93
Total Organic Carbon	mg/L	0.50	-	3.90	4.50
Aluminum (Al)-Total	mg/L	0.0030/0.050/0.0050	-	0.150	0.115
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	0.00024	<0.0010
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.0000050	<0.000050
Calcium (Ca)-Total	mg/L	0.05/0.50	-	58.9	86.6
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	0.00133	<0.0050
Iron (Fe)-Total	mg/L	0.010/0.10	-	0.170	0.14
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	0.000259	<0.00050
Magnesium (Mg)-Total	mg/L	0.0050/0.050	-	45.8	69.7
Manganese (Mn)-Total	mg/L	0.00010/0.0050/0.00050	-	0.181	0.363
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.00510	0.00492
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	0.00161	<0.0050
Potassium (K)-Total	mg/L	0.050/0.50	-	8.65	9.00
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	0.000363	0.00055
Sodium (Na)-Total	mg/L	0.050/0.50	-	57.2	53.3
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	0.000015	<0.00010
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.119	0.141
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	0.0070	<0.030
Aluminum (Al)-Dissolved	mg/L	0.0010/0.50/0.050/0.0050	-	0.0206	<0.050
Arsenic (As)-Dissolved	mg/L	0.00010/0.0010	-	0.00021	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.0000050/0.000050	-	<0.0000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050/0.50	-	60.3	85.60
Copper (Cu)-Dissolved	mg/L	0.00020/0.0020	-	0.00120	<0.0020
Iron (Fe)-Dissolved	mg/L	0.010/0.10	-	<0.010	<0.10
Lead (Pb)-Dissolved	mg/L	0.000050/0.00050	-	<0.000050	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.0050/0.050	-	48.1	71.4
Manganese (Mn)-Dissolved	mg/L	0.00010/0.0050/0.00050	-	0.158	0.330
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050/0.00050	-	0.00530	0.00471
Nickel (Ni)-Dissolved	mg/L	0.00050/0.0050	-	0.00136	<0.0050
Potassium (K)-Dissolved	mg/L	0.050/0.50	-	8.90	9.24
Selenium (Se)-Dissolved	mg/L	0.000050/0.00050	-	0.000348	0.00058
Sodium (Na)-Dissolved	mg/L	0.050/0.50	-	58.7	54.5
Thallium (Tl)-Dissolved	mg/L	0.000010/0.00010	-	0.000013	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010/0.00010	-	0.114	0.137
Zinc (Zn)-Dissolved	mg/L	0.0010/0.010	-	0.0046	<0.010
Oil and Grease, Total	mg/L	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05	MP-0501
	ALS Laboratory Sample ID			L2622832-1	L2622832-2
	Sample Date & Time			2021-08-02 14:30	2021-08-02 14:30
	QA/QC Sample Type			N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]		
Hardness (as CaCO3)	mg/L	0.50/1.3	-	434	437
pH	pH units	0.10	6.0 - 9.5	8.36	8.33
Total Suspended Solids	mg/L	1.0/2.0	15	1.7	1.7
Total Dissolved Solids	mg/L	10/20	-	658	659
Turbidity	NTU	0.10	-	4.24	4.68
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	179	179
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.10	-	0.049	0.049
Chloride (Cl)	mg/L	2.5/0.50	-	120	120
Fluoride (F)	mg/L	0.10/0.020	-	0.190	0.188
Nitrate (as N)	mg/L	0.020/0.10	-	3.77	3.77
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.490	0.770
Phosphorus, Total	mg/L	0.0020/0.0030	-	0.0073	0.0052
Sulfate (SO4)	mg/L	1.5/0.30	-	180	180
Dissolved Organic Carbon	mg/L	0.50	-	5.99	4.77
Total Organic Carbon	mg/L	0.50	-	5.10	4.51
Aluminum (Al)-Total	mg/L	0.0030/0.050/0.0050	-	0.097	0.077
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	<0.0010	<0.0010
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.05/0.50	-	78.4	79.8
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	<0.0050	<0.0050
Iron (Fe)-Total	mg/L	0.010/0.10	-	<0.10	0.11
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	<0.00050	<0.00050
Magnesium (Mg)-Total	mg/L	0.0050/0.050	-	57.8	56.6
Manganese (Mn)-Total	mg/L	0.00010/0.0050/0.00050	-	0.0977	0.0955
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.00388	0.00384
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	<0.0050	<0.0050
Potassium (K)-Total	mg/L	0.050/0.50	-	8.53	8.35
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.050/0.50	-	57.4	56.0
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.116	0.115
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	<0.030	<0.030
Aluminum (Al)-Dissolved	mg/L	0.0010/0.50/0.050/0.0050	-	<0.050	<0.050
Arsenic (As)-Dissolved	mg/L	0.00010/0.0010	-	<0.0010	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.0000050/0.000050	-	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050/0.50	-	78.4	79.3
Copper (Cu)-Dissolved	mg/L	0.00020/0.0020	-	<0.0020	<0.0020
Iron (Fe)-Dissolved	mg/L	0.010/0.10	-	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.000050/0.00050	-	<0.00050	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.0050/0.050	-	57.8	58.1
Manganese (Mn)-Dissolved	mg/L	0.00010/0.0050/0.00050	-	0.0789	0.0814
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050/0.00050	-	0.00402	0.00403
Nickel (Ni)-Dissolved	mg/L	0.00050/0.0050	-	<0.0050	<0.0050
Potassium (K)-Dissolved	mg/L	0.050/0.50	-	8.58	8.43
Selenium (Se)-Dissolved	mg/L	0.000050/0.00050	-	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.050/0.50	-	57.5	57.2
Thallium (Tl)-Dissolved	mg/L	0.000010/0.00010	-	<0.00010	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010/0.00010	-	0.116	0.115
Zinc (Zn)-Dissolved	mg/L	0.0010/0.010	-	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID			MP-05
	ALS Laboratory Sample ID			L2637962-1
	Sample Date & Time			2021-09-08 15:25
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria [1]	
Hardness (as CaCO3)	mg/L	0.50/1.3	-	426
pH	pH units	0.10	6.0 - 9.5	8.31
Total Suspended Solids	mg/L	1.0/2.0	15	2.1
Total Dissolved Solids	mg/L	10/20	-	697
Turbidity	NTU	0.10	-	6.16
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	198
Ammonia, Total (as N)	mg/L	0.0050/0.010/0.10	-	0.58
Chloride (Cl)	mg/L	2.5/0.50	-	131
Fluoride (F)	mg/L	0.10/0.020	-	<0.10
Nitrate (as N)	mg/L	0.020/0.10	-	4.45
Total Kjeldahl Nitrogen	mg/L	0.050	-	2.24
Phosphorus, Total	mg/L	0.0020/0.0030	-	0.0060
Sulfate (SO4)	mg/L	1.5/0.30	-	179
Dissolved Organic Carbon	mg/L	0.50	-	6.86
Total Organic Carbon	mg/L	0.50	-	5.89
Aluminum (Al)-Total	mg/L	0.0030/0.050/0.0050	-	0.0586
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	0.00022
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.05/0.50	-	83.5
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	0.00170
Iron (Fe)-Total	mg/L	0.010/0.10	-	0.101
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	0.000156
Magnesium (Mg)-Total	mg/L	0.0050/0.050	-	54.9
Manganese (Mn)-Total	mg/L	0.00010/0.0050/0.00050	-	0.0758
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.00339
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	0.00139
Potassium (K)-Total	mg/L	0.050/0.50	-	8.39
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	0.000337
Sodium (Na)-Total	mg/L	0.050/0.50	-	58.0
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	0.000017
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.0747
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	0.0114
Aluminum (Al)-Dissolved	mg/L	0.0010/0.50/0.050/0.0050	-	0.0091
Arsenic (As)-Dissolved	mg/L	0.00010/0.0010	-	0.00021
Cadmium (Cd)-Dissolved	mg/L	0.0000050/0.000050	-	0.0000135
Calcium (Ca)-Dissolved	mg/L	0.050/0.50	-	80.9
Copper (Cu)-Dissolved	mg/L	0.00020/0.0020	-	0.00159
Iron (Fe)-Dissolved	mg/L	0.010/0.10	-	0.014
Lead (Pb)-Dissolved	mg/L	0.000050/0.00050	-	0.000058
Magnesium (Mg)-Dissolved	mg/L	0.0050/0.050	-	54.4
Manganese (Mn)-Dissolved	mg/L	0.00010/0.0050/0.00050	-	0.0676
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050/0.00050	-	0.00328
Nickel (Ni)-Dissolved	mg/L	0.00050/0.0050	-	0.00165
Potassium (K)-Dissolved	mg/L	0.050/0.50	-	8.37
Selenium (Se)-Dissolved	mg/L	0.000050/0.00050	-	0.000421
Sodium (Na)-Dissolved	mg/L	0.050/0.50	-	57.5
Thallium (Tl)-Dissolved	mg/L	0.000010/0.00010	-	0.000014
Uranium (U)-Dissolved	mg/L	0.000010/0.00010	-	0.0711
Zinc (Zn)-Dissolved	mg/L	0.0010/0.010	-	0.0099
Oil and Grease, Total	mg/L	-	-	-
	-	-	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L2611198-1	L2622828-1
	Sample Date & Time			2021-07-05 14:30	2021-08-02 14:30
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Hardness (as CaCO3)	mg/L	0.50/1.3	-	356	378
pH	pH units	0.10	6.0 - 9.5	8.15	8.10
Total Suspended Solids	mg/L	1.0/2.0	15	2.1	2.7
Total Dissolved Solids	mg/L	10/20	-	643	699
Turbidity	NTU	0.10	-	1.66	2.35
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	77.1	103
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	0.028
Chloride (Cl)	mg/L	2.5/0.50	-	123	115
Fluoride (F)	mg/L	0.10/0.020	-	0.115	0.334
Nitrate (as N)	mg/L	0.020/0.10	-	2.39	4.06
Total Kjeldahl Nitrogen	mg/L	0.050	-	0.470	0.800
Phosphorus, Total	mg/L	0.0030	-	<0.0030	0.0042
Sulfate (SO4)	mg/L	1.5/0.30	-	217	238
Dissolved Organic Carbon	mg/L	0.50	-	8.17	12.6
Total Organic Carbon	mg/L	0.50	-	7.92	12.8
Aluminum (Al)-Total	mg/L	0.050/0.0050	-	0.0187	0.087
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	0.00020	<0.0010
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.0000050	<0.000050
Calcium (Ca)-Total	mg/L	0.050/0.50	-	52.9	67.9
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	0.00076	<0.0050
Iron (Fe)-Total	mg/L	0.010/0.10	-	0.015	0.18
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	<0.000050	<0.00050
Magnesium (Mg)-Total	mg/L	0.0050/0.050	-	53.5	50.5
Manganese (Mn)-Total	mg/L	0.0050/0.00050	-	0.0429	0.0189
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.00362	0.00581
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	0.00122	<0.0050
Potassium (K)-Total	mg/L	0.050/0.50	-	7.26	10.6
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	0.000410	<0.00050
Sodium (Na)-Total	mg/L	0.050/0.50	-	55.7	71.8
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	0.000015	<0.00010
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.0406	0.444
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	<0.0030	<0.030
Aluminum (Al)-Dissolved	mg/L	0.050/0.0050	-	0.0108	<0.050
Arsenic (As)-Dissolved	mg/L	0.00010/0.0010	-	0.00023	<0.0010
Cadmium (Cd)-Dissolved	mg/L	0.0000050/0.000050	-	0.0000061	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050/0.50	-	52.2	67.8
Copper (Cu)-Dissolved	mg/L	0.00020/0.0020	-	0.00069	<0.0020
Iron (Fe)-Dissolved	mg/L	0.010/0.10	-	<0.010	<0.10
Lead (Pb)-Dissolved	mg/L	0.000050/0.00050	-	<0.000050	<0.00050
Magnesium (Mg)-Dissolved	mg/L	0.0050/0.050	-	54.9	50.7
Manganese (Mn)-Dissolved	mg/L	0.0050/0.00050	-	0.0410	0.0100
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050/0.00050	-	0.00356	0.00642
Nickel (Ni)-Dissolved	mg/L	0.00050/0.0050	-	0.00112	<0.0050
Potassium (K)-Dissolved	mg/L	0.050/0.50	-	7.44	10.6
Selenium (Se)-Dissolved	mg/L	0.000050/0.00050	-	0.000491	0.00060
Sodium (Na)-Dissolved	mg/L	0.050/0.50	-	56.1	72.7
Thallium (Tl)-Dissolved	mg/L	0.000010/0.00010	-	0.000017	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010/0.00010	-	0.0407	0.450
Zinc (Zn)-Dissolved	mg/L	0.0010/0.010	-	0.0016	<0.010
Oil and Grease, Total	mg/L	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID			MP-06	MP-06
	ALS Laboratory Sample ID			L2634795-1	L2655270-1
	Sample Date & Time			2021-09-01 11:15	2021-10-24 16:15
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Hardness (as CaCO3)	mg/L	0.50/1.3	-	549	311
pH	pH units	0.10	6.0 - 9.5	8.11	8.13
Total Suspended Solids	mg/L	1.0/2.0	15	2.1	5.3
Total Dissolved Solids	mg/L	10/20	-	1,030	503
Turbidity	NTU	0.10	-	4.27	20.6
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	150	151
Ammonia, Total (as N)	mg/L	0.010	-	0.350	0.435
Chloride (Cl)	mg/L	2.5/0.50	-	159	77.8
Fluoride (F)	mg/L	0.10/0.020	-	0.48	0.165
Nitrate (as N)	mg/L	0.020/0.10	-	7.49	2.86
Total Kjeldahl Nitrogen	mg/L	0.050	-	1.82	1.46
Phosphorus, Total	mg/L	0.0030	-	0.0044	0.0049
Sulfate (SO4)	mg/L	1.5/0.30	-	428	139
Dissolved Organic Carbon	mg/L	0.50	-	5.13	7.49
Total Organic Carbon	mg/L	0.50	-	5.96	6.86
Aluminum (Al)-Total	mg/L	0.050/0.0050	-	<0.050	0.284
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	<0.0010	0.00025
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.000050	0.0000068
Calcium (Ca)-Total	mg/L	0.050/0.50	-	104	64.2
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	<0.0050	0.00164
Iron (Fe)-Total	mg/L	0.010/0.10	-	<0.10	0.413
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	<0.00050	0.000441
Magnesium (Mg)-Total	mg/L	0.0050/0.050	-	65.3	40.2
Manganese (Mn)-Total	mg/L	0.0050/0.00050	-	0.107	0.138
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.0134	0.00429
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	<0.0050	0.00132
Potassium (K)-Total	mg/L	0.050/0.50	-	15.6	6.70
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	0.00073	0.000431
Sodium (Na)-Total	mg/L	0.050/0.50	-	104	36.1
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	<0.00010	0.000018
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.778	0.109
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	<0.030	0.0098
Aluminum (Al)-Dissolved	mg/L	0.050/0.0050	-	<0.050	0.0175
Arsenic (As)-Dissolved	mg/L	0.00010/0.0010	-	<0.0010	0.00020
Cadmium (Cd)-Dissolved	mg/L	0.0000050/0.000050	-	<0.000050	0.0000075
Calcium (Ca)-Dissolved	mg/L	0.050/0.50	-	114	57.2
Copper (Cu)-Dissolved	mg/L	0.00020/0.0020	-	<0.0020	0.00136
Iron (Fe)-Dissolved	mg/L	0.010/0.10	-	<0.10	0.016
Lead (Pb)-Dissolved	mg/L	0.000050/0.00050	-	<0.00050	0.000061
Magnesium (Mg)-Dissolved	mg/L	0.0050/0.050	-	64.0	40.9
Manganese (Mn)-Dissolved	mg/L	0.0050/0.00050	-	0.0998	0.126
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050/0.00050	-	0.0150	0.00403
Nickel (Ni)-Dissolved	mg/L	0.00050/0.0050	-	<0.0050	0.00100
Potassium (K)-Dissolved	mg/L	0.050/0.50	-	15.5	6.91
Selenium (Se)-Dissolved	mg/L	0.000050/0.00050	-	0.0111	0.000451
Sodium (Na)-Dissolved	mg/L	0.050/0.50	-	<0.00050	36.2
Thallium (Tl)-Dissolved	mg/L	0.000010/0.00010	-	<0.0020	0.000015
Uranium (U)-Dissolved	mg/L	0.000010/0.00010	-	<0.0010	0.109
Zinc (Zn)-Dissolved	mg/L	0.0010/0.010	-	<0.0050	0.0088
Oil and Grease, Total	mg/L	-	-	<0.010	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Toxicity	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B03	MP-C-B	MP-C-B	MP-C-B	MP-C-B
	ALS Laboratory Sample ID			L2586524-1	L2595282-4	L2600575-4	L2602404-6	L2602404-7	L2606493-6	L2608772-4	L2611804-3	L2614208-3
	Sample Date & Time			2021-05-09 12:15	2021-06-01 9:05	2021-06-08 9:30	2021-06-15 11:45	2021-06-15 11:45	2021-06-24 10:15	2021-06-29 8:45	2021-07-06 8:50	2021-07-13 16:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	1.0/3.0	-	-	472	-	257	<1.0	-		488	-
pH	pH units	0.10	6.0 - 9.5	8.08	8.23	8.08	8.11	6.26	8.28	8.30	8.22	8.21
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	12.7	22.3	3.9	<1.0	<2.0	<2.0	1.8	<2.0
Total Dissolved Solids	mg/L	10/20	-	315	270	220	147	<10	224	278	320	344
Turbidity	NTU	0.10	-	3.99	33.6	51.0	0.20	0.31	5.10	10.0	2.22	3.80
Ammonia, Total (as N)	mg/L	0.010	-	-	0.406	-	0.066	0.013	-		0.022	-
Nitrate (as N)	mg/L	0.020	-	-	0.545	-	0.966	<0.020	-	-	0.903	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	<5.0	<5.0	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B01	MP-C-B	MP-C-B	MP-C-B01
	ALS Laboratory Sample ID			L2617707-3	L2620706-3	L2623229-8	L2626311-7	L2627807-2	L2627807-3	L2630604-5	L2634765-1	L2634765-2
	Sample Date & Time			2021-07-20 9:15	2021-07-27 14:15	2021-08-03 13:45	2021-08-11 6:40	2021-08-15 9:55	2021-08-15 9:55	2021-08-24 8:15	2021-09-01 10:00	2021-09-01 10:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	1.0/3.0	-	-	-	592	-	-	-	-	746	750
pH	pH units	0.10	6.0 - 9.5	8.28	8.31	8.29	8.28	8.33	8.32	8.37	8.18	8.22
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	3.2	<2.0	2.9	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	354	389	354	394	351	354	343	432	428
Turbidity	NTU	0.10	-	2.93	9.88	1.68	7.76	4.30	4.27	3.07	1.69	1.71
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.019	-	-	-	-	0.023	0.022
Nitrate (as N)	mg/L	0.020	-	-	-	3.50	-	-	-	-	4.34	4.34
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	-	-	-	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID			MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B01
	ALS Laboratory Sample ID			L2637047-1	L2639311-4	L2648053-1	L2650270-1	L2650270-2
	Sample Date & Time			2021-09-07 16:25	2021-09-14 10:40	2021-10-05 14:15	2021-10-11 8:15	2021-10-11 8:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0/3.0	-	-	-	537	-	-
pH	pH units	0.10	6.0 - 9.5	8.20	7.85	8.03	7.77	7.80
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	<2.0	26.8	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	394	469	343	433	432
Turbidity	NTU	0.10	-	1.64	0.47	111	3.08	3.11
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.247	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	1.95	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H
	ALS Laboratory Sample ID			L2600575-1	L2602404-1	L2606493-7	L2608772-1	L2611804-1	L2611804-2	L2614208-7
	Sample Date & Time			2021-06-08 7:30	2021-06-15 8:45	2021-06-24 10:40	2021-06-29 6:45	2021-07-06 7:40	2021-07-06 7:40	2021-07-13 15:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	150	-	-	227	228	-
pH	pH units	0.10	6.0 - 9.5	7.92	7.90	8.08	8.09	8.06	8.12	8.15
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	3.0	3.2	<2.0	<2.0	<1.0	<1.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	406	82	77	99	142	144	152
Turbidity	NTU	0.10	-	10.0	7.11	1.34	1.98	0.49	0.62	0.48
Ammonia, Total (as N)	mg/L	0.010	-	-	0.041	-	-	0.015	0.012	-
Nitrate (as N)	mg/L	0.020	-	-	0.343	-	-	0.335	0.327	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H	MP-C-H	MP-C-H03	MP-C-H	MP-C-H	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2617707-2	L2620706-6	L2620706-7	L2623229-5	L2626311-6	L2627807-1	L2630604-1
	Sample Date & Time			2021-07-20 7:20	2021-07-28 7:15	2021-07-28 7:15	2021-08-03 11:20	2021-08-10 11:00	2021-08-15 9:10	2021-08-24 6:50
	QA/QC Sample Type			N/A	N/A	Travel Blank	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	-	-	392	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.23	8.19	5.95	8.26	8.18	8.32	8.32
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	183	157	14	204	161	207	179
Turbidity	NTU	0.10	-	0.38	0.17	<0.10	0.38	0.29	0.41	0.23
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	0.073	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.988	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID			MP-C-H01	MP-C-H	MP-C-H	MP-C-H	MP-C-H01	MP-C-H	MP-C-H
	ALS Laboratory Sample ID			L2630604-2	L2634765-5	L2637047-5	L2639311-1	L2639311-2	L2648053-5	L2650270-5
	Sample Date & Time			2021-08-24 6:50	2021-09-01 10:45	2021-09-07 10:30	2021-09-14 9:00	2021-09-14 9:00	2021-10-05 13:50	2021-10-11 8:00
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	346	-	-	-	291	-
pH	pH units	0.10	6.0 - 9.5	8.33	8.28	8.20	8.09	8.13	8.17	8.09
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	174	202	204	217	197	187	166
Turbidity	NTU	0.10	-	0.25	0.12	0.45	0.11	0.11	0.72	0.26
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-	0.012	-
Nitrate (as N)	mg/L	0.020	-	-	0.151	-	-	-	0.185	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	-	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J03	MP-C-J	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2600575-2	L2600575-3	L2602404-4	L2606493-4	L2608772-2	L2611804-5
	Sample Date & Time			2021-06-08 8:15	2021-06-08 8:15	2021-06-15 11:05	2021-06-24 9:30	2021-06-29 7:35	2021-07-06 9:55
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	-	-	466	-		400
pH	pH units	0.10	6.0 - 9.5	8.05	5.90	8.22	8.14	8.03	7.98
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	<2.0	<2.0	2.2	<2.0	<2.0	<1.0
Total Dissolved Solids	mg/L	10/20	-	263	<10	258	205	196	244
Turbidity	NTU	0.10	-	2.09	<0.10	1.03	0.96	0.20	0.29
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.013	-	-	0.021
Nitrate (as N)	mg/L	0.020	-	-	-	0.230	-	-	0.079
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J01	MP-C-J
	ALS Laboratory Sample ID			L2614208-5	L2617707-5	L2620706-5	L2623229-6	L2626311-1	L2626311-2	L2627807-5
	Sample Date & Time			2021-07-13 16:00	2021-07-20 8:50	2021-07-28 8:00	2021-08-03 12:15	2021-08-10 8:35	2021-08-10 8:35	2021-08-15 10:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	-	-	452	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.96	8.09	7.95	8.07	8.06	8.06	8.15
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	2.1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	276	220	244	244	172	235	242
Turbidity	NTU	0.10	-	<0.10	0.50	0.25	0.19	0.33	0.39	0.35
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	0.011	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.048	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID			MP-C-J	MP-C-J	MP-C-J	MP-C-J
	ALS Laboratory Sample ID			L2630604-3	L2634765-3	L2637047-2	L2648053-2
	Sample Date & Time			2021-08-24 7:30	2021-09-01 9:20	2021-09-07 9:45	2021-10-06 6:55
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	-	500	-	419
pH	pH units	0.10	6.0 - 9.5	8.00	7.89	7.91	7.81
Total Suspended Solids	mg/L	2.0/1.0	Grab 30, Average 15	<2.0	2.2	<2.0	2.9
Total Dissolved Solids	mg/L	10/20	-	249	277	281	246
Turbidity	NTU	0.10	-	0.27	<0.10	0.21	0.69
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	0.018
Nitrate (as N)	mg/L	0.020	-	-	0.088	-	0.055
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID			MP-C-K	MP-C-K	MP-C-K03	MP-C-K	MP-C-K	MP-C-K
	ALS Laboratory Sample ID			L2592243-1	L2595282-2	L2595282-3	L2600575-5	L2602404-5	L2606493-5
	Sample Date & Time			2021-05-25 11:35	2021-06-01 8:45	2021-06-01 8:45	2021-06-08 9:45	2021-06-15 11:30	2021-06-24 10:00
	QA/QC Sample Type			N/A	N/A	Travel Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	539	509	<1.0	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.99	8.25	8.00	8.11	8.17	8.21
Total Suspended Solids	mg/L	1.0/2.0/3.0	Grab 30, Average 15	10.2	4.4	<1.0	3.4	<1.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	430	302	<10	267	269	268
Turbidity	NTU	0.10	-	22.9	11.6	<0.10	7.52	1.14	0.87
Ammonia, Total (as N)	mg/L	0.010/0.050	-	2.06	0.284	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.285	0.544	<0.020	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	<5.0	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID			MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
	ALS Laboratory Sample ID			L2608772-3	L2611804-4	L2614208-4	L2617707-4	L2620706-4	L2623229-7
	Sample Date & Time			2021-06-29 8:30	2021-07-06 9:30	2021-07-13 15:45	2021-07-20 8:35	2021-07-27 14:45	2021-08-03 13:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-		569	-	-	-	783
pH	pH units	0.10	6.0 - 9.5	8.22	8.20	8.00	8.13	8.18	8.16
Total Suspended Solids	mg/L	1.0/2.0/3.0	Grab 30, Average 15	<2.0	1.0	12.7	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	269	406	404	437	425	543
Turbidity	NTU	0.10	-	0.92	0.75	0.51	0.52	0.42	0.42
Ammonia, Total (as N)	mg/L	0.010/0.050	-	-	0.017	-	-	-	0.053
Nitrate (as N)	mg/L	0.020	-	-	1.43	-	-	-	1.95
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID			MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K01
	ALS Laboratory Sample ID			L2626311-3	L2627807-4	L2630604-4	L2634765-4	L2637047-3	L2637047-4
	Sample Date & Time			2021-08-10 9:00	2021-08-15 10:20	2021-08-24 8:00	2021-09-01 9:40	2021-09-07 16:05	2021-09-07 16:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	-	-	-	1,030	-	-
pH	pH units	0.10	6.0 - 9.5	8.15	8.26	8.29	8.15	8.15	8.13
Total Suspended Solids	mg/L	1.0/2.0/3.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	531	547	513	614	570	575
Turbidity	NTU	0.10	-	1.39	0.72	0.50	0.43	0.32	0.29
Ammonia, Total (as N)	mg/L	0.010/0.050	-	-	-	-	0.028	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	1.21	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID			MP-C-K	MP-C-K	MP-C-K01	MP-C-K
	ALS Laboratory Sample ID			L2639311-3	L2648053-3	L2648053-4	L2650270-3
	Sample Date & Time			2021-09-14 10:25	2021-10-05 14:30	2021-10-05 14:30	2021-10-11 9:00
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	-	704	701	-
pH	pH units	0.10	6.0 - 9.5	7.84	8.00	8.01	7.75
Total Suspended Solids	mg/L	1.0/2.0/3.0	Grab 30, Average 15	2.5	2.1	<2.0	2.1
Total Dissolved Solids	mg/L	10/20	-	795	447	426	467
Turbidity	NTU	0.10	-	0.27	3.49	3.42	0.74
Ammonia, Total (as N)	mg/L	0.010/0.050	-	-	0.056	0.053	-
Nitrate (as N)	mg/L	0.020	-	-	0.964	0.974	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01
	ALS Laboratory Sample ID			L2595282-1	L2600575-7	L2602404-3	L2606493-3	L2608772-7	L2608772-8	L2611804-7
	Sample Date & Time			2021-06-01 8:00	2021-06-08 10:45	2021-06-15 10:40	2021-06-24 9:30	2021-06-29 9:35	2021-06-29 9:35	2021-07-06 11:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	211	-	-	-	-	-	190
pH	pH units	0.10	6.0 - 9.5	8.01	7.77	7.74	7.89	7.79	7.83	7.92
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	2.9	6.8	1.4	<2.0	<2.0	<2.0	<1.0
Total Dissolved Solids	mg/L	10/13/20	-	122	78	63	103	77	104	128
Turbidity	NTU	0.10	-	16.1	7.56	5.51	2.08	1.95	1.98	1.66
Ammonia, Total (as N)	mg/L	0.010	-	0.072	-	-	-			0.031
Nitrate (as N)	mg/L	0.020	-	1.08	-	-	-			0.811
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-0103	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-0101	MP-Q1-01
	ALS Laboratory Sample ID			L2614208-1	L2614208-2	L2617707-1	L2620706-1	L2623229-3	L2623229-4	L2626311-5
	Sample Date & Time			2021-07-13 13:40	2021-07-13 13:40	2021-07-20 7:55	2021-07-27 13:40	2021-08-03 10:35	2021-08-03 10:35	2021-08-10 10:20
	QA/QC Sample Type			N/A	Travel Blank	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	-	-	-	195	196	-
pH	pH units	0.10	6.0 - 9.5	7.86	6.06	7.97	7.82	7.97	8.00	7.97
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13/20	-	101	17	133	115	72	71	112
Turbidity	NTU	0.10	-	3.88	<0.10	2.52	2.47	1.96	2.11	4.81
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	-	0.012	0.010	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	-	0.544	0.547	-
Oil and Grease, Total	mg/L	5.0	-	-	-	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID			MP-Q1-01	MP-Q1-01
	ALS Laboratory Sample ID			L2627807-6	L2648053-8
	Sample Date & Time			2021-08-15 11:10	2021-10-06 7:45
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	1.0	-	-	184
pH	pH units	0.10	6.0 - 9.5	8.02	7.92
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13/20	-	109	138
Turbidity	NTU	0.10	-	4.08	10.6
Ammonia, Total (as N)	mg/L	0.010	-	-	0.010
Nitrate (as N)	mg/L	0.020	-	-	1.09
Oil and Grease, Total	mg/L	5.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.14: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2600575-6	L2602404-2	L2606493-1	L2606493-2	L2608772-5	L2611804-6	L2614208-6
	Sample Date & Time			2021-06-08 10:15	2021-06-15 10:10	2021-06-24 8:45	2021-06-24 8:45	2021-06-29 9:10	2021-07-06 10:30	2021-07-13 17:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	237	-	-	-	336	-
pH	pH units	0.10	6.0 - 9.5	7.92	8.12	8.10	8.12	8.08	8.02	8.01
Total Suspended Solids [2]	mg/L	1.0/2.0/5.0	Grab 30, Average 15	**50.0**	**990.0**	**121.0**	**134.0**	**360.0**	21.6	**327.0**
Total Dissolved Solids	mg/L	10/20	-	178	251	210	210	235	279	257
Turbidity	NTU	0.10	-	80.9	1,010	133	152	239	34.7	241
Ammonia, Total (as N)	mg/L	0.01/0.05/0.010	-	-	1.17	-	-	-	1.62	-
Nitrate (as N)	mg/L	0.020	-	-	4.49	-	-	-	9.21	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, July, August and exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.14: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2617707-6	L2620706-2	L2623229-1	L2626311-4	L2627807-7	L2630604-6	L2634765-6
	Sample Date & Time			2021-07-22 15:50	2021-07-27 14:00	2021-08-03 9:30	2021-08-10 9:45	2021-08-15 8:15	2021-08-24 8:35	2021-09-01 8:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	-	514	-	-	-	558
pH	pH units	0.10	6.0 - 9.5	8.12	8.05	8.02	8.04	8.02	8.12	7.98
Total Suspended Solids [2]	mg/L	1.0/2.0/5.0	Grab 30, Average 15	8.9	5.1	8.2	3.4	21.7	**36.5**	<2.0
Total Dissolved Solids	mg/L	10/20	-	292	286	336	320	406	292	336
Turbidity	NTU	0.10	-	9.83	8.29	9.00	6.39	19.2	22.7	2.29
Ammonia, Total (as N)	mg/L	0.01/0.05/0.010	-	-	-	0.967	-	-	-	0.010
Nitrate (as N)	mg/L	0.020	-	-	-	13.1	-	-	-	5.32
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, July, August and exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.14: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID			MP-Q1-02	MP-Q1-02
	ALS Laboratory Sample ID			L2637047-6	L2648053-6
	Sample Date & Time			2021-09-07 15:10	2021-10-06 7:20
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	1.0	-	-	345
pH	pH units	0.10	6.0 - 9.5	7.76	8.01
Total Suspended Solids [2]	mg/L	1.0/2.0/5.0	Grab 30, Average 15	<2.0	23.9
Total Dissolved Solids	mg/L	10/20	-	300	235
Turbidity	NTU	0.10	-	2.16	42.0
Ammonia, Total (as N)	mg/L	0.01/0.05/0.010	-	-	0.162
Nitrate (as N)	mg/L	0.020	-	-	3.13
Oil and Grease, Total	mg/L	5.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, July, August and exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01	MS-0101	MS-01	MS-01	MS-01	MS-01	MS-01
	ALS Laboratory Sample ID			L2546495-1	L2546495-3	L2558678-1	L2564297-1	L2579165-1	L2588104-1	L2603176-1
	Sample Date & Time			2021-01-06 15:00	2021-01-06 15:00	2021-02-16 15:00	2021-03-04 15:00	2021-04-20 15:00	2021-05-12 15:00	2021-06-16 14:45
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	8.02	7.99	7.57	7.51	7.59	8.10	7.47
Total Suspended Solids	mg/L	1.0/2.0/3.0	35	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<2.0
Ammonia, Total (as N)	mg/L	0.010/0.020	4	2.19	2.21	0.399	0.589	1.79	0.047	0.129
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	8.30	7.70	0.830	2.40	2.24	1.01	0.560
Phosphorus, Total	mg/L	0.0030/0.0060	4	1.05	1.07	0.621	0.77	1.8	1.36	1.29
Fecal Coliforms	CFU/100 mL	-	1,000	0	0	0	0	0	0	0
BOD	mg/L	2.0	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-01	MS-01	MS-0102	MS-01	MS-0103	MS-01	MS-01
	ALS Laboratory Sample ID			L2614654-1	L2623232-1	L2623232-3	L2637974-1	L2637974-3	L2649043-1	L2662051-1
	Sample Date & Time			2021-07-14 14:45	2021-08-04 14:45	2021-08-04 14:45	2021-09-08 14:45	2021-09-08 14:45	2021-10-06 14:45	2021-11-10 14:45
	QA/QC Sample Type			N/A	N/A	Field Blank	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
pH	pH units	0.10	6.0 - 9.5	7.60	7.63	5.50	7.56	6.48	7.68	7.16
Total Suspended Solids	mg/L	1.0/2.0/3.0	35	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	0.010/0.020	4	0.076	0.099	0.021	0.283	0.014	0.053	0.096
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	0.720	4.10	<0.050	1.59	0.065	<0.050	0.560
Phosphorus, Total	mg/L	0.0030/0.0060	4	1.29	1.08	0.0064	2.66	<0.0030	0.728	1.18
Fecal Coliforms	CFU/100 mL	-	1,000	0	0	0	0	0	0	0
BOD	mg/L	2.0	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	7.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID			MS-0101	MS-01
	ALS Laboratory Sample ID			L2662051-3	L2671710-1
	Sample Date & Time			2021-11-10 14:45	2021-12-09 14:45
	QA/QC Sample Type			Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]		
pH	pH units	0.10	6.0 - 9.5	7.06	7.27
Total Suspended Solids	mg/L	1.0/2.0/3.0	35	1.7	<1.0
Ammonia, Total (as N)	mg/L	0.010/0.020	4	0.101	0.092
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	1.74	0.660
Phosphorus, Total	mg/L	0.0030/0.0060	4	1.17	1.09
Fecal Coliforms	CFU/100 mL	-	1,000	0	0
BOD	mg/L	2.0	30	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B01	MS-01B	MS-01B	MS-01B	MS-01B
	ALS Laboratory Sample ID			L2546497-1	L2546497-3	L2558651-1	L2564299-1	L2579205-1	L2588098-1
	Sample Date & Time			2021-01-06 15:00	2021-01-06 15:00	2021-02-16 15:00	2021-03-04 15:00	2021-04-20 15:00	2021-05-12 15:00
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.10	6.0 - 9.5	8.58	8.67	8.03	7.16	6.91	8.18
Total Suspended Solids	mg/L	1.0/3.0	35	4.0	3.0	<3.0	4.2	5.3	19.8
Ammonia, Total (as N)	mg/L	0.010	4	0.299	0.302	0.188	0.1	0.124	0.147
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	4.30	4.70	0.810	1.2	1.42	0.860
Phosphorus, Total	mg/L	0.0030/0.0060/0.0090	4	0.800	0.800	1.17	1.2	0.389	0.479
Fecal Coliforms	CFU/100 mL	-	1,000	0	0	0	0	0	0
BOD	mg/L	2.0	30	2.0	2.1	<2.0	<2.0	<2.0	3.3
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	<2.0	<2.0	<2.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B	MS-01B02	MS-01B	MS-01B03
	ALS Laboratory Sample ID			L2603172-1	L2614658-1	L2623234-1	L2623234-3	L2637955-1	L2637955-3
	Sample Date & Time			2021-06-16 15:00	2021-07-14 15:00	2021-08-04 15:00	2021-08-04 15:00	2021-09-08 15:00	2021-09-08 15:00
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A	Travel Blank
	Units	LOR	Water Licence Criteria [1]						
pH	pH units	0.10	6.0 - 9.5	8.15	7.87	7.98	6.54	8.37	6.31
Total Suspended Solids	mg/L	1.0/3.0	35	<2.0	2.2	6.3	<1.0	2.9	<1.0
Ammonia, Total (as N)	mg/L	0.010	4	0.114	0.207	0.374	<0.010	0.187	<0.010
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	0.850	0.230	1.80	<0.050	1.48	0.085
Phosphorus, Total	mg/L	0.0030/0.0060/0.0090	4	1.46	0.444	2.38	0.0098	1.01	<0.0030
Fecal Coliforms	CFU/100 mL	-	1,000	-	0	30	0	0	0
BOD	mg/L	2.0	30	<2.0	<2.0	2.5	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID			MS-01B	MS-01B	MS-01B01	MS-01B
	ALS Laboratory Sample ID			L2649046-1	L2661895-1	L2661895-3	L2671716-1
	Sample Date & Time			2021-10-06 14:45	2021-11-10 14:45	2021-11-10 14:45	2021-12-09 15:00
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]				
pH	pH units	0.10	6.0 - 9.5	7.88	8.15	8.08	7.58
Total Suspended Solids	mg/L	1.0/3.0	35	2.3	1.4	<1.0	2.2
Ammonia, Total (as N)	mg/L	0.010	4	0.414	0.188	0.189	0.227
Total Kjeldahl Nitrogen	mg/L	0.050/0.50	-	1.15	0.760	0.230	0.570
Phosphorus, Total	mg/L	0.0030/0.0060/0.0090	4	1.05	0.915	0.904	1.19
Fecal Coliforms	CFU/100 mL	-	1,000	3	0	0	0
BOD	mg/L	2.0	30	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.3: Water Quality Results for Water Licence Monitoring Location - MS-03B

Analyte	Sample ID			MS-03B	MS-03B
	ALS Laboratory Sample ID			L2625152-1	L2627334-1
	Sample Date & Time			2021-08-07 12:55	2021-08-15 9:50
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
pH	pH units	0.10	6.0 - 9.5	7.94	8.20
Total Suspended Solids	mg/L	1.0	-	<1.0	<2.0
Total Dissolved Solids	mg/L	20	-	234	426
Turbidity	NTU	0.10	-	1.86	6.70
Lead (Pb)-Total	mg/L	0.00050	0.001	<0.00050	0.00062
Benzene	mg/L	0.00050	0.370	<0.00050	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050	<0.00050
Toluene	mg/L	0.00050	0.002	<0.00050	<0.00050
F1 (C6-C10)	mg/L	0.025	-	<0.025	<0.025
F2 (C10-C16)	mg/L	0.10	-	<0.10	<0.10
F3 (C16-C34)	mg/L	0.25	-	<0.25	<0.25
F4 (C34-C50)	mg/L	0.25	-	<0.25	<0.25
Total Hydrocarbons (C6-C50)	mg/L	0.37	-	<0.37	<0.37
Oil and Grease, Total	mg/L	5.0	15	<5.0	<5.0
	-		No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

Table 7.3.4: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID				MS-06	MS-06	MS-06	MS-0603	MS-06
	ALS Laboratory Sample ID				L2595329-1	L2595285-1	L2611695-1	L2611695-2	L2622149-1
	Sample Date & Time				2021-05-31 14:00	2021-06-01 12:00	2021-07-08 9:30	2021-07-08 9:30	2021-08-04 11:10
	QA/QC Sample Type				N/A	N/A	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria[1]	MDMER Criteria [2]					
Conductivity	umhos/cm	1.0	-	-	-	-	1050	<1.0	-
Hardness (as CaCO3)	mg/L	0.50	-	-	120	84.1	536	<0.50	1,020
pH	pH units	0.10/0.50	6.0 - 9.5	6.0 - 9.5	7.46	7.41	7.69	5.74	7.54
Total Suspended Solids	mg/L	1.0/2.0	15	30	2.3	1.4	<2.0	<2.0	3.5
Total Dissolved Solids	mg/L	10/20	-	-	595	261	800	<10	744
Turbidity	NTU	0.10/10	-	-	2.15	7.68	10.6	<0.10	19.2
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	93.7	16.1	39.1	<1.0	32
Ammonia, Total (as N)	mg/L	0.010/0.10/0.050/0.0050	-	-	0.030	0.019	2.66	<0.010	2.31
Chloride (Cl)	mg/L	2.5/0.50	-	-	39.6	10.7	29.2	<0.50	24.9
Fluoride (F)	mg/L	0.10/0.020	-	-	0.035	0.045	<0.10	<0.020	0.071
Nitrate (as N)	mg/L	0.10/0.020	-	-	50.3	4.89	11.9	<0.020	11.3
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.620	0.520	3.71	<0.050	2.310
Phosphorus, Total	mg/L	0.0030	-	-	0.229	0.388	<0.0030	<0.0030	0.0086
Sulfate (SO4)	mg/L	1.5/0.30	-	-	109	136	489	<0.30	412
Dissolved Organic Carbon	mg/L	0.50	-	-	8.39	9.23	3.31	0.60	5.16
Total Organic Carbon	mg/L	0.50	-	-	9.00	7.49	3.73	1.01	2.72
Aluminum (Al)-Total	mg/L	0.050/0.0050	-	-	0.141	0.160	<0.050	<0.0050	0.026
Antimony (Sb)-Total	mg/L	0.0010/0.00010	-	-	0.00039	0.00046	<0.0010	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0010/0.00010	0.5	0.60	0.00030	0.00036	<0.0010	<0.00010	0.00014
Barium (Ba)-Total	mg/L	0.0010/0.00010	-	-	0.00527	0.00279	0.0134	<0.00010	0.01310
Beryllium (Be)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00050/0.000050	-	-	0.00165	0.00131	<0.00050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.10/0.010	-	-	0.306	0.276	<0.10	<0.010	0.049
Cadmium (Cd)-Total	mg/L	0.000050/0.0000050	-	-	0.0000803	0.0000998	<0.000050	<0.0000050	0.000013
Calcium (Ca)-Total	mg/L	0.50/0.050	-	-	23.8	15.8	48.2	<0.050	45.2
Cesium (Cs)-Total	mg/L	0.00010/0.000010	-	-	0.000057	0.000052	<0.00010	<0.000010	0.000038
Chromium (Cr)-Total	mg/L	0.0050/0.00050	-	-	<0.00050	<0.00050	<0.0050	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.0010/0.00010		-	0.00072	0.00050	0.0033	<0.00010	0.00211
Copper (Cu)-Total	mg/L	0.0050/0.00050	0.3	0.60	0.0146	0.0126	<0.0050	<0.00050	0.00727
Iron (Fe)-Total	mg/L	0.10/0.010	-	-	0.128	0.078	<0.10	<0.010	0.077
Lead (Pb)-Total	mg/L	0.00050/0.000050	0.2	0.20	0.000151	0.000129	<0.00050	<0.000050	0.000553
Lithium (Li)-Total	mg/L	0.010/0.0010	-	-	0.0073	0.0054	0.021	<0.0010	0.0217
Magnesium (Mg)-Total	mg/L	0.050/0.0050	-	-	15.1	11.1	97.6	0.0112	95.1
Manganese (Mn)-Total	mg/L	0.0050/0.00050	-	-	0.0665	0.00804	1.70	<0.00050	1.30000
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00050/0.000050	-	-	0.00115	0.0021	0.00395	<0.000050	0.00266
Nickel (Ni)-Total	mg/L	0.0050/0.00050	0.5	1.00	0.00335	0.00357	0.0082	<0.00050	0.0053
Phosphorus (P)-Total	mg/L	0.50/0.050	-	-	0.283	0.432	<0.50	<0.050	<0.050
Potassium (K)-Total	mg/L	0.50/0.050	-	-	20.8	16.9	10.5	<0.050	9.9
Rubidium (Rb)-Total	mg/L	0.0020/0.00020	-	-	0.0202	0.0176	0.0118	<0.00020	0.0126
Selenium (Se)-Total	mg/L	0.00050/0.000050	-	-	0.000122	0.000136	0.00157	<0.000050	0.001690
Silicon (Si)-Total	mg/L	1.0/0.10	-	-	1.10	0.89	1.1	<0.10	0.81
Silver (Ag)-Total	mg/L	0.00050/0.000050	-	-	<0.000050	<0.000050	<0.00050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.50/0.050	-	-	146	149	11.4	<0.050	11
Strontium (Sr)-Total	mg/L	0.010/0.0010	-	-	0.0270	0.0153	0.103	<0.0010	0.0997
Sulfur (S)-Total	mg/L	5.0/0.50	-	-	46.2	35.9	150	<0.50	154
Tellurium (Te)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.00020	<0.0020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00010/0.000010	-	-	<0.000010	<0.000010	<0.00010	<0.000010	0.000071
Thorium (Th)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.0010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0010/0.00010	-	-	0.00015	0.00014	<0.0010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0010/0.0020/0.0030/0.00030	-	-	0.00131	<0.00050	<0.0030	<0.00030	0.00031
Tungsten (W)-Total	mg/L	0.0010/0.00010	-	-	0.00016	0.00026	<0.0010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00010/0.000010	-	-	0.000229	0.000394	0.00525	<0.000010	0.00231
Vanadium (V)-Total	mg/L	0.0050/0.00050	-	-	<0.00050	<0.00050	<0.0050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.030/0.0030	0.5	1.00	0.0875	0.0721	<0.030	<0.0030	0.0376
Zirconium (Zr)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.00020	<0.0020	<0.00020	<0.00020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0516	0.126	<0.0050	<0.0050	<0.0050
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	0.00040	0.00052	0.00014	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	0.00032	0.00035	0.00012	<0.00010	0.00014
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	0.00519	0.00288	0.0136	<0.00010	0.01260
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	0.00162	0.00129	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved	mg/L	0.010	-	-	0.271	0.255	0.047	<0.010	0.048
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	0.0000834	0.0000972	0.0000291	<0.0000050	0.0000089
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	22.8	15.4	50.6	<0.050	46.1
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	0.000057	0.000057	0.000050	<0.000010	0.000039
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	0.00064	0.00047	0.00297	<0.00010	0.00185
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.0142	0.0122	0.00045	<0.00020	0.00047
Iron (Fe)-Dissolved	mg/L	0.010	-	-	0.072	0.063	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	0.000090	0.000110	<0.000050	<0.000050	<0.000050
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	0.0066	0.0049	0.0252	<0.0010	0.0237
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	15.4	11.1	99.4	<0.0050	94.9
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.0685	0.0071	1.67	<0.00050	1.2600
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.00109	0.0021	0.00419	<0.000050	0.00264
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	0.00322	0.00351	0.00696	<0.00050	0.00481
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	0.238	0.466	<0.050	<0.050	<0.050
Potassium (K)-Dissolved	mg/L	0.050	-	-	21.2	17.2	10.9	<0.050	10.0
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.0204	0.0172	0.0129	<0.00020	0.0125
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	0.000126	0.000146	0.00212	<0.000050	0.001700
Silicon (Si)-Dissolved	mg/L	0.050	-	-	0.992	0.841	1.14	<0.050	0.769
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Sodium (Na)-Dissolved	mg/L	0.050	-	-	123	138	11.7	<0.050	11
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	0.0267	0.0152	0.112	<0.0010	0.0994
Sulfur (S)-Dissolved	mg/L	0.50	-	-	44.7	36.2	167	<0.50	153
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	0.000010	<0.000010	0.000090	<0.000010	0.000070
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	<0.00010	0.00014	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	0.00016	0.00026	<0.00010	<0.00010	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000205	0.000371	0.00550	<0.000010	0.00236
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	0.0913	0.0765	0.0071	<0.0010	0.0168
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Ra-226	Bq/L	0.0067/0.0054/0.0058/0.0033/ 0.0031/0.0064	-	1.11	-	<0.0054	0.013	<0.0033	<0.0054
Oil and Grease, Total	mg/L	2	-	-	-	-	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Toxicity [3]	-	-	Not acutely toxic	Not Acutely Toxic	-	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.4: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID				MS-06	MS-06	MS-06
	ALS Laboratory Sample ID				L2624310-1	L2634291-1	L2638230-1
	Sample Date & Time				2021-08-08 11:35	2021-09-01 11:25	2021-09-10 10:55
	QA/QC Sample Type				N/A	N/A	N/A
	Units	LOR	Water Licence Criteria[1]	MDMER Criteria [2]			
Conductivity	umhos/cm	1.0	-	-	-	-	-
Hardness (as CaCO3)	mg/L	0.50	-	-	507	523	494
pH	pH units	0.10/0.50	6.0 - 9.5	6.0 - 9.5	7.69	7.49	7.59
Total Suspended Solids	mg/L	1.0/2.0	15	30	2.8	4.0	2.6
Total Dissolved Solids	mg/L	10/20	-	-	734	782	808
Turbidity	NTU	0.10/10	-	-	11	8.77	6.4
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	36.3	43.1	27.8
Ammonia, Total (as N)	mg/L	0.010/0.10/0.050/0.0050	-	-	1.97	1.17	1.04
Chloride (Cl)	mg/L	2.5/0.50	-	-	25.4	25.2	25.4
Fluoride (F)	mg/L	0.10/0.020	-	-	0.07	0.059	<0.10
Nitrate (as N)	mg/L	0.10/0.020	-	-	11.5	12.6	12.7
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	2.61	1.24	1.55
Phosphorus, Total	mg/L	0.0030	-	-	0.0031	<0.0030	0.005
Sulfate (SO4)	mg/L	1.5/0.30	-	-	420	434	448
Dissolved Organic Carbon	mg/L	0.50	-	-	3.72	3.23	2.4
Total Organic Carbon	mg/L	0.50	-	-	2.82	3.05	2.47
Aluminum (Al)-Total	mg/L	0.050/0.0050	-	-	0.0526	0.0360	0.0257
Antimony (Sb)-Total	mg/L	0.0010/0.00010	-	-	0.00012	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.0010/0.00010	0.5	0.60	0.00018	0.00017	0.00033
Barium (Ba)-Total	mg/L	0.0010/0.00010	-	-	0.0131	0.0120	0.0115
Beryllium (Be)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.00050/0.000050	-	-	<0.000050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.10/0.010	-	-	0.056	0.050	0.050
Cadmium (Cd)-Total	mg/L	0.000050/0.0000050	-	-	0.000006	0.0000120	0.0000072
Calcium (Ca)-Total	mg/L	0.50/0.050	-	-	49.1	46.6	50.0
Cesium (Cs)-Total	mg/L	0.00010/0.000010	-	-	0.000041	0.000030	0.000027
Chromium (Cr)-Total	mg/L	0.0050/0.00050	-	-	<0.00050	<0.00050	<0.00010
Cobalt (Co)-Total	mg/L	0.0010/0.00010		-	0.00203	0.00198	0.00185
Copper (Cu)-Total	mg/L	0.0050/0.00050	0.3	0.60	0.00055	0.00510	<0.00050
Iron (Fe)-Total	mg/L	0.10/0.010	-	-	0.159	0.078	0.040
Lead (Pb)-Total	mg/L	0.00050/0.000050	0.2	0.20	0.000089	0.000471	<0.000050
Lithium (Li)-Total	mg/L	0.010/0.0010	-	-	0.0261	0.0214	0.0238
Magnesium (Mg)-Total	mg/L	0.050/0.0050	-	-	95.5	98.0	92.7
Manganese (Mn)-Total	mg/L	0.0050/0.00050	-	-	1.3	1.04	0.987
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00050/0.000050	-	-	0.00265	0.00193	0.00258
Nickel (Ni)-Total	mg/L	0.0050/0.00050	0.5	1.00	0.00496	0.00463	0.00397
Phosphorus (P)-Total	mg/L	0.50/0.050	-	-	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L	0.50/0.050	-	-	10.1	9.25	10.1
Rubidium (Rb)-Total	mg/L	0.0020/0.00020	-	-	0.0135	0.0120	0.0127
Selenium (Se)-Total	mg/L	0.00050/0.000050	-	-	0.00179	0.00186	0.00172
Silicon (Si)-Total	mg/L	1.0/0.10	-	-	0.81	0.40	0.34
Silver (Ag)-Total	mg/L	0.00050/0.000050	-	-	<0.000050	<0.000050	<0.000010
Sodium (Na)-Total	mg/L	0.50/0.050	-	-	10.6	10.2	10.3
Strontium (Sr)-Total	mg/L	0.010/0.0010	-	-	0.104	0.102	0.104
Sulfur (S)-Total	mg/L	5.0/0.50	-	-	153	169	160
Tellurium (Te)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.00010/0.000010	-	-	0.000071	0.000064	0.000060
Thorium (Th)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.0010/0.0020/0.0030/0.00030	-	-	<0.0010	<0.0020	0.00069
Tungsten (W)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.00010/0.000010	-	-	0.00241	0.00167	0.00159
Vanadium (V)-Total	mg/L	0.0050/0.00050	-	-	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.030/0.0030	0.5	1.00	0.0198	0.0512	0.0052
Zirconium (Zr)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.00020	<0.00020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0078	0.0154	0.0065
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	0.00015	0.00016	0.00020
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	0.0126	0.0117	0.0109
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved	mg/L	0.010	-	-	0.053	0.052	0.048
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	0.0000052	0.0000151	0.0000064
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	48.5	49.2	49.2
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	0.000039	0.000028	0.000024
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00010
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	0.00162	0.00173	0.00133
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00033	0.00414	0.00037
Iron (Fe)-Dissolved	mg/L	0.010	-	-	<0.010	0.027	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	0.000391	<0.000050
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	0.0265	0.0249	0.0242
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	93.7	97.2	90.1
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	1.21	1.00	0.888
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.00271	0.00196	0.00199
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	0.00448	0.00434	0.00376
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	<0.050	<0.050	<0.050
Potassium (K)-Dissolved	mg/L	0.050	-	-	10	9.70	9.62
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.013	0.0124	0.0124
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	0.00198	0.00180	0.00164
Silicon (Si)-Dissolved	mg/L	0.050	-	-	0.704	0.367	0.266
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000010
Sodium (Na)-Dissolved	mg/L	0.050	-	-	10.3	10.2	10.1
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	0.105	0.101	0.100
Sulfur (S)-Dissolved	mg/L	0.50	-	-	153	167	153
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	0.000071	0.000064	0.000058
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	<0.00030	0.00033	<0.00030
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.00231	0.00168	0.00157
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	0.0197	0.129	0.0043
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Ra-226	Bq/L	0.0067/0.0054/0.0058/0.0033/ 0.0031/0.0064	-	1.11	0.0037	0.016	<0.0064
Oil and Grease, Total	mg/L	2	-	-	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	-	Not acutely toxic	Not Acutely Toxic	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.5: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID				MS-07	MS-0702	MS-07
	ALS Laboratory Sample ID				L2611689-1	L2611689-2	L2628143-1
	Sample Date & Time				2021-07-08 11:45	2021-07-08 11:45	2021-08-17 14:10
	QA/QC Sample Type				N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria[1]	MDMER Criteria[2]			
Conductivity	umhos/cm	1.0	-	-	399	402	-
Hardness (as CaCO3)	mg/L	0.50	-	-	176	175	282
pH	pH units	0.10	6.0 - 9.5	6.0 - 9.5	7.56	7.58	8.11
Total Suspended Solids	mg/L	2.0	15	30	<2.0	<2.0	6.3
Total Dissolved Solids	mg/L	10	-	-	265	274	402
Turbidity	NTU	0.10	-	-	1.59	1.62	3.72
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	31.1	31.3	67.8
Ammonia, Total (as N)	mg/L	0.010	-	-	0.340	0.336	0.082
Chloride (Cl)	mg/L	0.50	-	-	3.54	3.55	8.82
Fluoride (F)	mg/L	0.020	-	-	0.117	0.116	0.125
Nitrate (as N)	mg/L	0.020	-	-	5.99	6.00	12.2
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.860	0.910	0.630
Phosphorus, Total	mg/L	0.0030	-	-	<0.0030	<0.0030	0.0097
Sulfate (SO4)	mg/L	0.30	-	-	134	134	183
Dissolved Organic Carbon	mg/L	0.50	-	-	2.19	2.26	2.91
Total Organic Carbon	mg/L	0.50	-	-	2.42	2.50	3.93
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.0435	0.0563	0.185
Antimony (Sb)-Total	mg/L	0.00010	-	-	0.00013	0.00013	<0.00010
Arsenic (As)-Total	mg/L	0.00010	0.50	0.60	<0.00010	<0.00010	0.00013
Barium (Ba)-Total	mg/L	0.00010	-	-	0.0153	0.0152	0.0219
Beryllium (Be)-Total	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050
Boron (B)-Total	mg/L	0.010	-	-	0.016	0.017	0.026
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	0.0000233	0.0000210	0.0000203
Calcium (Ca)-Total	mg/L	0.050	-	-	24.8	25.0	47.4
Cesium (Cs)-Total	mg/L	0.000010	-	-	<0.000010	<0.000010	0.000022
Chromium (Cr)-Total	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050
Cobalt (Co)-Total	mg/L	0.00010	-	-	0.00062	0.00062	0.00079
Copper (Cu)-Total	mg/L	0.00050	0.30	0.60	0.00090	0.00109	0.00128
Iron (Fe)-Total	mg/L	0.010	-	-	0.042	0.057	0.214
Lead (Pb)-Total	mg/L	0.000050	0.20	0.20	0.000071	0.000081	0.000234
Lithium (Li)-Total	mg/L	0.0010	-	-	0.0050	0.0050	0.006
Magnesium (Mg)-Total	mg/L	0.0050	-	-	28.0	28.2	39.7
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.0421	0.0427	0.0319
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.00729	0.00729	0.00985
Nickel (Ni)-Total	mg/L	0.00050	0.50	1.00	0.00061	0.00060	0.00086
Phosphorus (P)-Total	mg/L	0.050	-	-	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L	0.050	-	-	8.47	8.48	11.7
Rubidium (Rb)-Total	mg/L	0.00020	-	-	0.00345	0.00341	0.00481
Selenium (Se)-Total	mg/L	0.000050	-	-	0.00114	0.00121	0.00149
Silicon (Si)-Total	mg/L	0.10	-	-	1.07	1.11	1.69
Silver (Ag)-Total	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	-	2.83	2.82	4.64
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.0300	0.0299	0.0816
Sulfur (S)-Total	mg/L	0.50	-	-	45.9	46.5	65.6
Tellurium (Te)-Total	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.000010	-	-	<0.000010	<0.000010	<0.000010
Thorium (Th)-Total	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	0.00030	-	-	0.00106	0.00184	0.00745
Tungsten (W)-Total	mg/L	0.00010	-	-	<0.00010	<0.00010	0.00014
Uranium (U)-Total	mg/L	0.000010	-	-	0.00236	0.00236	0.00631
Vanadium (V)-Total	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.0030	0.50	1.00	<0.0030	<0.0030	<0.0030
Zirconium (Zr)-Total	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0192	0.0189	0.168
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	0.00013
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	0.0155	0.0152	0.025
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved	mg/L	0.010	-	-	0.016	0.016	0.022
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	0.0000244	0.0000231	0.0000236
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	25.7	25.7	46.3
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	<0.000010	<0.000010	0.000018
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	0.00055	0.00055	0.00077
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00080	0.00064	0.00143
Iron (Fe)-Dissolved	mg/L	0.010	-	-	<0.010	<0.010	0.141
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	0.000232
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	0.0047	0.0048	0.0057
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	27.2	26.9	40.4
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.0372	0.0366	0.0331
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.00736	0.00744	0.00967
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	0.00082
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	<0.050	<0.050	<0.050
Potassium (K)-Dissolved	mg/L	0.050	-	-	8.35	8.34	12.1
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.00334	0.00348	0.0049
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	0.00133	0.00131	0.00132
Silicon (Si)-Dissolved	mg/L	0.050	-	-	1.01	1.02	1.53
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050
Sodium (Na)-Dissolved	mg/L	0.050	-	-	2.72	2.69	4.71
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	0.0308	0.0315	0.0832
Sulfur (S)-Dissolved	mg/L	0.50	-	-	47.2	47.1	59.9
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010	<0.000010	0.000010
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	<0.00030	<0.00030	0.00595
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	0.00013
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.00242	0.00242	0.00616
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	0.0010	<0.0010	0.0010
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020
Ra-226	Bq/L	0.0064/0.0035/0.0058	-	1.11	0.0068	<0.0035	0.0062
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity[3]	-	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID				MS-08	MS-08	MS-0802	MS-08	MS-08
	ALS Laboratory Sample ID				L2606206-1	L2611670-1	L2611670-2	L2621962-1	L2624309-1
	Sample Date & Time				2021-06-23 16:20	2021-07-08 13:05	2021-07-08 13:05	2021-08-03 13:20	2021-08-08 19:20
	QA/QC Sample Type				N/A	N/A	Field Blank	N/A	N/A
	Units	LOR	Water Licence Criteria [1]	MDMER Criteria [2]					
Conductivity	umhos/cm	1.0	-	-	551	943	<1.0	-	-
Hardness (as CaCO3)	mg/L	0.50/1.3		-	296	520	<0.50	1600	1610
pH	pH units	0.10	6.0 - 9.5	6.0 - 9.5	7.65	8.04	5.62	8.58	7.49
Total Suspended Solids	mg/L	2.0	15	30	2.5	13.0	<2.0	8.0	10.3
Total Dissolved Solids	mg/L	10	-	-	418	772	20	2,190	2,510
Turbidity	NTU	0.10	-	-	5.06	8.45	<0.10	6.43	14.1
Acidity (as CaCO3)	mg/L	2.0	-	-	<2.0	-	-	-	-
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	19.2	10.4	<1.0	10.1	8.4
Ammonia, Total (as N)	mg/L	0.10/0.010/0.20	-	-	0.436	1.09	<0.010	3.35	4.26
Chloride (Cl)	mg/L	0.50/2.5	-	-	1.35	3.94	<0.50	9.9	10.3
Fluoride (F)	mg/L	0.020/0.10	-	-	0.059	0.076	<0.020	<0.10	<0.10
Nitrate (as N)	mg/L	0.020/0.10	-	-	1.57	7.13	<0.020	18.8	19.2
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.71	1.46	<0.050	3.87	4.41
Phosphorus, Total	mg/L	0.0030	-	-	<0.0030	<0.0030	<0.0030	0.0058	0.0037
Sulfate (SO4)	mg/L	0.30/1.5	-	-	262	472	<0.30	1,370	1,350
Dissolved Organic Carbon	mg/L	0.50	-	-	2.09	1.87	<0.50	2.91	2.11
Total Organic Carbon	mg/L	0.50	-	-	1.63	1.42	0.87	2.29	2.14
Aluminum (Al)-Total	mg/L	0.050/0.0050	-	-	0.1	0.202	<0.0050	0.059	0.097
Antimony (Sb)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.0010	<0.00010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.0010/0.00010	0.50	0.60	<0.00010	<0.0010	<0.00010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L	0.0010/0.00010	-	-	0.0013	0.0093	<0.00010	0.0191	0.0155
Beryllium (Be)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.0010	<0.00010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L	0.00050/0.000050	-	-	<0.000050	<0.00050	<0.000050	<0.00050	<0.00050
Boron (B)-Total	mg/L	0.10/0.010	-	-	<0.010	<0.10	<0.010	<0.10	<0.10
Cadmium (Cd)-Total	mg/L	0.000050/0.0000050	-	-	<0.0000050	<0.000050	<0.0000050	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	0.50/0.050	-	-	19	50	<0.050	137	139
Cesium (Cs)-Total	mg/L	0.00010/0.000010	-	-	0.000014	<0.00010	<0.000010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L	0.0050/0.00050	-	-	<0.00050	<0.0050	<0.00050	<0.0050	<0.0050
Cobalt (Co)-Total	mg/L	0.0010/0.00010	-	-	0.0020	0.0268	<0.00010	0.0181	0.033
Copper (Cu)-Total	mg/L	0.0050/0.00050	0.30	0.60	0.00059	0.0051	<0.00050	0.0162	0.0149
Iron (Fe)-Total	mg/L	0.10/0.010	-	-	0.59	2.52	<0.010	2.28	4.45
Lead (Pb)-Total	mg/L	0.00050/0.000050	0.20	0.20	0.000122	<0.00050	<0.000050	<0.00050	<0.00050
Lithium (Li)-Total	mg/L	0.10/0.0010/0.010	-	-	0.0047	<0.010	<0.0010	0.033	0.037
Magnesium (Mg)-Total	mg/L	0.050/0.0050	-	-	57	96.9	0.0382	316	339
Manganese (Mn)-Total	mg/L	0.0050/0.00050	-	-	0.17	2.29	<0.00050	3.77	4.6
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00050/0.000050	-	-	0.000169	<0.00050	<0.000050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	0.0050/0.00050	0.50	1.00	0.00205	0.0238	<0.00050	0.0187	0.0322
Phosphorus (P)-Total	mg/L	0.50/0.050	-	-	<0.050	<0.50	<0.050	<0.50	<0.50
Potassium (K)-Total	mg/L	0.50/0.050	-	-	0.487	3.02	<0.050	6.78	7.76
Rubidium (Rb)-Total	mg/L	0.0020/0.00020	-	-	0.00117	0.004	<0.00020	0.0085	0.0099
Selenium (Se)-Total	mg/L	0.00050/0.000050	-	-	0.000587	0.00166	<0.000050	0.00586	0.00607
Silicon (Si)-Total	mg/L	1.0/0.10	-	-	0.31	<1.0	<0.10	<1.0	<1.0
Silver (Ag)-Total	mg/L	0.00050/0.000050	-	-	<0.000050	<0.00050	<0.000050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	0.50/0.050	-	-	0.466	1.55	<0.050	4.23	4.37
Strontium (Sr)-Total	mg/L	0.010/0.0010	-	-	0.0933	0.135	<0.0010	0.319	0.334
Sulfur (S)-Total	mg/L	5.0/0.50	-	-	88.7	165	<0.50	543	555
Tellurium (Te)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.0020	<0.00020	<0.0020	<0.0020
Thallium (Tl)-Total	mg/L	0.00010/0.000010	-	-	0.000026	<0.00010	<0.000010	0.00012	0.00012
Thorium (Th)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.0010	<0.00010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L	0.0010/0.00010	-	-	0.00066	<0.0010	<0.00010	<0.0010	<0.0010
Titanium (Ti)-Total	mg/L	0.0030/0.00030	-	-	<0.0050	0.003	<0.00030	<0.0030	<0.0030
Tungsten (W)-Total	mg/L	0.0010/0.00010	-	-	<0.00010	<0.0010	<0.00010	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.00010/0.000010	-	-	0.000099	0.00054	<0.000010	0.000256	0.00037
Vanadium (V)-Total	mg/L	0.0050/0.00050	-	-	0.0007	<0.0050	<0.00050	<0.0050	<0.0050
Zinc (Zn)-Total	mg/L	0.030/0.0030	0.50	1.00	<0.0030	<0.030	<0.0030	<0.030	<0.030
Zirconium (Zr)-Total	mg/L	0.0020/0.00020	-	-	<0.00020	<0.0020	<0.00020	<0.0020	<0.0020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	<0.0050	0.0434	<0.0050	<0.050 *	<0.050
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	0.00093	0.00859	<0.00010	0.0184	0.0141
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L	0.010	-	-	<0.010	0.015	<0.010	<0.10	<0.10
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	0.0000052	<0.0000050	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	20.5	49.6	0.055	133	131
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	<0.000010	0.000013	<0.000010	<0.00010	<0.00010
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050	<0.0050	<0.0050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	0.00136	0.00657	<0.00010	0.0097	0.0221
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	<0.00020	0.00382	<0.00020	0.0153	0.0119
Iron (Fe)-Dissolved	mg/L	0.010	-	-	<0.010	<0.010	<0.010	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050	<0.00050	<0.00050
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	0.005	0.0117	<0.0010	0.031	0.033
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	59.3	96.1	<0.0050	307	311
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.15	1.74	<0.00050	3.48	4.06
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.00017	0.000115	<0.000050	<0.00050	<0.00050
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	0.00144	0.00795	<0.00050	0.0114	0.0204
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	<0.050	<0.050	<0.050	<0.50	<0.50
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.5	3.03	<0.050	6.65	7.27
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.00099	0.00378	<0.00020	0.0079	0.0092
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	0.000717	0.00208	<0.000050	0.00566	0.00564
Silicon (Si)-Dissolved	mg/L	0.050	-	-	0.088	0.463	<0.050	<0.50	<0.50
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	<0.000050	<0.000050	<0.00050	<0.00050
Sodium (Na)-Dissolved	mg/L	0.050	-	-	0.48	1.51	<0.050	3.82	4.03
Strontium (Sr)-Dissolved	mg/L	0.00100	-	-	0.0923	0.137	<0.0010	0.299	0.325
Sulfur (S)-Dissolved	mg/L	0.50/5.0	-	-	92.8	170	<0.50	533	520
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020	<0.0020	<0.0020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	0.000026	0.000046	<0.000010	0.00012	0.00012
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	0.00071	<0.00010	<0.00010	<0.0010	<0.0010
Titanium (Ti)-Dissolved	mg/L	0.00030/0.0030	-	-	<0.00030	<0.00030	<0.00030	<0.0030	<0.0030
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	<0.00010	<0.00010	<0.00010	<0.0010	<0.0010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000032	0.000067	<0.000010	0.0001	<0.00010
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	<0.00050	<0.00050	<0.0050	<0.0050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	0.0022	<0.0010	<0.0010	<0.010	<0.010
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	<0.00020	<0.00020	<0.0020	<0.0020
Ra-226	Bq/L	0.0096/0.0060/0.0033 /0.0049/0.0047	-	1.11	<0.0096	0.0067	0.004	0.0047	0.0070
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - MS-MRY-06

Analyte	Sample ID			MS-MRY-06
	ALS Laboratory Sample ID			L2618137-2
	Sample Date & Time			2021-07-23 9:10
	QA/QC Sample Type			N/A
	Units	LOR	Water Licence Criteria[1]	
pH	pH units	0.10	6.0 - 9.5	8.05
Total Suspended Solids	mg/L	2.0	-	31.8
Lead (Pb)-Total	mg/L	0.00005/0.00050	0.001	0.000443
Oil and Grease, Total	mg/L	5.0	15	<5.0
	-	-	No Visible Sheen	No Visible Sheen
Benzene	mg/L	0.00050	0.370	<0.00050
Ethylbenzene	mg/L	0.00050	0.090	<0.00050
Toluene	mg/L	0.00045/0.00050	0.002	0.00088
F1 (C6-C10)	mg/L	0.10/0.025	-	<0.10
F2 (C10-C16)	mg/L	0.10	-	0.18
F3 (C16-C34)	mg/L	0.25	-	0.30
F4 (C34-C50)	mg/L	0.25	-	<0.25
Total Petroleum Hydrocarbons (TPH)	mg/L	0.38/0.37	-	0.48

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2600578-1	L2602902-1	L2605841-5	L2608050-1	L2609333-1	L2614342-1	L2618103-1	L2621268-10	L2621381-16	L2627735-1	L2631125-1	L2635818-1	L2635847-1
	Sample Date & Time			2021-06-10 7:50	2021-06-15 15:10	2021-06-21 8:25	2021-06-28 9:00	2021-07-04 8:15	2021-07-13 10:55	2021-07-21 10:35	2021-07-30 9:10	2021-08-02 14:20	2021-08-12 13:35	2021-08-24 8:45	2021-09-04 15:25	2021-09-06 11:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]													
Hardness	mg/L	0.50	-	-	26.5	-	-	44.5	-	-	-	65.7	-	-	85.4	-
pH	pH units	0.10	6.0 - 9.5	7.63	7.70	7.72	7.87	8.05	7.78	7.91	7.98	8.00	8.19	8.11	8.09	7.99
Total Suspended Solids	mg/L	1.0/2.0	15	**16.1**	6.7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	<2.0	<2.0	<2.0	2.5
Total Dissolved Solids	mg/L	10	-	43	39	25	33	90	72	60	75	84	25	83	75	94
Turbidity	NTU	0.10	-	1.70	7.08	2.89	2.67	1.01	2.01	1.12	0.55	0.83	0.40	0.33	0.25	0.60
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	36.1	-	-	46.2	-	-	-	58.6	-	-	86.6	-
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	<0.010	-	-	-	<0.010	-	-	<0.010	-
Chloride (Cl)	mg/L	0.50	-	-	0.77	-	-	1.11	-	-	-	1.16	-	-	1.62	-
Fluoride (F)	mg/L	0.020	-	-	<0.020	-	-	<0.020	-	-	-	<0.020	-	-	<0.020	-
Nitrate (as N)	mg/L	0.020	-	-	0.053	-	-	0.052	-	-	-	<0.020	-	-	0.057	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.070	-	-	0.110	-	-	-	0.060	-	-	0.116	-
Phosphorus, Total	mg/L	0.0030	-	-	0.0112	-	-	<0.0030	-	-	-	0.0100	-	-	<0.0030	-
Sulfate (SO4)	mg/L	0.30	-	-	1.22	-	-	2.43	-	-	-	2.49	-	-	4.06	-
Dissolved Organic Carbon	mg/L	0.50	-	-	1.96	-	-	1.69	-	-	-	2.58	-	-	2.90	-
Total Organic Carbon	mg/L	0.50	-	-	1.85	-	-	2.09	-	-	-	2.94	-	-	2.48	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.204	-	-	0.0242	-	-	-	0.136	-	-	0.0378	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	<0.00010	-	-	<0.00010	-	-	-	<0.00010	-	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050	-	-	-	<0.0000050	-	-	0.0000056	-
Calcium (Ca)-Total	mg/L	0.050	-	-	5.53	-	-	8.83	-	-	-	12.2	-	-	15.3	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	0.00187	-	-	0.00203	-	-	-	0.00174	-	-	0.00224	-
Iron (Fe)-Total	mg/L	0.010	-	-	0.286	-	-	0.031	-	-	-	0.174	-	-	0.049	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000262	-	-	<0.000050	-	-	-	0.000133	-	-	0.000053	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	3.27	-	-	5.33	-	-	-	8.38	-	-	10.1	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00527	-	-	0.00062	-	-	-	0.00267	-	-	0.00	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050	-	-	-	<0.0000050	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000232	-	-	0.000491	-	-	-	0.000434	-	-	0.00118	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00073	-	-	<0.00050	-	-	-	0.00063	-	-	0.00052	-
Potassium (K)-Total	mg/L	0.050	-	-	0.904	-	-	1.23	-	-	-	1.46	-	-	2.14	-
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050	-	-	-	<0.000050	-	-	0.000076	-
Sodium (Na)-Total	mg/L	0.050	-	-	0.322	-	-	0.418	-	-	-	0.653	-	-	0.763	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	0.000013	-	-	0.000012	-	-	-	0.000011	-	-	0.000014	-
Uranium (U)-Total	mg/L	0.000010	-	-	0.000569	-	-	0.00149	-	-	-	0.00196	-	-	0.0071	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	<0.0030	-	-	<0.0030	-	-	-	<0.0030	-	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0097	-	-	0.0076	-	-	-	0.0076	-	-	0.0067	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010	-	-	-	<0.00010	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050	-	-	-	<0.0000050	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	5.15	-	-	8.95	-	-	-	12.6	-	-	16.7	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00125	-	-	<0.010	-	-	-	0.00143	-	-	0.00205	-
Iron (Fe)-Dissolved	mg/L	0.010	-	-	0.011	-	-	<0.000050	-	-	-	<0.010	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	<0.0010	-	-	-	<0.000050	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	3.30	-	-	5.37	-	-	-	8.32	-	-	10.6	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.00098	-	-	<0.00050	-	-	-	<0.00050	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050	-	-	-	<0.0000050	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000218	-	-	0.000495	-	-	-	0.000401	-	-	0.0012	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-	<0.00050	-	-	-	<0.00050	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.875	-	-	1.28	-	-	-	1.42	-	-	2.26	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	0.000053	-	-	-	<0.000050	-	-	0.0001	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	0.344	-	-	0.436	-	-	-	0.647	-	-	0.786	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010	-	-	<0.000010	-	-	-	<0.000010	-	-	0.000012	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000403	-	-	0.00147	-	-	-	0.00192	-	-	0.00739	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	<0.0010	-	-	0.0015	-	-	-	<0.0010	-	-	<0.0010	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID			MS-MRY-09	MS-MRY-0901	MS-MRY-09	MS-MRY-09
	ALS Laboratory Sample ID			L2639307-1	L2639307-2	L2642214-1	L2644501-1
	Sample Date & Time			2021-09-13 9:50	2021-09-13 9:50	2021-09-20 8:05	2021-09-27 7:40
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Hardness	mg/L	0.50	-	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.90	7.89	7.88	7.99
Total Suspended Solids	mg/L	1.0/2.0	15	<2.0	<2.0	<2.0	4.0
Total Dissolved Solids	mg/L	10	-	53	25	131	214
Turbidity	NTU	0.10	-	0.27	0.26	0.11	0.22
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	-	-	-
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	-
Chloride (Cl)	mg/L	0.50	-	-	-	-	-
Fluoride (F)	mg/L	0.020	-	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	-	-	-
Phosphorus, Total	mg/L	0.0030	-	-	-	-	-
Sulfate (SO4)	mg/L	0.30	-	-	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-	-	-
Total Organic Carbon	mg/L	0.50	-	-	-	-	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	-	-	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	-	-	-
Calcium (Ca)-Total	mg/L	0.050	-	-	-	-	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	-	-	-
Iron (Fe)-Total	mg/L	0.010	-	-	-	-	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	-	-	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	-	-	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	-	-	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	-	-	-
Potassium (K)-Total	mg/L	0.050	-	-	-	-	-
Selenium (Se)-Total	mg/L	0.000050	-	-	-	-	-
Sodium (Na)-Total	mg/L	0.050	-	-	-	-	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	-	-	-
Uranium (U)-Total	mg/L	0.000010	-	-	-	-	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	-	-	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	-	-	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	-	-	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	-	-	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	-	-	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	-	-	-
Iron (Fe)-Dissolved	mg/L	0.010	-	-	-	-	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	-	-	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	-	-	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	-	-	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	-	-	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	-	-	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	-	-	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	-	-	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	-	-	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	-	-	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2600491-1	L2602423-1	L2605841-6	L2608050-13	L2609728-7
	Sample Date & Time			2021-06-07 16:00	2021-06-14 12:50	2021-06-21 10:35	2021-06-28 14:40	2021-07-05 16:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Hardness	mg/L	0.50	-	-	29.6	-	-	124
pH	pH units	0.10	6.0 - 9.5	6.95	7.39	8.06	8.21	8.42
Total Suspended Solids	mg/L	2.0/1.0	15	<2.0	13.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	21	36	130	64	153
Turbidity	NTU	0.10	-	1.36	6.99	0.29	0.27	0.13
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	30.6	-	-	108
Ammonia, Total (as N)	mg/L	0.010	-	-	0.014	-	-	<0.010
Chloride (Cl)	mg/L	0.50	-	-	2.00	-	-	11.3
Fluoride (F)	mg/L	0.020	-	-	<0.020	-	-	0.028
Nitrate (as N)	mg/L	0.020	-	-	<0.020	-	-	0.022
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	0.190	-	-	0.130
Phosphorus, Total	mg/L	0.0030	-	-	0.0149	-	-	<0.0030
Sulfate (SO4)	mg/L	0.30	-	-	2.64	-	-	10.4
Dissolved Organic Carbon	mg/L	0.50	-	-	2.76	-	-	1.13
Total Organic Carbon	mg/L	0.50	-	-	2.77	-	-	2.20
Aluminum (Al)-Total	mg/L	0.0050	-	-	0.290	-	-	0.0207
Antimony (Sb)-Total	mg/L	0.00010	-	-	<0.00010	-	-	0.00011
Arsenic (As)-Total	mg/L	0.00010	0.50	-	<0.00010	-	-	<0.00010
Barium (Ba)-Total	mg/L	0.00010	-	-	0.00637	-	-	0.0148
Beryllium (Be)-Total	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Bismuth (Bi)-Total	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Boron (B)-Total	mg/L	0.010	-	-	<0.010	-	-	<0.010
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050
Calcium (Ca)-Total	mg/L	0.050	-	-	5.39	-	-	25.3
Cesium (Cs)-Total	mg/L	0.000010	-	-	0.000022	-	-	<0.000010
Chromium (Cr)-Total	mg/L	0.00050	-	-	0.00053	-	-	<0.00050
Cobalt (Co)-Total	mg/L	0.00010	-	-	0.00020	-	-	<0.00010
Copper (Cu)-Total	mg/L	0.00050	0.30	-	0.00092	-	-	0.00130
Iron (Fe)-Total	mg/L	0.010	-	-	0.404	-	-	0.026
Lead (Pb)-Total	mg/L	0.000050	0.20	-	0.000213	-	-	<0.000050
Lithium (Li)-Total	mg/L	0.0010	-	-	<0.0010	-	-	0.0015
Magnesium (Mg)-Total	mg/L	0.0050	-	-	3.60	-	-	14.8
Manganese (Mn)-Total	mg/L	0.00050	-	-	0.00811	-	-	0.00064
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	0.000162	-	-	0.000311
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	0.00059	-	-	<0.00050
Phosphorus (P)-Total	mg/L	0.050	-	-	<0.050	-	-	<0.050
Potassium (K)-Total	mg/L	0.050	-	-	0.958	-	-	1.51
Rubidium (Rb)-Total	mg/L	0.00020	-	-	0.00153	-	-	0.00146
Selenium (Se)-Total	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Silicon (Si)-Total	mg/L	0.10	-	-	0.82	-	-	1.26
Silver (Ag)-Total	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Sodium (Na)-Total	mg/L	0.050	-	-	0.363	-	-	2.42
Strontium (Sr)-Total	mg/L	0.0010	-	-	0.0032	-	-	0.0153
Sulfur (S)-Total	mg/L	0.50	-	-	1.02	-	-	3.61
Tellurium (Te)-Total	mg/L	0.00020	-	-	<0.00020	-	-	<0.00020
Thallium (Tl)-Total	mg/L	0.000010	-	-	<0.000010	-	-	<0.000010
Thorium (Th)-Total	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Tin (Sn)-Total	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Titanium (Ti)-Total	mg/L	0.00030	-	-	0.0149	-	-	0.00110
Tungsten (W)-Total	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Uranium (U)-Total	mg/L	0.000010	-	-	0.000093	-	-	0.00138
Vanadium (V)-Total	mg/L	0.00050	-	-	0.00063	-	-	<0.00050
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	<0.0030	-	-	<0.0030
Zirconium (Zr)-Total	mg/L	0.00020	-	-	<0.00020	-	-	<0.00020
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	0.0086	-	-	<0.0050
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	0.00390	-	-	0.0143
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Boron (B)-Dissolved	mg/L	0.010	-	-	<0.010	-	-	<0.010
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	5.71	-	-	25.7
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	<0.000010	-	-	<0.000010
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-	<0.00050
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	0.00052	-	-	0.00104
Iron (Fe)-Dissolved	mg/L	0.010	-	-	<0.010	-	-	<0.010
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	0.0010	-	-	0.0010
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	3.72	-	-	14.6
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	0.00278	-	-	<0.00050
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	<0.0000050	-	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	0.000146	-	-	0.000299
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-	<0.00050
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	<0.050	-	-	<0.050
Potassium (K)-Dissolved	mg/L	0.050	-	-	0.863	-	-	1.50
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	0.00091	-	-	0.00141
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Silicon (Si)-Dissolved	mg/L	0.050	-	-	0.360	-	-	1.16
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	<0.000050	-	-	<0.000050
Sodium (Na)-Dissolved	mg/L	0.050	-	-	0.357	-	-	2.35
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	0.0033	-	-	0.0155
Sulfur (S)-Dissolved	mg/L	0.50	-	-	0.97	-	-	3.75
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	<0.00020	-	-	<0.00020
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	<0.000010	-	-	<0.000010
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	<0.00030	-	-	<0.00030
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	<0.00010	-	-	<0.00010
Uranium (U)-Dissolved	mg/L	0.000010	-	-	0.000051	-	-	0.00129
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	<0.00050	-	-	<0.00050
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	<0.0010	-	-	<0.0010
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	<0.00020	-	-	<0.00020
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2612809-16	L2618103-2	L2621358-7	L2621963-1	L2627333-1
	Sample Date & Time			2021-07-12 15:35	2021-07-22 16:15	2021-07-31 14:55	2021-08-03 14:40	2021-08-14 17:40
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Hardness	mg/L	0.50	-	-	-	-	140	-
pH	pH units	0.10	6.0 - 9.5	7.75	8.32	8.34	8.35	8.34
Total Suspended Solids	mg/L	2.0/1.0	15	2.7	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	124	157	128	136	96
Turbidity	NTU	0.10	-	0.33	0.17	0.19	<0.10	0.14
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	-	-	115	-
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	0.011	-
Chloride (Cl)	mg/L	0.50	-	-	-	-	8.99	-
Fluoride (F)	mg/L	0.020	-	-	-	-	0.032	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	<0.020	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	-	-	0.120	-
Phosphorus, Total	mg/L	0.0030	-	-	-	-	0.0039	-
Sulfate (SO4)	mg/L	0.30	-	-	-	-	9.95	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-	-	1.88	-
Total Organic Carbon	mg/L	0.50	-	-	-	-	2.68	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	-	-	<0.0050	-
Antimony (Sb)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	-	-	<0.00010	-
Barium (Ba)-Total	mg/L	0.00010	-	-	-	-	0.0153	-
Beryllium (Be)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.000050	-	-	-	-	<0.000050	-
Boron (B)-Total	mg/L	0.010	-	-	-	-	<0.010	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.050	-	-	-	-	26.8	-
Cesium (Cs)-Total	mg/L	0.000010	-	-	-	-	<0.000010	-
Chromium (Cr)-Total	mg/L	0.00050	-	-	-	-	<0.00050	-
Cobalt (Co)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	-	-	0.00115	-
Iron (Fe)-Total	mg/L	0.010	-	-	-	-	<0.010	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	-	-	<0.000050	-
Lithium (Li)-Total	mg/L	0.0010	-	-	-	-	0.0010	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	-	-	17.4	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	-	-	<0.00050	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	-	-	0.000313	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	-	-	<0.00050	-
Phosphorus (P)-Total	mg/L	0.050	-	-	-	-	<0.050	-
Potassium (K)-Total	mg/L	0.050	-	-	-	-	1.63	-
Rubidium (Rb)-Total	mg/L	0.00020	-	-	-	-	0.00134	-
Selenium (Se)-Total	mg/L	0.000050	-	-	-	-	<0.000050	-
Silicon (Si)-Total	mg/L	0.10	-	-	-	-	1.53	-
Silver (Ag)-Total	mg/L	0.000050	-	-	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.050	-	-	-	-	2.81	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	-	-	0.0162	-
Sulfur (S)-Total	mg/L	0.50	-	-	-	-	3.78	-
Tellurium (Te)-Total	mg/L	0.00020	-	-	-	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	-	-	<0.000010	-
Thorium (Th)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.00030	-	-	-	-	<0.00030	-
Tungsten (W)-Total	mg/L	0.00010	-	-	-	-	<0.00010	-
Uranium (U)-Total	mg/L	0.000010	-	-	-	-	0.00159	-
Vanadium (V)-Total	mg/L	0.00050	-	-	-	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	-	-	<0.0030	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-	-	-	<0.00020	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	-	-	<0.0050	-
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	-	-	0.0155	-
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	-	-	<0.000050	-
Boron (B)-Dissolved	mg/L	0.010	-	-	-	-	<0.010	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	-	-	27.2	-
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	-	-	<0.000010	-
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	-	-	<0.00050	-
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	-	-	0.00112	-
Iron (Fe)-Dissolved	mg/L	0.010	-	-	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	-	-	<0.000050	-
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	-	-	0.0012	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	-	-	17.5	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	-	-	0.000294	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	-	-	<0.00050	-
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	-	-	<0.050	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	-	-	1.63	-
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	-	-	0.00148	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	-	-	<0.000050	-
Silicon (Si)-Dissolved	mg/L	0.050	-	-	-	-	1.52	-
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	-	-	<0.000050	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	-	-	2.83	-
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	-	-	0.0162	-
Sulfur (S)-Dissolved	mg/L	0.50	-	-	-	-	3.45	-
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	-	-	<0.00020	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	-	-	<0.000010	-
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	-	-	<0.00030	-
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	-	-	<0.00010	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	-	-	0.00153	-
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	-	-	<0.00050	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	-	-	<0.0010	-
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	-	-	<0.00020	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-10

Analyte	Sample ID			MS-MRY-10	MS-MRY-10	MS-MRY-10	MS-MRY-10
	ALS Laboratory Sample ID			L2627332-15	L2630140-8	L2635757-1	L2637080-1
	Sample Date & Time			2021-08-16 9:50	2021-08-22 12:30	2021-09-03 11:40	2021-09-08 13:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Hardness	mg/L	0.50	-	-	-	143	-
pH	pH units	0.10	6.0 - 9.5	8.37	8.45	8.25	7.99
Total Suspended Solids	mg/L	2.0/1.0	15	<2.0	<2.0	2.5	2.6
Total Dissolved Solids	mg/L	10/13	-	122	209	144	222
Turbidity	NTU	0.10	-	0.15	<0.10	0.10	0.41
Alkalinity, Total (as CaCO3)	mg/L	1.0	-	-	-	130	-
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	-
Chloride (Cl)	mg/L	0.50	-	-	-	10.3	-
Fluoride (F)	mg/L	0.020	-	-	-	0.025	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.026	-
Total Kjeldahl Nitrogen	mg/L	0.050	-	-	-	0.117	-
Phosphorus, Total	mg/L	0.0030	-	-	-	<0.0030	-
Sulfate (SO4)	mg/L	0.30	-	-	-	9.88	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-	2.76	-
Total Organic Carbon	mg/L	0.50	-	-	-	1.91	-
Aluminum (Al)-Total	mg/L	0.0050	-	-	-	0.0231	-
Antimony (Sb)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Arsenic (As)-Total	mg/L	0.00010	0.50	-	-	<0.00010	-
Barium (Ba)-Total	mg/L	0.00010	-	-	-	0.0138	-
Beryllium (Be)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Bismuth (Bi)-Total	mg/L	0.000050	-	-	-	<0.000050	-
Boron (B)-Total	mg/L	0.010	-	-	-	<0.010	-
Cadmium (Cd)-Total	mg/L	0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	0.050	-	-	-	25.3	-
Cesium (Cs)-Total	mg/L	0.000010	-	-	-	<0.000010	-
Chromium (Cr)-Total	mg/L	0.00050	-	-	-	<0.00050	-
Cobalt (Co)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Copper (Cu)-Total	mg/L	0.00050	0.30	-	-	0.00103	-
Iron (Fe)-Total	mg/L	0.010	-	-	-	0.030	-
Lead (Pb)-Total	mg/L	0.000050	0.20	-	-	<0.000050	-
Lithium (Li)-Total	mg/L	0.0010	-	-	-	0.0011	-
Magnesium (Mg)-Total	mg/L	0.0050	-	-	-	16.9	-
Manganese (Mn)-Total	mg/L	0.00050	-	-	-	0.00076	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	0.000050	-	-	-	0.000272	-
Nickel (Ni)-Total	mg/L	0.00050	0.50	-	-	<0.00050	-
Phosphorus (P)-Total	mg/L	0.050	-	-	-	<0.050	-
Potassium (K)-Total	mg/L	0.050	-	-	-	1.37	-
Rubidium (Rb)-Total	mg/L	0.00020	-	-	-	0.00117	-
Selenium (Se)-Total	mg/L	0.000050	-	-	-	<0.000050	-
Silicon (Si)-Total	mg/L	0.10	-	-	-	1.37	-
Silver (Ag)-Total	mg/L	0.000050	-	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	0.050	-	-	-	2.50	-
Strontium (Sr)-Total	mg/L	0.0010	-	-	-	0.0155	-
Sulfur (S)-Total	mg/L	0.50	-	-	-	3.32	-
Tellurium (Te)-Total	mg/L	0.00020	-	-	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.000010	-	-	-	<0.000010	-
Thorium (Th)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Tin (Sn)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Titanium (Ti)-Total	mg/L	0.00030	-	-	-	0.00154	-
Tungsten (W)-Total	mg/L	0.00010	-	-	-	<0.00010	-
Uranium (U)-Total	mg/L	0.000010	-	-	-	0.00172	-
Vanadium (V)-Total	mg/L	0.00050	-	-	-	<0.00050	-
Zinc (Zn)-Total	mg/L	0.0030	0.50	-	-	<0.0030	-
Zirconium (Zr)-Total	mg/L	0.00020	-	-	-	<0.00020	-
Aluminum (Al)-Dissolved	mg/L	0.0050	-	-	-	<0.0050	-
Antimony (Sb)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Arsenic (As)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Barium (Ba)-Dissolved	mg/L	0.00010	-	-	-	0.0149	-
Beryllium (Be)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Bismuth (Bi)-Dissolved	mg/L	0.000050	-	-	-	<0.000050	-
Boron (B)-Dissolved	mg/L	0.010	-	-	-	<0.010	-
Cadmium (Cd)-Dissolved	mg/L	0.0000050	-	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	0.050	-	-	-	28.1	-
Cesium (Cs)-Dissolved	mg/L	0.000010	-	-	-	<0.000010	-
Chromium (Cr)-Dissolved	mg/L	0.00050	-	-	-	<0.00050	-
Cobalt (Co)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Copper (Cu)-Dissolved	mg/L	0.00020	-	-	-	0.00098	-
Iron (Fe)-Dissolved	mg/L	0.010	-	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	0.000050	-	-	-	<0.000050	-
Lithium (Li)-Dissolved	mg/L	0.0010	-	-	-	0.0014	-
Magnesium (Mg)-Dissolved	mg/L	0.0050	-	-	-	17.7	-
Manganese (Mn)-Dissolved	mg/L	0.00050	-	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	0.0000050	-	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	0.000050	-	-	-	0.000306	-
Nickel (Ni)-Dissolved	mg/L	0.00050	-	-	-	<0.00050	-
Phosphorus (P)-Dissolved	mg/L	0.050	-	-	-	<0.050	-
Potassium (K)-Dissolved	mg/L	0.050	-	-	-	1.46	-
Rubidium (Rb)-Dissolved	mg/L	0.00020	-	-	-	0.00124	-
Selenium (Se)-Dissolved	mg/L	0.000050	-	-	-	<0.000050	-
Silicon (Si)-Dissolved	mg/L	0.050	-	-	-	1.47	-
Silver (Ag)-Dissolved	mg/L	0.000050	-	-	-	<0.000050	-
Sodium (Na)-Dissolved	mg/L	0.050	-	-	-	2.63	-
Strontium (Sr)-Dissolved	mg/L	0.0010	-	-	-	0.0170	-
Sulfur (S)-Dissolved	mg/L	0.50	-	-	-	3.85	-
Tellurium (Te)-Dissolved	mg/L	0.00020	-	-	-	<0.00020	-
Thallium (Tl)-Dissolved	mg/L	0.000010	-	-	-	<0.000010	-
Thorium (Th)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Tin (Sn)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Titanium (Ti)-Dissolved	mg/L	0.00030	-	-	-	<0.00030	-
Tungsten (W)-Dissolved	mg/L	0.00010	-	-	-	<0.00010	-
Uranium (U)-Dissolved	mg/L	0.000010	-	-	-	0.00184	-
Vanadium (V)-Dissolved	mg/L	0.00050	-	-	-	<0.00050	-
Zinc (Zn)-Dissolved	mg/L	0.0010	-	-	-	<0.0010	-
Zirconium (Zr)-Dissolved	mg/L	0.00020	-	-	-	<0.00020	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2585502-6	L2592735-4	L2595911-8	L2601055-10
	Sample Date & Time			2021-05-09 14:45	2021-05-26 12:20	2021-05-31 15:45	2021-06-08 14:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-		89.1	-	-
pH	pH units	0.10	6.0 - 9.5	7.77	7.54	7.45	7.37
Total Suspended Solids	mg/L	2.0	15.0	2.0	7.9	2.0	4.6
Total Dissolved Solids	mg/L	10	-	63	73	41	45
Turbidity	NTU	0.10	-	49.6	85.8	14.5	17.7
Alkalinity, Total (as $CaCO_3$)	mg/L	1.0	-	-	38.1	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	7.44	-	-
Total Organic Carbon	mg/L	0.50	-	-	5.0	-	-
Aluminum (Al)-Total	mg/L	0.0050/0.050	-	-	1.48	-	-
Antimony (Sb)-Total	mg/L	0.00010/0.0010	-	-	0.00042	-	-
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	-	0.00041	-	-
Barium (Ba)-Total	mg/L	0.00010/0.0010	-	-	0.0143	-	-
Beryllium (Be)-Total	mg/L	0.00010/0.0010	-	-	<0.00010	-	-
Bismuth (Bi)-Total	mg/L	0.000050/0.00050	-	-	<0.000050	-	-
Boron (B)-Total	mg/L	0.010/0.10	-	-	0.078	-	-
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	-	0.0000167	-	-
Calcium (Ca)-Total	mg/L	0.050/0.50	-	-	8.80	-	-
Cesium (Cs)-total	mg/L	0.000010/0.00010			0.000169		
Chromium (Cr)-Total	mg/L	0.00050/0.0050	-	-	0.00330	-	-
Cobalt (Co)-Total	mg/L	0.00010/0.0010	-	-	0.00151	-	-
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	-	0.00339	-	-
Iron (Fe)-Total	mg/L	0.010/0.10	-	-	1.92	-	-
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	-	0.00143	-	-
Lithium (Li)-Total	mg/L	0.0010/0.010	-	-	0.0038	-	-
Magnesium (Mg)-Total	mg/L	0.0050/0.00050	-	-	4.74	-	-
Manganese (Mn)-Total	mg/L	0.00050/0.0050	-	-	0.0462	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	0.0000065	-	-
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	-	0.000559	-	-
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	-	0.00626	-	-
Phosphorus (P)-Total	mg/L	0.050/0.50			0.058		
Potassium (K)-Total	mg/L	0.050/0.50	-	-	2.13	-	-
Rubidium (Rb)-Total	mg/L	0.00020/0.0020			0.00498		-
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	-	0.000052	-	-
Silicon (Si)-Total	mg/L	0.10/1.0	-	-	3.11	-	-
Silver (Ag)-Total	mg/L	0.00005/0.00050	-	-	<0.000050	-	-
Sodium (Na)-Total	mg/L	0.050/0.50	-	-	1.16	-	-
Strontium (Sr)-Total	mg/L	0.0010/0.010	-	-	0.0127	-	-
Sulfur (S)-Total	mg/L	0.50/5.0			2.51		-
Tellurium (Te)-Total	mg/L	0.00020/0.0020			<0.00020		-
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	-	0.000027	-	-
Thorium (Th)-Total	mg/L	0.00010/0.0010			0.00078		-
Tin (Sn)-Total	mg/L	0.00010/0.0010	-	-	<0.00010	-	-
Titanium (Ti)-Total	mg/L	0.00030/0.0030	-	-	0.0523	-	-
Tungsten (W)-Total	mg/L	0.00010/0.0010	-	-	<0.00010	-	-
Uranium (U)-Total	mg/L	0.000010/0.00010	-	-	0.000775	-	-
Vanadium (V)-Total	mg/L	0.00050/0.0050	-	-	0.00255	-	-
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	-	0.0093	-	-
Zirconium (Zr)-Total	mg/L	0.00020/0.0020	-	-	0.00126	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	0.00010	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.010/0.0010	-	-	<0.010	-	-
F1 (C6-C10)	ug/L	25	-	-	<25	-	-
F2 (C10-C16)	ug/L	100/150	-	-	<150	-	-
F3 (C16-C34)	ug/L	250/380	-	-	<380	-	-
F4 (C34-C50)	ug/L	250/380	-	-	<380	-	-
Total Hydrocarbons (C6-C50)	ug/L	370/550	-	-	<550	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A03
	ALS Laboratory Sample ID			L2602498-10	L2605841-12	L2608050-5	L2608050-6
	Sample Date & Time			2021-06-13 14:50	2021-06-21 15:10	2021-06-28 16:10	2021-06-28 16:10
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	125	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.66	7.93	8.27	6.13
Total Suspended Solids	mg/L	2.0	15.0	2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	67	312	416	<10
Turbidity	NTU	0.10	-	8.87	0.27	0.43	<0.10
Alkalinity, Total (as $CaCO_3$)	mg/L	1.0	-	47.1	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	2.50	-	-	-
Total Organic Carbon	mg/L	0.50	-	3.10	-	-	-
Aluminum (Al)-Total	mg/L	0.0050/0.050	-	0.113	-	-	-
Antimony (Sb)-Total	mg/L	0.00010/0.0010	-	0.00014	-	-	-
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	0.00013	-	-	-
Barium (Ba)-Total	mg/L	0.00010/0.0010	-	0.0130	-	-	-
Beryllium (Be)-Total	mg/L	0.00010/0.0010	-	<0.00010	-	-	-
Bismuth (Bi)-Total	mg/L	0.000050/0.00050	-	<0.000050	-	-	-
Boron (B)-Total	mg/L	0.010/0.10	-	0.271	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	0.0000058	-	-	-
Calcium (Ca)-Total	mg/L	0.050/0.50	-	11.0	-	-	-
Cesium (Cs)-total	mg/L	0.000010/0.00010		0.000013			
Chromium (Cr)-Total	mg/L	0.00050/0.0050	-	<0.00050	-	-	-
Cobalt (Co)-Total	mg/L	0.00010/0.0010	-	0.00017	-	-	-
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	0.00132	-	-	-
Iron (Fe)-Total	mg/L	0.010/0.10	-	0.190	-	-	-
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	0.000130	-	-	-
Lithium (Li)-Total	mg/L	0.0010/0.010	-	0.0027	-	-	-
Magnesium (Mg)-Total	mg/L	0.0050/0.00050	-	6.84	-	-	-
Manganese (Mn)-Total	mg/L	0.00050/0.0050	-	0.00401	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.000446	-	-	-
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	0.00468	-	-	-
Phosphorus (P)-Total	mg/L	0.050/0.50		<0.050			
Potassium (K)-Total	mg/L	0.050/0.50	-	1.08	-	-	-
Rubidium (Rb)-Total	mg/L	0.00020/0.0020		0.00248	-	-	-
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	<0.000050	-	-	-
Silicon (Si)-Total	mg/L	0.10/1.0	-	0.99	-	-	-
Silver (Ag)-Total	mg/L	0.00005/0.00050	-	<0.000050	-	-	-
Sodium (Na)-Total	mg/L	0.050/0.50	-	1.93	-	-	-
Strontium (Sr)-Total	mg/L	0.0010/0.010	-	0.0100	-	-	-
Sulfur (S)-Total	mg/L	0.50/5.0		4.62	-	-	-
Tellurium (Te)-Total	mg/L	0.00020/0.0020		<0.00020	-	-	-
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	0.000013	-	-	-
Thorium (Th)-Total	mg/L	0.00010/0.0010		<0.00010	-	-	-
Tin (Sn)-Total	mg/L	0.00010/0.0010	-	0.00053	-	-	-
Titanium (Ti)-Total	mg/L	0.00030/0.0030	-	0.00428	-	-	-
Tungsten (W)-Total	mg/L	0.00010/0.0010	-	<0.00010	-	-	-
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.000107	-	-	-
Vanadium (V)-Total	mg/L	0.00050/0.0050	-	<0.00050	-	-	-
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	0.0110	-	-	-
Zirconium (Zr)-Total	mg/L	0.00020/0.0020	-	<0.00020	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	-
	-	0.00010	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Phenols (4AAP)	mg/L	0.010/0.0010	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	25	-	<25	-	-	-
F2 (C10-C16)	ug/L	100/150	-	<100	-	-	-
F3 (C16-C34)	ug/L	250/380	-	<250	-	-	-
F4 (C34-C50)	ug/L	250/380	-	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	370/550	-	<370	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A01	MS-MRY-13A
	ALS Laboratory Sample ID			L2609333-5	L2612809-9	L2612809-10	L2615981-2
	Sample Date & Time			2021-07-04 12:45	2021-07-12 11:45	2021-07-12 11:45	2021-07-19 10:35
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	749	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.26	7.94	7.92	8.01
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	526	480	486	497
Turbidity	NTU	0.10	-	0.30	0.35	0.22	0.17
Alkalinity, Total (as $CaCO_3$)	mg/L	1.0	-	136	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	4.54	-	-	-
Total Organic Carbon	mg/L	0.50	-	5.53	-	-	-
Aluminum (Al)-Total	mg/L	0.0050/0.050	-	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	0.00010/0.0010	-	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.00010/0.0010	-	0.0472	-	-	-
Beryllium (Be)-Total	mg/L	0.00010/0.0010	-	<0.0010	-	-	-
Bismuth (Bi)-Total	mg/L	0.000050/0.00050	-	<0.00050	-	-	-
Boron (B)-Total	mg/L	0.010/0.10	-	1.44	-	-	-
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	<0.000050	-	-	-
Calcium (Ca)-Total	mg/L	0.050/0.50	-	65.3	-	-	-
Cesium (Cs)-total	mg/L	0.000010/0.00010		<0.00010	-	-	-
Chromium (Cr)-Total	mg/L	0.00050/0.0050	-	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	0.00010/0.0010	-	<0.0010	-	-	-
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	<0.0050	-	-	-
Iron (Fe)-Total	mg/L	0.010/0.10	-	<0.10	-	-	-
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	0.0010/0.010	-	0.026	-	-	-
Magnesium (Mg)-Total	mg/L	0.0050/0.00050	-	48.9	-	-	-
Manganese (Mn)-Total	mg/L	0.00050/0.0050	-	<0.0050	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	0.00056	-	-	-
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	0.0125	-	-	-
Phosphorus (P)-Total	mg/L	0.050/0.50		<0.50	-	-	-
Potassium (K)-Total	mg/L	0.050/0.50	-	3.08	-	-	-
Rubidium (Rb)-Total	mg/L	0.00020/0.0020		0.0088	-	-	-
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	<0.00050	-	-	-
Silicon (Si)-Total	mg/L	0.10/1.0	-	3.3	-	-	-
Silver (Ag)-Total	mg/L	0.00005/0.00050	-	<0.00050	-	-	-
Sodium (Na)-Total	mg/L	0.050/0.50	-	15.2	-	-	-
Strontium (Sr)-Total	mg/L	0.0010/0.010	-	0.055	-	-	-
Sulfur (S)-Total	mg/L	0.50/5.0		56.6	-	-	-
Tellurium (Te)-Total	mg/L	0.00020/0.0020		<0.0020	-	-	-
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	<0.00010	-	-	-
Thorium (Th)-Total	mg/L	0.00010/0.0010		<0.0010	-	-	-
Tin (Sn)-Total	mg/L	0.00010/0.0010	-	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	0.00030/0.0030	-	<0.0030	-	-	-
Tungsten (W)-Total	mg/L	0.00010/0.0010	-	<0.0010	-	-	-
Uranium (U)-Total	mg/L	0.000010/0.00010	-	0.00255	-	-	-
Vanadium (V)-Total	mg/L	0.00050/0.0050	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	<0.030	-	-	-
Zirconium (Zr)-Total	mg/L	0.00020/0.0020	-	<0.0020	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	-
	-	0.00010	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.010/0.0010	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	25	-	<25	-	-	-
F2 (C10-C16)	ug/L	100/150	-	<100	-	-	-
F3 (C16-C34)	ug/L	250/380	-	<250	-	-	-
F4 (C34-C50)	ug/L	250/380	-	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	370/550	-	<370	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID			MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
	ALS Laboratory Sample ID			L2621268-6	L2621381-5	L2624988-5	L2627332-5
	Sample Date & Time			2021-07-29 11:40	2021-08-02 10:15	2021-08-10 14:15	2021-08-16 12:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	-	874	-	-
pH	pH units	0.10	6.0 - 9.5	7.95	7.89	8.08	8.14
Total Suspended Solids	mg/L	2.0	15.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	512	588	700	794
Turbidity	NTU	0.10	-	0.12	0.24	0.22	0.21
Alkalinity, Total (as $CaCO_3$)	mg/L	1.0	-	-	149	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	6.13	-	-
Total Organic Carbon	mg/L	0.50	-	-	6.68	-	-
Aluminum (Al)-Total	mg/L	0.0050/0.050	-	-	<0.050	-	-
Antimony (Sb)-Total	mg/L	0.00010/0.0010	-	-	<0.0010	-	-
Arsenic (As)-Total	mg/L	0.00010/0.0010	0.50	-	<0.0010	-	-
Barium (Ba)-Total	mg/L	0.00010/0.0010	-	-	0.0547	-	-
Beryllium (Be)-Total	mg/L	0.00010/0.0010	-	-	<0.0010	-	-
Bismuth (Bi)-Total	mg/L	0.000050/0.00050	-	-	<0.00050	-	-
Boron (B)-Total	mg/L	0.010/0.10	-	-	1.94	-	-
Cadmium (Cd)-Total	mg/L	0.0000050/0.000050	-	-	<0.000050	-	-
Calcium (Ca)-Total	mg/L	0.050/0.50	-	-	82.8	-	-
Cesium (Cs)-total	mg/L	0.000010/0.00010		-	<0.00010	-	-
Chromium (Cr)-Total	mg/L	0.00050/0.0050	-	-	<0.0050	-	-
Cobalt (Co)-Total	mg/L	0.00010/0.0010	-	-	<0.0010	-	-
Copper (Cu)-Total	mg/L	0.00050/0.0050	0.30	-	<0.0050	-	-
Iron (Fe)-Total	mg/L	0.010/0.10	-	-	<0.10	-	-
Lead (Pb)-Total	mg/L	0.000050/0.00050	0.20	-	<0.00050	-	-
Lithium (Li)-Total	mg/L	0.0010/0.010	-	-	0.030	-	-
Magnesium (Mg)-Total	mg/L	0.0050/0.00050	-	-	61.0	-	-
Manganese (Mn)-Total	mg/L	0.00050/0.0050	-	-	<0.0050	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	0.000050/0.00050	-	-	0.00051	-	-
Nickel (Ni)-Total	mg/L	0.00050/0.0050	0.50	-	0.0148	-	-
Phosphorus (P)-Total	mg/L	0.050/0.50		-	<0.50	-	-
Potassium (K)-Total	mg/L	0.050/0.50	-	-	3.97	-	-
Rubidium (Rb)-Total	mg/L	0.00020/0.0020		-	0.0131	-	-
Selenium (Se)-Total	mg/L	0.000050/0.00050	-	-	<0.00050	-	-
Silicon (Si)-Total	mg/L	0.10/1.0	-	-	3.8	-	-
Silver (Ag)-Total	mg/L	0.00005/0.00050	-	-	<0.00050	-	-
Sodium (Na)-Total	mg/L	0.050/0.50	-	-	21.4	-	-
Strontium (Sr)-Total	mg/L	0.0010/0.010	-	-	0.064	-	-
Sulfur (S)-Total	mg/L	0.50/5.0		-	73.6	-	-
Tellurium (Te)-Total	mg/L	0.00020/0.0020		-	<0.0020	-	-
Thallium (Tl)-Total	mg/L	0.000010/0.00010	-	-	<0.00010	-	-
Thorium (Th)-Total	mg/L	0.00010/0.0010		-	<0.0010	-	-
Tin (Sn)-Total	mg/L	0.00010/0.0010	-	-	<0.0010	-	-
Titanium (Ti)-Total	mg/L	0.00030/0.0030	-	-	<0.0030	-	-
Tungsten (W)-Total	mg/L	0.00010/0.0010	-	-	<0.0010	-	-
Uranium (U)-Total	mg/L	0.000010/0.00010	-	-	0.00622	-	-
Vanadium (V)-Total	mg/L	0.00050/0.0050	-	-	<0.0050	-	-
Zinc (Zn)-Total	mg/L	0.0030/0.030	0.50	-	<0.030	-	-
Zirconium (Zr)-Total	mg/L	0.00020/0.0020	-	-	<0.0020	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-
	-	0.00010	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.010/0.0010	-	-	<0.0010	-	-
F1 (C6-C10)	ug/L	25	-	-	<25	-	-
F2 (C10-C16)	ug/L	100/150	-	-	<100	-	-
F3 (C16-C34)	ug/L	250/380	-	-	<250	-	-
F4 (C34-C50)	ug/L	250/380	-	-	<250	-	-
Total Hydrocarbons (C6-C50)	ug/L	370/550	-	-	<370	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
	ALS Laboratory Sample ID			L2585502-5	L2601055-9	L2605841-11	L2609333-4	L2612809-8	L2615981-1	L2621268-5
	Sample Date & Time			2021-05-09 14:20	2021-06-08 14:30	2021-06-21 14:25	2021-07-04 12:10	2021-07-12 11:20	2021-07-19 10:10	2021-07-29 11:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	3.0/1.0	-	-	-	861	835	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.92	7.53	8.13	8.29	8.01	8.10	8.01
Total Suspended Solids	mg/L	1.0/2.0	15.0	3.9	2.5	3.1	2.1	2.5	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	157	71	558	563	366	681	606
Turbidity	NTU	0.10	-	36.6	9.14	2.49	0.31	1.53	0.16	0.20
Alkalinity, Total (as CaCO3)	mg/L	10	-	-	-	147	135	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	-	-	6.71	4.72	-	-	-
Total Organic Carbon	mg/L	0.50	-	-	-	5.72	5.69	-	-	-
Aluminum (Al)-Total	mg/L	0.050	-	-	-	<0.050	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.0010	0.50	-	-	<0.0010	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.0010	-	-	-	0.0572	0.0501	-	-	-
Beryllium (Be)-Total	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
Bismuth (Bi)-Total	mg/L	0.00050	-	-	-	<0.00050	<0.00050	-	-	-
Boron (B)-Total	mg/L	0.10	-	-	-	1.66	1.92	-	-	-
Cadmium (Cd)-Total	mg/L	0.000050	-	-	-	<0.000050	<0.000050	-	-	-
Calcium (Ca)-Total	mg/L	0.50	-	-	-	84.1	82.1	-	-	-
Chromium (Cr)-Total	mg/L	0.0050	-	-	-	<0.0050	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
Copper (Cu)-Total	mg/L	0.0050	0.30	-	-	<0.0050	<0.0050	-	-	-
Iron (Fe)-Total	mg/L	0.10	-	-	-	<0.10	<0.10	-	-	-
Lead (Pb)-Total	mg/L	0.00050	0.20	-	-	<0.00050	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	0.010	-	-	-	<0.010	0.023	-	-	-
Magnesium (Mg)-Total	mg/L	0.050	-	-	-	52.3	46.5	-	-	-
Manganese (Mn)-Total	mg/L	0.0050	-	-	-	<0.0050	0.0072	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	-	-	<0.0000050	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00050	-	-	-	<0.00050	<0.00050	-	-	-
Nickel (Ni)-Total	mg/L	0.0050	0.50	-	-	0.0131	0.0130	-	-	-
Potassium (K)-Total	mg/L	0.50	-	-	-	2.96	3.57	-	-	-
Selenium (Se)-Total	mg/L	0.00050	-	-	-	<0.00050	<0.00050	-	-	-
Silicon (Si)-Total	mg/L	1.0	-	-	-	2.6	3.2	-	-	-
Silver (Ag)-Total	mg/L	0.00050	-	-	-	<0.00050	<0.00050	-	-	-
Sodium (Na)-Total	mg/L	0.50	-	-	-	16.5	18.4	-	-	-
Strontium (Sr)-Total	mg/L	0.010	-	-	-	0.091	0.101	-	-	-
Thallium (Tl)-Total	mg/L	0.00010	-	-	-	<0.00010	<0.00010	-	-	-
Tin (Sn)-Total	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	0.0030	-	-	-	<0.0030	<0.0030	-	-	-
Tungsten (W)-Total	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
Uranium (U)-Total	mg/L	0.00010	-	-	-	0.00488	0.00493	-	-	-
Vanadium (V)-Total	mg/L	0.0050	-	-	-	<0.0050	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.030	0.50	-	-	<0.030	<0.030	-	-	-
Zirconium (Zr)-Total	mg/L	0.0020	-	-	-	<0.0020	<0.0020	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.0010	-	-	-	<0.0010	<0.0010	-	-	-
F1 (C6-C10)	ug/L	25	-	-	-	<25	<25	-	-	-
F2 (C10-C16)	ug/L	100	-	-	-	<100	<100	-	-	-
F3 (C16-C34)	ug/L	250	-	-	-	<250	<250	-	-	-
F4 (C34-C50)	ug/L	250	-	-	-	<250	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	370	-	-	-	<370	<370	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID			MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B03	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B01	MS-MRY-13B
	ALS Laboratory Sample ID			L2621381-6	L2624988-4	L2627332-3	L2627332-4	L2630140-5	L2635278-9	L2636426-5	L2636426-6	L2639307-9
	Sample Date & Time			2021-08-02 9:30	2021-08-10 13:55	2021-08-16 12:00	2021-08-16 12:00	2021-08-22 10:40	2021-09-02 10:30	2021-09-07 12:30	2021-09-07 12:30	2021-09-13 14:10
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]									
Conductivity	umhos/cm	3.0/1.0	-	815	-	-	-	-	1,380	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.99	8.10	8.15	5.97	8.11	7.93	7.55	7.57	7.30
Total Suspended Solids	mg/L	1.0/2.0	15.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	658	832	649	<10	959	991	1100	1030	1240
Turbidity	NTU	0.10	-	0.15	0.16	0.25	<0.10	<0.10	0.24	0.11	0.12	0.41
Alkalinity, Total (as CaCO3)	mg/L	10	-	135	-	-	-	-	189	-	-	-
Dissolved Organic Carbon	mg/L	0.50	-	6.53	-	-	-	-	8.75	-	-	-
Total Organic Carbon	mg/L	0.50	-	6.97	-	-	-	-	7.85	-	-	-
Aluminum (Al)-Total	mg/L	0.050	-	<0.050	-	-	-	-	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	0.0010	-	<0.0010	-	-	-	-	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.0010	0.50	<0.0010	-	-	-	-	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	0.0010	-	0.0419	-	-	-	-	0.0818	-	-	-
Beryllium (Be)-Total	mg/L	0.0010	-	<0.0010	-	-	-	-	<0.0010	-	-	-
Bismuth (Bi)-Total	mg/L	0.00050	-	<0.00050	-	-	-	-	<0.00050	-	-	-
Boron (B)-Total	mg/L	0.10	-	2.25	-	-	-	-	4.92	-	-	-
Cadmium (Cd)-Total	mg/L	0.000050	-	<0.000050	-	-	-	-	<0.000050	-	-	-
Calcium (Ca)-Total	mg/L	0.50	-	88.1	-	-	-	-	165	-	-	-
Chromium (Cr)-Total	mg/L	0.0050	-	<0.0050	-	-	-	-	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	0.0010	-	<0.0010	-	-	-	-	<0.0010	-	-	-
Copper (Cu)-Total	mg/L	0.0050	0.30	<0.0050	-	-	-	-	<0.0050	-	-	-
Iron (Fe)-Total	mg/L	0.10	-	<0.10	-	-	-	-	<0.10	-	-	-
Lead (Pb)-Total	mg/L	0.00050	0.20	<0.00050	-	-	-	-	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	0.010	-	0.023	-	-	-	-	0.059	-	-	-
Magnesium (Mg)-Total	mg/L	0.050	-	51.7	-	-	-	-	71.2	-	-	-
Manganese (Mn)-Total	mg/L	0.0050	-	<0.0050	-	-	-	-	<0.0050	-	-	-
Mercury (Hg)-Total	mg/L	0.0000050	-	<0.0000050	-	-	-	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	0.00050	-	<0.00050	-	-	-	-	0.00059	-	-	-
Nickel (Ni)-Total	mg/L	0.0050	0.50	0.0123	-	-	-	-	0.0189	-	-	-
Potassium (K)-Total	mg/L	0.50	-	3.07	-	-	-	-	6.90	-	-	-
Selenium (Se)-Total	mg/L	0.00050	-	<0.00050	-	-	-	-	<0.00050	-	-	-
Silicon (Si)-Total	mg/L	1.0	-	3.5	-	-	-	-	4.2	-	-	-
Silver (Ag)-Total	mg/L	0.00050	-	<0.00050	-	-	-	-	<0.00050	-	-	-
Sodium (Na)-Total	mg/L	0.50	-	18.0	-	-	-	-	35.3	-	-	-
Strontium (Sr)-Total	mg/L	0.010	-	0.108	-	-	-	-	0.232	-	-	-
Thallium (Tl)-Total	mg/L	0.00010	-	<0.00010	-	-	-	-	<0.00010	-	-	-
Tin (Sn)-Total	mg/L	0.0010	-	<0.0010	-	-	-	-	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	0.0030	-	<0.0030	-	-	-	-	<0.0030	-	-	-
Tungsten (W)-Total	mg/L	0.0010	-	<0.0010	-	-	-	-	<0.0010	-	-	-
Uranium (U)-Total	mg/L	0.00010	-	0.00551	-	-	-	-	0.0165	-	-	-
Vanadium (V)-Total	mg/L	0.0050	-	<0.0050	-	-	-	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.030	0.50	<0.030	-	-	-	-	<0.030	-	-	-
Zirconium (Zr)-Total	mg/L	0.0020	-	<0.0020	-	-	-	-	<0.0020	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	-	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	0.0010	-	0.0011	-	-	-	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	25	-	<25	-	-	-	-	<25	-	-	-
F2 (C10-C16)	ug/L	100	-	<100	-	-	-	-	<100	-	-	-
F3 (C16-C34)	ug/L	250	-	<250	-	-	-	-	<250	-	-	-
F4 (C34-C50)	ug/L	250	-	<250	-	-	-	-	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	370	-	<370	-	-	-	-	<370	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A01	MS-C-A
	ALS Laboratory Sample ID			L2592735-5	L2595911-7	L2601055-5	L2602498-6	L2602498-7	L2605841-13
	Sample Date & Time			2021-05-26 10:45	2021-05-31 10:45	2021-06-08 12:55	2021-06-13 11:25	2021-06-13 11:25	2021-06-21 17:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0/3.0	-	46.0	-	-	91.2	91.5	-
pH	pH units	0.10	6.0 - 9.5	7.31	7.35	7.55	7.74	7.73	7.93
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	6.5	3.5	3.1	<1.0	<1.0	<2.0
Total Dissolved Solids	mg/L	10	-	36	33	47	53	38	85
Turbidity	NTU	0.10	-	26.7	13.1	1.45	10.2	10.2	3.37
Ammonia, Total (as N)	mg/L	0.010/0.20	-	<0.010	-	-	<0.010	<0.010	-
Nitrate (as N)	mg/L	0.020	-	0.062	-	-	0.084	0.088	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<2.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A03	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2605841-14	L2608050-11	L2609728-4	L2612809-1	L2612809-2	L2615981-9	L2621358-2
	Sample Date & Time			2021-06-21 17:15	2021-06-29 12:30	2021-07-05 11:30	2021-07-12 8:50	2021-07-12 8:50	2021-07-19 13:40	2021-07-31 9:10
	QA/QC Sample Type			Travel Blank	N/A	N/A	N/A	Field Blank	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	-	155	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	5.91	7.88	8.14	7.80	5.54	7.91	7.87
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	2.9	2.5
Total Dissolved Solids	mg/L	10	-	<10	66	69	88	11	128	117
Turbidity	NTU	0.10	-	<0.10	1.95	1.15	1.16	<0.10	9.03	7.43
Ammonia, Total (as N)	mg/L	0.010/0.20	-	-	-	0.34	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.180	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	-	-	-	-
	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A01	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2621358-3	L2621381-4	L2626309-5	L2627332-9	L2630140-13	L2635278-2	L2636426-1
	Sample Date & Time			2021-07-31 9:10	2021-08-02 11:10	2021-08-11 10:20	2021-08-16 15:55	2021-08-22 14:35	2021-09-02 9:00	2021-09-07 10:30
	QA/QC Sample Type			Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	250	-	-	-	238	-
pH	pH units	0.10	6.0 - 9.5	7.88	7.89	8.05	8.09	8.06	7.95	7.87
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	2.5	<2.0	2.4	<2.0	<2.0	<2.0	3.7
Total Dissolved Solids	mg/L	10	-	120	134	135	137	170	127	123
Turbidity	NTU	0.10	-	7.57	4.47	14.6	11.2	8.15	3.00	2.44
Ammonia, Total (as N)	mg/L	0.010/0.20	-	-	0.053	-	-	-	<0.010	-
Nitrate (as N)	mg/L	0.020	-	-	0.344	-	-	-	0.289	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID			MS-C-A	MS-C-A	MS-C-A	MS-C-A
	ALS Laboratory Sample ID			L2639307-12	L2642214-4	L2644501-3	L2647099-6
	Sample Date & Time			2021-09-13 16:00	2021-09-20 15:30	2021-09-27 14:30	2021-10-04 16:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0/3.0	-	-	-	-	221
pH	pH units	0.10	6.0 - 9.5	7.85	7.76	7.63	7.79
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	98	154	193	109
Turbidity	NTU	0.10	-	2.11	1.04	0.80	2.05
Ammonia, Total (as N)	mg/L	0.010/0.20	-	-	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.219
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B01	MS-C-B	MS-C-B01	MS-C-B	MS-C-B01	MS-C-B
	ALS Laboratory Sample ID			L2585502-3	L2585502-4	L2592735-6	L2592735-7	L2595911-5	L2595911-6	L2601055-6
	Sample Date & Time			2021-05-09 10:55	2021-05-09 10:55	2021-05-26 11:10	2021-05-26 11:10	2021-05-31 11:10	2021-05-31 11:10	2021-06-08 13:20
	QA/QC Sample Type			N/A	Field Duplicate	N/A	Field Duplicate	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	-	46.9	46.7	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.50	7.49	7.29	7.31	7.40	7.37	7.58
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	2.5	2.0	20.1	29.6	2.4	2.0	2.5
Total Dissolved Solids	mg/L	10	-	55	57	49	44	32	32	44
Turbidity	NTU	0.10	-	32.6	32.9	40.4	60.2	14.8	15.6	19.4
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.011	0.012	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.076	0.114	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	<2.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B01	MS-C-B	MS-C-B	MS-C-B01	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2601055-7	L2602498-8	L2605841-15	L2605841-16	L2608050-15	L2609728-5	L2612809-3
	Sample Date & Time			2021-06-08 13:20	2021-06-13 12:05	2021-06-21 17:45	2021-06-21 17:45	2021-06-29 12:40	2021-07-05 12:05	2021-07-12 9:20
	QA/QC Sample Type			Field Duplicate	N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	87.5	-	-	-	160	-
pH	pH units	0.10	6.0 - 9.5	7.52	7.72	7.89	7.86	7.80	8.16	7.79
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	2.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	43	53	61	61	74	82	101
Turbidity	NTU	0.10	-	19.2	10.6	3.86	3.84	2.37	1.38	1.45
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-	0.033	-
Nitrate (as N)	mg/L	0.020	-	-	0.104	-	-	-	0.195	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B01	MS-C-B	MS-C-B	MS-C-B	MS-C-B01	MS-C-B
	ALS Laboratory Sample ID			L2615981-12	L2615981-14	L2621358-4	L2621381-3	L2626309-6	L2626309-7	L2627332-10
	Sample Date & Time			2021-07-19 14:10	2021-07-19 14:10	2021-07-31 9:45	2021-08-02 11:45	2021-08-11 10:55	2021-08-11 10:55	2021-08-16 16:35
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	-	-	253	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.88	7.63	7.87	7.85	8.03	8.03	8.11
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	2.1	<2.0	<2.0	<2.0	2.9	<2.0	2.4
Total Dissolved Solids	mg/L	10	-	120	133	118	143	150	148	104
Turbidity	NTU	0.10	-	10.2	10.4	8.83	5.10	17.4	17.2	12.9
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	0.369	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID			MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
	ALS Laboratory Sample ID			L2630140-14	L2635278-7	L2636426-2	L2639307-13	L2647099-7
	Sample Date & Time			2021-08-22 15:00	2021-09-02 9:40	2021-09-07 10:55	2021-09-13 16:15	2021-10-04 16:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0/3.0	-	-	252	-	-	201
pH	pH units	0.10	6.0 - 9.5	8.00	7.84	7.83	7.72	7.70
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	3.5	<2.0	2.1	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	169	148	133	64	99
Turbidity	NTU	0.10	-	8.64	2.95	2.23	1.76	4.24
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	0.336	-	-	0.235
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2585502-9	L2592735-3	L2595911-10	L2608050-9	L2609333-9	L2612809-7	L2615981-13
	Sample Date & Time			2021-05-09 16:40	2021-05-26 10:50	2021-06-01 9:55	2021-06-28 17:00	2021-07-04 15:10	2021-07-12 10:25	2021-07-19 14:10
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	320	-	-	930	-	-
pH	pH units	0.10	6.0 - 9.5	7.80	7.75	7.69	7.83	8.18	7.82	7.92
Total Suspended Solids	mg/L	2.0	Grab 30 and Average 15	13.6	8.4	16.7	2.5	<2.0	5.8	2.5
Total Dissolved Solids	mg/L	10	-	168	181	298	745	679	556	601
Turbidity	NTU	0.10	-	108	24.7	32.3	2.8	4.64	94.1	3.67
Ammonia, Total (as N)	mg/L	0.010	-	-	1.02	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	1.36	-	-	7.40	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID			MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
	ALS Laboratory Sample ID			L2621268-9	L2621381-12	L2626309-3	L2627332-13	L2630140-11	L2635278-6	L2636426-10	L2647099-5
	Sample Date & Time			2021-07-29 14:05	2021-08-02 14:00	2021-08-11 9:40	2021-08-16 15:05	2021-08-22 13:55	2021-09-02 9:30	2021-09-07 13:40	2021-10-04 10:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0/3.0	-	-	836	-	-	-	937	-	670
pH	pH units	0.10	6.0 - 9.5	7.93	7.94	8.00	8.11	8.12	8.02	7.85	7.97
Total Suspended Solids	mg/L	2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	4.2	4.6	8.0
Total Dissolved Solids	mg/L	10	-	564	557	487	500	611	640	658	405
Turbidity	NTU	0.10	-	2.18	6.27	3.74	0.22	2.07	8.31	0.76	57.6
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-	<0.010	-	0.058
Nitrate (as N)	mg/L	0.020	-	-	6.54	-	-	-	7.51	-	5.76
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	-	<5.0	-	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D01	MS-C-D	MS-C-D	MS-C-D	MS-C-D01
	ALS Laboratory Sample ID			L2585502-8	L2592735-2	L2595911-11	L2595911-12	L2600576-1	L2608050-8	L2609333-7	L2609333-8
	Sample Date & Time			2021-05-09 16:25	2021-05-26 10:25	2021-06-01 9:30	2021-06-01 9:30	2021-06-08 17:10	2021-06-28 16:40	2021-07-04 14:35	2021-07-04 14:35
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0/3.0	-	-	291	-	-	-	-	845	854
pH	pH units	0.10	6.0 - 9.5	7.82	7.67	7.91	7.86	7.99	8.45	8.45	8.44
Total Suspended Solids	mg/L	2.0	Grab 30 and Average 15	**131**	5.8	12.3	12.4	25.0	4.5	4.6	5.9
Total Dissolved Solids	mg/L	10	-	171	166	183	181	146	561	610	624
Turbidity	NTU	0.10	-	411	74.3	64.1	66.5	88.4	13.2	23.7	23.9
Ammonia, Total (as N)	mg/L	0.010	-	-	0.568	-	-	-	-	<0.010	<0.010
Nitrate (as N)	mg/L	0.020	-	-	0.581	-	-	-	-	3.99	4.00
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	-	-	-	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2612809-6	L2615981-11	L2621268-8	L2621381-10	L2626309-2	L2627332-7	L2630140-10	L2635278-5
	Sample Date & Time			2021-07-12 10:10	2021-07-19 13:55	2021-07-29 13:50	2021-08-02 13:35	2021-08-11 9:15	2021-08-16 14:55	2021-08-22 13:45	2021-09-02 9:15
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0/3.0	-	-	-	-	885	-	-	-	869
pH	pH units	0.10	6.0 - 9.5	8.10	8.31	8.20	8.26	8.17	8.37	8.49	8.30
Total Suspended Solids	mg/L	2.0	Grab 30 and Average 15	10.9	10.1	4.7	3.9	3.8	5.7	6.0	2.5
Total Dissolved Solids	mg/L	10	-	616	677	626	578	464	472	561	565
Turbidity	NTU	0.10	-	71.3	42.5	20.5	22.0	25.8	44.8	13.8	7.11
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	0.028	-	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	-	-	5.41	-	-	-	6.32
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	<2.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID			MS-C-D	MS-C-D
	ALS Laboratory Sample ID			L2636426-8	L2639307-8
	Sample Date & Time			2021-09-07 13:25	2021-09-13 13:00
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	1.0/3.0	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.24	8.13
Total Suspended Solids	mg/L	2.0	Grab 30 and Average 15	4.1	3.0
Total Dissolved Solids	mg/L	10	-	599	563
Turbidity	NTU	0.10	-	13.8	10.1
Ammonia, Total (as N)	mg/L	0.010	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2585502-7	L2592735-1	L2595911-9	L2601055-12	L2602498-3	L2602498-4	L2605841-10
	Sample Date & Time			2021-05-09 16:10	2021-05-26 9:25	2021-06-01 9:15	2021-06-08 16:10	2021-06-13 9:50	2021-06-13 9:50	2021-06-21 13:20
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	166	-	-	346	348	-
pH	pH units	0.10	6.0 - 9.5	7.67	7.65	7.67	7.85	7.98	7.98	8.14
Total Suspended Solids[2]	mg/L	1.0/2.0	Grab 30 and Average 15	**69.4**	21.7	7.4	7.7	1.3	1.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	85	102	77	103	204	200	497
Turbidity	NTU	0.10	-	157	60.5	21.0	43.6	1.66	1.39	3.14
Ammonia, Total (as N)	mg/L	0.010	-	-	0.179	-	-	0.013	0.013	-
Nitrate (as N)	mg/L	0.020	-	-	0.292	-	-	0.751	0.746	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
	ALS Laboratory Sample ID			L2608050-7	L2609333-6	L2612809-5	L2615981-10	L2621268-7	L2621381-11	L2626309-4	L2627332-6
	Sample Date & Time			2021-06-28 16:30	2021-07-04 14:20	2021-07-12 10:00	2021-07-19 13:45	2021-07-29 13:45	2021-08-02 12:55	2021-08-11 8:50	2021-08-16 14:25
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0/3.0	-	-	730	-	-	-	832	-	-
pH	pH units	0.10	6.0 - 9.5	8.16	8.30	7.99	8.05	8.03	8.06	8.06	8.15
Total Suspended Solids[2]	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	2.5	2.1	<2.0	2.9	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	487	537	559	672	605	564	631	624
Turbidity	NTU	0.10	-	1.70	4.75	11.3	5.85	3.71	8.15	5.73	6.98
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	2.74	-	-	-	4.79	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID			MS-C-E	MS-C-E	MS-C-E01	MS-C-E	MS-C-E	MS-C-E03	MS-C-E
	ALS Laboratory Sample ID			L2630140-9	L2635278-3	L2635278-3	L2636426-7	L2639307-6	L2639307-7	L2647099-4
	Sample Date & Time			2021-08-22 13:35	2021-09-02 9:00	2021-09-02 9:00	2021-09-07 13:20	2021-09-13 12:50	2021-09-13 12:50	2021-10-04 9:50
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	Travel Blank	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	980	973	-	-	-	667
pH	pH units	0.10	6.0 - 9.5	8.19	7.99	8.01	7.91	7.52	5.91	8.02
Total Suspended Solids[2]	mg/L	1.0/2.0	Grab 30 and Average 15	2.5	3.3	2.9	3.8	10.2	<2.0	4.0
Total Dissolved Solids	mg/L	10/20	-	715	661	698	725	685	<10	390
Turbidity	NTU	0.10	-	2.73	5.46	5.30	2.04	2.29	<0.10	36.5
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	<0.010	-	-	-	0.046
Nitrate (as N)	mg/L	0.020	-	-	6.73	6.71	-	-	-	4.15
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	<5.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2601055-8	L2602498-5	L2605841-1	L2608050-10	L2609333-10	L2612809-4	L2616345-1
	Sample Date & Time			2021-06-08 13:55	2021-06-13 10:35	2021-06-22 9:20	2021-06-29 13:15	2021-07-04 16:10	2021-07-12 9:45	2021-07-21 7:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	84.8	-	-	152	-	-
pH	pH units	0.10	6.0 - 9.5	7.48	7.68	7.92	8.06	8.19	7.94	7.87
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	4.0	3.4	23.5	<2.0	<2.0	2.5	16.7
Total Dissolved Solids	mg/L	10	-	47	51	68	96	105	106	117
Turbidity	NTU	0.10	-	32.9	20.2	29.0	12.0	8.84	11.3	33.3
Ammonia, Total (as N)	mg/L	0.010	-	-	0.023	-	-	0.016	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.060	-	-	0.184	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID			MS-C-F	MS-C-F	MS-C-F01	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
	ALS Laboratory Sample ID			L2621358-1	L2621381-1	L2621381-2	L2624988-8	L2627332-8	L2630140-12	L2635278-1	L2636426-9
	Sample Date & Time			2021-07-31 8:50	2021-08-02 12:50	2021-08-02 12:50	2021-08-10 16:55	2021-08-16 15:35	2021-08-22 14:15	2021-09-02 8:25	2021-09-07 13:25
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0	-	-	266	267	-	-	-	252	-
pH	pH units	0.10	6.0 - 9.5	7.92	8.02	8.03	8.01	8.08	8.03	7.95	7.87
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	10.4	5.8	6.3	29.4	15.7	**36.3**	26.7	7.7
Total Dissolved Solids	mg/L	10	-	138	139	145	200	151	206	153	144
Turbidity	NTU	0.10	-	31.9	15.4	16.0	94.7	48.8	68.3	41.9	14.3
Ammonia, Total (as N)	mg/L	0.010	-	-	0.019	0.023	-	-	-	0.015	-
Nitrate (as N)	mg/L	0.020	-	-	0.460	0.445	-	-	-	0.357	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G03	MS-C-G	MS-C-G02	MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2605841-2	L2605841-3	L2608050-2	L2608050-3	L2609333-2	L2612809-11	L2615981-7
	Sample Date & Time			2021-06-22 9:55	2021-06-22 9:55	2021-06-28 10:55	2021-06-28 10:55	2021-07-04 10:30	2021-07-12 12:15	2021-07-19 12:05
	QA/QC Sample Type			N/A	Travel Blank	N/A	Field Blank	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	194	1.2	-	-	191	-	-
pH	pH units	0.10	6.0 - 9.5	8.07	5.29	7.9	6.05	8.17	7.77	7.77
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	97	<10	106	97	117	120	121
Turbidity	NTU	0.10	-	3.17	0.22	1.35	<0.10	0.54	0.26	<0.10
Ammonia, Total (as N)	mg/L	0.050/0.010	-	0.038	<0.010	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	0.478	<0.020	-	-	0.693	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	<5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G	MS-C-G02	MS-C-G	MS-C-G	MS-C-G01
	ALS Laboratory Sample ID			L2621358-5	L2621381-13	L2624988-1	L2624988-2	L2627332-14	L2630140-6	L2630140-15
	Sample Date & Time			2021-07-31 11:50	2021-08-02 11:00	2021-08-10 12:40	2021-08-10 12:40	2021-08-16 12:55	2021-08-22 11:15	2021-08-22 11:15
	QA/QC Sample Type			N/A	N/A	N/A	Field Blank	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	243	-	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.76	7.71	7.99	6.26	7.97	7.73	7.75
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.3
Total Dissolved Solids	mg/L	10	-	106	146	153	<10	93	171	170
Turbidity	NTU	0.10	-	0.17	<0.10	0.18	<0.10	0.22	0.10	<0.10
Ammonia, Total (as N)	mg/L	0.050/0.010	-	-	0.012	-	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	5.28	-	-	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID			MS-C-G	MS-C-G	MS-C-G
	ALS Laboratory Sample ID			L2635278-8	L2636426-3	L2639307-10
	Sample Date & Time			2021-09-02 10:25	2021-09-07 12:05	2021-09-13 14:40
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	1.0	-	312	-	-
pH	pH units	0.10	6.0 - 9.5	7.63	7.61	7.55
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	187	177	152
Turbidity	NTU	0.10	-	0.10	<0.10	0.11
Ammonia, Total (as N)	mg/L	0.050/0.010	-	1.82	-	-
Nitrate (as N)	mg/L	0.020	-	11.2	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2601055-11	L2602498-9	L2605841-4	L2608050-4	L2609333-3	L2612809-12
	Sample Date & Time			2021-06-08 15:35	2021-06-13 14:50	2021-06-21 10:35	2021-06-28 11:35	2021-07-04 11:10	2021-07-12 12:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	-	67.0	-	-	187	-
pH	pH units	0.10	6.0 - 9.5	7.40	7.64	7.88	8.05	8.29	8.10
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	2.0	2.2	<1.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	27	34	74	96	111	118
Turbidity	NTU	0.10	-	10.9	12.0	1.0	0.38	0.29	0.48
Ammonia, Total (as N)	mg/L	0.010	-	-	0.021	-	-	0.018	-
Nitrate (as N)	mg/L	0.020	-	-	0.268	-	-	0.184	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H01
	ALS Laboratory Sample ID			L2615981-8	L2621358-6	L2621381-14	L2624988-3	L2627332-11	L2627332-12
	Sample Date & Time			2021-07-19 12:35	2021-07-31 12:20	2021-08-02 11:35	2021-08-10 13:15	2021-08-16 13:30	2021-08-16 13:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	-	-	234	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.06	8.17	8.20	8.21	8.29	8.28
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	100	102	128	120	87	88
Turbidity	NTU	0.10	-	0.18	0.16	0.12	0.30	0.27	0.13
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.022	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.221	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID			MS-C-H	MS-C-H	MS-C-H01	MS-C-H	MS-C-H
	ALS Laboratory Sample ID			L2630140-7	L2635278-10	L2635278-11	L2636426-4	L2639307-11
	Sample Date & Time			2021-08-22 11:40	2021-09-02 10:55	2021-09-02 10:55	2021-09-07 12:25	2021-09-13 15:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0	-	-	253	253	-	-
pH	pH units	0.10	6.0 - 9.5	8.36	8.26	8.28	8.16	8.10
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10	-	155	210	135	129	90
Turbidity	NTU	0.10	-	0.13	3.35	0.33	0.17	0.33
Ammonia, Total (as N)	mg/L	0.010	-	-	0.013	0.014	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.138	0.129	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01	MQ-C-A	MQ-C-A02	MQ-C-A
	ALS Laboratory Sample ID			L2592735-8	L2593502-1	L2595911-1	L2595911-2	L2601055-1	L2601055-2	L2602498-1
	Sample Date & Time			2021-05-26 13:40	2021-05-27 13:45	2021-05-31 9:10	2021-05-31 9:10	2021-06-07 13:50	2021-06-07 13:50	2021-06-13 8:45
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	31.5	41.7	-	-	-	-	85.2
pH	pH units	0.10	6.0 - 9.5	7.08	7.61	7.57	7.56	7.66	5.81	7.64
Total Suspended Solids	mg/L	2.0/1.0	Grab 30 and Average 15	<2.0	<3.0	2.0	<2.0	3.0	<2.0	<1.0
Total Dissolved Solids	mg/L	10/13	-	25	27	53	49	53	<10	38
Turbidity	NTU	0.10	-	4.93	20.2	3.17	3.49	7.92	<0.10	2.39
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	0.013	-	-	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	0.050	0.035	-	-	-	-	<0.020
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	-	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A03	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A01
	ALS Laboratory Sample ID			L2605841-7	L2608050-12	L2609728-1	L2609728-2	L2612809-15	L2615981-5	L2621268-1	L2621268-2
	Sample Date & Time			2021-06-21 11:20	2021-06-29 7:45	2021-07-05 9:30	2021-07-05 9:30	2021-07-12 15:15	2021-07-19 11:05	2021-07-29 9:40	2021-07-29 9:40
	QA/QC Sample Type			N/A	N/A	N/A	Travel Blank	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]								
Conductivity	umhos/cm	1.0/3.0	-	-	-	211	<1.0	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.80	7.94	8.31	6.01	8.00	8.03	8.12	8.15
Total Suspended Solids	mg/L	2.0/1.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	43	72	106	25	140	153	162	156
Turbidity	NTU	0.10	-	6.90	0.77	0.23	<0.10	0.72	0.19	0.20	0.19
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010	<0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.026	<0.020	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	<5.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID			MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
	ALS Laboratory Sample ID			L2621381-9	L2624988-6	L2627332-1	L2630140-1	L2635806-1	L2636426-12	L2639307-3
	Sample Date & Time			2021-08-02 8:50	2021-08-10 15:20	2021-08-16 9:40	2021-08-22 8:00	2021-09-04 9:25	2021-09-07 14:40	2021-09-13 11:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	321	-	327	-	358	-	-
pH	pH units	0.10	6.0 - 9.5	8.16	8.23	8.34	8.19	8.23	8.12	7.99
Total Suspended Solids	mg/L	2.0/1.0	Grab 30 and Average 15	<2.0	<2.0	<2.0	2.5	3.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/13	-	186	175	120	207	190	191	146
Turbidity	NTU	0.10	-	0.23	0.22	0.25	0.17	0.27	<0.10	0.21
Ammonia, Total (as N)	mg/L	0.010	-	0.024	-	0.011	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	<0.020	-	<0.020	-	<0.020	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	-	<5.0	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	-	Not Acutely Toxic	-	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B02	MQ-C-B
	ALS Laboratory Sample ID			L2585502-2	L2592735-9	L2595911-4	L2601055-4	L2601684-1	L2601684-2	L2605841-9
	Sample Date & Time			2021-05-09 10:35	2021-05-26 14:00	2021-05-31 10:10	2021-06-07 15:00	2021-06-15 9:20	2021-06-15 9:20	2021-06-21 12:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Blank	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	54.2	-	-	133	<1.0	-
pH	pH units	0.10	6.0 - 9.5	7.56	7.34	7.62	7.65	7.88	5.93	8.17
Total Suspended Solids [2]	mg/L	1.0/2.0	Grab 30 and Average 15	2.7	**43.6**	19.7	**92.2**	2.4	<2.0	6.9
Total Dissolved Solids	mg/L	10	-	69	66	73	84	100	15	113
Turbidity	NTU	0.10	-	25.6	217	113	146	56.6	<0.10	34.4
Ammonia, Total (as N)	mg/L	0.010	-	-	0.050	-	-	0.039	<0.010	-
Nitrate (as N)	mg/L	0.020	-	-	0.136	-	-	0.452	<0.020	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	-	-	<5.0	<5.0	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May, June, August and October exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B02
	ALS Laboratory Sample ID			L2608050-14	L2609728-3	L2612809-13	L2615981-6	L2621268-4	L2621381-8	L2621381-15
	Sample Date & Time			2021-06-29 9:00	2021-07-05 10:30	2021-07-12 14:05	2021-07-19 11:35	2021-07-29 10:45	2021-08-02 9:50	2021-08-02 9:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	Field Blank
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	287	-	-	-	341	<1.0
pH	pH units	0.10	6.0 - 9.5	8.09	8.33	8.06	8.14	8.14	8.14	6.64
Total Suspended Solids [2]	mg/L	1.0/2.0	Grab 30 and Average 15	19.0	5.6	10.4	5.3	<2.0	11.9	<2.0
Total Dissolved Solids	mg/L	10	-	116	167	153	163	159	196	15
Turbidity	NTU	0.10	-	58.9	24.1	23.3	9.76	3.41	23.5	<0.10
Ammonia, Total (as N)	mg/L	0.010	-	-	0.037	-	-	-	0.021	<0.010
Nitrate (as N)	mg/L	0.020	-	-	2.09	-	-	-	1.44	<0.020
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May, June, August and October exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01	MQ-C-B	MQ-C-B	MQ-C-B
	ALS Laboratory Sample ID			L2626309-1	L2628128-1	L2630140-3	L2630140-4	L2635278-12	L2636426-11	L2639307-5
	Sample Date & Time			2021-08-11 12:35	2021-08-17 8:40	2021-08-22 9:50	2021-08-22 9:50	2021-09-02 11:45	2021-09-07 14:35	2021-09-13 12:30
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	-	-	-	365	-	-
pH	pH units	0.10	6.0 - 9.5	8.20	8.28	8.32	8.33	8.29	8.12	7.86
Total Suspended Solids [2]	mg/L	1.0/2.0	Grab 30 and Average 15	**98.7**	<2.0	<2.0	3.0	<2.0	<2.0	3.9
Total Dissolved Solids	mg/L	10	-	288	174	224	222	136	229	284
Turbidity	NTU	0.10	-	184	2.51	3.27	3.23	0.33	0.89	8.44
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-	-	1.35	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May, June, August and October exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID			MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B01
	ALS Laboratory Sample ID			L2642214-3	L2644501-4	L2647099-2	L2647099-3
	Sample Date & Time			2021-09-20 11:30	2021-09-27 10:00	2021-10-04 9:10	2021-10-04 9:10
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0/3.0	-	-	475	377	377
pH	pH units	0.10	6.0 - 9.5	7.72	7.56	7.92	7.92
Total Suspended Solids [2]	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	18.5	16.5
Total Dissolved Solids	mg/L	10	-	257	281	178	220
Turbidity	NTU	0.10	-	1.46	1.2	71.1	69.5
Ammonia, Total (as N)	mg/L	0.010	-	-	0.020	0.043	0.043
Nitrate (as N)	mg/L	0.020	-	-	0.135	0.292	0.282
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	<2.0	<2.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May, June, August and October exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D01	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2585502-1	L2592735-10	L2592735-11	L2595911-3	L2601055-3	L2602498-2
	Sample Date & Time			2021-05-09 9:30	2021-05-26 14:00	2021-05-26 14:00	2021-05-31 9:40	2021-06-07 14:25	2021-06-13 9:10
	QA/QC Sample Type			N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0/3.0	-	-	65.3	65.7	-	-	274
pH	pH units	0.10	6.0 - 9.5	7.58	7.39	7.42	7.54	7.73	7.93
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	3.1	8.2	10.6	11.9	14.9	10.8
Total Dissolved Solids	mg/L	10	-	108	49	53	61	66	172
Turbidity	NTU	0.10	-	38.8	70.4	53.6	41.7	64.1	55.9
Ammonia, Total (as N)	mg/L	0.010	-	-	0.087	0.084	-	-	0.037
Nitrate (as N)	mg/L	0.020	-	-	0.044	0.023	-	-	0.860
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<2.0	<2.0	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D03	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2605841-8	L2608050-16	L2609728-6	L2612809-14	L2615981-3	L2615981-4	L2621268-3
	Sample Date & Time			2021-06-21 11:35	2021-06-29 8:00	2021-07-05 15:30	2021-07-12 14:40	2021-07-19 11:05	2021-07-19 11:05	2021-07-29 10:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	-	-	250	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.02	8.20	8.35	8.00	5.97	8.14	8.05
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	10.6	9.3	6.0	24.0	<2.0	11.5	9.0
Total Dissolved Solids	mg/L	10	-	155	157	132	180	<10	179	177
Turbidity	NTU	0.10	-	34.4	29.3	21.8	50.1	<0.10	25.2	21.5
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.022	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.597	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	<5.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
	ALS Laboratory Sample ID			L2621381-7	L2624988-7	L2627332-2	L2630140-2	L2635278-13	L2636426-13	L2639307-4
	Sample Date & Time			2021-08-02 9:10	2021-08-10 15:40	2021-08-16 10:15	2021-08-22 8:10	2021-09-02 11:50	2021-09-07 14:50	2021-09-13 12:05
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0/3.0	-	313	-	-	-	348	-	-
pH	pH units	0.10	6.0 - 9.5	8.09	8.23	8.13	8.21	8.17	7.98	7.92
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	4.6	7.1	8.1	3.5	2.5	5.5	2.9
Total Dissolved Solids	mg/L	10	-	153	127	139	218	197	199	255
Turbidity	NTU	0.10	-	14.8	25.5	26.0	13.3	7.12	4.96	4.83
Ammonia, Total (as N)	mg/L	0.010	-	0.026	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	0.968	-	-	-	0.970	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	-	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID			MQ-C-D	MQ-C-D02	MQ-C-D	MQ-C-D01	MQ-C-D
	ALS Laboratory Sample ID			L2642214-2	L2642214-5	L2644501-2	L2644501-5	L2647099-1
	Sample Date & Time			2021-09-20 10:40	2021-09-20 10:40	2021-09-27 9:10	2021-09-27 9:10	2021-10-04 8:35
	QA/QC Sample Type			N/A	Field Blank	N/A	Field Duplicate	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0/3.0	-	-	-	-	-	263
pH	pH units	0.10	6.0 - 9.5	7.90	5.84	7.78	7.80	7.53
Total Suspended Solids	mg/L	1.0/2.0	Grab 30 and Average 15	<2.0	<2.0	2.0	2.0	<2.0
Total Dissolved Solids	mg/L	10	-	235	26	290	300	129
Turbidity	NTU	0.10	-	3.64	<0.10	3.18	3.01	5.79
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	-	0.210
Nitrate (as N)	mg/L	0.020	-	-	-	-	-	0.115
Oil and Grease, Total	mg/L	2.0/5.0	-	-	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID[3]			MS-SN-01_2021-05-25_1635	MS-SN-01_2021-06-01_1500	MS-SN-01_2021-06-09_1115	MS-SN-01_2021-06-14_1525	MS-SN-01_2021-06-22_1000	MS-SN-01_2021-06-30_1535
	ALS Laboratory Sample ID			L2592985-1	L2595323-4	L2601057-1	L2602839-3	L2604736-1	L2608766-1
	Sample Date & Time			2021-05-25 16:35	2021-06-01 13:40	2021-06-09 11:15	2021-06-14 15:25	2021-06-22 10:00	2021-06-30 15:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	32.7	172	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.33	7.98	7.58	7.62	7.97	7.89
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	3.8	**52.1**	23.6	11.0	9.7	8.8
Total Dissolved Solids	mg/L	10/13	-	<10	133	96	99	103	93
Turbidity	NTU	0.10	-	23.1	60.5	33.6	31.9	18.8	17.7
Ammonia, Total (as N)	mg/L	0.010	-	<0.010	0.011	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	<0.020	0.197	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<5.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Sample location for MS-SN-01 was incorrect for June samples. Results may not be representative of location.

Table 7.4.2: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Analyte	Sample ID			MS-SN-02_2021-05-25_1730	MS-SN-02_2021-06-01_1300	MS-SN-02_2021-06-09_1340	MS-SN-02_2021-06-14_1040	MS-SN-02_2021-06-22_1530	MS-SN-02_2021-06-30_1645
	ALS Laboratory Sample ID			L2592985-2	L2595323-2	L2601057-2	L2602839-1	L2604736-4	L2608766-2
	Sample Date & Time			2021-05-25 17:30	2021-06-01 13:00	2021-06-09 13:40	2021-06-14 10:40	2021-06-22 15:30	2021-06-30 16:45
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	36.2	81.0	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.40	7.62	7.82	7.97	8.04	8.18
Total Suspended Solids	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	**39.3**	24.6	14.9	3.9	19.0	6.0
Total Dissolved Solids	mg/L	10/13	-	51	58	77	85	114	127
Turbidity	NTU	0.10	-	263	206	113	55.8	157	29.5
Ammonia, Total (as N)	mg/L	0.010	-	0.052	0.099	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.111	1.39	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.4.3: Water Quality Results for Water Licence Monitoring Location - MS-SN-03

Analyte	Sample ID			MS-SN-03_2021-05-25_1710	MS-SN-03_2021-06-01_1045	MS-SN-03_2021-06-09_1250	MS-SN-03_2021-06-14_1420	MS-SN-03_2021-06-22_1150	MS-SN-0301_2021-06-22_1150
	ALS Laboratory Sample ID			L2592985-3	L2595323-1	L2601057-2	L2602839-2	L2604736-2	L2604736-3
	Sample Date & Time			2021-05-25 17:10	2021-06-01 10:45	2021-06-09 12:50	2021-06-14 14:40	2021-06-22 11:50	2021-06-22 11:50
	QA/QC Sample Type			N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	116	158	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.72	7.88	7.64	7.78	8.03	7.97
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	21.4	17.1	**112**	**53.8**	18.2	18.6
Total Dissolved Solids	mg/L	10/13	-	82	115	110	138	131	142
Turbidity	NTU	0.10	-	113	126	354	205	114	115
Ammonia, Total (as N)	mg/L	0.010	-	0.231	0.089	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.118	0.137	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	<5.0	<2.0	-	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.4.4: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Analyte	Sample ID			TR-SN-01_2021-06-05_1140	TR-SN-01_2021-06-07_1510
	ALS Laboratory Sample ID			L2600488-1	L2599385-7
	Sample Date & Time			2021-06-05 11:40	2021-06-07 15:10
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	1.0	-	-	162
pH	pH units	0.10	6.0 - 9.5	8.11	8.11
Total Suspended Solids[2]	mg/L	1.0/2.0	Grab 30 and Average 15	**260.0**	**84.8**
Total Dissolved Solids	mg/L	10	-	100	134
Turbidity	NTU	0.10	-	80.5	183
Ammonia, Total (as N)	mg/L	0.010	-	-	0.034
Nitrate (as N)	mg/L	0.020	-	-	0.152
Oil and Grease, Total	mg/L	2.0	-	-	<2.0
	-	-	No Visible Sheen	No visible sheen	No visible sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.5: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Analyte	Sample ID			TR-SN-02_2021-06-05_1300	TR-SN-02_2021-06-07_1340	TR-SN-0203_2021-06-07_1340	TR-SN-02_2021-06-13_1120	TR-SN-02_2021-06-29_1530
	ALS Laboratory Sample ID			L2600488-2	L2599385-5	L2599385-6	L2603800-5	L2608769-4
	Sample Date & Time			2021-06-05 13:00	2021-06-07 13:40	2021-06-07 13:40	2021-06-13 11:20	2021-06-29 15:30
	QA/QC Sample Type			N/A	N/A	Travel Blank	N/A	N/A
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0	-	-	110	<1.0	-	-
pH	pH units	0.10	6.0 - 9.5	8.16	8.11	6.08	8.07	8.15
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	**129**	**117**	<1.0	**31.0**	**65.4**
Total Dissolved Solids	mg/L	10	-	117	106	<10	106	142
Turbidity	NTU	0.10	-	110	195	0.54	90.7	123
Ammonia, Total (as N)	mg/L	0.010	-	-	0.026	<0.010	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.088	<0.020	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	<2.0	-	-
	-	-	No Visible Sheen	No visible sheen	No visible sheen	-	No visible sheen	No visible sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.6: Water Quality Results for Water Licence Monitoring Location - TR-SN-03

Analyte	Sample ID			TR-SN-03_2021-06-05_1420	TR-SN-03_2021-06-07_1215	TR-SN-03_2021-06-13_1555	TR-SN-0301_2021-06-13_1555
	ALS Laboratory Sample ID			L2600488-5	L2599385-3	L2603800-2	L2603800-3
	Sample Date & Time			2021-06-05 14:20	2021-06-07 12:15	2021-06-13 15:55	2021-06-13 15:55
	QA/QC Sample Type			N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	-	117	-	-
pH	pH units	0.10	6.0 - 9.5	8.07	8.22	8.15	8.21
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	**476**	**905**	**158**	**112**
Total Dissolved Solids	mg/L	10	-	136	197	181	177
Turbidity	NTU	0.10	-	700	588	215	222
Ammonia, Total (as N)	mg/L	0.010	-	-	0.039	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.102	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<2.0	-	-
	-	-	No Visible Sheen	No visible sheen	No visible sheen	No visible sheen	No visible sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.7: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Analyte	Sample ID			TR-SN-04_2021-06-07_1135	TR-SN-04_2021-06-13_1345	TR-SN-04_2021-06-29_1210
	ALS Laboratory Sample ID			L2599385-2	L2603800-1	L2608769-1
	Sample Date & Time			2021-06-07 11:35	2021-06-13 13:45	2021-06-29 12:10
	QA/QC Sample Type			N/A	N/A	N/A
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	1.0	-	102	-	-
pH	pH units	0.10	6.0 - 9.5	7.62	7.11	7.53
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	**1,080**	**74.9**	19.5
Total Dissolved Solids	mg/L	10	-	135	93	113
Turbidity	NTU	0.10	-	364	91.0	131
Ammonia, Total (as N)	mg/L	0.010	-	0.042	-	-
Nitrate (as N)	mg/L	0.020	-	0.030	-	-
Oil and Grease, Total	mg/L	2.0	-	<5.0	-	-
	-	-	No Visible Sheen	No visible sheen	No visible sheen	No visible sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.8: Water Quality Results for Water Licence Monitoring Location - TR-SN-06

Analyte	Sample ID			TR-SN-06_2021-06-05_1535	TR-SN-06_2021-06-07_1045
	ALS Laboratory Sample ID			L2600488-6	L2599385-1
	Sample Date & Time			2021-06-05 15:35	2021-06-07 10:45
	QA/QC Sample Type			N/A	N/A
	Units	LOR	Water Licence Criteria [1]		
Conductivity	umhos/cm	1.0	-	-	132
pH	pH units	0.10	6.0 - 9.5	7.84	7.94
Total Suspended Solids[2]	mg/L	1.0/2.0	Grab 30 and Average 15	**73.6**	**235**
Total Dissolved Solids	mg/L	10	-	147	189
Turbidity	NTU	0.10	-	134	362
Ammonia, Total (as N)	mg/L	0.010	-	-	0.023
Nitrate (as N)	mg/L	0.020	-	-	0.114
Oil and Grease, Total	mg/L	2.0	-	-	<2.0
	-	-	No Visible Sheen	No visible sheen	No visible sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.9: Water Quality Results for Water Licence Monitoring Location - TR-SN-07

Analyte	Sample ID			TR-SN-07_2021-06-05_1345	TR-SN-0701_2021-06-05_1345	TR-SN-07_2021-06-07_1255	TR-SN-07_2021-06-13_930	TR-SN-07_2021-06-29_1430	TR-SN-0701_2021-06-29_1430
	ALS Laboratory Sample ID			L2600488-3	L2600488-4	L2599385-4	L2603800-4	L2608769-2	L2608769-3
	Sample Date & Time			2021-06-05 13:45	2021-06-05 13:45	2021-06-07 12:55	2021-06-13 9:30	2021-06-29 14:30	2021-06-29 14:30
	QA/QC Sample Type			N/A	Field Duplicate	N/A	N/A	N/A	Field Duplicate
	Units	LOR	Water Licence Criteria [1]						
Conductivity	umhos/cm	1.0	-	-	-	107	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.14	8.09	8.18	7.88	7.99	7.99
Total Suspended Solids[2]	mg/L	1.0/2.0/3.0	Grab 30 and Average 15	**556**	**464**	**995**	22.7	**285**	**267**
Total Dissolved Solids	mg/L	10	-	131	132	126	101	248	267
Turbidity	NTU	0.10	-	656	602	305	73.2	475	474
Ammonia, Total (as N)	mg/L	0.010	-	-	-	0.060	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	0.060	-	-	-
Oil and Grease, Total	mg/L	2.0	-	-	-	<2.0	-	-	-
	-	-	No Visible Sheen	No visible sheen	-	No visible sheen	No visible sheen	No visible sheen	No visible sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.5.1: Water Quality Results for Water Licence Monitoring Location - MS-RW-01

Analyte	Sample ID			MS-RW-01	MS-RW-01	MS-RW-01
	ALS Laboratory Sample ID			L2602509-1	L2606196-2	L2608042-1
	Sample Date & Time			2021-06-14 13:45	2021-06-24 16:15	2021-06-29 14:30
	QA/QC Sample Type			NA	NA	NA
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	1.0	-	-	-	-
pH	pH units	0.10	6.0 - 9.5	7.77	8.10	8.08
Total Suspended Solids[2]	mg/L	2.0	Grab 30, Average 15	**35.9**	21.3	12.2
Total Dissolved Solids	mg/L	10	-	171	264	274
Turbidity	NTU	0.10	-	132.0	59.4	39.3
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-		-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits. It should be noted that this water was applied directly to roadways for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.2: Water Quality Results for Water Licence Monitoring Location - MS-RW-02

Analyte	Sample ID			MS-RW-02	MS-RW-02	MS-RW-02	MS-RW-02
	ALS Laboratory Sample ID			L2599259-1	L2602509-2	L2606196-3	L2608042-2
	Sample Date & Time			2021-06-09 12:25	2021-06-14 14:00	2021-06-24 16:30	2021-06-29 14:45
	QA/QC Sample Type			NA	NA	NA	NA
	Units	LOR	Water Licence Criteria [1]				
Conductivity	umhos/cm	1.0	-	-	111	-	-
pH	pH units	0.10	6.0 - 9.5	7.73	7.74	8.03	8.31
Total Suspended Solids[2]	mg/L	2.0	Grab 30, Average 15	**35.0**	21.0	8.2	4.3
Total Dissolved Solids	mg/L	10	-	79	74	89	70
Turbidity	NTU	0.10	-	124	76.4	26.0	14.7
Ammonia, Total (as N)	mg/L	0.010	-	-	0.071	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.188	-	-
Oil and Grease, Total	mg/L	2.0/5.0	-	-	<5.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits, although only two (2) samples were collected. It should be noted that this water was applied directly to roadways for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID			MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P101
	ALS Laboratory Sample ID			L2602410-1	L2606555-2	L2608772-6	L2611924-1	L2614201-1	L2617629-1	L2617629-2
	Sample Date & Time			2021-06-15	2021-06-22 17:00	2021-06-29 9:30	2021-07-06 11:00	2021-07-13 13:50	2021-07-20 8:05	2021-07-20 8:05
	QA/QC Sample Type			NA	NA	NA	NA	NA	NA	Field Duplicate
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	210		-	313	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.02	8.20	8.27	8.22	8.30	8.33	8.33
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	7.2	<2.0	<2.0	1.5	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	121	207	77	226	218	201	194
Turbidity	NTU	0.10	-	4.52	1.75	1.95	2.16	1.61	1.36	1.38
Ammonia, Total (as N)	mg/L	0.0050	-	0.153	-	-	0.0402	-	-	-
Nitrate (as N)	mg/L	0.020	-	0.245	-	-	0.249	-	-	-
Oil and Grease, Total	mg/L	5.0	-	<5.0	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID			MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
	ALS Laboratory Sample ID			L2620707-1	L2623229-2	L2626310-1	L2627881-1	L2630428-1
	Sample Date & Time			2021-07-27 13:50	2021-08-03 10:35	2021-08-10 10:05	2021-08-15 11:20	2021-08-24 8:45
	QA/QC Sample Type			NA	NA	NA	NA	NA
	Units	LOR	Water Licence Criteria [1]					
Conductivity	umhos/cm	1.0	-	-	312	-	-	-
pH	pH units	0.10	6.0 - 9.5	8.15	8.22	8.26	8.28	8.21
Total Suspended Solids	mg/L	1.0/2.0	Grab 30, Average 15	<2.0	1.7	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	10/20	-	187	199	128	179	161
Turbidity	NTU	0.10	-	2.07	1.99	4.54	5.13	4.39
Ammonia, Total (as N)	mg/L	0.0050	-	-	0.034	-	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.243	-	-	-
Oil and Grease, Total	mg/L	5.0	-	-	<5.0	-	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.4: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2599259-4	L2602421-1	L2606196-1	L2608768-1	L2609726-3	L2614868-1	L2618096-1
	Sample Date & Time			2021-06-09 15:15	2021-06-15 10:40	2021-06-24 15:50	2021-06-30 16:50	2021-07-05 16:00	2021-07-15 12:30	2021-07-21 17:35
	QA/QC Sample Type			NA	NA	NA	NA	NA	NA	NA
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	126	-	-	523	-	-
pH	pH units	0.10	6.0 - 9.5	7.53	7.33	7.84	7.81	8.02	7.68	7.57
Total Suspended Solids[2]	mg/L	2.0	Grab 30, Average 15	28.5	18.4	21.3	14	6.0	<2.0	5.2
Total Dissolved Solids	mg/L	10	-	118	110	264	445	465	455	512
Turbidity	NTU	0.10	-	131	77.70	59.40	21.30	13.4	9.87	5.27
Ammonia, Total (as N)	mg/L	0.010	-	-	<0.010	-		0.053	-	-
Nitrate (as N)	mg/L	0.020	-	-	0.065	-		<0.020	-	-
Oil and Grease, Total	mg/L	2.0	-	-	<5.0	-		<2.0	-	-
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits. It should be noted that this water was applied directly to roadways for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.4: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID			TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID			L2621357-4	L2623789-4	L2626308-2	L2627457-3	L2632985-1	L2635807-3	L2635807-4
	Sample Date & Time			2021-07-31 11:25	2021-08-06 17:50	2021-08-11 17:45	2021-08-16 17:10	2021-08-28 15:40	2021-09-04 10:10	2021-09-04 10:10
	QA/QC Sample Type			NA	NA	NA	NA	NA	NA	Field Duplicate
	Units	LOR	Water Licence Criteria [1]							
Conductivity	umhos/cm	1.0	-	-	-	-	773	-	721	720
pH	pH units	0.10	6.0 - 9.5	7.75	7.8	7.95	7.89	7.79	7.93	7.9
Total Suspended Solids[2]	mg/L	2.0	Grab 30, Average 15	4.8	7.0	3.2	5.1	<2.0	6.1	5.6
Total Dissolved Solids	mg/L	10	-	576	621	579	635	563	586	598
Turbidity	NTU	0.10	-	3.84	4.35	4.05	3.12	2.42	2.66	2.77
Ammonia, Total (as N)	mg/L	0.010	-	-	-	-	<0.010	-	0.023	0.015
Nitrate (as N)	mg/L	0.020	-	-	-	-	<0.020	-	0.089	0.084
Oil and Grease, Total	mg/L	2.0	-	-	-	-	<5.0	-	<5.0	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits. It should be noted that this water was applied directly to roadways for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.5: Water Quality Results for Water Licence Monitoring Location - TR-BP-02

Analyte	Sample ID			TR-BP-02	TR-BP-02	TR-BP-02
	ALS Laboratory Sample ID			L2602531-1	L2606555-1	L2613425-1
	Sample Date & Time			2021-06-10 11:35	2021-06-22 13:00	2021-07-13 15:55
	QA/QC Sample Type			NA	NA	NA
	Units	LOR	Water Licence Criteria [1]			
Conductivity	umhos/cm	1.0	-	-	-	288
pH	pH units	0.10	6.0 - 9.5	7.94	8.21	7.98
Total Suspended Solids[2]	mg/L	2.0	Grab 30, Average 15	21.2	12.8	12.4
Total Dissolved Solids	mg/L	10	-	64	155	164
Turbidity	NTU	0.10	-	44.2	23.6	17.4
Ammonia, Total (as N)	mg/L	0.010	-	-	-	<0.010
Nitrate (as N)	mg/L	0.020	-	-	-	<0.020
Oil and Grease, Total	mg/L	5.0	-	-	-	<5.0
	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits, although only two (2) samples were collected. It should be noted that this water was applied directly to roadways for dust suppression efforts and did not migrate to receiving water bodies.

ATTACHMENT 10

2022 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2022
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.5 Water Quality Results for Other Water Licence Monitoring Locations

Table 7.1: Water Quality Monitoring Locations - 2022

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2022
			Easting	Northing	Latitude	Longitude	
Milne Port							
SNP	MP-01	Milne Port Sewage Treatment Plant (STP)	503807	7975982	71° 53' 01.9" N	-80° 53' 25.1" W	Active
SNP	MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 02.9" N	-80° 53' 43.9" W	Active
SNP	MP-01B	Milne Port 380 Person Sewage Treatment Plant (STP)	503368	7975186	71° 52' 36.2" N	-80° 54' 10.8" W	Active
SNP	MP-02	Milne Port Maintenance Shop (Oily Water)	503785	7976209	71° 53' 09.2" N	-80° 53' 27.3" W	Not Constructed
SNP	MP-03	Milne Port Bulk Fuel Storage Facility (Stormwater)	503638	7976272	71° 53' 11.3" N	-80° 53' 42.6" W	Active
SNP	MP-04	Milne Port Landfarm Facility	503751	7975570	71° 52' 48.6" N	-80° 53' 31.1" W	Active[1]
SNP	MP-04A	Milne Port Landfarm Facility (Contaminated Snow Containment Berm)	503862	7975482	71° 52' 45.8" N	-80° 53' 19.5" W	Active
SNP	MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 14.9" N	-80° 54' 00.1" W	Active
SNP	MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14.3" N	-80° 54' 35.8" W	Active
SNP	MP-C-A	Surface Water Drainage Downstream of Milne Port Infrastructure	503214	7976483	71° 53' 18.1" N	-80° 54' 26.5" W	Active[1]
SNP	MP-C-B		502844	7975741	71° 52' 54.2" N	-80° 55' 05.0" W	Active
SNP	MP-C-K		502982	7975333	71° 52' 41.0" N	-80° 54' 50.8" W	Active
SNP	MP-C-D		503651	7976363	71° 53' 14.2" N	-80° 53' 41.2" W	Active[1]
SNP	MP-C-E		503736	7976346	71° 53' 13.7" N	-80° 53' 32.4" W	Active[1]
SNP	MP-C-F		503922	7976304	71° 53' 12.3" N	-80° 53' 13.1" W	Active[1]
SNP	MP-C-H		504113	7976509	71° 53' 18.9" N	-80° 52' 53.2" W	Active
SNP	MP-C-J		502940	7974760	71° 52' 22.5" N	-80° 54' 55.2" W	Active
SNP	MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52.4" N	-80° 35' 03.8" W	Active[2]
SNP	MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00.4" N	-80° 23' 08.5" W	Active
SNP	MP-Q1-01	Surface Water Drainage Downstream of the Q1 Quarry	503839	7974467	71° 52' 13.0" N	-80° 53' 22.1" W	Active
SNP	MP-Q1-02		503828	7975396	71° 52' 43.0" N	-80° 53' 23.0" W	Active
Recycled Water	MP-Q1-P1	Milne Port Q1 Quarry Recycled Water for Dust Suppression	503822	7974661	71° 52' 19.3" N	-80° 53' 23.8" W	Active
Mine Site							
SNP	MQ-C-A	Surface Water Drainage Downstream of QMR2 Quarry	559489	7914408	71° 19' 28.2" N	-79° 20' 06.9" W	Active
SNP	MQ-C-B		560076	7913888	71° 19' 10.9" N	-79° 19' 09.3" W	Active
SNP	MQ-C-D		559422	7914223	71° 19' 22.3" N	-79° 20' 14.2" W	Active
SNP	MQ-C-E	Surface Water Drainage Downstream of D1Q1	563351	7912902	71° 18' 36.1" N	-79° 13' 42.5" W	Inactive[3]
SNP	MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	-79° 17' 05.7" W	Active
SNP	MS-01A	Mine Site Polishing Waste Stabilization Pond (PWSP)	-	-	-	-	Not Constructed

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from containment facility in 2022.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2022.

[3] Flow to this monitoring station has been cut off and the monitoring station is no longer required.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 will not be used in 2023.

[6] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2022

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2022
			Easting	Northing	Latitude	Longitude	
SNP	MS-01B	Mine Site Sewage Treatment Plant No. 2	560798	7913291	71° 18'51.0" N	-79° 17' 58.3" W	Active
SNP	MS-02	Mine Site Mobile Maintenance Buildings (Meltwater)	561638	7913222	71° 18' 48.0" N	-79° 16' 34.0" W	Not Constructed
SNP	MS-03	Mine Site Bulk Fuel Storage Facility (Stormwater)	561258	7913304	71° 18' 51.0" N	-79° 17' 12.0" W	Active[1]
SNP	MS-03B	Mine Site Bulk Fuel Storage Facility (Stormwater)	560980	7913568	71° 18' 59.7" N	-79° 17' 39.2" W	Active
SNP	MS-04	Mine Site Fuel Unloading Station (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-05	Mine Site Landfarm Facility (Stormwater)	560828	7912726	71° 18' 32.7" N	-79° 17' 56.9" W	Active[1]
SNP	MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 41.0" N	-79° 16' 51.0" W	Active
SNP	MS-07	Mine Site Run of Mine (ROM) Ore Stockpile Pond - Surface Water Management Pond	563583	7913074	71° 18' 41.4" N	-79° 13' 18.7" W	Active
SNP	MS-08	Mine Site Waste Rock Facility (WRF) - Surface Water Management Pond	563218	7916802	71° 20' 24.7" N	-79° 13' 18.3" W	Active
SNP	MS-09	Waste Rock Stockpile - East Pond	-	-	-	-	Not Constructed
SNP	MS-10	Mine Site SDLT-1 Pond Ore Stockpile (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-11	Mine Site KM105 Pond (Stormwater)	562171	7913159	71°18'45.5" N	- 79° 15'40.5" W	Active
SNP	MS-12	Mine Site Weatherhaven Camp (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-13	Mine Site Explosives Magazine Pond	-	-	-	-	Not Constructed
SNP	MS-14	Mine Site Quarry QMR2 Pond/Sump	-	-	-	-	Not Constructed
SNP	MS-C-A	Surface Water Drainage Downstream of Mine Site Infrastructure	561263	7913571	71° 18' 59.6" N	-79° 17' 10.7" W	Active
SNP	MS-C-B		561454	7913537	71° 18' 58.3" N	-79° 16' 51.6" W	Active
SNP	MS-C-C		561117	7913196	71° 18' 47.6" N	-79° 17' 26.5" W	Active
SNP	MS-C-D		561008	7913280	71° 18' 50.5" N	-79° 17' 37.2" W	Active
SNP	MS-C-E		560980	7913388	71° 18' 54.0" N	-79° 17' 39.7" W	Active
SNP	MS-C-F		561797	7913278	71° 18' 49.7" N	-79° 16' 17.8" W	Active
SNP	MS-C-G		561813	7911830	71° 18' 02.9" N	-79° 16' 20.3" W	Active
SNP	MS-C-H		561162	7912067	71° 18' 11.2" N	-79° 17' 25.1" W	Active
Recycled Water	HR-CD-05	Mine Site Haul Road KM105 Pond Recycled Water for Dust Suppression	563812	7913140	71° 18' 43.3" N	-79° 12' 55.4" W	Active[1]
Recycled Water	MS-RW-01	Mine Site Flight Ops Pond (Pond 1) Recycled Water for Dust Suppression	559348	7914222	71° 19' 22.3" N	-79° 20' 21.6" W	Active
Recycled Water	MS-RW-02	Mine Site Warehouse Pond (Pond 2) Recycled Water for Dust Suppression	559555	7913950	71° 19' 13.4" N	-79° 20' 01.6" W	Active
SNP	MS-MRY-1	Fresh Water Intake at Camp Lake	557779	7914722	71° 19' 39.8" N	-79° 22' 58.2" W	Active
SNP	MS-MRY-04	Mine Site Exploration Camp Sewage Treatment Plant	558134	7914459	71° 19' 31.0" N	-79° 22' 23.2" W	Inactive[4]
SNP	MS-MRY-04A	Mine Site Polishing Waste Stabilization Pond (PWSP)	558492	7914118	71° 19' 19.7" N	-79° 21' 48.1" W	Active[1]
SNP	MS-MRY-04B	Mine Site Polishing Waste Stabilization Pond (PWSP)	558438	7914310	71° 19' 26.0" N	-79° 21' 53.0" W	Active[1]

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from containment facility in 2022.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2022.

[3] Flow to this monitoring station has been cut off and the monitoring station is no longer required.

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[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 will not be used in 2023.

[6] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2022

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2022
			Easting	Northing	Latitude	Longitude	
SNP	MS-MRY-04C	Mine Site Polishing Waste Stabilization Pond (PWSP)	558489	7914271	71° 19' 24.7" N	-79° 21' 48.0" W	Active[1]
SNP	MS-MRY-6	Hazardous Materials Storage Area (MS-HWB-7) (Stormwater)	558284	7914449	71° 19' 30.6" N	-79° 22' 08.1" W	Active
SNP	MS-MRY-09	Mine Site Deposit No.1 - Surface Water Drainage	561083	7915084	71° 19' 48.5" N	-79° 17' 24.5" W	Active
SNP	MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560754	7912484	71° 18' 25.0" N	-79° 18' 05.0" W	Active
SNP	MS-MRY-13B	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560642	7912527	71° 18' 26.5" N	-79° 18' 16.1" W	Active
SSPM	MS-SN-01	Mine Site Weatherhaven Snow Stockpile	558052	7914303	71° 19' 26.1" N	79° 22' 31.9" W	Active
SSPM	MS-SN-02	Mine Site Landfill Access Road Snow Stockpile	561097	7912884	71° 18' 37.6" N	79° 17' 29.4" W	Active
SSPM	MS-SN-03	Mine Site Warehouse Snow Stockpile	559803	7913756	71° 19' 06.9" N	79° 19' 37.1" W	Active
Tote Road							
SSPM	TR-SN-01	Tote Road Snow Stockpile KM37	521593	7949160	71° 38' 32.8" N	-80° 23' 08.6" W	Active
SSPM	TR-SN-02	Tote Road Snow Stockpile KM63	529344	7926819	71° 26' 28.8" N	-80° 10' 26.1" W	Active
SSPM	TR-SN-03[5]	Tote Road Snow Stockpile KM77	538726	7920503	71° 23' 00.1" N	-79° 54' 47.0" W	Active
SSPM	TR-SN-04	Tote Road Snow Stockpile KM86	546920	7919831	71° 22' 33.2" N	-79° 41' 00.8" W	Active
SSPM	TR-SN-05	Tote Road Snow Stockpile KM92	551307	7916785	71° 20' 51.7" N	-79° 33' 45.2" W	Active[1]
SSPM	TR-SN-06	Tote Road Snow Stockpile KM97	555203	7914497	71° 19' 34.8" N	-79° 27' 18.3" W	Active
SSPM	TR-SN-07	Tote Road Snow Stockpile KM75	537466	7920200	71° 22' 51.1" N	-79° 56' 54.8" W	Active
Recycled Water	TR-BP-01	Tote Road KM97 Borrow Pond Recycled Water for Dust Suppression	556021	7914684	71° 19' 40.1" N	-79° 25' 55.4" W	Active
Recycled Water	TR-BP-02	Tote Road KM57 Borrow Pond Recycled Water for Dust Suppression	527171	7932085	71° 29' 19.6" N	-80° 13' 59.6" W	Active
TRMP	CV-167	Approximately located at KM6	505538	7972370	71° 51' 05.2" N	-80° 50' 26.5" W	Active
TRMP	CV-154-A[6]	Approximately located at KM9.5	507629	7970074	71° 49' 51.0" N	-80° 46' 50.9" W	Active
TRMP	CV-128	Approximately located at KM17	513556	7965889	71° 47' 34.9"N	-80° 36' 40.6"W	Active
TRMP	CV-129	Approximately located at KM15	512381	7966783	71° 48' 03.9"N	-80° 38' 41.3"W	Active
TRMP	CV-115	Approximately located at KM28	519222	7958135	71° 43' 23.2"N	-80° 27' 03.0"W	Active
TRMP	CV-112	Approximately located at KM33	521033	7954935	71° 41' 39.3"N	-80° 24' 00.0"W	Active
TRMP	CV-106	Approximately located at KM33	521663	7953392	71° 40' 49.3"N	-80° 22' 57.0"W	Active
TRMP	CV-099	Approximately located at KM37	521886	7948843	71° 38' 22.4"N	-80° 22' 38.9"W	Active
TRMP	CV-093	Approximately located at KM42	522927	7945093	71° 36' 21.1"N	-80° 20' 56.4"W	Active
TRMP	CV-078	Approximately located at KM51	525852	7936787	71° 31' 51.9"N	-80° 16' 07.8"W	Active
TRMP	CV-072-C[6]	Approximately located at KM54	526897	7934576	71° 30' 40.1"N	-80° 14' 24.2"W	Active

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from containment facility in 2022.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2022.

[3] Flow to this monitoring station has been cut off and the monitoring station is no longer required.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 will not be used in 2023.

[6] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2022

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2022
			Easting	Northing	Latitude	Longitude	
TRMP	CV-060	Approximately located at KM58	527622	7930342	71° 28' 23.2"N	-80° 13' 16.0"W	Active
TRMP	BG-50	Approximately located at KM63	529294	7926852	71° 26' 29.8"N	-80° 10' 31.1"W	Active
TRMP	CV-040	Approximately located at KM71.5	535168	7920326	71° 22' 56.4"N	-80° 00' 46.7"W	Active
TRMP	BG-32	Approximately located at KM78	540729	7921597	71° 23' 34.2"N	-79° 51' 22.6"W	Active
TRMP	CV-217	Approximately located at KM80	542321	7922189	71° 23' 52.4"N	-79° 48' 40.5"W	Active
TRMP	BG-30	Approximately located at KM84.5	546070	7919844	71° 22' 34.2"N	-79° 42' 26.6"W	Active
TRMP	BG-24	Approximately located at KM88	548766	7918878	71° 22' 01.1"N	-79° 37' 56.6"W	Active
TRMP	CV-001	Approximately located at KM94.1	553544	7914897	71° 19' 49.0"N	-79° 30' 04.3"W	Active
TRMP	CV-223	Approximately located at KM97.5	555705	7914676	71° 19' 40.1"N	-79° 26' 27.3"W	Active

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from containment facility in 2022.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2022.

[3] Flow to this monitoring station has been cut off and the monitoring station is no longer required.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 will not be used in 2023.

[6] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023), that are still representative of the appropriate watershed.

SNP - Surveillance Network Program ; TRMP - Tote Road Monitoring Program ; SSPM - Snow Stockpile Program Monitoring

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID		MP-01_2022-01-05	MP-0101_2022-01-05	MP-01_2022-02-16	MP-01_2022-02-22	MP-01_2022-03-08	MP-01_2022-04-12	MP-01_2022-05-03	MP-01_2022-06-21	MP-01_2022-07-05
	ALS Laboratory Sample ID		L2677334-1	L2677334-4	L2687188-1	L2687489-1	L2691306-1	L2699142-1	L2703696-1	L2716962-1	L2720802-1
	Sample Date & Time		2022-01-05 13:10	2022-01-05 13:10	2022-02-16 13:10	2022-02-22 13:10	2022-03-08 14:30	2022-04-12 14:45	2022-05-03 13:10	2022-06-21 13:10	2022-07-05 13:10
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]									
pH	pH units	6.0 - 9.5	7.96	7.88	7.82	7.68	7.88	7.80	7.96	7.81	7.72
Total Suspended Solids	mg/L	120	<1.0	<1.0	<1.0	<2.0	1.0	<1.0	<1.0	1.0	<1.0
Ammonia, Total (as N)	mg/L	-	0.057	0.058	0.027	0.020	0.029	0.044	0.098	0.027	0.052
Total Kjeldahl Nitrogen	mg/L	-	1.13	3.22	1.74	4.73	0.792	<0.050	0.690	0.669	1.14
Phosphorus, Total	mg/L	-	7.97	7.98	10.4	10.4	10.7	10.1	9.39	12.9	12.3
Fecal Coliforms	CFU/100 mL	10,000	0	0	0	0	0	0	0	0	0
BOD	mg/L	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No visible sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

Analyte	Sample ID		MP-0102_2022-07-05	MP-01_2022-08-02	MP-01_2022-09-13	MP-0103_2022-09-13	MP-01_2022-10-11	MP-01_2022-11-08	MP-0101_2022-11-08	MP-01_2022-12-06
	ALS Laboratory Sample ID		L2720802-4	L2726464-1	L2732953-1	L2732953-3	L2736567-1	L2740009-1	L2740009-3	L2742716-1
	Sample Date & Time		2022-07-05 13:10	2022-08-02 13:10	2022-09-13 13:10	2022-09-13 13:10	2022-10-11 13:10	2022-11-08 14:45	2022-11-08 14:45	2022-12-06 13:10
	QA/QC Sample Type		Field Blank	N/A	N/A	Travel Blank	N/A	N/A	Field Duplicate	N/A
	Units	Water Licence Criteria [1]								
pH	pH units	6.0 - 9.5	5.69	7.80	7.97	6.68	8.03	7.99	7.98	7.82
Total Suspended Solids	mg/L	120	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	1.2
Ammonia, Total (as N)	mg/L	-	<0.010	0.028	0.051	<0.010	0.063	0.047	0.049	0.126
Total Kjeldahl Nitrogen	mg/L	-	<0.050	4.84	3.42	<0.050	1.10	6.53	1.35	4.98
Phosphorus, Total	mg/L	-	<0.0030	9.64	11.8	0.0047	10.9	10.7	10.6	10.7
Fecal Coliforms	CFU/100 mL	10,000	0	0	0	0	0	2	3	0
BOD	mg/L	100	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	2.9
Oil and Grease, Total	mg/L	-	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01A

Analyte	Sample ID		MP-01A_2022-08-16
	ALS Laboratory Sample ID		L2728885-1
	Sample Date & Time		2022-08-16 14:00
	QA/QC Sample Type		N/A
	Units	Water Licence Criteria [1]	
pH	pH units	6.0 - 9.5	7.95
Total Suspended Solids	mg/L	120	17.4
Total Dissolved Solids	mg/L	-	614
Turbidity	NTU	-	2.91
Alkalinity, Total (as CaCO3)	mg/L	-	219
Ammonia, Total (as N)	mg/L	-	3.65
Total Kjeldahl Nitrogen	mg/L	-	12.9
Phosphorus, Total	mg/L	-	0.380
Fecal Coliforms	CFU/100mL	10,000	0
BOD	mg/L	100	2.8
COD	mg/L	-	178
Oil and Grease, Total	mg/L	-	<1.0
	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2, 3]	-	Not Acutely Toxic	Not acutely toxic

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID		MP-01B_2022-01-20	MP-01B01_2022-01-20	MP-01B_2022-02-16	MP-01B_2022-02-22	MP-01B_2022-03-08	MP-01B_2022-04-12	MP-01B_2022-05-03	MP-01B_2022-06-21
	ALS Laboratory Sample ID		L2680664-1	L2680664-3	L2687193-1	L2687487-1	L2691305-1	L2699144-1	L2703688-1	L2716991-1
	Sample Date & Time		2022-01-20 13:45	2022-01-20 13:50	2022-02-16 13:45	2022-02-22 13:45	2022-03-08 14:00	2022-04-12 14:00	2022-05-03 13:10	2022-06-21 13:45
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
pH	pH units	6.0 - 9.5	7.58	7.53	7.57	7.64	8.00	7.81	7.85	7.62
Total Suspended Solids	mg/L	120	<1.0	<1.0	<1.0	2.4	<1.0	<1.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	-	0.019	0.019	0.012	0.010	0.041	0.015	0.016	0.055
Total Kjeldahl Nitrogen	mg/L	-	0.563	4.48	0.853	3.88	0.896	0.954	0.247	0.798
Phosphorus, Total	mg/L	-	12.4	12.2	6.00	7.16	7.64	8.06	8.76	9.48
Fecal Coliforms	CFU/100mL	10,000	0	0	0	3	0	0	0	0
BOD	mg/L	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No visible sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-01B

Analyte	Sample ID		MP-01B_2022-07-05	MP-01B02_2022-07-05	MP-01B_2022-08-02	MP-01B_2022-09-13	MP-01B03-2022-09-13	MP-01B_2022-10-11	MP-01B_2022-11-15	MP-01B01_2022-11-15	MP-01B_2022-12-06
	ALS Laboratory Sample ID		L2720800-1	L2720800-3	L2726461-1	L2732973-1	L2732973-3	L2736574-1	L2740641-1	L2740641-3	L2742713-1
	Sample Date & Time		2022-07-05 14:00	2022-07-05 14:15	2022-08-02 13:40	2022-09-13 13:40	2022-09-13 13:45	2022-10-11 13:40	2022-11-15 14:00	2022-11-15 14:00	2022-12-06 13:40
	QA/QC Sample Type		N/A	Field Blank	N/A	N/A	Travel Blank	N/A	N/A	Field Duplicate	N/A
	Units	Water Licence Criteria [1]									
pH	pH units	6.0 - 9.5	7.61	6.23	8.02	8.00	6.31	8.19	8.34	8.29	7.89
Total Suspended Solids	mg/L	120	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0
Ammonia, Total (as N)	mg/L	-	0.013	<0.010	0.025	0.044	<0.010	0.071	0.078	0.078	0.054
Total Kjeldahl Nitrogen	mg/L	-	4.04	0.066	3.29	0.194	<0.050	1.08	0.733	0.755	1.59
Phosphorus, Total	mg/L	-	7.38	0.0052	5.84	8.23	<0.0030	4.49	8.71	8.70	11.3
Fecal Coliforms	CFU/100mL	10,000	0	0	0	0	0	>200[4]	8	3	0
BOD	mg/L	100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.2
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.4: Water Quality Results for Water Licence Monitoring Location - MP-03

Analyte	Sample ID		MP-03_2022-07-02	MP-0302_2022-07-02
	ALS Laboratory Sample ID		L2721021-1	L2721021-2
	Sample Date & Time		2022-07-02 13:20	2022-07-02 13:35
	QA/QC Sample Type		N/A	Field Blank
	Units	Water Licence Criteria [1]		
pH	pH units	-	8.29	8.32
Total Suspended Solids	mg/L	-	11.6	12.2
Total Dissolved Solids	mg/L	-	209	205
Turbidity	NTU	-	21	22.80
Ammonia, Total (as N)	mg/L	-	<0.010	0.237
Phosphorus, Total	mg/L	-	<0.0030	<0.0030
Arsenic (As)-Total	mg/L	-	0.00030	0.00032
Copper (Cu)-Total	mg/L	-	0.00179	0.00179
Lead (Pb)-Total	mg/L	0.001	0.000988	0.000957
Nickel (Ni)-Total	mg/L	-	0.00064	0.00063
Zinc (Zn)-Total	mg/L	-	0.0072	0.0070
Benzene	ug/L	0.37	<0.50	<0.50
Ethylbenzene	ug/L	0.09	<0.50	<0.50
Toluene	ug/L	0.002	<0.50	<0.50
F1 (C6-C10)	ug/L	-	<25	<25
F1-BTEX	ug/L	-	<25	<25
F2 (C10-C16)	ug/L	-	380	320
F3 (C16-C34)	ug/L	-	<250	<250
F4 (C34-C50)	ug/L	-	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	-	380	<370
Oil and Grease, Total	mg/L	15	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.2.5: Water Quality Results for Water Licence Monitoring Location - MP-04A

Analyte	Sample ID		MP-04A_2022-08-01
	ALS Laboratory Sample ID		L2726814-1
	Sample Date & Time		2022-08-01 9:00
	QA/QC Sample Type		N/A
	Units	Water Licence Criteria [1]	
pH	pH	6.0 - 9.0	7.38
Total Suspended Solids	mg/L	15	12.4
Total Dissolved Solids	mg/L	-	1190
Turbidity	NTU	-	2.93
Lead (Pb)-Total	mg/L	0.001	<0.00050
Benzene	ug/L	0.370	<0.50
Ethylbenzene	ug/L	0.090	<0.50
Toluene	ug/L	0.002	<0.50
ortho-Xylene	ug/L	-	<0.50
meta- & para-Xylene	ug/L	-	<1.0
Xylenes	ug/L	-	<1.1
F1 (C6-C10)	ug/L	-	<25
F1-BTEX	ug/L	-	<25
F2 (C10-C16)	ug/L	-	<100
F3 (C16-C34)	ug/L	-	<250
F4 (C34-C50)	ug/L	-	<250
Total Hydrocarbons (C6-C50)	ug/L	-	<370
Oil and Grease, Total	mg/L	15	<5.0
	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9.

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID		MP-05_2022-06-08	MP-05_2022-07-13	MP-0501_2022-07-13
	ALS Laboratory Sample ID		L2713939-1	L2722584-1	L2722584-2
	Sample Date & Time		2022-06-08 14:15	2022-07-13 16:15	2022-07-13 16:15
	QA/QC Sample Type		N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]			
Hardness (as CaCO3)	mg/L	-	165	187	180
pH	pH units	6.0 - 9.5	7.85	8.50	8.47
Total Suspended Solids	mg/L	15	**15.4**	<1.0	<1.0
Total Dissolved Solids	mg/L	-	276	221	228
Turbidity	NTU	-	46.4	3.6	3.54
Alkalinity, Total (as CaCO3)	mg/L	-	68.3	118	118
Ammonia, Total (as N)	mg/L	-	0.320	0.034	0.032
Chloride (Cl)	mg/L	-	70.8	37.7	37.7
Fluoride (F)	mg/L	-	0.100	0.153	0.152
Nitrate (as N)	mg/L	-	1.31	1.74	1.74
Total Kjeldahl Nitrogen	mg/L	-	0.844	0.397	0.404
Phosphorus, Total	mg/L	-	0.0210	0.0042	0.0205
Sulfate (SO4)	mg/L	-	80.1	34.4	34.3
Dissolved Organic Carbon	mg/L	-	5.75	3.85	4.15
Total Organic Carbon	mg/L	-	5.03	3.88	3.77
Aluminum (Al)-Total	mg/L	-	0.675	0.127	0.127
Arsenic (As)-Total	mg/L	0.50	0.00025	0.00020	0.00020
Cadmium (Cd)-Total	mg/L	-	0.0000115	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	-	28.2	46.8	46.4
Copper (Cu)-Total	mg/L	0.30	0.00146	0.00144	0.00150
Iron (Fe)-Total	mg/L	-	0.766	0.110	0.117
Lead (Pb)-Total	mg/L	0.20	0.00109	0.000202	0.000208
Magnesium (Mg)-Total	mg/L	-	24.6	16.8	16.9
Manganese (Mn)-Total	mg/L	-	0.171	0.0420	0.0427
Mercury (Hg)-Total	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	0.00310	0.00472	0.00480
Nickel (Ni)-Total	mg/L	0.50	0.00156	0.00085	0.00083
Potassium (K)-Total	mg/L	-	5.26	4.89	5.03
Selenium (Se)-Total	mg/L	-	0.000397	0.000107	0.000100
Sodium (Na)-Total	mg/L	-	31.7	14.0	14.3
Thallium (Tl)-Total	mg/L	-	0.000021	0.000014	0.000014
Uranium (U)-Total	mg/L	-	0.0441	0.112	0.115
Zinc (Zn)-Total	mg/L	0.50	0.0078	0.0049	0.0051
Aluminum (Al)-Dissolved	mg/L	-	0.0113	0.0328	0.0308
Arsenic (As)-Dissolved	mg/L	-	0.00014	0.00018	0.00016
Cadmium (Cd)-Dissolved	mg/L	-	0.0000099	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	-	28.2	48.1	45.4
Copper (Cu)-Dissolved	mg/L	-	0.00077	0.00140	0.00137
Iron (Fe)-Dissolved	mg/L	-	<0.010	0.010	0.012
Lead (Pb)-Dissolved	mg/L	-	<0.000050	<0.000050	0.000054
Magnesium (Mg)-Dissolved	mg/L	-	23.0	16.3	16.2
Manganese (Mn)-Dissolved	mg/L	-	0.145	0.0348	0.034
Mercury (Hg)-Dissolved	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	0.00321	0.00473	0.00465
Nickel (Ni)-Dissolved	mg/L	-	0.00079	0.00060	0.00061
Potassium (K)-Dissolved	mg/L	-	4.80	4.73	4.65
Selenium (Se)-Dissolved	mg/L	-	0.000382	0.000105	0.000107
Sodium (Na)-Dissolved	mg/L	-	28.6	14.9	14.6
Thallium (Tl)-Dissolved	mg/L	-	<0.000010	0.000012	0.000011
Uranium (U)-Dissolved	mg/L	-	0.0452	0.115	0.114
Zinc (Zn)-Dissolved	mg/L	-	0.0035	0.0049	0.0046
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Toxicity	-	Not Acutely Toxic	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-05

Analyte	Sample ID		MP-05_2022-08-01	MP-05_2022-09-08	MP-0501_2022-09-08
	ALS Laboratory Sample ID		L2726798-1	L2732317-1	L2732317-2
	Sample Date & Time		2022-08-01 8:00	2022-09-08 15:00	2022-09-08 15:00
	QA/QC Sample Type		N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]			
Hardness (as CaCO3)	mg/L	-	278	396	386
pH	pH units	6.0 - 9.5	8.38	8.51	8.49
Total Suspended Solids	mg/L	15	<3.0	<1.0	<1.0
Total Dissolved Solids	mg/L	-	384	566	571
Turbidity	NTU	-	4.71	4.4	4.07
Alkalinity, Total (as CaCO3)	mg/L	-	175	182	182
Ammonia, Total (as N)	mg/L	-	0.057	0.138	0.120
Chloride (Cl)	mg/L	-	82.1	131	131
Fluoride (F)	mg/L	-	0.186	0.154	0.160
Nitrate (as N)	mg/L	-	3.14	3.69	3.69
Total Kjeldahl Nitrogen	mg/L	-	0.540	0.603	0.579
Phosphorus, Total	mg/L	-	0.0058	0.0047	0.0046
Sulfate (SO4)	mg/L	-	37.9	114	116
Dissolved Organic Carbon	mg/L	-	5.05	4.95	5.06
Total Organic Carbon	mg/L	-	4.73	5.50	5.72
Aluminum (Al)-Total	mg/L	-	0.0838	0.0577	0.0546
Arsenic (As)-Total	mg/L	0.50	0.00025	0.00022	0.00022
Cadmium (Cd)-Total	mg/L	-	0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	-	58.3	72.8	71.1
Copper (Cu)-Total	mg/L	0.30	0.00169	0.00198	0.00203
Iron (Fe)-Total	mg/L	-	0.133	0.112	0.124
Lead (Pb)-Total	mg/L	0.20	0.000235	0.000121	0.000115
Magnesium (Mg)-Total	mg/L	-	24.3	44.4	44.2
Manganese (Mn)-Total	mg/L	-	0.0237	0.0409	0.0407
Mercury (Hg)-Total	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	0.00533	0.00422	0.00410
Nickel (Ni)-Total	mg/L	0.50	0.00088	0.00122	0.00126
Potassium (K)-Total	mg/L	-	6.63	7.96	8.08
Selenium (Se)-Total	mg/L	-	0.000083	0.000262	0.000220
Sodium (Na)-Total	mg/L	-	35.7	54.0	53.6
Thallium (Tl)-Total	mg/L	-	0.000015	0.000014	0.000013
Uranium (U)-Total	mg/L	-	0.159	0.107	0.101
Zinc (Zn)-Total	mg/L	0.50	0.0050	0.0094	0.0094
Aluminum (Al)-Dissolved	mg/L	-	0.0166	0.0122	0.0103
Arsenic (As)-Dissolved	mg/L	-	0.00021	0.00021	0.00020
Cadmium (Cd)-Dissolved	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	-	69.7	81.1	78.5
Copper (Cu)-Dissolved	mg/L	-	0.00176	0.00188	0.00188
Iron (Fe)-Dissolved	mg/L	-	0.018	0.020	0.014
Lead (Pb)-Dissolved	mg/L	-	0.000063	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	25.4	47.0	46.2
Manganese (Mn)-Dissolved	mg/L	-	0.0200	0.0340	0.0337
Mercury (Hg)-Dissolved	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	0.00609	0.00422	0.00432
Nickel (Ni)-Dissolved	mg/L	-	0.00084	0.00110	0.00111
Potassium (K)-Dissolved	mg/L	-	7.08	8.48	8.30
Selenium (Se)-Dissolved	mg/L	-	0.000093	0.000232	0.000230
Sodium (Na)-Dissolved	mg/L	-	39.8	56.8	57.5
Thallium (Tl)-Dissolved	mg/L	-	0.000013	0.000013	0.000013
Uranium (U)-Dissolved	mg/L	-	0.168	0.103	0.109
Zinc (Zn)-Dissolved	mg/L	-	0.0051	0.0090	0.0090
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Toxicity	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID		MP-06_2022-06-07	MP-06_2022-07-14	MP-0601_2022-07-14
ALS Laboratory Sample ID			L2713708-1	L2722582-1	L2722582-2
Sample Date & Time			2022-06-07 14:15	2022-07-14 8:15	2022-07-14 8:15
QA/QC Sample Type			N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]			
Hardness (as CaCO3)	mg/L	-	73.1	380	381
pH	pH units	6.0 - 9.5	7.51	8.41	8.37
Total Suspended Solids	mg/L	15	2.5	1.6	1.3
Total Dissolved Solids	mg/L	-	150	602	613
Turbidity	NTU	-	17.4	2.70	3.13
Alkalinity, Total (as CaCO3)	mg/L	-	30.5	114	113
Ammonia, Total (as N)	mg/L	-	0.157	0.957	0.978
Chloride (Cl)	mg/L	-	48.2	109	110
Fluoride (F)	mg/L	-	0.060	0.215	0.208
Nitrate (as N)	mg/L	-	0.499	3.97	3.98
Total Kjeldahl Nitrogen	mg/L	-	0.354	1.40	1.44
Phosphorus, Total	mg/L	-	0.0072	0.0049	0.0051
Sulfate (SO4)	mg/L	-	27.2	219	219
Dissolved Organic Carbon	mg/L	-	3.75	3.50	3.29
Total Organic Carbon	mg/L	-	3.83	4.11	3.64
Aluminum (Al)-Total	mg/L	-	0.225	0.0285	0.0265
Arsenic (As)-Total	mg/L	0.50	<0.00010	0.00023	0.00025
Cadmium (Cd)-Total	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	-	12.6	71.2	72.8
Copper (Cu)-Total	mg/L	0.30	0.00051	<0.00050	0.00052
Iron (Fe)-Total	mg/L	-	0.270	0.053	0.048
Lead (Pb)-Total	mg/L	0.20	0.000411	<0.000050	<0.000050
Magnesium (Mg)-Total	mg/L	-	9.47	52.6	51.7
Manganese (Mn)-Total	mg/L	-	0.0437	0.0615	0.0639
Mercury (Hg)-Total	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	0.00152	0.00575	0.00584
Nickel (Ni)-Total	mg/L	0.50	0.00055	0.00143	0.00145
Potassium (K)-Total	mg/L	-	2.21	11.1	10.8
Selenium (Se)-Total	mg/L	-	0.000141	0.000651	0.000635
Sodium (Na)-Total	mg/L	-	21.2	64.3	63.2
Thallium (Tl)-Total	mg/L	-	0.000010	0.000085	0.000083
Uranium (U)-Total	mg/L	-	0.0126	0.188	0.194
Zinc (Zn)-Total	mg/L	0.50	0.0037	<0.0030	<0.0030
Aluminum (Al)-Dissolved	mg/L	-	0.0108	0.0063	0.0065
Arsenic (As)-Dissolved	mg/L	-	<0.00010	0.00020	0.00019
Cadmium (Cd)-Dissolved	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	-	13.5	69.3	69.3
Copper (Cu)-Dissolved	mg/L	-	0.00027	0.00038	0.00042
Iron (Fe)-Dissolved	mg/L	-	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	-	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	9.58	50.2	50.4
Manganese (Mn)-Dissolved	mg/L	-	0.0378	0.0141	0.0160
Mercury (Hg)-Dissolved	mg/L	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	0.00170	0.00564	0.00553
Nickel (Ni)-Dissolved	mg/L	-	<0.00050	0.00116	0.00114
Potassium (K)-Dissolved	mg/L	-	2.38	10.6	10.6
Selenium (Se)-Dissolved	mg/L	-	0.000137	0.000652	0.000671
Sodium (Na)-Dissolved	mg/L	-	21.8	63.3	64.2
Thallium (Tl)-Dissolved	mg/L	-	<0.000010	0.000091	0.000085
Uranium (U)-Dissolved	mg/L	-	0.0119	0.183	0.185
Zinc (Zn)-Dissolved	mg/L	-	0.0021	<0.0010	0.0012
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Toxicity	-	Not Acutely Toxic	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-06

Analyte	Sample ID		MP-06_2022-08-02
ALS Laboratory Sample ID			L2726807-1
Sample Date & Time			2022-08-02 10:20
QA/QC Sample Type			N/A
	Units	Water Licence Criteria [1]	
Hardness (as CaCO3)	mg/L	-	383
pH	pH units	6.0 - 9.5	8.31
Total Suspended Solids	mg/L	15	4.1
Total Dissolved Solids	mg/L	-	562
Turbidity	NTU	-	20.1
Alkalinity, Total (as CaCO3)	mg/L	-	118
Ammonia, Total (as N)	mg/L	-	0.185
Chloride (Cl)	mg/L	-	106
Fluoride (F)	mg/L	-	0.15
Nitrate (as N)	mg/L	-	4.38
Total Kjeldahl Nitrogen	mg/L	-	0.721
Phosphorus, Total	mg/L	-	0.0056
Sulfate (SO4)	mg/L	-	180
Dissolved Organic Carbon	mg/L	-	4.73
Total Organic Carbon	mg/L	-	4.24
Aluminum (Al)-Total	mg/L	-	0.113
Arsenic (As)-Total	mg/L	0.50	<0.0010
Cadmium (Cd)-Total	mg/L	-	<0.000050
Calcium (Ca)-Total	mg/L	-	65.9
Copper (Cu)-Total	mg/L	0.30	<0.0050
Iron (Fe)-Total	mg/L	-	0.19
Lead (Pb)-Total	mg/L	0.20	<0.00050
Magnesium (Mg)-Total	mg/L	-	51.3
Manganese (Mn)-Total	mg/L	-	0.0257
Mercury (Hg)-Total	mg/L	-	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	0.00591
Nickel (Ni)-Total	mg/L	0.50	<0.0050
Potassium (K)-Total	mg/L	-	8.14
Selenium (Se)-Total	mg/L	-	0.00053
Sodium (Na)-Total	mg/L	-	51.7
Thallium (Tl)-Total	mg/L	-	<0.00010
Uranium (U)-Total	mg/L	-	0.138
Zinc (Zn)-Total	mg/L	0.50	<0.030
Aluminum (Al)-Dissolved	mg/L	-	0.0194
Arsenic (As)-Dissolved	mg/L	-	0.00025
Cadmium (Cd)-Dissolved	mg/L	-	<0.0000050
Calcium (Ca)-Dissolved	mg/L	-	69.7
Copper (Cu)-Dissolved	mg/L	-	0.00082
Iron (Fe)-Dissolved	mg/L	-	0.034
Lead (Pb)-Dissolved	mg/L	-	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	50.6
Manganese (Mn)-Dissolved	mg/L	-	0.00672
Mercury (Hg)-Dissolved	mg/L	-	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	0.00664
Nickel (Ni)-Dissolved	mg/L	-	0.00115
Potassium (K)-Dissolved	mg/L	-	8.72
Selenium (Se)-Dissolved	mg/L	-	0.000525
Sodium (Na)-Dissolved	mg/L	-	51.1
Thallium (Tl)-Dissolved	mg/L	-	0.000021
Uranium (U)-Dissolved	mg/L	-	0.131
Zinc (Zn)-Dissolved	mg/L	-	0.0016
Oil and Grease, Total	mg/L	-	-
	-	No Visible Sheen	No Visible Sheen
Toxicity	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID		MP-C-B_2022-05-18	MP-C-B_2022-05-20	MP-C-B_2022-05-21	MP-C-B_2022-05-24	MP-C-B_2022-05-26	MP-C-B_2022-06-07	MP-C-B_2022-06-14
	ALS Laboratory Sample ID		L2708508-1	L2708508-2	L2708508-3	L2709941-1	L2710277-1	L2713602-5	L2715409-2
	Sample Date & Time		2022-05-18 16:30	2022-05-20 13:10	2022-05-21 16:25	2022-05-24 13:10	2022-05-26 12:30	2022-06-07 14:50	2022-06-14 8:30
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	373	-	325	-
pH	pH units	6.0 - 9.5	7.80	7.99	8.03	7.99	7.82	8.06	7.65
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	5.8	4.4	14.1	7.3	2.9	22.2	**42.7**
Total Dissolved Solids	mg/L	-	212	242	234	214	356	215	209
Turbidity	NTU	-	10.2	14.8	130	47.1	21.5	119	91.0
Ammonia, Total (as N)	mg/L	-	-	-	-	1.21	-	0.671	-
Nitrate (as N)	mg/L	-	-	-	-	0.264	-	0.366	-
Oil and Grease, Total	mg/L	-	-	-	-	<5.0	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B

Analyte	Sample ID		MP-C-B_2022-06-21	MP-C-B_2022-06-28	MP-C-B_2022-07-05	M-C-B_2022-09-05	MP-C-B_2022-09-13	MP-C-B_2022-09-20	MP-C-B_2022-09-27
	ALS Laboratory Sample ID		L2716862-2	L2719587-2	L2723073-8	L2732104-4	L2733009-1	L2734090-5	L2734862-3
	Sample Date & Time		2022-06-21 10:05	2022-06-28 11:30	2022-07-05 11:55	2022-09-05 10:30	2022-09-13 10:30	2022-09-20 10:40	2022-09-27 10:10
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	932	-	-	-
pH	pH units	6.0 - 9.5	8.19	8.25	8.43	8.45	8.42	7.95	7.80
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	19.8	2.3	1.1	<1.0	1.5	<2.0	<2.0
Total Dissolved Solids	mg/L	-	134	168	199	548	523	560	488
Turbidity	NTU	-	42.1	8.52	2.35	2.75	5.83	2.70	7.80
Ammonia, Total (as N)	mg/L	-	-	-	-	0.049	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	3.37	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No visible sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID		MP-C-H_2022-06-07	QD-BT2_2022-06-07	MP-C-H_2022-06-14	MP-C-H_2022-06-21	MP-C-H_2022-06-28	QD-BF2_2022-06-28	MP-C-H_2022-07-05
	ALS Laboratory Sample ID		L2713602-4	L2713602-2	L2715409-1	L2716862-1	L2719587-1	L2719587-5	L2723073-6
	Sample Date & Time		2022-06-07 10:00	2022-06-07 10:00	2022-06-14 7:35	2022-06-21 9:00	2022-06-28 10:25	2022-06-28 10:25	2022-07-05 16:50
	QA/QC Sample Type		N/A	Travel Blank	N/A	N/A	N/A	Field Blank	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	703	<1.0	-	-	-	-	-
pH	pH units	6.0 - 9.5	7.83	5.71	7.51	7.86	7.92	6.34	8.29
Total Suspended Solids	mg/L	Grab 30, Average 15	**33.1**	<1.0	3.8	<2.0	<2.0	<2.0	<1.0
Total Dissolved Solids	mg/L	-	405	<10	133	49	76	<10	81
Turbidity	NTU	-	68.0	<0.10	7.60	0.78	2.42	<0.10	0.47
Ammonia, Total (as N)	mg/L	-	0.198	<0.010	-	-	-	-	-
Nitrate (as N)	mg/L	-	0.198	<0.020	-	-	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No visible sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID		MP-C-H_2022-07-12	MP-C-H_2022-07-19	MP-C-H_2022-07-26	MP-C-H_2022-08-02	QD-BT2_2022-08-02	MP-C-H_2022-08-09	QD-CC2_2022-08-09	MP-C-H_2022-08-16
	ALS Laboratory Sample ID		L2722585-4	L2724101-4	L2724929-1	L2726793-5	L2726793-6	L2727458-5	L2727458-6	L2728891-5
	Sample Date & Time		2022-07-12 9:50	2022-07-19 10:00	2022-07-26 7:15	2022-08-02 9:00	2022-08-02 9:00	2022-08-09 11:20	2022-08-09 11:20	2022-08-16 10:10
	QA/QC Sample Type		N/A	N/A	N/A	N/A	Travel Blank	N/A	Field Duplicate	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	261	-	-	348	<1.0	-	-	-
pH	pH units	6.0 - 9.5	8.41	8.17	8.17	8.36	5.85	8.22	8.23	8.22
Total Suspended Solids	mg/L	Grab 30, Average 15	<1.0	<2.0	<2.0	<3.0	<3.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	136	141	175	167	<10	219	207	296
Turbidity	NTU	-	0.22	0.39	0.21	0.13	<0.10	0.21	0.26	0.70
Ammonia, Total (as N)	mg/L	-	<0.010	-	-	<0.010	<0.010	-	-	-
Nitrate (as N)	mg/L	-	0.161	-	-	0.309	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

Analyte	Sample ID		MP-C-H_2022-08-23	MP-C-H_2022-08-30	QP-CC2_2022-08-30	M-C-H_2022-09-05	MP-C-H_2022-09-13	MP-C-H_2022-09-20	MP-C-H_2022-09-27	QP-CC2_2022-09-27
	ALS Laboratory Sample ID		L2730240-5	L2731106-3	L2731106-2	L2732104-5	L2733009-6	L2734090-2	L2734862-2	L2734862-1
	Sample Date & Time		2022-08-23 19:00	2022-08-30 13:10	2022-08-30 13:10	2022-09-05 11:20	2022-09-13 13:50	2022-09-20 11:10	2022-09-27 8:40	2022-09-27 8:40
	QA/QC Sample Type		N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	-	569	-	-	-	-
pH	pH units	6.0 - 9.5	8.57	8.22	8.21	8.56	8.46	8.08	8.05	8.01
Total Suspended Solids	mg/L	Grab 30, Average 15	<3.0	<2.0	<2.0	<1.0	1.1	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	250	225	226	264	186	260	203	204
Turbidity	NTU	-	<1.0	0.13	0.20	0.45	<0.10	0.59	<0.10	<0.10
Ammonia, Total (as N)	mg/L	-	-	-	-	0.024	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	0.505	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	<5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID		MP-C-J _2022-06-14	QD-CC2_2022-06-14	MP-C-J_2022-06-21	MP-C-J_2022-06-28	MP-C-J_2022-07-05	QD-BT2_2022-07-05	MP-C-J_2022-07-12
	ALS Laboratory Sample ID		L2715409-4	L2715409-5	L2716862-4	L2719587-4	L2723073-4	L2723073-7	L2722585-3
	Sample Date & Time		2022-06-14 9:20	2022-06-14 9:20	2022-06-21 10:40	2022-06-28 12:00	2022-07-05 11:20	2022-07-05 11:20	2022-07-12 8:45
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	Travel Blank	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	263	263	-	-	-	-	554
pH	pH units	6.0 - 9.5	8.02	8.01	8.16	8.01	8.58	5.81	8.52
Total Suspended Solids	mg/L	Grab 30, Average 15	2.6	2.7	<2.0	<2.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	-	162	161	184	206	219	<10	280
Turbidity	NTU	-	9.88	10.4	1.2	0.14	0.43	<0.10	<0.10
Ammonia, Total (as N)	mg/L	-	0.014	0.011	-	-	-	-	0.012
Nitrate (as N)	mg/L	-	0.032	0.030	-	-	-	-	0.154
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No visible sheen	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID		MP-C-J_2022-07-19	MP-C-J_2022-07-26	MP-C-J_2022-08-02	MP-C-J_2022-08-09	MP-C-J_2022-08-16	MP-C-J_2022-08-23	QD-BT2_2022-08-23
	ALS Laboratory Sample ID		L2724101-6	L2724929-4	L2726793-4	L2727458-1	L2728891-6	L2730240-1	L2730240-2
	Sample Date & Time		2022-07-19 11:10	2022-07-26 8:30	2022-08-02 8:10	2022-08-09 8:50	2022-08-16 8:50	2022-08-23 7:45	2022-08-23 7:45
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	Travel Blank
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	501	-	-	-	-
pH	pH units	6.0 - 9.5	7.83	7.80	8.23	7.87	7.88	8.55	6.09
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	3.3	<2.0	2.0	<3.0	<3.0
Total Dissolved Solids	mg/L	-	280	289	261	240	260	228	<10
Turbidity	NTU	-	0.49	0.40	<0.10	<0.10	0.23	<1.0	1.0
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	0.122	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

Analyte	Sample ID		MP-C-J_2022-08-30	MP-C-J_2022-09-05	QP-BF2_2022-09-05	MP-C-J_2022-09-13	MP-C-J_2022-09-20
	ALS Laboratory Sample ID		L2731106-1	L2732104-1	L2732104-2	L2733009-5	L2734090-1
	Sample Date & Time		2022-08-30 12:00	2022-09-05 10:00	2022-09-05 10:00	2022-09-13 12:00	2022-09-20 10:10
	QA/QC Sample Type		N/A	N/A	Field Blank	N/A	N/A
	Units	Water Licence Criteria [1]					
Conductivity	umhos/cm	-	-	438	<1.0	-	-
pH	pH units	6.0 - 9.5	7.97	8.56	5.83	8.43	7.83
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<1.0	<1.0	<1.0	<2.0
Total Dissolved Solids	mg/L	-	256	231	<10	223	255
Turbidity	NTU	-	0.45	0.18	<0.10	<0.10	<0.10
Ammonia, Total (as N)	mg/L	-	-	<0.010	<0.010	-	-
Nitrate (as N)	mg/L	-	-	0.073	<0.020	-	-
Oil and Grease, Total	mg/L	-	-	<5.0	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID		MP-C-K_2022-06-07	MP-C-K_2022-06-14	MP-C-K_2022-06-21	MP-C-K_2022-06-28	MP-C-K_2022-07-05	MP-C-K_2022-07-12
	ALS Laboratory Sample ID		L2713602-1	L2715409-3	L2716862-3	L2719587-3	L2723073-5	L2722585-2
	Sample Date & Time		2022-06-07 12:00	2022-06-14 8:55	2022-06-21 10:25	2022-06-28 11:50	2022-07-05 11:40	2022-07-12 8:05
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	336	-	-	-	-	551
pH	pH units	6.0 - 9.5	8.13	8.02	8.26	8.23	8.47	8.42
Total Suspended Solids	mg/L	Grab 30, Average 15	3.7	2.5	4.5	16.5	<1.0	<1.0
Total Dissolved Solids	mg/L	-	192	218	165	182	218	285
Turbidity	NTU	-	20.4	10.2	8.63	1.58	1.02	0.58
Ammonia, Total (as N)	mg/L	-	0.451	-	-	-	-	2.44
Nitrate (as N)	mg/L	-	0.441	-	-	-	-	2.45
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No visible sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID		QD-CC2_2022-07-12	MP-C-K_2022-07-19	MP-C-K_2022-07-26	QD-CC2_2022-07-26	MP-C-K_2022-08-02	MP-C-K_2022-08-09	MP-C-K_2022-08-16
	ALS Laboratory Sample ID		L2722585-1	L2724101-5	L2724929-2	L2724929-3	L2726793-1	L2727458-4	L2728891-2
	Sample Date & Time		2022-07-12 8:05	2022-07-19 10:45	2022-07-26 8:10	2022-07-26 8:10	2022-08-02 8:00	2022-08-09 9:55	2022-08-16 9:20
	QA/QC Sample Type		Field Duplicate	N/A	N/A	Field Duplicate	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	551	-	-	-	711	-	-
pH	pH units	6.0 - 9.5	8.45	8.06	7.99	8.00	8.27	8.01	8.03
Total Suspended Solids	mg/L	Grab 30, Average 15	<1.0	<2.0	<2.0	<2.0	<3.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	276	336	379	360	384	414	521
Turbidity	NTU	-	0.63	0.73	0.69	0.76	0.32	0.85	0.30
Ammonia, Total (as N)	mg/L	-	2.42	-	-	-	0.340	-	-
Nitrate (as N)	mg/L	-	2.45	-	-	-	1.79	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	<5.0	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-K

Analyte	Sample ID		MP-C-K_2022-08-23	MP-C-K_2022-08-30	MP-C-K_2022-09-05	MP-C-K_2022-09-13	MP-C-K_2022-09-20	QP-BT2_2022-09-20
	ALS Laboratory Sample ID		L2730240-3	L2731106-4	L2732104-3	L2733009-7	L2734090-6	L2734090-7
	Sample Date & Time		2022-08-23 8:10	2022-08-30 14:20	2022-09-05 10:30	2022-09-13 11:40	2022-09-20 10:30	2022-09-20 10:30
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	Travel Blank
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	-	-	1060	-	-	-
pH	pH units	6.0 - 9.5	8.45	7.83	8.47	8.42	7.82	6.48
Total Suspended Solids	mg/L	Grab 30, Average 15	<3.0	<2.0	<1.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	537	561	710	841	884	16
Turbidity	NTU	-	<1.0	0.12	0.37	0.49	0.23	<0.10
Ammonia, Total (as N)	mg/L	-	-	-	0.045	-	-	-
Nitrate (as N)	mg/L	-	-	-	0.656	-	-	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID		MP-Q1-01_2022-06-07	MP-Q1-01_2022-06-14	MP-Q1-01_2022-06-21	MP-Q1-01 _2022-06-28	MP-Q1-01_2022-07-05	MP-Q1-01_2022-07-12
	ALS Laboratory Sample ID		L2713602-3	L2715409-6	L2716862-8	L2719587-6	L2723073-1	L2722585-5
	Sample Date & Time		2022-06-07 9:00	2022-06-14 10:45	2022-06-21 11:45	2022-06-28 12:45	2022-07-05 8:50	2022-07-12 10:40
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	84.0	-	-	-	-	181
pH	pH units	6.0 - 9.5	7.80	7.70	7.83	7.86	8.25	8.20
Total Suspended Solids	mg/L	Grab 30, Average 15	16.5	8.5	3.2	<2.0	2.1	3.9
Total Dissolved Solids	mg/L	-	46	70	62	101	175	99
Turbidity	NTU	-	17.9	9.92	5.42	3.61	6.21	3.89
Ammonia, Total (as N)	mg/L	-	0.027	-	-	-	-	<0.010
Nitrate (as N)	mg/L	-	0.053	-	-	-	-	0.470
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

Analyte	Sample ID		MP-Q1-01_2022-07-19	MP-Q1-01_2022-07-26
	ALS Laboratory Sample ID		L2724101-3	L2724929-5
	Sample Date & Time		2022-07-19 9:20	2022-07-26 8:50
	QA/QC Sample Type		N/A	N/A
	Units	Water Licence Criteria [1]		
Conductivity	umhos/cm	-	-	-
pH	pH units	6.0 - 9.5	7.90	7.95
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0
Total Dissolved Solids	mg/L	-	90	120
Turbidity	NTU	-	4.08	3.07
Ammonia, Total (as N)	mg/L	-	-	-
Nitrate (as N)	mg/L	-	-	-
Oil and Grease, Total	mg/L	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).
[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID		MP-Q1-02_2022-06-21	QD-CC2_2022-06-21	MP-Q1-02_2022-06-28	MP-Q1-02_2022-07-05	MP-Q1-02_2022-07-12	MP-Q1-02_2022-07-19	QP-CC2_2022-07-19
	ALS Laboratory Sample ID		L2716862-5	L2716862-6	L2719587-7	L2723073-3	L2722585-6	L2724101-1	L2724101-2
	Sample Date & Time		2022-06-21 11:05	2022-06-21 11:05	2022-06-28 12:30	2022-07-05 9:20	2022-07-12 13:15	2022-07-19 8:55	2022-07-19 8:55
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	-	344.0	-	-
pH	pH units	6.0 - 9.5	8.05	8.04	7.99	8.19	8.32	7.97	7.97
Total Suspended Solids [2]	mg/L	Grab 30, Average 15	**41.6**	41.6	2.8	<1.0	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	171	147	103	84	203	251	271
Turbidity	NTU	-	70.0	67.1	15.2	2.78	1.60	2.42	2.46
Ammonia, Total (as N)	mg/L	-	- [5]	-	-	-	1.30	-	-
Nitrate (as N)	mg/L	-	- [5]	-	-	-	7.42	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	-	No visible sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [3,4]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] Ammonia and Nitrate not analyzed; required bottles not received by laboratory and insufficient volume remaining in other bottles to use for the analysis.

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID		MP-Q1-02_2022-07-26	MP-Q1-02_2022-08-02	MP-Q1-02_2022-08-09	MP-Q1-02_2022-08-16	QD-BT2_2022-08-16	MP-Q1-02_2022-08-23	MP-Q1-02_2022-09-13
	ALS Laboratory Sample ID		L2724929-6	L2726793-3	L2727458-3	L2728891-4	L2728891-1	L2730240-4	L2733009-4
	Sample Date & Time		2022-07-26 9:20	2022-08-02 7:20	2022-08-09 8:00	2022-08-16 7:55	2022-08-16 7:55	2022-08-23 16:40	2022-09-13 11:10
	QA/QC Sample Type		N/A	N/A	N/A	N/A	Travel Blank	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	491	-	-	-	503	551
pH	pH units	6.0 - 9.5	7.87	8.27	7.85	7.85	6.37	8.55	8.38
Total Suspended Solids [2]	mg/L	Grab 30, Average 15	<2.0	<3.0	<2.0	<2.0	<2.0	<1.0	2.4
Total Dissolved Solids	mg/L	-	305	277	257	277	19	267	308
Turbidity	NTU	-	1.26	0.48	0.83	0.53	0.12	<1.0	0.24
Ammonia, Total (as N)	mg/L	-	-	0.013	-	-	-	0.043	0.022
Nitrate (as N)	mg/L	-	-	5.73	-	-	-	3.81	4.10
Oil and Grease, Total	mg/L	-	-	<5.0	-	-	-	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4]	N/A	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] Ammonia and Nitrate not analyzed; required bottles not received by laboratory and insufficient volume remaining in other bottles to use for the analysis.

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

Analyte	Sample ID		QP-BT2_2022-09-13	MP-Q1-02_2022-09-20
	ALS Laboratory Sample ID		L2733009-3	L2734090-3
	Sample Date & Time		2022-09-13 11:10	2022-09-20 9:35
	QA/QC Sample Type		Travel Blank	N/A
	Units	Water Licence Criteria [1]		
Conductivity	umhos/cm	-	2.1	-
pH	pH units	6.0 - 9.5	6.91	7.63
Total Suspended Solids [2]	mg/L	Grab 30, Average 15	<1.0	<2.0
Total Dissolved Solids	mg/L	-	<10	331
Turbidity	NTU	-	<0.10	0.35
Ammonia, Total (as N)	mg/L	-	<0.010	-
Nitrate (as N)	mg/L	-	<0.020	-
Oil and Grease, Total	mg/L	-	<5.0	-
	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality [3,4]	N/A	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] Ammonia and Nitrate not analyzed; required bottles not received by laboratory and insufficient volume remaining in other bottles to use for the analysis.

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID		MS-01_2022-01-11	MS-0101_2022-01-11	MS-01_2022-02-16	MS-01_2022-02-22	MS-01_2022-03-01	MS-01_2022-04-19	MS-01_2022-05-03	MS-01_2022-06-14	MS-01_2022-07-05
	ALS Laboratory Sample ID		L2678451-1	L2678451-3	L2687190-1	L2687941-1	L2689694-1	L2700271-1	L2703673-1	L2715252-1	L2720791-1
	Sample Date & Time		2022-01-11 14:45	2022-01-11 14:45	2022-02-16 14:45	2022-02-22 14:45	2022-03-01 14:45	2022-04-19 14:45	2022-05-03 14:45	2022-06-14 14:45	2022-07-05 14:45
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]									
pH	pH units	6.0 - 9.5	6.93	6.89	7.44	7.46	7.44	7.47	7.48	7.38	7.74
Total Suspended Solids	mg/L	35	<1.0	<1.0	1.0	<1.0	<1.0	5.0	4.1	3.9	7.8
Ammonia, Total (as N)	mg/L	4.0	3.03	3.03	0.072	0.076	0.188	0.261	0.101	0.193	0.084
Total Kjeldahl Nitrogen	mg/L	-	4.91	5.01	7.24	5.41	4.74	0.410	6.52	0.791	0.904
Phosphorus, Total	mg/L	4.0	0.660	0.665	0.961	0.496	0.992	1.80	2.03	0.544	0.822
Fecal Coliforms	CFU/100 mL	1000	0	0	0	0	0	41	0	0	2
BOD	mg/L	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01

Analyte	Sample ID		MS-0102_2022-07-05	MS-01_2022-08-02	MS-01_2022-09-13	MS-0103_2022-09-13	MS-01	MS-01_2022-11-08	MS-0101_2022-11-08	MS-01_2022-12-06
	ALS Laboratory Sample ID		L2720791-3	L2726465-1	L2732950-1	L2732950-3	L2736757-1	L2740007-1	L2740007-3	L2742711-1
	Sample Date & Time		2022-07-05 14:45	2022-08-02 14:45	2022-09-13 14:45	2022-09-13 14:45	2022-10-12 14:45	2022-11-08 14:30	2022-11-08 14:50	2022-12-06 14:30
	QA/QC Sample Type		Field Blank	N/A	N/A	Travel Blank	N/A	N/A	Field duplicate	N/A
	Units	Water Licence Criteria [1]								
pH	pH units	6.0 - 9.5	5.76	7.59	8.05	6.43	7.34	7.80	7.74	7.87
Total Suspended Solids	mg/L	35	<1.0	2.6	20.0	<1.0	10.5	7.4	6.5	<1.0
Ammonia, Total (as N)	mg/L	4.0	<0.010	0.117	0.237	<0.010	0.320	0.049	0.061	**10.3**
Total Kjeldahl Nitrogen	mg/L	-	<0.050	3.91	136	<0.050	0.476	0.887	<0.50	9.64
Phosphorus, Total	mg/L	4.0	<0.0030	0.422	1.50	<0.0030	0.607	1.08	1.16	**5.22**
Fecal Coliforms	CFU/100 mL	1000	0	0	11	0	0	8	2	3
BOD	mg/L	30	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID		MS-01B_2022-01-11	MS-01B01_2022-01-11	MS-01B_2022-02-16	MS-01B_2022-02-22	MS-01B_2022-03-01	MS-01B_2022-04-19	MS-01B_2022-05-03	MS-01B_2022-06-14	MS-01B_2022-07-05	MS-01B02_2022-07-05
	ALS Laboratory Sample ID		L2678452-1	L2678452-3	L2687191-1	L2687937-1	L2689696-1	L2700268-1	L2703684-1	L2715271-1	L2720782-1	L2720782-3
	Sample Date & Time		2022-01-11 15:00	2022-01-11 15:00	2022-02-16 15:00	2022-02-22 15:00	2022-03-01 15:00	2022-04-19 15:00	2022-05-03 15:00	2022-06-14 14:00	2022-07-05 15:00	2022-07-05 14:00
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Field Blank
	Units	Water Licence Criteria [1]										
pH	pH units	6.0 - 9.5	8.18	8.19	8.14	8.27	7.93	8.03	8.01	7.98	7.93	5.67
Total Suspended Solids	mg/L	35	1.3	1.6	2.2	8.9	1.3	1.6	8.2	1.1	2.0	<1.0
Ammonia, Total (as N)	mg/L	4.0	0.223	0.216	0.150	0.196	0.181	0.302	0.137	0.029	0.112	<0.010
Total Kjeldahl Nitrogen	mg/L	-	1.47	0.903	0.818	1.26	1.09	1.45	0.935	1.20	1.24	0.09
Phosphorus, Total	mg/L	4.0	2.41	2.43	0.418	1.44	0.927	0.403	0.912	0.658	0.684	<0.0030
Fecal Coliforms	CFU/100 mL	1000	0	0	-	0	0	69	750	70	25	0
BOD	mg/L	30	<2.0	<2.0	<2.0	2.5	<2.0	<2.0	3.2	2.3	<2.0	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] No Data: overgrowth with target. Likely a generic bacterial contamination at the lab made it impossible to accurately count the analysis plate. The lab was able to confirm the absence of Total or Fecal Coliforms, however, the interpretation does not match the analysis method requirements and so the test result is rendered invalid. Based on communications with the lab there was no Total or Fecal Coliforms present in the sample.

[5] Re-sampled on October 31, 2022 due to fecal coliform exceedance on October 12, 2022.

[6] Re-sampled on December 20, 2022 due to total ammonia exceedance on December 6, 2022.

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-01B

Analyte	Sample ID		MS-01B_2022-08-02	MS-01B_2022-09-13	MS-01B03_2022-09-13	MS-01B	MS-01B_31-10-2022	MS-01B_2022-11-08	MS-01B01_2022-11-08	MS-01B_2022-12-06	MS-01B_2022-12-20
	ALS Laboratory Sample ID		L2726548-1	L2732962-1	L2732962-3	L2736759-1	L2738929-1	L2740006-1	L2740006-3	L2742712-1	L2743737-1
	Sample Date & Time		2022-08-02 15:00	2022-09-13 15:00	2022-09-13 15:00	2022-10-12 15:00	2022-10-31 18:00	2022-11-08 15:10	2022-11-08 15:20	2022-12-06 15:10	2022-12-20 12:00
	QA/QC Sample Type		N/A	N/A	Travel Blank	N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	Water Licence Criteria [1]									
pH	pH units	6.0 - 9.5	8.30	7.80	6.46	8.13	8.32	8.27	8.19	8.06	8.37
Total Suspended Solids	mg/L	35	1.6	7.4	<1.0	12.9	1.0	<1.0	6.7	<1.0	<1.0
Ammonia, Total (as N)	mg/L	4.0	0.083	0.071	<0.010	0.096	0.245	0.113	0.062	**9.0**	**21.9** [6]
Total Kjeldahl Nitrogen	mg/L	-	3.06	0.784	<0.050	1.84	1.12	0.945	1.03	9.25	21.8
Phosphorus, Total	mg/L	4.0	0.792	1.52	<0.0030	3.12	0.816	1.20	2.56	**5.26**	2.24
Fecal Coliforms	CFU/100 mL	1000	4	NR [4]	0	**1440**	0 [5]	29	41	4	-
BOD	mg/L	30	<2.0	3.1	<2.0	4.8	<2.0	<2.0	3.3	2.1	<2.0
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	-	No Visible Sheen	No visible sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] No Data: overgrowth with target. Likely a generic bacterial contamination at the lab made it impossible to accurately count the analysis plate. The lab was able to confirm the absence of Total or Fecal Coliforms, however, the interpretation does not match the analysis method requirements and so the test result is rendered invalid. Based on communications with the lab there was no Total or Fecal Coliforms present in the sample.

[5] Re-sampled on October 31, 2022 due to fecal coliform exceedance on October 12, 2022.

[6] Re-sampled on December 20, 2022 due to total ammonia exceedance on December 6, 2022.

Table 7.3.3: Water Quality Results for Water Licence Monitoring Location - MS-03B

Analyte	Sample ID		MS-03B_2022-07-10	MS-03B_2022-07-13
	ALS Laboratory Sample ID		L2722755-1	L2722755-2
	Sample Date & Time		2022-07-10 21:05	2022-07-13 21:05
	QA/QC Sample Type		N/A	N/A
	Units	Water Licence Criteria [1]		
pH	pH units	6.0 - 9.5	8.28	-
Total Suspended Solids	mg/L	-	<1.0	-
Total Dissolved Solids	mg/L	-	133	-
Turbidity	NTU	-	0.93	-
Lead (Pb)-Total	mg/L	0.001	<0.00050	-
Benzene	ug/L	0.370	-	<0.50
Ethylbenzene	ug/L	0.090	-	<0.50
Toluene	ug/L	0.002	-	<0.50
F1 (C6-C10)	ug/L	-	-	<100
F2 (C10-C16)	ug/L	-	-	-
F3 (C16-C34)	ug/L	-	-	-
F4 (C34-C50)	ug/L	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	-	- [2]	- [2]
Oil and Grease, Total	mg/L	15	<5.0	-
	-	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

[2] TPH not analyzed; incorrect bottle set was used on July 10 and during a second sampling event on July 13 for the remaining parameters, the requested reanalysis was miscommunicated to the external laboratory.

Table 7.3.4: Water Quality Results for Water Licence Monitoring Location - MS-06

Analyte	Sample ID			MS-06_2022-06-04	MS-06_2022-06-05	MS-06_2022-08-16	MS-06_2022-09-06
	ALS Laboratory Sample ID			L2712364-1	L2712374-1	L2728673-1	L2731629-1
	Sample Date & Time			2022-06-04 16:30	2022-06-05 13:00	2022-08-16 11:35	2022-09-06 11:35
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	Water Licence Criteria[1]	MDMER Criteria [2]				
Hardness (as CaCO3)	mg/L	-	-	84.5	84.4	723	737
pH	pH units	6.0 - 9.5	6.0 - 9.5	7.37	7.37	7.79	7.76
Total Suspended Solids	mg/L	15	30 (Grab)	**59.8**	**19.5**	9.9	2.6
Total Dissolved Solids	mg/L	-	-	146	131	1070	1100
Turbidity	NTU	-	-	213	123	33.8	15.5
Alkalinity, Total (as CaCO3)	mg/L	-	-	21.2	17.7	128	54.6
Ammonia, Total (as N)	mg/L	-	-	1.030	1.01	0.759	0.216
Chloride (Cl)	mg/L	-	-	7.52	7.43	51.5	48.4
Fluoride (F)	mg/L	-	-	0.068	0.074	<0.10	0.12
Nitrate (as N)	mg/L	-	-	1.97	1.95	20.3	20.1
Total Kjeldahl Nitrogen	mg/L	-	-	2.22	2.49	1.10	1.98
Phosphorus, Total	mg/L	-	-	0.0380	0.0226	0.0092	0.0052
Sulfate (SO4)	mg/L	-	-	58.4	56.2	613	557
Dissolved Organic Carbon	mg/L	-	-	4.58	4.61	3.57	3.65
Total Organic Carbon	mg/L	-	-	4.87	4.73	3.37	3.55
Aluminum (Al)-Total	mg/L	-	-	2.05	1.38	0.102	0.063
Arsenic (As)-Total	mg/L	0.5	0.60	0.00083	0.00034	0.00030	<0.0010
Cadmium (Cd)-Total	mg/L	-	-	0.0000088	0.0000092	0.0000211	<0.000050
Calcium (Ca)-Total	mg/L	-	-	11.4	10.5	78.8	78.4
Copper (Cu)-Total	mg/L	0.3	0.60	0.00297	0.00199	0.00090	<0.0050
Iron (Fe)-Total	mg/L	-	-	5.17	2.22	0.270	0.11
Lead (Pb)-Total	mg/L	0.2	0.20	0.00148	0.00121	0.000968	<0.00050
Magnesium (Mg)-Total	mg/L	-	-	14.4	13.1	131	137
Manganese (Mn)-Total	mg/L	-	-	0.411	0.379	0.288	0.119
Mercury (Hg)-Total	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	-	0.00239	0.00245	0.00533	0.00464
Nickel (Ni)-Total	mg/L	0.5	1.00	0.00580	0.00331	0.00393	<0.0050
Potassium (K)-Total	mg/L	-	-	3.78	3.63	18.3	17.4
Selenium (Se)-Total	mg/L	-	-	0.000608	0.000522	0.00232	0.00198
Sodium (Na)-Total	mg/L	-	-	2.36	2.24	19.9	21.4
Thallium (Tl)-Total	mg/L	-	-	0.000041	0.000037	0.000089	<0.00010
Uranium (U)-Total	mg/L	-	-	0.00129	0.00135	0.0156	0.0146
Zinc (Zn)-Total	mg/L	0.5	1.00	0.0077	0.0081	0.0115	<0.030
Aluminum (Al)-Dissolved	mg/L	-	-	0.0107	0.0093	0.0065	<0.050
Arsenic (As)-Dissolved	mg/L	-	-	<0.00010	<0.00010	0.00026	<0.0010
Cadmium (Cd)-Dissolved	mg/L	-	-	<0.0000050	0.0000062	0.0000189	<0.000050
Calcium (Ca)-Dissolved	mg/L	-	-	12.4	12.3	78.4	77.0
Copper (Cu)-Dissolved	mg/L	-	-	<0.00020	<0.00020	0.00055	<0.0020
Iron (Fe)-Dissolved	mg/L	-	-	<0.010	<0.010	<0.010	<0.10
Lead (Pb)-Dissolved	mg/L	-	-	<0.000050	<0.000050	0.000117	<0.00050
Magnesium (Mg)-Dissolved	mg/L	-	-	13.0	13.1	128	132
Manganese (Mn)-Dissolved	mg/L	-	-	0.340	0.358	0.168	0.0640
Mercury (Hg)-Dissolved	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.00348	0.00355	0.00551	0.00450
Nickel (Ni)-Dissolved	mg/L	-	-	0.00075	0.00077	0.00321	<0.0050
Potassium (K)-Dissolved	mg/L	-	-	3.24	3.40	17.8	17.1
Selenium (Se)-Dissolved	mg/L	-	-	0.000518	0.000562	0.00236	0.00202
Sodium (Na)-Dissolved	mg/L	-	-	2.28	2.40	19.1	21.1
Thallium (Tl)-Dissolved	mg/L	-	-	0.000021	0.000021	0.000088	<0.00010
Uranium (U)-Dissolved	mg/L	-	-	0.000462	0.000650	0.0159	0.0145
Zinc (Zn)-Dissolved	mg/L	-	-	<0.0010	0.0029	0.0085	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	Not acutely toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.5: Water Quality Results for Water Licence Monitoring Location - MS-07

Analyte	Sample ID			MS-07-2022-07-18	MS-07_2022-08-02	MS-07_2022-08-29
	ALS Laboratory Sample ID			L2723437-1	L2726074-1	L2730586-1
	Sample Date & Time			2022-07-18 12:30	2022-08-02 9:00	2022-08-29 9:25
	QA/QC Sample Type			N/A	N/A	N/A
	Units	Water Licence Criteria[1]	MDMER Criteria [2]			
Hardness (as CaCO3)	mg/L	-	-	89.2	113	177
pH	pH units	6.0 - 9.5	6.0 - 9.5	8.01	7.95	8.03
Total Suspended Solids	mg/L	15	30 (Grab)	<2.0	**29.9**	3.8
Total Dissolved Solids	mg/L	-	-	113	163	257
Turbidity	NTU	-	-	3.29	57.3	7.94
Alkalinity, Total (as CaCO3)	mg/L	-	-	47.9	53.7	70.0
Ammonia, Total (as N)	mg/L	-	-	0.013	<0.010	0.021
Chloride (Cl)	mg/L	-	-	3.54	3.84	8.90
Fluoride (F)	mg/L	-	-	0.117	0.117	0.162
Nitrate (as N)	mg/L	-	-	2.05	2.00	3.39
Total Kjeldahl Nitrogen	mg/L	-	-	0.530	0.239	0.279
Phosphorus, Total	mg/L	-	-	0.0064	0.0051	0.0053
Sulfate (SO4)	mg/L	-	-	45.6	51.7	98.9
Dissolved Organic Carbon	mg/L	-	-	1.95	2.14	1.96
Total Organic Carbon	mg/L	-	-	1.77	3.31	2.47
Aluminum (Al)-Total	mg/L	-	-	0.148	1.92	0.195
Arsenic (As)-Total	mg/L	0.50	0.60	0.00012	0.00030	0.00015
Cadmium (Cd)-Total	mg/L	-	-	0.0000112	0.0000340	0.0000167
Calcium (Ca)-Total	mg/L	-	-	13.3	16.5	25.8
Copper (Cu)-Total	mg/L	0.30	0.60	0.00110	0.00909	0.00477
Iron (Fe)-Total	mg/L	-	-	0.203	2.76	0.283
Lead (Pb)-Total	mg/L	0.20	0.20	0.00360	0.00831	0.000386
Magnesium (Mg)-Total	mg/L	-	-	12.7	17.2	27.5
Manganese (Mn)-Total	mg/L	-	-	0.00468	0.0452	0.0208
Mercury (Hg)-Total	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	-	0.00775	0.00761	0.0151
Nickel (Ni)-Total	mg/L	0.50	1.00	<0.00050	0.00389	0.00075
Potassium (K)-Dissolved	mg/L			7.14	8.88	13.9
Selenium (Se)-Total	mg/L	-	-	0.000350	0.000317	0.000493
Sodium (Na)-Total	mg/L	-	-	2.08	2.35	4.04
Thallium (Tl)-Total	mg/L	-	-	<0.000010	0.000037	<0.000010
Uranium (U)-Total	mg/L	-	-	0.00162	0.00218	0.00376
Zinc (Zn)-Total	mg/L	0.50	1.00	<0.0030	0.0094	<0.0030
Aluminum (Al)-Dissolved	mg/L	-	-	0.0361	0.0304	0.0157
Arsenic (As)-Dissolved	mg/L	-	-	<0.00010	0.00013	0.00012
Cadmium (Cd)-Dissolved	mg/L	-	-	0.0000071	0.0000082	0.0000077
Calcium (Ca)-Dissolved	mg/L	-	-	13.9	18.5	26.1
Copper (Cu)-Dissolved	mg/L	-	-	0.00035	0.00105	0.00073
Iron (Fe)-Dissolved	mg/L	-	-	0.012	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	-	-	0.000551	0.000112	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	-	13.2	16.1	27.1
Manganese (Mn)-Dissolved	mg/L	-	-	0.00139	0.00462	0.00054
Mercury (Hg)-Dissolved	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.00672	0.00912	0.0150
Nickel (Ni)-Dissolved	mg/L	-	-	<0.00050	<0.00050	<0.00050
Potassium (K)-Dissolved	mg/L	-	-	7.09	8.65	13.7
Selenium (Se)-Dissolved	mg/L	-	-	0.000346	0.000324	0.000545
Sodium (Na)-Dissolved	mg/L	-	-	1.98	2.46	4.13
Thallium (Tl)-Dissolved	mg/L	-	-	<0.000010	<0.000010	<0.000010
Uranium (U)-Dissolved	mg/L	-	-	0.00153	0.00188	0.00359
Zinc (Zn)-Dissolved	mg/L	-	-	<0.0010	0.0031	<0.0010
Oil and Grease, Total	mg/L	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	- [4]	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Acute toxicity sample collected on August 2 passed, however, lab control sample failed QA/QC. Due to this a second sample was collected on August 29.

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - MS-08

Analyte	Sample ID			MS-08_2022-06-22	MS-08_2022-07-12	MS-08_2022-08-02	MS-08_2022-08-28
	ALS Laboratory Sample ID			L2717831-1	L2722590-1	L2726075-1	L2730434-1
	Sample Date & Time			2022-06-22 16:25	2022-07-12 8:45	2022-08-02 9:45	2022-08-28 9:30
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]	MDMER Criteria [2]				
Hardness (as CaCO3)	mg/L		-	59	225	991	2170
pH	pH units	6.0 - 9.5	6.0 - 9.5	6.85	7.43	8.72	7.59
Total Suspended Solids	mg/L	15	30 (Grab)	7.4	3.4	<2.0	6.0
Total Dissolved Solids	mg/L	-	-	69	340	1300	2740
Turbidity	NTU	-	-	5.67	5.62	0.48	10.6
Alkalinity, Total (as CaCO3)	mg/L	-	-	4.1	12.9	16.1	6.6
Ammonia, Total (as N)	mg/L	-	-	0.220	0.55	1.95	2.97
Chloride (Cl)	mg/L	-	-	1.00	1.95	9.0	42.6
Fluoride (F)	mg/L	-	-	0.029	0.045	0.11	<0.10
Nitrate (as N)	mg/L	-	-	0.828	3.35	13.5	15.8
Total Kjeldahl Nitrogen	mg/L	-	-	0.249	1.01	2.32	3.27
Phosphorus, Total	mg/L	-	-	0.0085	0.0040	<0.0030	<0.0030
Sulfate (SO4)	mg/L	-	-	49.6	191	872	1740
Dissolved Organic Carbon	mg/L	-	-	0.79	1.16	1.60	2.11
Total Organic Carbon	mg/L	-	-	0.54	1.16	2.80	2.18
Aluminum (Al)-Total	mg/L	-	-	0.725	0.225	<0.050	<0.050
Arsenic (As)-Total	mg/L	0.50	0.60	<0.00010	<0.00010	<0.0010	<0.0010
Cadmium (Cd)-Total	mg/L	-	-	0.0000158	0.0000195	<0.000050	<0.000050
Calcium (Ca)-Total	mg/L	-	-	4.51	17.0	60.7	157
Copper (Cu)-Total	mg/L	0.30	0.60	0.00170	0.00121	<0.0050	0.0055
Iron (Fe)-Total	mg/L	-	-	0.973	0.406	<0.10	1.88
Lead (Pb)-Total	mg/L	0.20	0.20	0.000427	0.000136	<0.00050	<0.00050
Magnesium (Mg)-Total	mg/L	-	-	12.6	45.6	197	415
Manganese (Mn)-Total	mg/L	-	-	0.225	0.727	0.593	4.05
Mercury (Hg)-Total	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	-	0.000610	0.00155	0.00073	<0.00050
Nickel (Ni)-Total	mg/L	0.50	1.00	0.00469	0.0100	0.0120	0.0247
Potassium (K)-Total	mg/L	-	-	1.26	2.27	5.10	5.89
Selenium (Se)-Total	mg/L	-	-	0.000707	0.00132	0.00412	0.00719
Sodium (Na)-Total	mg/L			0.562	0.944	2.95	4.38
Thallium (Tl)-Total	mg/L	-	-	0.000014	0.000027	<0.00010	0.00011
Uranium (U)-Total	mg/L	-	-	0.000165	0.000297	0.00015	0.000184
Zinc (Zn)-Total	mg/L	0.50	1.00	<0.0030	<0.0030	<0.030	<0.030
Aluminum (Al)-Dissolved	mg/L	-	-	<0.0050	0.0068	<0.050	<0.050
Arsenic (As)-Dissolved	mg/L	-	-	<0.00010	<0.00010	<0.0010	<0.0010
Cadmium (Cd)-Dissolved	mg/L	-	-	0.0000126	0.0000202	<0.000050	<0.000050
Calcium (Ca)-Dissolved	mg/L	-	-	4.37	17.6	67.7	163
Copper (Cu)-Dissolved	mg/L	-	-	0.00032	0.00053	<0.0020	0.0052
Iron (Fe)-Dissolved	mg/L	-	-	0.022	<0.010	<0.10	<0.10
Lead (Pb)-Dissolved	mg/L	-	-	<0.000050	<0.000050	<0.00050	<0.00050
Magnesium (Mg)-Dissolved	mg/L	-	-	11.7	44.0	200	427
Manganese (Mn)-Dissolved	mg/L	-	-	0.207	0.680	0.591	4.13
Mercury (Hg)-Dissolved	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.000562	0.00152	0.00087	<0.00050
Nickel (Ni)-Dissolved	mg/L	-	-	0.00337	0.00939	0.0119	0.0204
Potassium (K)-Dissolved	mg/L	-	-	1.02	2.26	5.39	6.31
Selenium (Se)-Dissolved	mg/L	-	-	0.000747	0.00147	0.00439	0.00715
Sodium (Na)-Dissolved	mg/L			0.523	0.954	3.10	4.61
Thallium (Tl)-Dissolved	mg/L	-	-	<0.000010	0.000024	<0.00010	0.00011
Uranium (U)-Dissolved	mg/L	-	-	0.000042	0.000174	0.00017	0.00011
Zinc (Zn)-Dissolved	mg/L	-	-	0.0017	0.0015	<0.010	<0.010
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - MS-11

Analyte	Sample ID			MS-11_2022-06-09	MS-11_2022-07-05	KM1055WMP-SEEPAGE-D1_2022-07-15[4]	KM105-SWMP-SEEP-01_2022-08-02
	ALS Laboratory Sample ID			L2714253-1	L2720319-1	L2722901-1	L2726077-1
	Sample Date & Time			2022-06-09 16:20	2022-07-05 12:20	2022-07-15 9:40	2022-08-02 11:00
	QA/QC Sample Type			N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]	MDMER Criteria [2]				
Hardness (as CaCO3)	mg/L		-	34.2	124	217	251
pH	pH units	6.0 - 9.5	6.0 - 9.5	6.48	7.19	7.82	7.73
Total Suspended Solids	mg/L	15	30 (Grab)	**45.7**	4.7	**68.7**	<2.0
Total Dissolved Solids	mg/L	-	-	81	203	465	328
Turbidity	NTU	-	-	125	13.4	37.9	1.49
Alkalinity, Total (as CaCO3)	mg/L	-	-	11.0	27.3	50.0	104
Ammonia, Total (as N)	mg/L	-	-	0.171	0.150	0.258	0.096
Chloride (Cl)	mg/L	-	-	1.24	47.0	74.6	45.1
Fluoride (F)	mg/L	-	-	0.062	0.073	0.088	0.154
Nitrate (as N)	mg/L	-	-	0.580	0.662	1.56	2.82
Total Kjeldahl Nitrogen	mg/L	-	-	0.691	0.278	0.558	0.259
Phosphorus, Total	mg/L	-	-	0.0369	0.0047	0.0435	0.0048
Sulfate (SO4)	mg/L	-	-	25.5	38.1	51.2	71.9
Dissolved Organic Carbon	mg/L	-	-	2.16	1.26	2.30	1.60
Total Organic Carbon	mg/L	-	-	1.72	1.04	2.13	2.36
Aluminum (Al)-Total	mg/L	-	-	3.38	0.211	1.40	0.073
Arsenic (As)-Total	mg/L	0.50	0.60	0.00037	<0.00010	0.00025	<0.0010
Cadmium (Cd)-Total	mg/L	-	-	0.0000754	0.0000990	0.000395	0.000177
Calcium (Ca)-Total	mg/L	-	-	5.30	29.7	50.4	48.8
Copper (Cu)-Total	mg/L	0.30	0.60	0.00684	0.00112	0.00648	<0.0050
Iron (Fe)-Total	mg/L	-	-	5.75	0.707	2.03	<0.10
Lead (Pb)-Total	mg/L	0.20	0.20	0.00268	0.000575	0.00301	<0.00050
Magnesium (Mg)-Total	mg/L	-	-	8.02	11.7	24.2	29.0
Manganese (Mn)-Total	mg/L	-	-	0.101	0.0783	0.150	0.0241
Mercury (Hg)-Total	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	-	0.00111	0.00340	0.00967	0.0214
Nickel (Ni)-Total	mg/L	0.50	1.00	0.00922	0.00197	0.00333	<0.0050
Potassium (K)-Total	mg/L	-	-	4.45	4.22	8.05	7.67
Selenium (Se)-Total	mg/L	-	-	0.000135	0.000156	0.000367	<0.00050
Sodium (Na)-Total	mg/L	-	-	0.941	1.80	3.81	4.72
Thallium (Tl)-Total	mg/L	-	-	0.000041	0.000013	0.000040	<0.00010
Uranium (U)-Total	mg/L	-	-	0.000892	0.00114	0.00704	0.0275
Zinc (Zn)-Total	mg/L	0.50	1.00	0.0185	0.0048	0.0087	<0.030
Aluminum (Al)-Dissolved	mg/L	-	-	0.0070	<0.0050	0.0057	<0.0050
Arsenic (As)-Dissolved	mg/L	-	-	<0.00010	<0.00010	<0.00010	<0.00010
Cadmium (Cd)-Dissolved	mg/L	-	-	0.0000514	0.0000914	0.000294	0.000212
Calcium (Ca)-Dissolved	mg/L	-	-	5.26	29.5	49.9	53.8
Copper (Cu)-Dissolved	mg/L	-	-	0.00045	0.00042	0.00097	0.00196
Iron (Fe)-Dissolved	mg/L	-	-	0.164	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	-	-	<0.000050	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	-	5.13	12.2	22.5	28.4
Manganese (Mn)-Dissolved	mg/L	-	-	0.0421	0.0756	0.124	0.0244
Mercury (Hg)-Dissolved	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.000798	0.00325	0.0107	0.0236
Nickel (Ni)-Dissolved	mg/L	-	-	0.00161	0.00153	0.00098	0.00100
Potassium (K)-Dissolved	mg/L	-	-	3.44	4.28	8.05	8.62
Selenium (Se)-Dissolved	mg/L	-	-	0.000113	0.000163	0.000299	0.000432
Sodium (Na)-Dissolved	mg/L	-	-	0.873	1.84	3.89	4.81
Thallium (Tl)-Dissolved	mg/L	-	-	<0.000010	0.000011	0.000022	0.000024
Uranium (U)-Dissolved	mg/L	-	-	0.000137	0.000344	0.00624	0.0287
Zinc (Zn)-Dissolved	mg/L	-	-	0.0047	0.0032	0.0011	0.0078
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Samples taken at the established seepage monitoring point from MS-11 are labeled as KM105-SWMP-SEEP-01 for reporting purposes only.

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - MS-11

Analyte	Sample ID			KM105-SWMP-SEEP-01_2022-08-16	KM105-SWMP-SEEP-01_2022-09-05	KM105-SWMP-SEEP01_2022-10-01
	ALS Laboratory Sample ID			L2728672-1	L2731630-1	L2735184-1
	Sample Date & Time			2022-08-16 9:40	2022-09-05 14:45	2022-10-01 9:35
	QA/QC Sample Type			N/A	N/A	N/A
	Units	Water Licence Criteria [1]	MDMER Criteria [2]			
Hardness (as CaCO3)	mg/L		-	264	490	263
pH	pH units	6.0 - 9.5	6.0 - 9.5	7.80	7.69	7.71
Total Suspended Solids	mg/L	15	30 (Grab)	3.2	<2.0	<2.0
Total Dissolved Solids	mg/L	-	-	370	721	336
Turbidity	NTU	-	-	3.46	0.43	1.17
Alkalinity, Total (as CaCO3)	mg/L	-	-	113	122	128
Ammonia, Total (as N)	mg/L	-	-	0.045	0.010	0.019
Chloride (Cl)	mg/L	-	-	45.6	203	42.6
Fluoride (F)	mg/L	-	-	0.142	0.098	0.117
Nitrate (as N)	mg/L	-	-	2.75	1.99	1.77
Total Kjeldahl Nitrogen	mg/L	-	-	0.449	0.213	0.194
Phosphorus, Total	mg/L	-	-	0.0032	<0.0030	<0.0030
Sulfate (SO4)	mg/L	-	-	96.0	104	78.4
Dissolved Organic Carbon	mg/L	-	-	2.43	2.35	2.03
Total Organic Carbon	mg/L	-	-	2.44	2.00	1.76
Aluminum (Al)-Total	mg/L	-	-	0.0346	<0.050	0.0356
Arsenic (As)-Total	mg/L	0.50	0.60	<0.00010	<0.0010	0.00011
Cadmium (Cd)-Total	mg/L	-	-	0.000164	0.000242	0.0000887
Calcium (Ca)-Total	mg/L	-	-	54.0	129	59.9
Copper (Cu)-Total	mg/L	0.30	0.60	0.00216	<0.0050	0.00204
Iron (Fe)-Total	mg/L	-	-	0.051	<0.10	0.044
Lead (Pb)-Total	mg/L	0.20	0.20	0.000147	<0.00050	0.000054
Magnesium (Mg)-Total	mg/L	-	-	31.9	46.3	30.5
Manganese (Mn)-Total	mg/L	-	-	0.0182	0.0215	0.00891
Mercury (Hg)-Total	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	-	-	0.0192	0.0145	0.0213
Nickel (Ni)-Total	mg/L	0.50	1.00	0.00108	<0.0050	0.00103
Potassium (K)-Total	mg/L	-	-	7.46	10.0	7.40
Selenium (Se)-Total	mg/L	-	-	0.000444	<0.00050	0.000299
Sodium (Na)-Total	mg/L	-	-	5.10	8.05	5.27
Thallium (Tl)-Total	mg/L	-	-	0.000019	<0.00010	0.000017
Uranium (U)-Total	mg/L	-	-	0.0292	0.0395	0.0287
Zinc (Zn)-Total	mg/L	0.50	1.00	<0.0030	<0.030	<0.0030
Aluminum (Al)-Dissolved	mg/L	-	-	<0.0050	<0.0050	0.0056
Arsenic (As)-Dissolved	mg/L	-	-	0.00011	0.00012	<0.00010
Cadmium (Cd)-Dissolved	mg/L	-	-	0.000157	0.000240	0.0000817
Calcium (Ca)-Dissolved	mg/L	-	-	54.6	127	55.2
Copper (Cu)-Dissolved	mg/L	-	-	0.00194	0.00184	0.00194
Iron (Fe)-Dissolved	mg/L	-	-	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	mg/L	-	-	<0.000050	<0.000050	<0.000050
Magnesium (Mg)-Dissolved	mg/L	-	-	31.0	41.9	30.3
Manganese (Mn)-Dissolved	mg/L	-	-	0.0170	0.0196	0.00829
Mercury (Hg)-Dissolved	mg/L	-	-	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	-	-	0.0186	0.0147	0.0193
Nickel (Ni)-Dissolved	mg/L	-	-	0.00093	0.00124	0.00093
Potassium (K)-Dissolved	mg/L	-	-	7.21	9.12	7.06
Selenium (Se)-Dissolved	mg/L	-	-	0.000542	0.000391	0.000324
Sodium (Na)-Dissolved	mg/L	-	-	4.87	7.20	5.00
Thallium (Tl)-Dissolved	mg/L	-	-	0.000021	0.000021	0.000014
Uranium (U)-Dissolved	mg/L	-	-	0.0299	0.0370	0.0253
Zinc (Zn)-Dissolved	mg/L	-	-	0.0025	0.0026	<0.0010
Oil and Grease, Total	mg/L	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity [3]	-	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13). Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Samples taken at the established seepage monitoring point from MS-11 are labeled as KM105-SWMP-SEEP-01 for reporting purposes only.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-MRY-06

Analyte	Sample ID		MS-MRY-6_2022-09-02
	ALS Laboratory Sample ID		L2731432-1
	Sample Date & Time		2022-09-02 15:00
	QA/QC Sample Type		N/A
	Units	Water Licence Criteria[1]	
pH	pH units	6.0 - 9.5	7.17
Total Suspended Solids	mg/L	-	<2.0
Lead (Pb)-Total	mg/L	0.001	0.00068
Oil and Grease, Total	mg/L	15	<5.0
	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	370	<0.50
Ethylbenzene	ug/L	90	<0.50
Toluene	ug/L	2	<0.50
F1 (C6-C10)	ug/L	-	<25
F2 (C10-C16)	ug/L	-	<100
F3 (C16-C34)	ug/L	-	310
F4 (C34-C50)	ug/L	-	<250
Total Petroleum Hydrocarbons (TPH)	ug/L	-	<370

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8: Effluent Quality Discharge Limits for the Bulk Fuel Storage Facilities.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID		MS-MRY-09_2022-06-11	MS-MRY-09_2022-06-17	MS-MRY-09_2022-06-21	MS-MRY-09_2022-06-28	MS-MRY-0901_2022-06-28	MS-MRY-09_2022-07-05	MS-MRY-0903_2022-07-05	MS-MRY-09_2022-07-12	MS-MRY-9_2022-07-18
	ALS Laboratory Sample ID		L2714246-6	L2716148-1	L2716859-15	L2719863-12	L2719863-13	L2721012-13	L2721012-14	L2722588-10	L2723440-8
	Sample Date & Time		2022-06-11 12:30	2022-06-17 14:45	2022-06-21 16:05	2022-06-28 12:15	2022-06-28 12:15	2022-07-05 8:55	2022-07-05 8:55	2022-07-12 7:55	2022-07-18 16:20
	QA/QC Sample Type		N/A	N/A	N/A	N/A	Field Duplicate	N/A	Travel Blank	N/A	N/A
	Units	Water Licence Criteria [1]									
Hardness	mg/L	-	19.5	-	-	-	-	-	-	33.7	-
pH	pH units	6.0 - 9.5	7.18	7.28	7.50	7.76	7.66	8.01	5.92	7.87	7.74
Total Suspended Solids	mg/L	15	<2.0	6.4	**25.9**	<2.0	<2.0	<3.0	<3.0	<1.0	<2.0
Total Dissolved Solids	mg/L	-	31	41	43	51	50	43	<10	33	38
Turbidity	NTU	-	6.02	17.6	11.0	1.60	1.60	0.67	<0.10	0.97	1.36
Alkalinity, Total (as CaCO3)	mg/L	-	19.8	-	-	-	-	-	-	32.8	-
Ammonia, Total (as N)	mg/L	-	0.018	-	-	-	-	-	-	<0.010	-
Chloride (Cl)	mg/L	-	0.65	-	-	-	-	-	-	<0.50	-
Fluoride (F)	mg/L	-	<0.020	-	-	-	-	-	-	<0.020	-
Nitrate (as N)	mg/L	-	0.053	-	-	-	-	-	-	0.108	-
Total Kjeldahl Nitrogen	mg/L	-	0.157	-	-	-	-	-	-	0.060	-
Phosphorus, Total	mg/L	-	0.0074	-	-	-	-	-	-	<0.0030	-
Sulfate (SO4)	mg/L	-	0.73	-	-	-	-	-	-	1.36	-
Dissolved Organic Carbon	mg/L	-	2.43	-	-	-	-	-	-	1.30	-
Total Organic Carbon	mg/L	-	2.30	-	-	-	-	-	-	1.31	-
Aluminum (Al)-Total	mg/L	-	0.0903	-	-	-	-	-	-	0.0388	-
Arsenic (As)-Total	mg/L	0.50	<0.00010	-	-	-	-	-	-	<0.00010	-
Cadmium (Cd)-Total	mg/L	-	0.0000142	-	-	-	-	-	-	<0.0000050	-
Calcium (Ca)-Total	mg/L	-	3.79	-	-	-	-	-	-	6.21	-
Copper (Cu)-Total	mg/L	0.30	0.00152	-	-	-	-	-	-	0.00174	-
Iron (Fe)-Total	mg/L	-	0.128	-	-	-	-	-	-	0.049	-
Lead (Pb)-Total	mg/L	0.20	0.000107	-	-	-	-	-	-	0.000058	-
Magnesium (Mg)-Total	mg/L	-	2.63	-	-	-	-	-	-	4.09	-
Manganese (Mn)-Total	mg/L	-	0.00234	-	-	-	-	-	-	0.00096	-
Mercury (Hg)-Total	mg/L	-	<0.0000050	-	-	-	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	-	0.000212	-	-	-	-	-	-	0.000598	-
Nickel (Ni)-Total	mg/L	0.50	0.00059	-	-	-	-	-	-	<0.00050	-
Potassium (K)-Total	mg/L	-	0.834	-	-	-	-	-	-	1.35	-
Selenium (Se)-Total	mg/L	-	<0.000050	-	-	-	-	-	-	<0.000050	-
Sodium (Na)-Total	mg/L	-	0.333	-	-	-	-	-	-	0.375	-
Thallium (Tl)-Total	mg/L	-	<0.000010	-	-	-	-	-	-	0.000011	-
Uranium (U)-Total	mg/L	-	0.000182	-	-	-	-	-	-	0.000583	-
Zinc (Zn)-Total	mg/L	0.50	<0.0030	-	-	-	-	-	-	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	-	0.0157	-	-	-	-	-	-	0.0081	-
Arsenic (As)-Dissolved	mg/L	-	<0.00010	-	-	-	-	-	-	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	-	<0.0000050	-	-	-	-	-	-	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	-	3.57	-	-	-	-	-	-	6.81	-
Copper (Cu)-Dissolved	mg/L	-	0.00111	-	-	-	-	-	-	0.00160	-
Iron (Fe)-Dissolved	mg/L	-	0.019	-	-	-	-	-	-	<0.010	-
Lead (Pb)-Dissolved	mg/L	-	<0.000050	-	-	-	-	-	-	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	-	2.58	-	-	-	-	-	-	4.05	-
Manganese (Mn)-Dissolved	mg/L	-	0.00083	-	-	-	-	-	-	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	-	<0.0000050	-	-	-	-	-	-	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	-	0.000187	-	-	-	-	-	-	0.000568	-
Nickel (Ni)-Dissolved	mg/L	-	<0.00050	-	-	-	-	-	-	<0.00050	-
Potassium (K)-Dissolved	mg/L	-	0.851	-	-	-	-	-	-	1.36	-
Selenium (Se)-Dissolved	mg/L	-	<0.000050	-	-	-	-	-	-	<0.000050	-
Sodium (Na)-Dissolved	mg/L	-	0.336	-	-	-	-	-	-	0.401	-
Thallium (Tl)-Dissolved	mg/L	-	<0.000010	-	-	-	-	-	-	<0.000010	-
Uranium (U)-Dissolved	mg/L	-	0.000161	-	-	-	-	-	-	0.000570	-
Zinc (Zn)-Dissolved	mg/L	-	0.0064	-	-	-	-	-	-	<0.0010	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	Not Acutely Toxic	-	-	-	-	-	-	-	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

Analyte	Sample ID		MS-MRY-09_2022-07-26	MS-MRY-09_2022-08-03	MS-MRY-09_2022-08-09	MS-MRY-09_2022-08-18	MS-MRY-09_2022-08-23	MS-MRY-09_2022-08-29	MS-MRY-09_2022-09-05	MS-MRY-09_2022-09-14
	ALS Laboratory Sample ID		L2725223-7	L2726644-2	L2727453-14	L2729151-11	L2730409-1	L2730582-14	L2731631-3	L2733138-9
	Sample Date & Time		2022-07-26 10:30	2022-08-03 11:30	2022-08-09 15:20	2022-08-18 13:25	2022-08-23 9:40	2022-08-29 10:45	2022-09-05 10:10	2022-09-14 16:10
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Hardness	mg/L	-	-	-	63.1	-	-	92.9	88.6	-
pH	pH units	6.0 - 9.5	7.86	7.92	8.03	7.99	7.88	8.06	8.02	7.98
Total Suspended Solids	mg/L	15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	48	71	104	102	107	107	119	129
Turbidity	NTU	-	0.49	0.33	0.35	0.36	0.71	0.23	0.38	0.26
Alkalinity, Total (as CaCO3)	mg/L	-	-	-	63.9	-	-	82.4	88.2	-
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-	0.011	<0.010	-
Chloride (Cl)	mg/L	-	-	-	0.88	-	-	1.49	1.64	-
Fluoride (F)	mg/L	-	-	-	0.022	-	-	<0.020	<0.020	-
Nitrate (as N)	mg/L	-	-	-	0.158	-	-	0.145	0.157	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	0.083	-	-	0.052	0.051	-
Phosphorus, Total	mg/L	-	-	-	0.0047	-	-	<0.0030	0.0034	-
Sulfate (SO4)	mg/L	-	-	-	3.78	-	-	5.04	5.08	-
Dissolved Organic Carbon	mg/L	-	-	-	2.30	-	-	1.49	3.32	-
Total Organic Carbon	mg/L	-	-	-	1.65	-	-	2.11	1.67	-
Aluminum (Al)-Total	mg/L	-	-	-	0.0132	-	-	0.0162	0.0184	-
Arsenic (As)-Total	mg/L	0.50	-	-	<0.00010	-	-	<0.00010	<0.00010	-
Cadmium (Cd)-Total	mg/L	-	-	-	<0.0000050	-	-	<0.0000050	<0.0000050	-
Calcium (Ca)-Total	mg/L	-	-	-	12.8	-	-	16.1	18.3	-
Copper (Cu)-Total	mg/L	0.30	-	-	0.00207	-	-	0.00216	0.00204	-
Iron (Fe)-Total	mg/L	-	-	-	0.011	-	-	0.016	0.017	-
Lead (Pb)-Total	mg/L	0.20	-	-	<0.000050	-	-	<0.000050	<0.000050	-
Magnesium (Mg)-Total	mg/L	-	-	-	8.47	-	-	11.9	11.4	-
Manganese (Mn)-Total	mg/L	-	-	-	0.00075	-	-	0.00072	0.00066	-
Mercury (Hg)-Total	mg/L	-	-	-	<0.0000050	-	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	-	-	-	0.00147	-	-	0.00166	0.00171	-
Nickel (Ni)-Total	mg/L	0.50	-	-	<0.00050	-	-	<0.00050	<0.00050	-
Potassium (K)-Total	mg/L	-	-	-	2.36	-	-	2.59	2.62	-
Selenium (Se)-Total	mg/L	-	-	-	0.000077	-	-	0.000089	0.000106	-
Sodium (Na)-Total	mg/L	-	-	-	0.643	-	-	0.868	0.831	-
Thallium (Tl)-Total	mg/L	-	-	-	0.000014	-	-	0.000014	0.000015	-
Uranium (U)-Total	mg/L	-	-	-	0.00383	-	-	0.00831	0.00924	-
Zinc (Zn)-Total	mg/L	0.50	-	-	<0.0030	-	-	<0.0030	<0.0030	-
Aluminum (Al)-Dissolved	mg/L	-	-	-	0.0069	-	-	0.0103	0.0058	-
Arsenic (As)-Dissolved	mg/L	-	-	-	<0.00010	-	-	<0.00010	<0.00010	-
Cadmium (Cd)-Dissolved	mg/L	-	-	-	<0.0000050	-	-	<0.0000050	<0.0000050	-
Calcium (Ca)-Dissolved	mg/L	-	-	-	12.5	-	-	17.2	17.6	-
Copper (Cu)-Dissolved	mg/L	-	-	-	0.00210	-	-	0.00199	0.00194	-
Iron (Fe)-Dissolved	mg/L	-	-	-	<0.010	-	-	<0.010	<0.010	-
Lead (Pb)-Dissolved	mg/L	-	-	-	<0.000050	-	-	<0.000050	<0.000050	-
Magnesium (Mg)-Dissolved	mg/L	-	-	-	7.79	-	-	12.1	10.9	-
Manganese (Mn)-Dissolved	mg/L	-	-	-	0.00063	-	-	0.00065	<0.00050	-
Mercury (Hg)-Dissolved	mg/L	-	-	-	<0.0000050	-	-	<0.0000050	<0.0000050	-
Molybdenum (Mo)-Dissolved	mg/L	-	-	-	0.00151	-	-	0.00172	0.00174	-
Nickel (Ni)-Dissolved	mg/L	-	-	-	<0.00050	-	-	<0.00050	<0.00050	-
Potassium (K)-Dissolved	mg/L	-	-	-	2.24	-	-	2.69	2.45	-
Selenium (Se)-Dissolved	mg/L	-	-	-	0.000109	-	-	0.000110	0.000122	-
Sodium (Na)-Dissolved	mg/L	-	-	-	0.650	-	-	0.860	0.790	-
Thallium (Tl)-Dissolved	mg/L	-	-	-	0.000014	-	-	0.000012	0.000013	-
Uranium (U)-Dissolved	mg/L	-	-	-	0.00378	-	-	0.00788	0.00910	-
Zinc (Zn)-Dissolved	mg/L	-	-	-	<0.0010	-	-	<0.0010	<0.0010	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Toxicity	-	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality Discharge Limits for Open Pit, Stockpiles, and Sedimentation Ponds.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

Analyte	Sample ID		MS-MRY-13A_2022-06-07	MS-MRY-13A_2022-06-14	MS-MRY-13A_2022-06-21	MS-MRY-13A_2022-07-04	MS-MRY-13A_2022-07-11	MS-MRY-13A_2022-07-18	MS-MRY-13A01_2022-07-18	MS-MRY-13A_2022-07-27
	ALS Laboratory Sample ID		L2713555-3	L2715408-5	L2716859-5	L2721012-3	L2722588-4	L2723440-9	L2723440-10	L2725223-10
	Sample Date & Time		2022-06-07 12:45	2022-06-14 11:05	2022-06-21 10:10	2022-07-04 11:40	2022-07-11 11:40	2022-07-18 9:05	2022-07-18 9:05	2022-07-27 11:40
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	67.0	-	-	-	570	-		-
pH	pH units	6.0 - 9.5	7.34	7.44	7.98	8.41	8.26	8.05	8.06	8.12
Total Suspended Solids	mg/L	15.0	4.8	<2.0	<2.0	<3.0	<1.0	<2.0	<2.0	2.0
Total Dissolved Solids	mg/L	-	43	121	152	294	345	533	536	775
Turbidity	NTU	-	65.0	1.61	0.49	0.32	0.28	0.46	0.48	0.59
Alkalinity, Total (as $CaCO_3$)	mg/L	-	30.8	-	-	-	160	-	-	-
Dissolved Organic Carbon	mg/L	-	4.26	-	-	-	6.16	-	-	-
Total Organic Carbon	mg/L	-	2.41	-	-	-	5.78	-	-	-
Aluminum (Al)-Total	mg/L	-	0.431	-	-	-	<0.050	-	-	-
Antimony (Sb)-Total	mg/L	-	0.00013	-	-	-	<0.0010	-	-	-
Arsenic (As)-Total	mg/L	0.50	0.00024	-	-	-	<0.0010	-	-	-
Barium (Ba)-Total	mg/L	-	0.00751	-	-	-	0.0392	-	-	-
Cadmium (Cd)-Total	mg/L	-	0.0000129	-	-	-	<0.000050	-	-	-
Chromium (Cr)-Total	mg/L	-	0.00099	-	-	-	<0.0050	-	-	-
Cobalt (Co)-Total	mg/L	-	0.00100	-	-	-	<0.0010	-	-	-
Copper (Cu)-Total	mg/L	0.30	0.00174	-	-	-	<0.0050	-	-	-
Iron (Fe)-Total	mg/L	-	0.722	-	-	-	<0.10	-	-	-
Lead (Pb)-Total	mg/L	0.20	0.000367	-	-	-	<0.00050	-	-	-
Lithium (Li)-Total	mg/L	-	0.0018	-	-	-	0.018	-	-	-
Manganese (Mn)-Total	mg/L	-	0.0220	-	-	-	<0.0050	-	-	-
Mercury (Hg)-Total	mg/L	-	<0.0000050	-	-	-	<0.0000050	-	-	-
Molybdenum (Mo)-Total	mg/L	-	0.000459	-	-	-	0.00065	-	-	-
Nickel (Ni)-Total	mg/L	0.50	0.00542	-	-	-	0.0125	-	-	-
Selenium (Se)-Total	mg/L	-	<0.000050		-	-	<0.00050	-	-	-
Strontium (Sr)-Total	mg/L	-	0.0055	-	-	-	0.045	-	-	-
Thallium (Tl)-Total	mg/L	-	0.000017	-	-	-	<0.00010	-	-	-
Tin (Sn)-Total	mg/L	-	<0.00010	-	-	-	<0.0010	-	-	-
Titanium (Ti)-Total	mg/L	-	0.0107	-	-	-	<0.0030	-	-	-
Uranium (U)-Total	mg/L	-	0.000186	-	-	-	0.00308	-	-	-
Vanadium (V)-Total	mg/L	-	0.00062	-	-	-	<0.0050	-	-	-
Zinc (Zn)-Total	mg/L	0.50	0.0075	-	-	-	<0.030	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen
Phenols (4AAP)	mg/L	-	<0.0010	-	-	-	<0.0010	-	-	-
F1 (C6-C10)	ug/L	-	<25	-	-	-	<25	-	-	-
F2 (C10-C16)	ug/L	-	<100	-	-	-	<100	-	-	-
F3 (C16-C34)	ug/L	-	<250	-	-	-	<250	-	-	-
F4 (C34-C50)	ug/L	-	<250	-	-	-	<250	-	-	-
Total Hydrocarbons (C6-C50)	ug/L	-	<370	-	-	-	<370	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID		MS-MRY-13B_2022-06-08	MS-MRY-13B_2022-06-14	QD-BT1_2022-06-21	MS-MRY-13B_2022-06-21	MS-MRY-13B_2022-06-27	MS-MRY-13B_2022-07-18	MS-MRY-13B_2022-07-27	MS-MRY-13B_2022-08-03
	ALS Laboratory Sample ID		L2714246-1	L2715408-4	L2716859-2	L2716859-3	L2719863-11	L2723440-11	L2725223-9	L2726644-7
	Sample Date & Time		2022-06-08 11:10	2022-06-14 10:55	2022-06-21 9:45	2022-06-21 9:45	2022-06-27 16:40	2022-07-18 8:45	2022-07-27 11:20	2022-08-03 14:45
	QA/QC Sample Type		N/A	N/A	Travel Blank	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	119	-	-	-	-	907	-	-
pH	pH units	6.0 - 9.5	7.33	7.58	6.88	8.04	8.14	8.16	8.21	8.20
Total Suspended Solids	mg/L	15.0	4.4	<2.0	<2.0	<2.0	<2.0	10.3	2.3	<2.0
Total Dissolved Solids	mg/L	-	81	229	<10	276	278	584	614	724
Turbidity	NTU	-	12.6	0.71	<0.10	0.42	0.44	3.77	0.42	0.23
Alkalinity, Total (as CaCO3)	mg/L	-	55.0	-	-	-	-	178	-	-
Dissolved Organic Carbon	mg/L	-	4.40	-	-	-	-	7.03	-	-
Total Organic Carbon	mg/L	-	4.81	-	-	-	-	6.28	-	-
Aluminum (Al)-Total	mg/L	-	0.117	-	-	-	-	<0.050	-	-
Antimony (Sb)-Total	mg/L	-	0.00010	-	-	-	-	<0.0010	-	-
Arsenic (As)-Total	mg/L	0.50	0.00015	-	-	-	-	<0.0010	-	-
Barium (Ba)-Total	mg/L	-	0.0092	-	-	-	-	0.0488	-	-
Cadmium (Cd)-Total	mg/L	-	0.0000082	-	-	-	-	<0.000050	-	-
Chromium (Cr)-Total	mg/L	-	<0.00050	-	-	-	-	<0.0050	-	-
Cobalt (Co)-Total	mg/L	-	0.00020	-	-	-	-	<0.0010	-	-
Copper (Cu)-Total	mg/L	0.30	0.00129	-	-	-	-	<0.0050	-	-
Iron (Fe)-Total	mg/L	-	0.209	-	-	-	-	<0.10	-	-
Lead (Pb)-Total	mg/L	0.20	0.000075	-	-	-	-	<0.00050	-	-
Lithium (Li)-Total	mg/L	-	0.0027	-	-	-	-	0.038	-	-
Manganese (Mn)-Total	mg/L	-	0.00347	-	-	-	-	<0.0050	-	-
Mercury (Hg)-Total	mg/L	-	<0.0000050	-	-	-	-	<0.0000050	-	-
Molybdenum (Mo)-Total	mg/L	-	0.000443	-	-	-	-	0.00055	-	-
Nickel (Ni)-Total	mg/L	0.50	0.00651	-	-	-	-	0.0143	-	-
Selenium (Se)-Total	mg/L	-	<0.000050	-	-	-	-	<0.00050	-	-
Strontium (Sr)-Total	mg/L	-	0.0105	-	-	-	-	0.108	-	-
Thallium (Tl)-Total	mg/L	-	0.000013	-	-	-	-	<0.00010	-	-
Tin (Sn)-Total	mg/L	-	<0.00010	-	-	-	-	<0.0010	-	-
Titanium (Ti)-Total	mg/L	-	0.00236	-	-	-	-	<0.0030	-	-
Uranium (U)-Total	mg/L	-	0.000348	-	-	-	-	0.00744	-	-
Vanadium (V)-Total	mg/L	-	<0.00050	-	-	-	-	<0.0050	-	-
Zinc (Zn)-Total	mg/L	0.50	<0.0030	-	-	-	-	<0.030	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	-	<0.0010	-	-	-	-	<0.0010	-	-
F1 (C6-C10)	ug/L	-	<25	-	-	-	-	<25	-	-
F2 (C10-C16)	ug/L	-	<100	-	-	-	-	<100	-	-
F3 (C16-C34)	ug/L	-	<250	-	-	-	-	<250	-	-
F4 (C34-C50)	ug/L	-	<250	-	-	-	-	<250	-	-
Total Hydrocarbons (C6-C50)	ug/L	-	<370	-	-	-	-	<370	-	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

Analyte	Sample ID		MS-MRY-13B_2022-06-08	MS-MRY-13B_2022-08-08	MS-MRY-13B_2022-08-17	MS-MRY-13B01_2022-08-17	MS-MRY-13B_2022-08-22	MS-MRY-13B_2022-08-29	MS-MRY-13B_2022-09-07	MS-MRY-13B_2022-09-14
	ALS Laboratory Sample ID		L2714246-1	L2727453-1	L2729151-3	L2729151-4	L2729530-3	L2730582-13	L2731871-1	L2733138-2
	Sample Date & Time		2022-06-08 11:10	2022-08-08 13:25	2022-08-17 11:45	2022-08-17 11:45	2022-08-22 10:00	2022-08-29 8:25	2022-09-07 15:00	2022-09-14 12:00
	QA/QC Sample Type		N/A	N/A	N/A	Field Duplicate	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	119	1200	-	-	-	-	1620	-
pH	pH units	6.0 - 9.5	7.33	8.17	8.12	8.14	7.92	7.90	8.04	7.94
Total Suspended Solids	mg/L	15.0	4.4	<2.0	2.0	<2.0	5.0	4.2	<2.0	<2.0
Total Dissolved Solids	mg/L	-	81	816	936	938	986	1120	1150	1150
Turbidity	NTU	-	12.6	0.28	0.28	0.30	1.01	0.54	0.26	0.14
Alkalinity, Total (as CaCO3)	mg/L	-	55.0	187	-	-	-	-	240	-
Dissolved Organic Carbon	mg/L	-	4.40	7.59	-	-	-	-	10.1	-
Total Organic Carbon	mg/L	-	4.81	6.76	-	-	-	-	8.95	-
Aluminum (Al)-Total	mg/L	-	0.117	0.050	-	-	-	-	<0.050	-
Antimony (Sb)-Total	mg/L	-	0.00010	<0.0010	-	-	-	-	<0.0010	-
Arsenic (As)-Total	mg/L	0.50	0.00015	<0.0010	-	-	-	-	<0.0010	-
Barium (Ba)-Total	mg/L	-	0.0092	0.0728	-	-	-	-	0.0911	-
Cadmium (Cd)-Total	mg/L	-	0.0000082	<0.000050	-	-	-	-	<0.000050	-
Chromium (Cr)-Total	mg/L	-	<0.00050	<0.0050	-	-	-	-	<0.0050	-
Cobalt (Co)-Total	mg/L	-	0.00020	<0.0010	-	-	-	-	<0.0010	-
Copper (Cu)-Total	mg/L	0.30	0.00129	<0.0050	-	-	-	-	<0.0050	-
Iron (Fe)-Total	mg/L	-	0.209	<0.10	-	-	-	-	<0.10	-
Lead (Pb)-Total	mg/L	0.20	0.000075	<0.00050	-	-	-	-	<0.00050	-
Lithium (Li)-Total	mg/L	-	0.0027	0.055	-	-	-	-	0.160	-
Manganese (Mn)-Total	mg/L	-	0.00347	<0.0050	-	-	-	-	<0.0050	-
Mercury (Hg)-Total	mg/L	-	<0.0000050	<0.0000050	-	-	-	-	<0.0000050	-
Molybdenum (Mo)-Total	mg/L	-	0.000443	<0.00050	-	-	-	-	<0.00050	-
Nickel (Ni)-Total	mg/L	0.50	0.00651	0.0160	-	-	-	-	0.0205	-
Selenium (Se)-Total	mg/L	-	<0.000050	<0.00050	-	-	-	-	<0.00050	-
Strontium (Sr)-Total	mg/L	-	0.0105	0.172	-	-	-	-	0.246	-
Thallium (Tl)-Total	mg/L	-	0.000013	<0.00010	-	-	-	-	<0.00010	-
Tin (Sn)-Total	mg/L	-	<0.00010	<0.0010	-	-	-	-	<0.0010	-
Titanium (Ti)-Total	mg/L	-	0.00236	<0.0030	-	-	-	-	<0.0030	-
Uranium (U)-Total	mg/L	-	0.000348	0.00970	-	-	-	-	0.0227	-
Vanadium (V)-Total	mg/L	-	<0.00050	<0.0050	-	-	-	-	<0.0050	-
Zinc (Zn)-Total	mg/L	0.50	<0.0030	<0.030	-	-	-	-	<0.030	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols (4AAP)	mg/L	-	<0.0010	<0.0010	-	-	-	-	<0.0010	-
F1 (C6-C10)	ug/L	-	<25	<25	-	-	-	-	<25	-
F2 (C10-C16)	ug/L	-	<100	<100	-	-	-	-	<100	-
F3 (C16-C34)	ug/L	-	<250	<250	-	-	-	-	<250	-
F4 (C34-C50)	ug/L	-	<250	<250	-	-	-	-	<250	-
Total Hydrocarbons (C6-C50)	ug/L	-	<370	<370	-	-	-	-	<370	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7: Landfill Facilities.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID		MS-C-A_2022-05-22	MS-C-A_2022-06-07	MS-C-A_2022-06-14	QD-CC1_2022-06-14	MS-C-A_2022-06-21	MS-C-A_2022-06-27	MS-C-A01_2022-06-27	MS-C-A_2022-07-04
	ALS Laboratory Sample ID		L2708550-2	L2713555-7	L2715408-9	L2715408-10	L2716859-9	L2719863-5	L2719863-6	L2721012-10
	Sample Date & Time		2022-05-22 14:45	2022-06-07 15:20	2022-06-14 13:55	2022-06-14 13:55	2022-06-21 12:20	2022-06-27 11:05	2022-06-27 11:05	2022-07-04 13:50
	QA/QC Sample Type		N/A	N/A	N/A	Field Duplicate	N/A	N/A	Field Duplicate	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	57.8	61.4	-	-	-	-	-	-
pH	pH units	6.0 - 9.5	7.46	7.44	6.98	6.95	7.62	7.29	7.42	8.08
Total Suspended Solids	mg/L	Grab 30, Average 15	4.0	4.4	2.5	<2.0	6.4	<2.0	<2.0	<3.0
Total Dissolved Solids	mg/L	-	43	43	61	71	65	115	108	126
Turbidity	NTU	-	26.3	31.2	11.3	11.9	21.2	5.52	5.59	1.97
Ammonia, Total (as N)	mg/L	-	0.061	0.051	-	-	-	-	-	-
Nitrate (as N)	mg/L	-	0.102	0.086	-	-	-	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID		MS-C-A_2022-07-11	MS-C-A02_2022-07-11	MS-C-A_2022-07-18	MS-C-A_2022-07-25	MS-C-A_2022-08-03	MS-C-A_2022-08-08	MS-C-A_2022-08-17	MS-C-A_2022-08-22
	ALS Laboratory Sample ID		L2722588-3	L2722588-7	L2723440-1	L2725223-6	L2726644-1	L2727453-2	L2729151-8	L2729530-7
	Sample Date & Time		2022-07-11 11:30	2022-07-11 15:20	2022-07-18 10:30	2022-07-25 16:40	2022-08-03 11:00	2022-08-08 15:15	2022-08-17 14:40	2022-08-22 11:25
	QA/QC Sample Type		N/A	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	247	1.0	-	-	-	477	-	-
pH	pH units	6.0 - 9.5	8.05	5.69	7.74	7.79	7.72	7.87	7.93	7.91
Total Suspended Solids	mg/L	Grab 30, Average 15	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	147	<10	250	313	297	281	299	285
Turbidity	NTU	-	1.02	<0.10	0.79	0.37	0.26	0.27	0.31	0.42
Ammonia, Total (as N)	mg/L	-	<0.010	<0.010	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	-	0.470	<0.020	-	-	-	1.63	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-A

Analyte	Sample ID		MS-C-A02_2022-08-22	MS-C-A_2022-08-29	MS-C-A_2022-09-05	MS-C-A_2022-09-14	MS-C-A_2022-09-21	MS-C-A02_2022-09-21
	ALS Laboratory Sample ID		L2729530-8	L2730582-5	L2731631-11	L2733138-8	L2733828-6	L2733828-7
	Sample Date & Time		2022-08-22 11:25	2022-08-29 13:30	2022-09-05 15:45	2022-09-14 15:35	2022-09-21 14:40	2022-09-21 14:40
	QA/QC Sample Type		Field Blank	N/A	N/A	N/A	N/A	Field Blank
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	-	-	705	-	-	-
pH	pH units	6.0 - 9.5	6.79	7.84	7.88	7.83	7.84	5.97
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	<10	403	442	443	415	23
Turbidity	NTU	-	<0.10	0.18	0.18	<0.10	<0.10	<0.10
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	-	-	1.45	-	-	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlight indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID		MS-C-B_2022-06-07	MS-C-B_2022-06-14	MS-C-B_2022-06-21	MS-C-B_2022-06-27	MS-C-B_2022-07-04	MS-C-B_2022-07-11	MS-C-B_2022-07-18	MS-C-B_2022-07-27	MS-C-B_2022-08-03	MS-C-B_2022-08-08
	ALS Laboratory Sample ID		L2713555-8	L2715408-11	L2716859-10	L2719863-7	L2721012-11	L2722588-5	L2723440-2	L2725223-11	L2726644-3	L2727453-3
	Sample Date & Time		2022-06-07 15:55	2022-06-14 14:20	2022-06-21 12:50	2022-06-27 11:25	2022-07-04 14:25	2022-07-11 14:00	2022-07-18 10:50	2022-07-27 12:30	2022-08-03 11:40	2022-08-08 16:20
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]										
Conductivity	umhos/cm	-	58.8	-	-	-	-	258	-	-	-	475
pH	pH units	6.0 - 9.5	7.30	6.91	7.60	7.35	7.99	7.90	7.63	7.65	7.65	7.70
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	6.5	<2.0	<3.0	<1.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	48	66	87	109	124	161	258	318	289	263
Turbidity	NTU	-	31.1	13.1	22.8	6.07	2.02	0.94	1.02	0.51	0.26	0.29
Ammonia, Total (as N)	mg/L	-	0.053	-	-	-	-	<0.010	-	-	-	<0.010
Nitrate (as N)	mg/L	-	0.093	-	-	-	-	0.517	-	-	-	1.51
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-B

Analyte	Sample ID		MS-C-B03_2022-08-08	MS-C-B_2022-08-17	MS-C-B_2022-08-22	MS-C-B_2022-08-29	MS-C-B_2022-09-05	MS-C-B02_2022-09-05	MS-C_B_2022-09-14	MS-C-B_2022-09-21	MS_C_B_2022_09_26	QD_BF1_2022_09_26
	ALS Laboratory Sample ID		L2727453-4	L2729151-9	L2729530-9	L2730582-6	L2731631-12	L2731631-13	L2733138-10	L2733828-8	L2734375-3	L2734375-4
	Sample Date & Time		2022-08-08 16:20	2022-08-17 13:30	2022-08-22 11:50	2022-08-29 14:00	2022-09-05 16:05	2022-09-05 16:05	2022-09-14 16:30	2022-09-21 15:15	2022-09-26 11:15	2022-09-26 11:15
	QA/QC Sample Type		Travel Blank	N/A	N/A	N/A	N/A	Field Blank	N/A	N/A	N/A	Field Blank
	Units	Water Licence Criteria [1]										
Conductivity	umhos/cm	-	1.1	-	-	-	700	<1.0	-	-	-	-
pH	pH units	6.0 - 9.5	7.24	7.78	7.71	7.70	7.74	5.96	7.71	7.70	7.76	7.12
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	<10	289	246	376	451	31	468	418	360	15
Turbidity	NTU	-	<0.10	0.33	0.45	0.18	0.13	<0.10	<0.10	<0.10	0.18	0.12
Ammonia, Total (as N)	mg/L	-	<0.010	-	-	-	<0.010	<0.010	-	-	-	-
Nitrate (as N)	mg/L	-	<0.020	-	-	-	1.47	<0.020	-	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	<5.0	<5.0	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID		MS-C-C_2022-06-09	MS-C-C_2022-06-14	MS-C-C_2022-06-21	MS-C-C_2022-06-27	MS-C-C_2022-07-04	MS-C-C_2022-07-11	MS-C-C_2022-07-18	MS-C-C_2022-07-25
	ALS Laboratory Sample ID		L2714246-4	L2715408-15	L2716859-14	L2719863-10	L2721012-7	L2722588-8	L2723440-3	L2725223-5
	Sample Date & Time		2022-06-09 9:45	2022-06-14 16:05	2022-06-21 15:00	2022-06-27 15:40	2022-07-04 12:25	2022-07-11 15:05	2022-07-18 9:45	2022-07-25 16:05
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	477	-	-	-	-	843	-	-
pH	pH units	6.0 - 9.5	7.55	7.24	7.79	7.66	8.37	8.17	7.93	8.00
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	**40.9**	17.6	6.4	9.1	<1.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	256	329	379	429	469	531	564	570
Turbidity	NTU	-	20.8	65.8	23.3	9.26	7.11	2.38	2.76	1.61
Ammonia, Total (as N)	mg/L	-	4.88	-	-	-	-	0.017	-	-
Nitrate (as N)	mg/L	-	1.87	-	-	-	-	2.88	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-C

Analyte	Sample ID		MS-C-C_2022-08-03	MS-C-C03_2022-08-03	MS-C-C_2022-08-09	MS-C-C_2022-08-17	MS-C-C_2022-08-22	MS-C-C_2022-08-29	MS-C-C_2022-09-05	MS-C-C_2022-09-15
	ALS Laboratory Sample ID		L2726644-10	L2726644-11	L2727453-11	L2729151-7	L2729530-6	L2730582-11	L2731631-8	L2733138-14
	Sample Date & Time		2022-08-03 16:15	2022-08-03 16:15	2022-08-09 10:30	2022-08-17 14:00	2022-08-22 11:00	2022-08-29 13:40	2022-09-05 14:30	2022-09-15 10:45
	QA/QC Sample Type		N/A	Travel Blank	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	949	-	-	-	1040	-
pH	pH units	6.0 - 9.5	8.13	6.26	8.05	8.11	8.02	8.08	8.04	7.95
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	<2.0	3.2	<2.0	<2.0	2.8	4.4	<2.0
Total Dissolved Solids	mg/L	-	609	16	639	645	614	651	695	760
Turbidity	NTU	-	0.99	<0.10	2.21	1.18	3.80	0.73	1.95	0.35
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-	-	<0.010	-
Nitrate (as N)	mg/L	-	-	-	9.33	-	-	-	8.01	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID		MS-C-D_2022-06-09	MS-C-D_2022-06-14	MS-C-D_2022-06-21	MS-C-D_2022-06-27	MS-C-D_2022-07-25	MS-C-D_2022-08-03	MS-C-D_2022-08-09	MS-C-D_2022-08-17
	ALS Laboratory Sample ID		L2714246-3	L2715408-14	L2716859-12	L2719863-9	L2724930-5	L2726644-9	L2727453-10	L2729151-6
	Sample Date & Time		2022-06-09 9:15	2022-06-14 15:55	2022-06-21 14:40	2022-06-27 15:15	2022-07-25 15:45	2022-08-03 16:00	2022-08-09 10:15	2022-08-17 13:45
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	279	-	-	-	742	-	1030	-
pH	pH units	6.0 - 9.5	7.67	7.55	7.92	8.07	8.49	8.54	8.43	8.39
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	2.4	13.6	23.4	15.9	22.4	2.5	4.6	<2.0
Total Dissolved Solids	mg/L	-	179	125	118	151	470	670	658	627
Turbidity	NTU	-	32.3	89.8	91.9	42.6	9.70	4.70	2.52	4.39
Ammonia, Total (as N)	mg/L	-	1.40	-	-	-	0.018	-	<0.010	-
Nitrate (as N)	mg/L	-	0.553	-	-	-	1.90	-	3.91	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	<5.0	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for July exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in July due to no flow conditions during other scheduled July sampling events.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-D

Analyte	Sample ID		MS-C-D_2022-08-22	MS-C-D_2022-08-29	MS-C-D_2022-09-05	MS-C-D03_2022-09-05	MS-C-D_2022-09-15	MS-C-D_2022-09-21	MS_C_D_2022_09_26
	ALS Laboratory Sample ID		L2729530-5	L2730582-9	L2731631-6	L2731631-7	L2733138-13	L2733828-10	L2734375-2
	Sample Date & Time		2022-08-22 10:50	2022-08-29 13:55	2022-09-05 14:15	2022-09-05 14:15	2022-09-15 10:25	2022-09-21 16:15	2022-09-26 11:15
	QA/QC Sample Type		N/A	N/A	N/A	Travel Blank	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	917	<1.0	-	-	-
pH	pH units	6.0 - 9.5	8.31	8.39	8.34	6.13	8.35	8.25	7.98
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	4.0	<2.0	2.0	<2.0	2.4	4.8	5.1
Total Dissolved Solids	mg/L	-	592	599	579	35	606	697	496
Turbidity	NTU	-	11.1	4.02	3.63	<0.10	2.85	5.07	23.4
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	<0.010	-	-	-
Nitrate (as N)	mg/L	-	-	-	4.83	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for July exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in July due to no flow conditions during other scheduled July sampling events.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID		MS-C-E_2022-06-09	QD-BF1_2022-06-09	MS-C-E_2022-06-14	MS-C-E_2022-06-21	MS-C-E_2022-06-27	MS-C-E_2022-07-04	MS-C-E_2022-07-12	MS-C-E_2022-07-18	MS-C-E_2022-07-25	MS-C-E_2022-08-03
	ALS Laboratory Sample ID		L2714246-2	L2714246-5	L2715408-13	L2716859-13	L2719863-8	L2721012-6	L2722588-9	L2723440-4	L2725223-4	L2726644-8
	Sample Date & Time		2022-06-09 8:30	2022-06-09 8:30	2022-06-14 15:40	2022-06-21 14:20	2022-06-27 15:00	2022-07-04 12:05	2022-07-12 9:00	2022-07-18 9:25	2022-07-25 15:35	2022-08-03 15:45
	QA/QC Sample Type		N/A	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]										
Conductivity	umhos/cm	-	208	<1.0	-	-	-	-	929	-	-	-
pH	pH units	6.0 - 9.5	7.41	5.77	7.44	8.13	8.06	8.44	8.33	7.96	8.03	8.11
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	3.4	<2.0	6.1	**55.9**	<2.0	5.9	2.0	2.5	<2.0	7.6
Total Dissolved Solids	mg/L	-	123	<10	150	237	379	483	575	590	556	673
Turbidity	NTU	-	24.7	<0.10	35.1	155	6.02	4.17	1.90	2.55	1.50	2.32
Ammonia, Total (as N)	mg/L	-	0.329	0.012	-	-	-	-	0.020	-	-	-
Nitrate (as N)	mg/L	-	0.545	<0.020	-	-	-	-	2.44	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-E

Analyte	Sample ID		MS-C-E_2022-08-09	MS-C-E_2022-08-17	MS-C-E_2022-08-22	MS-C-E_2022-08-23	MS-C-E_2022-08-29	MS-C-E_2022-09-05	MS-C-E_2022-09-15	MS-C-E_2022-09-21	MS_C_E_2022_09_26
	ALS Laboratory Sample ID		L2727453-9	L2729151-5	L2729530-4	L2730409-2	L2730582-10	L2731631-5	L2733138-12	L2733828-9	L2734375-1
	Sample Date & Time		2022-08-09 10:00	2022-08-17 13:35	2022-08-22 10:40	2022-08-23 13:55	2022-08-29 14:10	2022-09-05 14:00	2022-09-15 9:20	2022-09-21 16:00	2022-09-26 11:15
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	996	-	-	-	-	1040	-	-	-
pH	pH units	6.0 - 9.5	7.78	8.09	7.97	8.11	7.94	7.97	7.75	7.70	7.68
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	8.5	<2.0	**42.4**	<2.0	4.2	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	671	800	779	756	680	714	681	755	595
Turbidity	NTU	-	1.20	1.29	74.8	1.94	2.52	0.72	0.58	0.92	3.81
Ammonia, Total (as N)	mg/L	-	0.010	-	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	4.41	-	-	-	-	5.90	-	-	-
Oil and Grease, Total	mg/L	-	6.4	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID		MS-C-F_2022-06-07	QD-BT1_2022-06-07	MS-C-F_2022-06-14	MS-C-F_2022-06-21	MS-C-F_2022-06-28	MS-C-F_2022-07-04	MS-C-F_2022-07-11	MS-C-F_2022-07-18	MS-C-F_2022-07-27
	ALS Laboratory Sample ID		L2713555-9	L2713555-10	L2715408-12	L2716859-11	L2719863-14	L2721012-12	L2722588-6	L2723440-5	L2725223-13
	Sample Date & Time		2022-06-07 16:25	2022-06-07 16:25	2022-06-14 14:55	2022-06-21 13:50	2022-06-28 14:50	2022-07-04 14:45	2022-07-11 14:35	2022-07-18 11:20	2022-07-27 13:00
	QA/QC Sample Type		N/A	Travel Blank	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	61.6	<1.0	-	-	-	-	325	-	-
pH	pH units	6.0 - 9.5	7.30	5.95	6.78	7.29	7.35	7.82	7.77	7.78	7.98
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	9.9	<2.0	4.2	**49.0**	11.8	<3.0	1.8	3.2	2.6
Total Dissolved Solids	mg/L	-	50	12	107	99	99	137	224	336	468
Turbidity	NTU	-	52.0	<0.10	22.2	84.3	22.7	12.2	3.43	8.54	2.76
Ammonia, Total (as N)	mg/L	-	0.115	<0.010	-	-	-	-	0.039	-	-
Nitrate (as N)	mg/L	-	0.090	<0.020	-	-	-	-	0.685	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-F

Analyte	Sample ID		MS-C-F01_2022-07-27	MS-C-F_2022-08-03	MS-C-F_2022-08-09	MS-C-F_2022-08-17	MS-C-F_2022-08-22	MS-C-F_2022-08-29	MS-C-F01_2022-08-29	MS-C-F_2022-09-05	MS-C-F_2022-09-14
	ALS Laboratory Sample ID		L2725223-12	L2726644-4	L2727453-13	L2729151-10	L2729530-10	L2730582-7	L2730582-8	L2731631-10	L2733138-11
	Sample Date & Time		2022-07-27 13:00	2022-08-03 12:00	2022-08-09 11:45	2022-08-17 16:00	2022-08-22 12:15	2022-08-29 14:30	2022-08-29 14:30	2022-09-05 15:20	2022-09-14 16:50
	QA/QC Sample Type		Field Duplicate	N/A	N/A	N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	-	-	576	-	-	-	-	865	-
pH	pH units	6.0 - 9.5	7.99	8.11	8.11	8.00	7.90	7.94	7.95	8.01	8.00
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	2.8	<2.0	2.6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	462	389	360	330	368	540	546	536	530
Turbidity	NTU	-	2.53	1.65	1.57	1.90	1.52	0.78	0.74	0.89	0.52
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-	-	-	<0.010	-
Nitrate (as N)	mg/L	-	-	-	2.24	-	-	-	-	1.72	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-	-	<5.0	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID		MS-C-G_2022-06-07	MS-C-G_2022-06-14	QD-BT1_2022-06-14	MS-C-G_2022-06-28	MS-C-G_2022-07-04	MS-C-G_2022-07-11	MS-C-G_2022-07-18	MS-C-G_2022-07-27
	ALS Laboratory Sample ID		L2713555-1	L2715408-1	L2715408-2	L2719863-15	L2721012-1	L2722588-1	L2723440-6	L2725223-8
	Sample Date & Time		2022-06-07 9:15	2022-06-14 9:50	2022-06-14 9:50	2022-06-28 15:10	2022-07-04 8:40	2022-07-11 9:35	2022-07-18 7:50	2022-07-27 10:10
	QA/QC Sample Type		N/A	N/A	Travel Blank	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	52.4	-	-	-	-	213	-	-
pH	pH units	6.0 - 9.5	7.23	7.18	5.71	7.72	8.08	8.25	7.66	7.56
Total Suspended Solids	mg/L	Grab 30, Average 15	3.5	3.0	<2.0	<2.0	<3.0	<1.0	2.7	<2.0
Total Dissolved Solids	mg/L	-	38	66	16	122	90	109	128	208
Turbidity	NTU	-	25.9	15.8	<0.10	0.53	0.32	<0.10	0.27	<0.10
Ammonia, Total (as N)	mg/L	-	0.305	-	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	-	0.425	-	-	-	-	3.34	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID		MS-C-G_2022-08-03	MS-C-G02_2022-08-03	MS-C-G_2022-08-09	MS-C-G_2022-08-17	MS-C-G_2022-08-22	MS-C-G_2022-08-29	MS-C-G_2022-09-05	MS-C-G_2022-09-14
	ALS Laboratory Sample ID		L2726644-5	L2726644-6	L2727453-12	L2729151-1	L2729530-1	L2730582-12	L2731631-4	L2733138-5
	Sample Date & Time		2022-08-03 13:45	2022-08-03 13:45	2022-08-09 11:00	2022-08-17 10:05	2022-08-22 9:00	2022-08-29 8:55	2022-09-05 12:10	2022-09-14 14:10
	QA/QC Sample Type		N/A	Field Blank	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	503	-	-	-	273	-
pH	pH units	6.0 - 9.5	7.38	6.06	7.43	7.53	7.42	7.47	7.60	7.42
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	315	<10	324	255	197	192	161	130
Turbidity	NTU	-	<0.10	0.12	<0.10	<0.10	0.19	0.11	<0.10	0.16
Ammonia, Total (as N)	mg/L	-	-	-	4.43	-	-	-	2.08	-
Nitrate (as N)	mg/L	-	-	-	33.2	-	-	-	7.94	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-G

Analyte	Sample ID		MS-C-G03_2022-09-14	MS-C-G_2022-09-21	MS-C-G03_2022-09-21	MS-C-G_2022_09_26	QD_CC1_2022_09_26
	ALS Laboratory Sample ID		L2733138-6	L2733828-4	L2733828-5	L2734375-5	L2734375-6
	Sample Date & Time		2022-09-14 14:10	2022-09-21 12:30	2022-09-21 12:30	2022-09-26 11:15	2022-09-26 11:15
	QA/QC Sample Type		Travel Blank	N/A	Travel Blank	N/A	Field Duplicate
	Units	Water Licence Criteria [1]					
Conductivity	umhos/cm	-	-	-	-	-	-
pH	pH units	6.0 - 9.5	5.86	7.49	5.94	7.63	7.63
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	<10	159	17	139	135
Turbidity	NTU	-	<0.10	<0.10	0.13	0.40	0.25
Ammonia, Total (as N)	mg/L	-	-	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID		MS-C-H_2022-05-22	MS-C-H_2022-06-07	MS-C-H_2022-06-14	MS-C-H_2022-06-21	MS-C-H_2022-07-04	MS-C-H_2022-07-11	MQ-C-H01_2022-07-11
	ALS Laboratory Sample ID		L2708550-1	L2713555-2	L2715408-3	L2716859-8	L2721012-2	L2722588-2	L2722588-14
	Sample Date & Time		2022-05-22 12:45	2022-06-07 9:40	2022-06-14 10:15	2022-06-21 11:30	2022-07-04 9:10	2022-07-11 10:20	2022-07-11 10:20
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	74.6	63.0	-	-	-	199	198
pH	pH units	6.0 - 9.5	7.34	7.36	7.19	7.62	8.18	8.17	8.35
Total Suspended Solids	mg/L	Grab 30, Average 15	6.6	2.8	<2.0	<2.0	<3.0	<1.0	<1.0
Total Dissolved Solids	mg/L	-	41	39	60	80	88	94	88
Turbidity	NTU	-	17.1	23.9	15.1	0.63	1.00	0.37	0.36
Ammonia, Total (as N)	mg/L	-	1.69	0.495	-	-	-	0.027	0.036
Nitrate (as N)	mg/L	-	2.46	0.595	-	-	-	0.833	0.828
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	-	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MS-C-H

Analyte	Sample ID		MS-C-H_2022-07-18	MS-C-H_2022-08-17	MS-C-H_2022-08-22	MS-C-H_2022-08-31	MS-C-H_2022-09-07
	ALS Laboratory Sample ID		L2723440-7	L2729151-2	L2729530-2	L2731287-1	L2731871-2
	Sample Date & Time		2022-07-18 8:15	2022-08-17 10:55	2022-08-22 9:25	2022-08-31 15:35	2022-09-07 16:00
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]					
Conductivity	umhos/cm	-	-	-	-	284	273
pH	pH units	6.0 - 9.5	7.69	8.04	8.05	8.11	8.18
Total Suspended Solids	mg/L	Grab 30, Average 15	2.3	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	127	151	137	154	150
Turbidity	NTU	-	0.54	0.44	0.95	0.59	0.71
Ammonia, Total (as N)	mg/L	-	-	-	-	0.040	0.011
Nitrate (as N)	mg/L	-	-	-	-	0.061	0.089
Oil and Grease, Total	mg/L	-	-	-	-	<5.0	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID		MQ-C-A_2022-06-07	MQ-C-A_2022-06-14	MQ-C-A_2022-06-21	MQ-C-A_2022-06-27	MQ-C-A_2022-07-04	MQ-C-A_2022-07-12	MQ-C-A_2022-08-04	MQ-C-A_2022-08-09
	ALS Laboratory Sample ID		L2713555-4	L2715408-6	L2716859-1	L2719863-1	L2721012-4	L2722588-12	L2726644-14	L2727453-6
	Sample Date & Time		2022-06-07 13:45	2022-06-14 11:55	2022-06-21 9:35	2022-06-27 8:50	2022-07-04 11:45	2022-07-12 10:00	2022-08-04 10:25	2022-08-09 8:40
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	65.5	-	-	-	-	199	-	304
pH	pH units	6.0 - 9.5	7.48	7.38	7.82	7.79	8.17	8.31	8.05	8.03
Total Suspended Solids	mg/L	Grab 30, Average 15	6.6	<2.0	2.1	12.5	<3.0	2.5	<2.0	<2.0
Total Dissolved Solids	mg/L	-	45	59	60	67	58	102	136	163
Turbidity	NTU	-	29.6	12.2	4.94	3.47	5.90	1.08	0.21	0.17
Ammonia, Total (as N)	mg/L	-	0.02	-	-	-	-	<0.010	-	<0.010
Nitrate (as N)	mg/L	-	<0.020	-	-	-	-	0.046	-	0.032
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

Analyte	Sample ID		MQ-C-A01_2022-08-09	MQ-C-A_2022-08-18	MQ-C-A03_2022-08-18	MQ-C-A_2022-08-22	MQ-C-A_2022-08-29	MQ-C-A_2022-09-05	MQ-C-A_2022-09-14	MQ-C-A_2022-09-21
	ALS Laboratory Sample ID		L2727453-7	L2729151-13	L2729151-14	L2729530-12	L2730582-1	L2731631-1	L2733138-1	L2733828-1
	Sample Date & Time		2022-08-09 8:40	2022-08-18 14:50	2022-08-18 14:50	2022-08-22 13:10	2022-08-29 10:50	2022-09-05 8:00	2022-09-14 12:00	2022-09-21 10:50
	QA/QC Sample Type		Field Duplicate	N/A	Travel Blank	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	299	-	-	-	-	399	-	-
pH	pH units	6.0 - 9.5	8.05	8.15	6.65	8.12	8.10	8.10	8.08	8.09
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	3.6	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	176	215	20	194	207	237	187	219
Turbidity	NTU	-	0.17	0.29	<0.10	0.38	0.18	0.12	0.24	<0.10
Ammonia, Total (as N)	mg/L	-	<0.010	-	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	-	0.034	-	-	-	-	<0.020	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	-	No Visble Sheen	-	No Visble Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visble Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID		MQ-C-B_2022-05-22	MQ-C-B01_2022-05-22	MQ-C-B_2022-06-07	MQ-C-B_2022-06-14	MQ-C-B_2022-06-21	QD-BF1_2022-06-21	MQ-C-B_2022-06-27	QD-BT1_2022-06-27	MQ-C-B_2022-07-04
	ALS Laboratory Sample ID		L2708550-3	L2708550-4	L2713555-6	L2715408-8	L2716859-6	L2716859-7	L2719863-3	L2719863-4	L2721012-9
	Sample Date & Time		2022-05-22 15:50	2022-05-22 15:50	2022-06-07 14:55	2022-06-14 13:15	2022-06-21 10:50	2022-06-21 10:50	2022-06-27 10:10	2022-06-27 10:10	2022-07-04 12:30
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	Field Blank	N/A	Travel Blank	N/A
	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	74.8	75.2	71.0	-	-	-	-	-	-
pH	pH units	6.0 - 9.5	7.53	7.50	7.51	7.29	7.88	6.63	7.90	5.89	8.37
Total Suspended Solids[4]	mg/L	Grab 30, Average 15	16.8	12.3	18.5	8.4	18.2	<2.0	9.7	<2.0	5.0
Total Dissolved Solids	mg/L	-	54	48	60	77	90	<10	137	26	169
Turbidity	NTU	-	42.1	30.2	57.2	46.7	49.8	<0.10	40.6	0.42	35.0
Ammonia, Total (as N)	mg/L	-	0.029	0.033	0.043	-	-	-	-	-	-
Nitrate (as N)	mg/L	-	0.066	0.103	0.049	-	-	-	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	<5.0	-	-	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	-	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID		MQ-C-B01_2022-07-04	MQ-C-B_2022-07-12	MQ-C-B_2022-07-19	MQ-C-B_2022-07-25	MQ-C-B03_2022-07-25	MQ-C-B_2022-08-03	MQ-C-B_2022-08-09	MQ-C-B_2022-08-18	MQ-C-B_2022-08-22
	ALS Laboratory Sample ID		L2721012-8	L2722588-11	L2723440-12	L2725223-2	L2725223-3	L2726644-12	L2727453-8	L2729151-12	L2729530-11
	Sample Date & Time		2022-07-04 12:30	2022-07-12 9:25	2022-07-19 8:30	2022-07-25 14:55	2022-07-25 14:55	2022-08-03 16:45	2022-08-09 9:15	2022-08-18 14:25	2022-08-22 12:40
	QA/QC Sample Type		Field Duplicate	N/A	N/A	N/A	Travel Blank	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	-	405	-	-	-	-	619	-	-
pH	pH units	6.0 - 9.5	8.38	8.42	8.02	8.18	6.42	8.13	7.91	8.17	8.11
Total Suspended Solids[4]	mg/L	Grab 30, Average 15	4.7	4.3	3.7	4.3	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	170	236	271	306	10	317	338	274	210
Turbidity	NTU	-	34.9	34.8	27.8	11.2	<0.10	4.32	5.52	2.48	2.53
Ammonia, Total (as N)	mg/L	-	-	<0.010	-	-	-	-	0.020	-	-
Nitrate (as N)	mg/L	-	-	2.66	-	-	-	-	5.59	-	-
Oil and Grease, Total	mg/L	-	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

Analyte	Sample ID		MQ-C-B_2022-08-29	MQ-C-B02_2022-08-29	MQ-C-B_2022-09-05	MQ-C-B_2022-09-14	MQ-C-B_2022-09-21
	ALS Laboratory Sample ID		L2730582-3	L2730582-4	L2731631-14	L2733138-7	L2733828-3
	Sample Date & Time		2022-08-29 13:00	2022-08-29 13:00	2022-09-05 16:35	2022-09-14 16:40	2022-09-21 12:15
	QA/QC Sample Type		N/A	Field Blank	N/A	N/A	N/A
	Units	Water Licence Criteria [1]					
Conductivity	umhos/cm	-	-	-	445	-	-
pH	pH units	6.0 - 9.5	8.05	6.10	8.14	8.03	7.89
Total Suspended Solids[4]	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	273	12	227	269	299
Turbidity	NTU	-	2.29	<0.10	2.27	1.83	1.92
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	-	-
Nitrate (as N)	mg/L	-	-	-	1.47	-	-
Oil and Grease, Total	mg/L	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID		MQ-C-D_2022-06-07	MQ-C-D_2022-06-14	MQ-C-D_2022-06-21	MQ-C-D_2022-06-27	MQ-C-D_2022-07-04	MQ-C-D_2022-07-12	MQ-C-D_2022-07-19
	ALS Laboratory Sample ID		L2713555-5	L2715408-7	L2716859-4	L2719863-2	L2721012-5	L2722588-13	L2723440-13
	Sample Date & Time		2022-06-07 14:05	2022-06-14 12:15	2022-06-21 10:05	2022-06-27 9:20	2022-07-04 12:05	2022-07-12 10:15	2022-07-19 8:00
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	82.5	-	-	-	-	222	-
pH	pH units	6.0 - 9.5	7.48	7.36	7.99	7.89	8.24	8.35	8.08
Total Suspended Solids	mg/L	Grab 30, Average 15	17.1	20.0	10.7	6.6	3.8	3.7	2.8
Total Dissolved Solids	mg/L	-	69	89	98	102	88	112	123
Turbidity	NTU	-	72.0	107	34.8	26.1	14.4	7.96	4.72
Ammonia, Total (as N)	mg/L	-	0.050	-	-	-	-	<0.010	-
Nitrate (as N)	mg/L	-	0.078	-	-	-	-	0.033	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID		MQ-C-D02_2022-07-19	MQ-C-D_2022-07-25	MQ-C-D_2022-08-04	MQ-C-D_2022-08-09	MQ-C-D_2022-08-18	MQ-C-D_2022-08-22	MQ-C-D01_2022-08-22
	ALS Laboratory Sample ID		L2723440-14	L2725223-1	L2726644-13	L2727453-5	L2729151-15	L2729530-13	L2729530-14
	Sample Date & Time		2022-07-19 8:00	7/25/2022 14:20	2022-08-04 9:00	2022-08-09 8:20	2022-08-18 15:10	2022-08-22 13:20	2022-08-22 13:20
	QA/QC Sample Type		Field Blank	N/A	N/A	N/A	N/A	N/A	Field Duplicate
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	308	-	-	-
pH	pH units	6.0 - 9.5	6.14	7.71	7.92	7.98	8.10	8.01	7.96
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	22.5	<2.0	4.4	<2.0	2.6	<2.0
Total Dissolved Solids	mg/L	-	<10	134	135	157	177	163	163
Turbidity	NTU	-	<0.10	10.7	5.59	12.4	7.03	7.97	7.84
Ammonia, Total (as N)	mg/L	-	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	0.088	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.3.22: Water Quality Results for Water Licence Monitoring Location - MQ-C-D

Analyte	Sample ID		MQ-C-D_2022-08-29	MQ-C-D_2022-09-05	MQ-C-D_2022-09-14	MQ-C-D02_2022-09-14	MQ-C-D_2022-09-21	MQ-C-D_2022-09-27
	ALS Laboratory Sample ID		L2730582-2	L2731631-2	L2733138-3	L2733138-4	L2733828-2	L2734532-1
	Sample Date & Time		2022-08-29 11:00	2022-09-05 8:25	2022-09-14 13:05	2022-09-14 13:05	2022-09-21 11:10	2022-09-27 10:10
	QA/QC Sample Type		N/A	N/A	N/A	Field Blank	N/A	N/A
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	-	338	-	-	-	-
pH	pH units	6.0 - 9.5	8.14	7.92	8.11	6.00	8.00	7.63
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0	<2.0	3.3	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	181	191	202	<10	200	221
Turbidity	NTU	-	5.75	4.78	4.34	<0.10	4.07	4.56
Ammonia, Total (as N)	mg/L	-	-	<0.010	-	-	-	-
Nitrate (as N)	mg/L	-	-	0.660	-	-	-	-
Oil and Grease, Total	mg/L	-	-	<5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14)

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID		MS-SN-01_2022-06-04	MS-SN-01_2022-06-05	MS-SN-01_2022-06-10	MS-SN-01_2022-07-01	MS-SN-01_2022-07-08	MS-SN-01_2022-07-15	MS-SN-01_2022-07-22	MS-SN-01_2022-07-29
	ALS Laboratory Sample ID		L2712362-1	L2712663-5	L2714250-2	L2719591-1	L2721525-1	L2723436-1	L2724365-1	L2725731-1
	Sample Date & Time		2022-06-04 16:20	2022-06-05 14:40	2022-06-10 16:10	2022-07-01 15:15	2022-07-08 8:00	2022-07-15 7:15	2022-07-22 13:50	2022-07-29 14:00
			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	44.9	-	-	215	-	-	-	-
pH	pH units	6.0 - 9.5	7.30	7.44	7.23	8.03	8.05	8.04	8.04	8.11
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	6.9	**46.8**	4.7	<2.0	<2.0	<2.0	<2.0	3.6
Total Dissolved Solids	mg/L	-	39	53	51	107	137	134	154	174
Turbidity	NTU	-	41.0	103	24.9	5.05	0.38	0.54	0.45	0.39
Ammonia, Total (as N)	mg/L	-	0.0254	-	-	<0.010	-	-	-	
Nitrate (as N)	mg/L	-	0.093	-	-	0.103	-	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID		MS-SN-0101_2022-07-29	MS-SN-0103_2022-07-29	MS-SN-01_2022-08-05	MS-SN-0102_2022-08-05	MS-SN-01_2022-08-10	MS-SN-01_2022-08-18	MS-SN-01_2022-08-18	MS-SN-01_2022-09-01
	ALS Laboratory Sample ID		L2725731-2	L2725731-3	L2726910-1	L2726910-2	L2728014-1	L2729150-1	L2730425-1	L2731420-1
	Sample Date & Time		2022-07-29 14:00	2022-07-29 14:00	2022-08-05 9:50	2022-08-05 9:50	2022-08-10 10:45	2022-08-18 9:50	2022-08-27 9:30	2022-09-01 15:15
			Field Duplicate	Travel Blank	N/A	Field Blank	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	294	<1.0	-	-	-	325
pH	pH units	6.0 - 9.5	8.13	6.37	8.05	6.50	8.12	8.01	7.98	8.12
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.1	<2.0
Total Dissolved Solids	mg/L	-	165	25	148	<10	140	160	172	172
Turbidity	NTU	-	0.25	<0.10	0.32	<0.10	0.24	0.33	0.23	0.24
Ammonia, Total (as N)	mg/L	-	-	-	<0.010	<0.010	-	-	-	0.018
Nitrate (as N)	mg/L	-	-	-	0.595	<0.020	-	-	-	0.523
Oil and Grease, Total	mg/L	-	-	-	<5.0	<5.0	-	-	-	<5.0
	-	No Visible Sheen	-	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Analyte	Sample ID		MS-SN-01_2022-09-01	MS-SN-0102_2022-09-01	MS-SN-01_2022-09-22
	ALS Laboratory Sample ID		L2732291-1	L2732291-2	L2733989-1
	Sample Date & Time		2022-09-10 13:40	2022-09-10 13:40	2022-09-22 15:15
			N/A	Field Blank	N/A
	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	-	-	-
pH	pH units	6.0 - 9.5	8.20	6.15	7.89
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	<2.0	<2.0
Total Dissolved Solids	mg/L	-	185	<10	198
Turbidity	NTU	-	0.67	<0.10	0.14
Ammonia, Total (as N)	mg/L	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.2: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Analyte	Sample ID		MS-SN-02_2022-06-10
	ALS Laboratory Sample ID		L2714250-1
	Sample Date & Time		2022-06-10 10:15
	QA/QC Sample Type		N/A
	Units	Water Licence Criteria [1]	
Conductivity	umhos/cm	-	107.0
pH	pH units	6.0 - 9.5	7.33
Total Suspended Solids	mg/L	Grab 30, Average 15	<2.0
Total Dissolved Solids	mg/L	-	64
Turbidity	NTU	-	33.4
Ammonia, Total (as N)	mg/L	-	0.095
Nitrate (as N)	mg/L	-	0.504
Oil and Grease, Total	mg/L	-	<5.0
	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.4.3: Water Quality Results for Water Licence Monitoring Location - MS-SN-03

Analyte	Sample ID		MS-SN-03_2022-06-24
	ALS Laboratory Sample ID		L2718360-1
	Sample Date & Time		2022-06-24 14:30
	QA/QC Sample Type		N/A
	Units	Water Licence Criteria [1]	
Conductivity	umhos/cm	-	-
pH	pH units	6.0 - 9.5	8.01
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	23.8
Total Dissolved Solids	mg/L	-	128
Turbidity	NTU	-	64.9
Ammonia, Total (as N)	mg/L	-	-
Nitrate (as N)	mg/L	-	-
Oil and Grease, Total	mg/L	-	-
	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.4: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Analyte	Sample ID		TR-SN-01_2022_06_16	TR-SN-01_2022-06-21	TR-SN-01_2022-06-27	TR-SN-01_2022-07-12
	ALS Laboratory Sample ID		L2716178-5	L2717326-6	L2719619-1	L2722758-1
	Sample Date & Time		2022-06-16 10:00	2022-06-21 17:45	2022-06-27 15:20	2022-07-12 15:50
	QA/QC Sample Type		N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]				
Conductivity	umhos/cm	-	202	-	-	137
pH	pH units	6.0 - 9.5	7.99	8.44	8.32	8.14
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	**595.0**	9.7	<1.0
Total Dissolved Solids	mg/L	-	107	67	125	73
Turbidity	NTU	-	3.49	770.0	1010	0.18
Ammonia, Total (as N)	mg/L	-	<0.010	-	-	<0.010
Nitrate (as N)	mg/L	-	0.382	-	-	<0.020
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.5: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Analyte	Sample ID		TR-SN-02_2022_06_16	TR-SN-02_2022-06-21	TR-SN-02_2022-06-27	TR-SN-02_2022-07-07	TR-SN-02_2022-07-12	TR-SN-02_2022-07-17
	ALS Laboratory Sample ID		L2716178-6	L2717326-5	L2719619-2	L2721292-4	L2722758-2	L2724102-3
	Sample Date & Time		2022-06-16 11:15	2022-06-21 16:55	2022-06-27 14:30	2022-07-07 12:30	2022-07-12 14:35	2022-07-17 14:20
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	110	-	-	127	-	-
pH	pH units	6.0 - 9.5	8.08	8.16	8.18	7.91	8.17	8.04
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**194**	**70.6**	**41.4**	<2.0	1.7	2.6
Total Dissolved Solids	mg/L	-	87	70	89	72	49	64
Turbidity	NTU	-	58.1	117	178	2.89	3.23	5.16
Ammonia, Total (as N)	mg/L	-	0.047	-	-	<0.010	-	-
Nitrate (as N)	mg/L	-	0.077	-	-	<0.020	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.6: Water Quality Results for Water Licence Monitoring Location - TR-SN-03

Analyte	Sample ID		TR-SN-03_2022-06-06	TR-SN-03_2022_06_15	TR-SN-03_2022-06-21	TR-SN-03_2022-06-27
	ALS Laboratory Sample ID		L2713710-1	L2716178-3	L2717326-3	L2719619-3
	Sample Date & Time		2022-06-06 12:15	2022-06-15 16:00	2022-06-21 16:15	2022-06-27 14:05
	QA/QC Sample Type		N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]				
Conductivity	umhos/cm	-	96.6	-	-	-
pH	pH units	6.0 - 9.5	7.83	8.00	8.29	8.07
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**35.5**	**36.8**	<2.0	**143**
Total Dissolved Solids	mg/L	-	62	140	148	132
Turbidity	NTU	-	37.6	55.6	2	221
Ammonia, Total (as N)	mg/L	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.7: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Analyte	Sample ID		TR-SN-04_2022_06_15	TR-SN-04_2022-06-21	TR-SN-04_2022-06-27	TR-SN-04_2022-07-06	TR-SN-04_2022-07-12	TR-SN-04_2022-07-26	TR-SN-04_2022-08-01
	ALS Laboratory Sample ID		L2716178-2	L2717326-2	L2719619-4	L2721292-2	L2722758-3	L2725521-1	L2726810-2
	Sample Date & Time		2022-06-15 15:35	2022-06-21 15:55	2022-06-27 13:40	2022-07-06 16:10	2022-07-12 12:15	2022-07-26 12:10	2022-08-01 15:05
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	100	-	-	<1.0	-	-	-
pH	pH units	6.0 - 9.5	7.65	7.58	8.02	7.85	8.22	7.59	7.90
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	18.1	**35.0**	7.6	2.1	2.5	3.4	**32.1**
Total Dissolved Solids	mg/L	-	71	78	77	95	108	125	144
Turbidity	NTU	-	37.8	84.8	29.4	24.1	6.05	16.5	139
Ammonia, Total (as N)	mg/L	-	0.045	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	0.150	-	-	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, August exceeded maximum average TSS concentration discharge limits.

Table 7.4.7: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Analyte	Sample ID		TR-SN-04_07-08-2022	QP-BF1_07-08-2022	TR-SN-04_2022-08-14
	ALS Laboratory Sample ID		L2727454-1	L2727454-2	L2728914-1
	Sample Date & Time		2022-08-07 11:40	2022-08-07 11:40	2022-08-14 13:15
	QA/QC Sample Type		N/A	Field Blank	N/A
	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	-	-	-
pH	pH units	6.0 - 9.5	7.69	6.91	7.74
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	16.8	<2.0	18.3
Total Dissolved Solids	mg/L	-	158	24	201
Turbidity	NTU	-	60.4	<0.10	94.8
Ammonia, Total (as N)	mg/L	-		-	-
Nitrate (as N)	mg/L	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, August exceeded maximum average TSS concentration discharge limits.

Table 7.4.8: Water Quality Results for Water Licence Monitoring Location - TR-SN-06

Analyte	Sample ID		TR-SN-06_2022_06_15	TR-SN-06_2022-06-21	TR-SN-06_2022-06-27	TR-SN-06_2022-07-06	TR-SN-06_2022-07-12	QP-BT1_2022-07-12	TR-SN-06_2022-08-01
	ALS Laboratory Sample ID		L2716178-1	L2717326-1	L2719619-5	L2721292-1	L2722758-4	L2722758-6	L2726810-1
	Sample Date & Time		2022-06-15 15:00	2022-06-21 15:30	2022-06-27 13:15	2022-07-06 14:40	2022-07-12 11:20	2022-07-12 11:20	2022-08-01 14:40
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	Travel Blank	N/A
	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	177	-	-	30.8	-	-	-
pH	pH units	6.0 - 9.5	7.98	8.11	8.10	7.26	7.78	5.58	8.11
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**57.9**	**179**	19.3	<2.0	2.1	<1.0	**129**
Total Dissolved Solids	mg/L	-	144	85	94	28	34	<10	89
Turbidity	NTU	-	121	286	76.2	2.32	6.25	<0.10	130
Ammonia, Total (as N)	mg/L	-	0.035	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	0.152	-	-	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, August exceeded maximum average TSS concentration discharge limits.

Table 7.4.9: Water Quality Results for Water Licence Monitoring Location - TR-SN-07

Analyte	Sample ID		TR-SN-07_2022-06-06	QP-CC1_2022-06-06	TR-SN-07_2022_06_15	TR-SN-07_2022-06-21	TR-SN-07_2022-07-07	QP-CC1_2022-07-07	TR-SN-07_2022-07-12	TR-SN-07_2022-07-17
	ALS Laboratory Sample ID		L2713710-2	L2713710-3	L2716178-4	L2717326-4	L2721292-3	L2721292-5	L2722758-5	L2724102-1
	Sample Date & Time		2022-06-06 15:35	2022-06-06 15:35	2022-06-15 16:20	2022-06-21 16:25	2022-07-07 11:30	2022-07-07 11:30	2022-07-12 13:55	2022-07-17 13:30
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	Field Duplicate	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	109	108	-	-	272	272	-	-
pH	pH units	6.0 - 9.5	8.03	8.05	7.97	8.18	8.10	8.21	8.57	8.20
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**227**	**219**	**206**	**435**	4.9	4.3	5.3	<2.0
Total Dissolved Solids	mg/L	-	133	130	169	102	149	158	196	218
Turbidity	NTU	-	251	242	320	618	6.07	5.33	8.55	2.71
Ammonia, Total (as N)	mg/L	-	0.039	0.041	-	-	<0.010	<0.010	-	-
Nitrate (as N)	mg/L	-	0.038	0.039	-	-	<0.020	<0.020	-	-
Oil and Grease, Total	mg/L	-	<5.0	<5.0	-	-	<5.0	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	-	No Visible Sheen	No Visible Sheen

Notes:
Bold highlighted values indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.9: Water Quality Results for Water Licence Monitoring Location - TR-SN-07

Analyte	Sample ID		QP-BF1_2022-07-17	TR-SN-07_2022-08-01	TR-SN-07_2022-08-14	QP-BT1_2022-08-14
	ALS Laboratory Sample ID		L2724102-2	L2726810-3	L2728914-2	L2728914-3
	Sample Date & Time		2022-07-17 13:30	2022-08-01 15:40	2022-08-14 13:40	2022-08-14 13:40
	QA/QC Sample Type		Field Blank	N/A	N/A	Travel Blank
	Units	Water Licence Criteria [1]				
Conductivity	umhos/cm	-	-	-	-	-
pH	pH units	6.0 - 9.5	6.28	8.38	8.17	6.52
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	8.5	2.5	<2.0
Total Dissolved Solids	mg/L	-	<10	292	295	13
Turbidity	NTU	-	0.16	5.91	1.96	0.30
Ammonia, Total (as N)	mg/L	-	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-
	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	-

Notes:
Bold highlighted values indicate results that exceeded the applicable water quality criteria.
[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.
[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.5.1: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID		MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
	ALS Laboratory Sample ID		L2713711-1	L2715792-1	L2716862-7	L2719587-8	L2723073-2	L2722798-1	L2724100-1	L2724924-1
	Sample Date & Time		2022-06-07 7:00	2022-06-14 10:35	2022-06-21 11:35	2022-06-28 12:40	2022-07-05 9:10	2022-07-12 10:55	2022-07-19 9:10	2022-07-26 9:05
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	215	-	-	-	-	269	-	-
pH	pH units	6.0 - 9.5	8.08	7.81	7.84	8.02	8.37	8.43	8.47	8.42
Total Suspended Solids	mg/L	Grab 30, Average 15	10.5	7.2	10.2	9.5	7.1	1.3	<2.0	<2.0
Total Dissolved Solids	mg/L	-	131	89	71	113	122	156	145	163
Turbidity	NTU	-	15.7	24.6	15.90	12.50	10.60	2.77	2.75	1.91
Ammonia, Total (as N)	mg/L	-	0.112	-	-	-	-	0.030	-	-
Nitrate (as N)	mg/L	-	0.155	-	-	-	-	0.255	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.1: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

Analyte	Sample ID		MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
	ALS Laboratory Sample ID		L2726793-2	L2727458-2	L2728891-3	L2730385-1	L2731108-1	L2732071-1	L2733009-2	L2734090-4
	Sample Date & Time		2022-08-02 7:40	2022-08-09 8:20	2022-08-16 8:15	2022-08-23 17:40	2022-08-30 13:50	2022-09-05 13:00	2022-09-13 11:00	2022-09-20 9:50
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	323	-	-	-	-	393	-	-
pH	pH units	6.0 - 9.5	8.34	8.34	8.25	8.39	8.14	8.47	8.40	8.16
Total Suspended Solids	mg/L	Grab 30, Average 15	6.8	<2.0	3.0	<3.0	2.3	1.9	3.6	5.6
Total Dissolved Solids	mg/L	-	190	190	216	207	235	246	225	252
Turbidity	NTU	-	4.39	2.61	2.18	3.20	3.95	1.82	4.62	2.36
Ammonia, Total (as N)	mg/L	-	0.094	-	-	-	-	0.187	-	-
Nitrate (as N)	mg/L	-	0.199	-	-	-	-	0.23	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	<5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.2: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID		TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID		L2714289-1	L2714976-1	L2720788-1	L2722811-3	L2724364-3	L2725518-1	L2726844-1	L2727452-1
	Sample Date & Time		2022-06-12 10:05	2022-06-14 13:45	2022-07-05 8:45	2022-07-16 15:40	2022-07-23 17:30	2022-07-28 8:30	2022-08-04 13:15	2022-08-09 8:20
	QA/QC Sample Type		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	72.5	-	546	-	-	-	-	747
pH	pH units	6.0 - 9.5	7.24	7.31	7.93	7.91	8.01	7.96	7.78	7.84
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	21.4	20.4	6.2	3.8	3.6	3.8	4.2	3.2
Total Dissolved Solids	mg/L	-	65	91	358	396	407	390	641	577
Turbidity	NTU	-	142	155	31.9	12.90	10.1	6.6	4.76	3.89
Ammonia, Total (as N)	mg/L	-	0.040	-	0.147	-	-	-	-	0.098
Nitrate (as N)	mg/L	-	0.125	-	0.080	-	-	-	-	0.048
Oil and Grease, Total	mg/L	-	<5.0	-	<5.0	-	-	-	-	<5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and September exceeded maximum average TSS concentration discharge limits, although only two (2) samples were collected in June, and only one (1) sample was collected in September. Note that this water was applied directly to dry road surfaces for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.2: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

Analyte	Sample ID		TR-BP-01	TR-BP-01	TR-BP-01
	ALS Laboratory Sample ID		L2729342-3	L2731107-1	L2731421-3
	Sample Date & Time		2022-08-19 16:30	2022-08-28 13:20	2022-09-02 8:05
	QA/QC Sample Type		N/A	N/A	N/A
	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	-	-	-
pH	pH units	6.0 - 9.5	7.67	7.84	6.99
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	6.0	<2.0	18.5
Total Dissolved Solids	mg/L	-	712	631	1090
Turbidity	NTU	-	4.82	3.37	17.7
Ammonia, Total (as N)	mg/L	-	-	-	-
Nitrate (as N)	mg/L	-	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and September exceeded maximum average TSS concentration discharge limits, although only two (2) samples were collected in June, and only one (1) sample was collected in September. Note that this water was applied directly to dry road surfaces for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - TR-BP-02

Analyte	Sample ID		TR-BP-02	QD-CC1	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02
	ALS Laboratory Sample ID		L2716151-1	L2716151-2	L2717674-1	L2719620-1	L2721293-1	L2722756-1	L2723836-1	L2725522-1
	Sample Date & Time		2022-06-16 10:40	2022-06-16 10:40	2022-06-21 17:10	2022-06-27 14:55	2022-07-07 13:45	2022-07-12 15:05	2022-07-17 14:50	2022-07-26 14:05
	QA/QC Sample Type		N/A	Field Duplicate	N/A	N/A	N/A	N/A	N/A	N/A
	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	-	-	221	-	-	-
pH	pH units	6.0 - 9.5	7.96	8.00	8.02	8.17	8.25	8.51	8.32	8.35
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	24.1	26.6	24.1	5.3	<2.0	<1.0	2.1	2.0
Total Dissolved Solids	mg/L	-	113	107	73	96	123	127	157	173
Turbidity	NTU	-	35.9	32.6	32.9	11.0 *	1.22	0.95	2.86	2.95
Ammonia, Total (as N)	mg/L	-	-	-	-	-	<0.010	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	<0.020	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	<5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits, although only three (3) samples were collected. Note that this water was applied directly to dry road surfaces for dust suppression efforts and did not migrate to receiving water bodies.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - TR-BP-02

Analyte	Sample ID		TR-BP-02	TR-BP-02	TR-BP-02
	ALS Laboratory Sample ID		L2731107-2	L2732073-1	L2733414-1
	Sample Date & Time		2022-08-29 15:05	2022-09-04 9:35	2022-09-18 12:30
	QA/QC Sample Type		N/A	N/A	N/A
	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	-	371	-
pH	pH units	6.0 - 9.5	8.20	8.42	8.15
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	<2.0	1.6	2.8
Total Dissolved Solids	mg/L	-	246	223	244
Turbidity	NTU	-	11.30	9.25	8.97
Ammonia, Total (as N)	mg/L	-	-	<0.010	-
Nitrate (as N)	mg/L	-	-	<0.020	-
Oil and Grease, Total	mg/L	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits, although only three (3) samples were collected. Note that this water was applied directly to dry road surfaces for dust suppression efforts and did not migrate to receiving water bodies.

ATTACHMENT 11

2023 QIA-NWB Annual Report for Operations

- Table 7.1 Water Licence Water Quality Monitoring Locations - 2023
- Table 7.2 Water Quality Results for Milne Port Water Licence Monitoring Location
- Table 7.3 Water Quality Results for Mine Site Water Licence Monitoring Location
- Table 7.4 Water Quality Results for Tote Road Water Licence Monitoring Location
- Table 7.5 Water Quality Results for Snow Stockpile Water Licence Monitoring Locations
- Table 7.6 Water Quality Results for Other Water Licence Monitoring Locations
- Table 7.6 Water Quality Results for Milne Port Freshet Water Licence Monitoring Locations

Table 7.6 Water Quality Results for Mine Site Freshet Water Licence Monitoring Locations

Table 7.1: Water Quality Monitoring Locations - 2023

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2023
			Easting	Northing	Latitude	Longitude	
Milne Port							
SNP	MP-01	Milne Port Sewage Treatment Plant (STP)	503807	7975982	71° 53' 01.9" N	-80° 53' 25.1" W	Active
SNP	MP-01A	Milne Port Polishing Waste Stabilization Pond (PWSP)	503625	7976015	71° 53' 02.9" N	-80° 53' 43.9" W	Active[1]
SNP	MP-01B	Milne Port 380 Person Sewage Treatment Plant (STP)	503368	7975186	71° 52' 36.2" N	-80° 54' 10.8" W	Active
SNP	MP-02	Milne Port Maintenance Shop (Oily Water)	503785	7976209	71° 53' 09.2" N	-80° 53' 27.3" W	Not Constructed
SNP	MP-03	Milne Port Bulk Fuel Storage Facility (Stormwater)	503638	7976272	71° 53' 11.3" N	-80° 53' 42.6" W	Active
SNP	MP-04	Milne Port Landfarm Facility	503751	7975570	71° 52' 48.6" N	-80° 53' 31.1" W	Active
SNP	MP-04A	Milne Port Landfarm Facility (Contaminated Snow Containment Berm)	503862	7975482	71° 52' 45.8" N	-80° 53' 19.5" W	Active
SNP	MP-05	Milne Port Ore Stockpile Facility - East Surface Water Management Pond	503469	7976383	71° 53' 14.9" N	-80° 54' 00.1" W	Active
SNP	MP-06	Milne Port Ore Stockpile Facility - West Surface Water Management Pond	503125	7976364	71° 53' 14.3" N	-80° 54' 35.8" W	Active
SNP	MP-C-A	Surface Water Drainage Downstream of Milne Port Infrastructure	503214	7976483	71° 53' 18.1" N	-80° 54' 26.5" W	Active[1]
SNP	MP-C-B		502844	7975741	71° 52' 54.2" N	-80° 55' 05.0" W	Active
SNP	MP-C-K		502982	7975333	71° 52' 41.0" N	-80° 54' 50.8" W	Active
SNP	MP-C-D		503651	7976363	71° 53' 14.2" N	-80° 53' 41.2" W	Active[1]
SNP	MP-C-E		503736	7976346	71° 53' 13.7" N	-80° 53' 32.4" W	Active[1]
SNP	MP-C-F		503922	7976304	71° 53' 12.3" N	-80° 53' 13.1" W	Active[1]
SNP	MP-C-H		504113	7976509	71° 53' 18.9" N	-80° 52' 53.2" W	Active
SNP	MP-C-J		502940	7974760	71° 52' 22.5" N	-80° 54' 55.2" W	Active
SNP	MP-MRY-2	Fresh Water Intake at Phillips Creek	514503	7964579	71° 46' 52.4" N	-80° 35' 03.8" W	Active[2]
SNP	MP-MRY-3	Fresh Water Intake at Km 32 Lake	521547	7953735	71° 41' 00.4" N	-80° 23' 08.5" W	Active
SNP	MP-Q1-01	Surface Water Drainage Downstream of the Q1 Quarry	503839	7974467	71° 52' 13.0" N	-80° 53' 22.1" W	Active
SNP	MP-Q1-02		503828	7975396	71° 52' 43.0" N	-80° 53' 23.0" W	Active
Recycled Water	MP-Q1-P1	Milne Port Q1 Quarry Recycled Water for Dust Suppression	503822	7974661	71° 52' 19.3" N	-80° 53' 23.8" W	Active
Mine Site							
SNP	MQ-C-A	Surface Water Drainage Downstream of QMR2 Quarry	559489	7914408	71° 19' 28.2" N	-79° 20' 06.9" W	Active
SNP	MQ-C-B		560076	7913888	71° 19' 10.9" N	-79° 19' 09.3" W	Active
SNP	MQ-C-D		559422	7914223	71° 19' 22.3" N	-79° 20' 14.2" W	Active
SNP	MS-01	Mine Site Sewage Treatment Plant No. 1	561322	7913257	71° 18' 49.4" N	-79° 17' 05.7" W	Active[1]
SNP	MS-01A	Mine Site Polishing Waste Stabilization Pond (PWSP)	-	-	-	-	Not Constructed

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2024.

[3] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023) that are still representative of the appropriate watershed.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 was not used in 2023.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2023

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2023
			Easting	Northing	Latitude	Longitude	
SNP	MS-01B	Mine Site Sewage Treatment Plant No. 2	560798	7913291	71° 18'51.0" N	-79° 17' 58.3" W	Active
SNP	MS-02	Mine Site Mobile Maintenance Buildings (Meltwater)	561638	7913222	71° 18' 48.0" N	-79° 16' 34.0" W	Not Constructed
SNP	MS-03	Mine Site Bulk Fuel Storage Facility (Stormwater)	561258	7913304	71° 18' 51.0" N	-79° 17' 12.0" W	Active[1]
SNP	MS-03B	Mine Site Bulk Fuel Storage Facility (Stormwater)	560980	7913568	71° 18' 59.7" N	-79° 17' 39.2" W	Active
SNP	MS-04	Mine Site Fuel Unloading Station (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-05	Mine Site Landfarm Facility (Stormwater)	560828	7912726	71° 18' 32.7" N	-79° 17' 56.9" W	Active[1]
SNP	MS-06	Mine Site Crusher Facility - Surface Water Management Pond	561475	7913000	71° 18' 41.0" N	-79° 16' 51.0" W	Active
SNP	MS-07	Mine Site Run of Mine (ROM) Ore Stockpile Pond - Surface Water Management Pond	563583	7913074	71° 18' 41.4" N	-79° 13' 18.7" W	Active
SNP	MS-08	Mine Site Waste Rock Facility (WRF) - Surface Water Management Pond	563218	7916802	71° 20' 24.7" N	-79° 13' 18.3" W	Active
SNP	MS-09	Waste Rock Stockpile - East Pond	-	-	-	-	Not Constructed
SNP	MS-10	Mine Site SDLT-1 Pond Ore Stockpile (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-11	Mine Site KM105 Pond (Stormwater)	562171	7913159	71°18'45.5" N	- 79° 15'40.5" W	Active
SNP	MS-12	Mine Site Weatherhaven Camp (Stormwater)	-	-	-	-	Not Constructed
SNP	MS-13	Mine Site Explosives Magazine Pond	-	-	-	-	Not Constructed
SNP	MS-14	Mine Site Quarry QMR2 Pond/Sump	-	-	-	-	Not Constructed
SNP	MS-C-A	Surface Water Drainage Downstream of Mine Site Infrastructure	561263	7913571	71° 18' 59.6" N	-79° 17' 10.7" W	Active
SNP	MS-C-B		561454	7913537	71° 18' 58.3" N	-79° 16' 51.6" W	Active
SNP	MS-C-C		561117	7913196	71° 18' 47.6" N	-79° 17' 26.5" W	Active
SNP	MS-C-D		561008	7913280	71° 18' 50.5" N	-79° 17' 37.2" W	Active
SNP	MS-C-E		560980	7913388	71° 18' 54.0" N	-79° 17' 39.7" W	Active
SNP	MS-C-F		561797	7913278	71° 18' 49.7" N	-79° 16' 17.8" W	Active
SNP	MS-C-G		561813	7911830	71° 18' 02.9" N	-79° 16' 20.3" W	Active
SNP	MS-C-H		561162	7912067	71° 18' 11.2" N	-79° 17' 25.1" W	Active
Recycled Water	HR-CD-05	Mine Site Haul Road KM105 Pond Recycled Water for Dust Suppression	563812	7913140	71° 18' 43.3" N	-79° 12' 55.4" W	Active[1]
Recycled Water	MS-RW-01	Mine Site Flight Ops Pond (Pond 1) Recycled Water for Dust Suppression	559348	7914222	71° 19' 22.3" N	-79° 20' 21.6" W	Active[1]
Recycled Water	MS-RW-02	Mine Site Warehouse Pond (Pond 2) Recycled Water for Dust Suppression	559555	7913950	71° 19' 13.4" N	-79° 20' 01.6" W	Active[1]
Recycled Water	MS-RW-03	Mine Site Flight Ops Pond (Pond 3) Recycled Water for Dust Suppression	559225	7914167	71° 19' 20.7"N	-79° 20' 34.2"W	Active[1]
SNP	MS-MRY-1	Fresh Water Intake at Camp Lake	557779	7914722	71° 19' 39.8" N	-79° 22' 58.2" W	Active
SNP	MS-MRY-04	Mine Site Exploration Camp Sewage Treatment Plant	558134	7914459	71° 19' 31.0" N	-79° 22' 23.2" W	Inactive[4]
SNP	MS-MRY-04A	Mine Site Polishing Waste Stabilization Pond (PWSP)	558492	7914118	71° 19' 19.7" N	-79° 21' 48.1" W	Active[1]
SNP	MS-MRY-04B	Mine Site Polishing Waste Stabilization Pond (PWSP)	558438	7914310	71° 19' 26.0" N	-79° 21' 53.0" W	Active[1]

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2024.

[3] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023) that are still representative of the appropriate watershed.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 was not used in 2023.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2023

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2023
			Easting	Northing	Latitude	Longitude	
SNP	MS-MRY-04C	Mine Site Polishing Waste Stabilization Pond (PWSP)	558489	7914271	71° 19' 24.7" N	-79° 21' 48.0" W	Active[1]
SNP	MS-MRY-6	Hazardous Materials Storage Area (MS-HWB-7) (Stormwater)	558284	7914449	71° 19' 30.6" N	-79° 22' 08.1" W	Active
SNP	MS-MRY-09	Mine Site Deposit No.1 - Surface Water Drainage	561083	7915084	71° 19' 48.5" N	-79° 17' 24.5" W	Active
SNP	MS-MRY-13A	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560754	7912484	71° 18' 25.0" N	-79° 18' 05.0" W	Active
SNP	MS-MRY-13B	Mine Site Non-Hazardous Waste Landfill Facility (Surface Water Drainage)	560642	7912527	71° 18' 26.5" N	-79° 18' 16.1" W	Active
SSPM	MS-SN-01	Mine Site Weatherhaven Snow Stockpile	558052	7914303	71° 19' 26.1" N	79° 22' 31.9" W	Active
SSPM	MS-SN-02	Mine Site Landfill Access Road Snow Stockpile	561097	7912884	71° 18' 37.6" N	79° 17' 29.4" W	Active
SSPM	MS-SN-03	Mine Site Warehouse Snow Stockpile	559803	7913756	71° 19' 06.9" N	79° 19' 37.1" W	Active[1]
Tote Road							
SSPM	TR-SN-01	Tote Road Snow Stockpile KM37	521593	7949160	71° 38' 32.8" N	-80° 23' 08.6" W	Active
SSPM	TR-SN-02	Tote Road Snow Stockpile KM63	529344	7926819	71° 26' 28.8" N	-80° 10' 26.1" W	Active
SSPM	TR-SN-03[5]	Tote Road Snow Stockpile KM77	538726	7920503	71° 23' 00.1" N	-79° 54' 47.0" W	Active[1]
SSPM	TR-SN-04	Tote Road Snow Stockpile KM86	546477	7919889	71° 22' 33.2" N	-79° 41' 00.8" W	Active
SSPM	TR-SN-05	Tote Road Snow Stockpile KM92	551307	7916785	71° 20' 51.7" N	-79° 33' 45.2" W	Active[1]
SSPM	TR-SN-06	Tote Road Snow Stockpile KM97	554983	7914446	71° 19' 34.8" N	-79° 27' 18.3" W	Active
SSPM	TR-SN-07	Tote Road Snow Stockpile KM75	537466	7920200	71° 22' 51.1" N	-79° 56' 54.8" W	Active
Recycled Water	TR-BP-01	Tote Road KM97 Borrow Pond Recycled Water for Dust Suppression	556021	7914684	71° 19' 40.1" N	-79° 25' 55.4" W	Active
Recycled Water	TR-BP-02	Tote Road KM57 Borrow Pond Recycled Water for Dust Suppression	527171	7932085	71° 29' 19.6" N	-80° 13' 59.6" W	Active
TRMP	CV-167	Approximately located at KM6	505538	7972370	71° 51' 05.2" N	-80° 50' 26.5" W	Active
TRMP	CV-154-A[3]	Approximately located at KM9.5	507629	7970074	71° 49' 51.0" N	-80° 46' 50.9" W	Active
TRMP	CV-128	Approximately located at KM17	513556	7965889	71° 47' 34.9"N	-80° 36' 40.6"W	Active
TRMP	CV-129	Approximately located at KM15	512381	7966783	71° 48' 03.9"N	-80° 38' 41.3"W	Active
TRMP	CV-115	Approximately located at KM28	519222	7958135	71° 43' 23.2"N	-80° 27' 03.0"W	Active
TRMP	CV-112	Approximately located at KM33	521033	7954935	71° 41' 39.3"N	-80° 24' 00.0"W	Active
TRMP	CV-106	Approximately located at KM33	521663	7953392	71° 40' 49.3"N	-80° 22' 57.0"W	Active
TRMP	CV-099	Approximately located at KM37	521886	7948843	71° 38' 22.4"N	-80° 22' 38.9"W	Active
TRMP	CV-093	Approximately located at KM42	522927	7945093	71° 36' 21.1"N	-80° 20' 56.4"W	Active
TRMP	CV-078	Approximately located at KM51	525852	7936787	71° 31' 51.9"N	-80° 16' 07.8"W	Active
TRMP	CV-072-C[3]	Approximately located at KM54	526897	7934576	71° 30' 40.1"N	-80° 14' 24.2"W	Active

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2024.

[3] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023) that are still representative of the appropriate watershed.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 was not used in 2023.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.1: Water Quality Monitoring Locations - 2023

Monitoring Program	Monitoring Station	Description	Location (UTM NAD83 Zone 17 W)		Location		Status in 2023
			Easting	Northing	Latitude	Longitude	
TRMP	CV-060	Approximately located at KM58	527622	7930342	71° 28' 23.2"N	-80° 13' 16.0"W	Active
TRMP	BG-50	Approximately located at KM63	529294	7926852	71° 26' 29.8"N	-80° 10' 31.1"W	Active
TRMP	CV-040	Approximately located at KM71.5	535168	7920326	71° 22' 56.4"N	-80° 00' 46.7"W	Active
TRMP	BG-32	Approximately located at KM78	540729	7921597	71° 23' 34.2"N	-79° 51' 22.6"W	Active
TRMP	CV-217	Approximately located at KM80	542321	7922189	71° 23' 52.4"N	-79° 48' 40.5"W	Active
TRMP	BG-30	Approximately located at KM84.5	546070	7919844	71° 22' 34.2"N	-79° 42' 26.6"W	Active
TRMP	BG-24	Approximately located at KM88	548766	7918878	71° 22' 01.1"N	-79° 37' 56.6"W	Active
TRMP	CV-001	Approximately located at KM94.1	553544	7914897	71° 19' 49.0"N	-79° 30' 04.3"W	Active
TRMP	CV-223	Approximately located at KM97.5	555705	7914676	71° 19' 40.1"N	-79° 26' 27.3"W	Active

Notes:

[1] Monitoring station active but there was no surface water flow through the monitoring station/discharge from facility in 2024.

[2] Monitoring station active but there was no water withdrawal (intake) for domestic/industrial use through the monitoring station in 2024.

[3] Tote Road Water Crossings CV-154-A and CV-072-C are replacements for CV-162 and CV-071, respectively, that were originally listed in the Roads Management Plan (BAF-PH1-830-P16-0023) that are still representative of the appropriate watershed.

[4] Exploration Phase infrastructure decommissioned.

[5] Snow stockpile sampling station TR-SN-03 was used in early 2022 but during evaluation of the Tote Road snow stockpile monitoring locations it was found that the sampling station is not required because flow from the snow stockpile ends in the tundra and does not directly enter a waterbody (the closest downgradient waterbody is over a kilometer away); therefore, monitoring location TR-SN-03 was not used in 2023.

SNP - Surveillance Network Program; TRMP - Tote Road Monitoring Program; SSPM - Snow Stockpile Program Monitoring

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

		Sample ID	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
		ALS Laboratory Work Order	WT2300745	WT2303767	WT2305625	WT2308542	WT2311641	WT2315991	WT2319797	WT2324094
		Sample Date & Time	2023-01-10 12:45	2023-02-14 14:45	2023-03-08 13:10	2023-04-04 13:10	2023-05-02 14:30	2023-06-06 12:45	2023-07-04 13:10	2023-08-02 13:10
Analyte	**Units**	**Water Licence Criteria[1]**								
pH, Lab	pH units	6.0-9.5	7.40	7.67	7.94	8.06	7.91	7.85	7.74	7.89
Total Suspended Solids	mg/L	120	< 2.1	5.2	< 1.5	2.3	< 1.0	2.0	< 1.0	1.4
Total Dissolved Solids	mg/L	-	950	884	922	1030	908	1040	868	1100
Turbidity	NTU	-	0.30	1.40	0.54	0.30	0.25	0.62	0.33	0.64
Alkalinity, Total	mg/L	-	56.2	85.0	91.9	110	104	85.6	104	108
Ammonia, Total (as N)	mg/L	-	0.0605	0.0419	0.0854	0.0889	0.0872	0.0796	0.0990	0.0712
Total Kjeldahl Nitrogen	mg/L	-	0.400	1.58	5.65	5.54	1.02	5.15	1.42	13.1
Fecal Coliforms	CFU/100mL	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BOD	mg/L	100	< 2.0	2.9	2.2	< 2.0	< 2.0	< 2.0	2.8	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	11.0	9.28	10.3	11.8	9.09	13.1	10.8	13.9

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.1: Water Quality Results for Water Licence Monitoring Location - MP-01

		Sample ID	MP-01	MP-01	MP-01	MP-01
		ALS Laboratory Work Order	WT2328180	WT2331962	WT2336424	WT2339607
		Sample Date & Time	2023-09-05 14:30	2023-10-03 13:10	2023-11-07 13:10	2023-12-05 14:20
Analyte	**Units**	**Water Licence Criteria[1]**				
pH, Lab	pH units	6.0-9.5	7.83	7.95	7.90	7.92
Total Suspended Solids	mg/L	120	1.7	1.8	1.1	1.5
Total Dissolved Solids	mg/L		806	988	921	894
Turbidity	NTU		0.67	1.02	0.63	0.82
Alkalinity, Total	mg/L		81.8	104	98.3	111
Ammonia, Total (as N)	mg/L		0.0484	0.0565	0.0423	0.0436
Total Kjeldahl Nitrogen	mg/L		1.28	0.774	1.64	0.413
Fecal Coliforms	CFU/100mL	10000	< 1	< 1	< 1	105
BOD	mg/L	100	< 2.0	< 2.0	< 2.0	< 2.0
Oil and Grease, Total	mg/L		< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	-	-	-	-
Phosphorus, Nutrient	mg/L		9.72	10.4	8.62	7.67

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01B

		Sample ID	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B
		ALS Laboratory Work Order	WT2300744	WT2303771	WT2305812	WT2306931	WT2308546	WT2311644	WT2315995	WT2319798
		Sample Date & Time	2023-01-10 13:30	2023-02-14 14:45	2023-03-07 14:00	2023-03-21 14:00	2023-04-04 13:10	2023-05-02 13:30	2023-06-06 11:15	2023-07-04 13:10
Analyte	**Units**	**Water Licence Criteria[1]**								
pH, Lab	pH units	6.0-9.5	7.85	7.61	7.32	7.77	8.33	7.54	6.64	7.50
Total Suspended Solids	mg/L	120	< 2.5	< 1.0	< 1.0	< 1.4	< 1.0	< 1.5	< 1.4	< 1.0
Total Dissolved Solids	mg/L	-	627	598	677	618	595	628	804	696
Turbidity	NTU	-	0.27	0.14	< 0.10	< 0.10	0.12	0.16	0.16	0.33
Alkalinity, Total	mg/L	-	85.6	55.0	44.7	48.3	133	75.3	26.9	66.4
Ammonia, Total (as N)	mg/L	-	0.0282	0.0313	0.0231	0.0136	0.0177	0.0135	0.0166	0.0343
Total Kjeldahl Nitrogen	mg/L	-	1.58	1.43	0.922	< 0.050	0.651	1.26	1.66	1.47
Fecal Coliforms	CFU/100mL	10000	< 1	< 1	< 1	< 1	< 1	< 1	< 1	7
BOD	mg/L	100	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.2	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-
Phosphorus, Nutrient	mg/L	-	8.58	8.45	9.44	7.19	5.19	9.17	13.1	9.21

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.2: Water Quality Results for Water Licence Monitoring Location - MP-01B

		Sample ID	MP-01B	MP-01B	MP-01B	MP-01B	MP-01B
		ALS Laboratory Work Order	WT2323831	WT2328178	WT2331975	WT2336441	WT2339609
		Sample Date & Time	2023-08-02 13:00	2023-09-05 13:30	2023-10-03 13:30	2023-11-07 14:00	2023-12-05 13:00
Analyte	**Units**	**Water Licence Criteria[1]**					
pH, Lab	pH units	6.0-9.5	8.46	7.65	7.28	7.34	7.60
Total Suspended Solids	mg/L	120	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	987	647	616	680	586
Turbidity	NTU	-	0.28	< 0.10	0.13	0.17	0.21
Alkalinity, Total	mg/L	-	274	62.5	56.1	51.5	56.9
Ammonia, Total (as N)	mg/L	-	0.0763	0.0937	0.0218	0.0172	0.0168
Total Kjeldahl Nitrogen	mg/L	-	1.37	4.37	< 0.050	1.63	0.250
Fecal Coliforms	CFU/100mL	10000	< 1	< 10	< 1	33	1
BOD	mg/L	100	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	8.42	7.44	7.40	9.82	7.87

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 5.

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.3: Water Quality Results for Water Licence Monitoring Location - MP-03

		Sample ID	MP-03	MP-03	MP-03
		ALS Laboratory Work Order	WT2317133	BF2300167	WT2328478
		Sample Date & Time	2023-06-12 10:40	2023-07-22 07:25	2023-09-05 09:45
Analyte	**Units**	**Water Licence Criteria[1]**			
pH, Lab	pH units	-	7.96	8.32	8.46
Total Suspended Solids	mg/L	-	34.4	2.3	5.4
Total Dissolved Solids	mg/L	-	144	585	495
Turbidity	NTU	-	51.2	3.51	12.3
Ammonia, Total (as N)	mg/L	-	0.137	0.0330	0.317
Arsenic - Total	mg/L	-	< 0.00100	0.00134	0.00101
Copper - Total	mg/L	-	< 0.00500	< 0.00500	< 0.00500
Lead - Total	mg/L	0.0010	-	< 0.000500	-
Lead - Total	mg/L	0.0010	**0.00292**	-	**0.001**
Nickel - Total	mg/L	-	< 0.00500	< 0.00500	< 0.00500
Zinc - Total	mg/L	-	< 0.0300	< 0.0300	< 0.0300
Oil and Grease, Total	mg/L	15	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Benzene	ug/L	370	< 0.50	< 0.50	< 0.50
Ethylbenzene	ug/L	90	< 0.50	< 0.50	< 0.50
Toluene	ug/L	2.0	< 0.50	< 0.50	< 0.50
F1-BTEX	ug/L	-	< 25	< 25	< 25
F1 (C6-C10)	ug/L	-	< 25	< 25	< 25
F2 (C10-C16)	ug/L	-	280	110	120
F3 (C16-C34)	ug/L	-	< 250	< 250	< 250
F4 (C34-C50)	ug/L	-	< 250	< 250	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	< 370	< 370
Phosphorus, Nutrient	mg/L	-	0.0225	0.0052	0.0188

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8

Table 7.2.4: Water Quality Results for Water Licence Monitoring Location - MP-04

		Sample ID	MP-04
		ALS Laboratory Work Order	BF2300255
		Sample Date & Time	2023-09-03 18:45
Analyte	Units	Water Licence Criteria[1]	
pH, Lab	pH units	6.0-9.0	7.99
Total Suspended Solids	mg/L	15	1.5
Total Dissolved Solids	mg/L	-	500
Turbidity	NTU	-	6.73
Lead - Total	mg/L	0.001	0.000514
Oil and Grease, Total	mg/L	15	< 5.0
	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	370	< 0.50
Ethylbenzene	ug/L	90	< 0.50
Toluene	ug/L	2	< 0.50
F1-BTEX	ug/L	-	< 25
F1 (C6-C10)	ug/L	-	< 25
F2 (C10-C16)	ug/L	-	130
F3 (C16-C34)	ug/L	-	< 250
F4 (C34-C50)	ug/L	-	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9

Table 7.2.5: Water Quality Results for Water Licence Monitoring Location - MP-04A

		Sample ID	MP-04A
		ALS Laboratory Work Order	WT2328476
		Sample Date & Time	2023-09-05 10:30
Analyte	**Units**	**Water Licence Criteria[1]**	
pH, Lab	pH units	6.0-9.0	7.51
Total Suspended Solids	mg/L	15	**141**
Total Dissolved Solids	mg/L	-	2430
Turbidity	NTU	-	48.5
Lead - Total	mg/L	0.0010	**0.0137**
Oil and Grease, Total	mg/L	15	< 5.0
	-	No Visible Sheen	No Visible Sheen
Benzene	ug/L	370	< 0.50
Ethylbenzene	ug/L	90	< 0.50
Toluene	ug/L	2.0	< 0.50
F1-BTEX	ug/L	-	< 25
F1 (C6-C10)	ug/L	-	< 25
F2 (C10-C16)	ug/L	-	< 100
F3 (C16-C34)	ug/L	-	1030
F4 (C34-C50)	ug/L	-	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	1030

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9

Table 7.2.6: Water Quality Results for Water Licence Monitoring Location - MP-05

		Sample ID	MP-05	MP-05	MP-05	MP-05	MP-05
		ALS Laboratory Work Order	WT2317137	WT2320156	YL2301039	BF2300271	BF2300316
		Sample Date & Time	2023-06-12 12:50	2023-07-04 11:00	2023-08-11 15:40	2023-09-09 08:20	2023-10-06 15:15
Analyte	Units	Water Licence Criteria[1]					
Hardness	mg/L	-	225	367	366	442	328
pH, Lab	pH units	6.0-9.5	7.97	8.17	8.42	8.14	7.86
Total Suspended Solids	mg/L	15	3.4	1.1	< 1.0	1.8	< 1.3
Total Dissolved Solids	mg/L	-	313	561	733	585	490
Turbidity	NTU	-	11.6	2.5	3.8	5.14	1.72
Alkalinity, Total	mg/L	-	80.2	117	167	210	213
Ammonia, Total (as N)	mg/L	-	0.334	0.483	0.0419	0.0676	0.0951
Chloride	mg/L	-	100	142	162	184	89.4
Fluoride	mg/L	-	0.084	0.181	0.25	0.175	0.189
Nitrate	mg/L	-	1.04	2.33	4.47	6.7	4.66
Total Kjeldahl Nitrogen	mg/L	-	1.02	1.63	0.522	0.544	0.533
Sulfate	mg/L	-	84.3	134	91.8	96.7	65.3
Dissolved Organic Carbon	mg/L	-	4.08	4.04	4.92	5.32	4.49
Total Organic Carbon	mg/L	-	3.65	3.99	4.71	5.84	4.09
Aluminum - Total	mg/L	-	0.222	0.0405	0.0586	0.0394	0.0205
Antimony - Total	mg/L	-	0.00012	0.00022	0.00021	0.00012	0.00014
Arsenic - Total	mg/L	0.50	0.00025	0.0002	0.00028	0.00025	0.00022
Barium - Total	mg/L	-	0.0142	0.0213	0.0179	0.0177	0.0124
Cadmium - Total	mg/L	-	0.0000093	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Calcium - Total	mg/L	-	41.5	76.6	77	95.4	78.8
Chromium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Cobalt - Total	mg/L	-	0.00086	0.0005	0.00028	0.00034	0.00026
Copper - Total	mg/L	0.30	0.00122	0.00137	0.00173	0.00207	0.00153
Iron - Total	mg/L	-	0.224	0.038	0.082	0.113	0.038
Lead - Total	mg/L	0.20	0.000368	0.000058	0.000107	0.000093	0.000077
Lithium - Total	mg/L	-	0.0124	0.0228	0.022	0.0181	0.0144
Magnesium - Total	mg/L	-	29.4	42.6	42.1	49.5	32
Manganese - Total	mg/L	-	0.252	0.056	0.0211	0.0349	0.0652
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	0.00301	0.00569	0.00549	0.0038	0.005
Nickel - Total	mg/L	0.50	0.00123	0.00093	0.00095	0.00132	0.00093
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Potassium - Total	mg/L	-	5.78	9.05	9.93	9.6	7.11
Selenium - Total	mg/L	-	0.000241	0.000436	0.000213	0.000118	0.00009
Sodium - Total	mg/L	-	37	39.9	54.9	73.1	40.6
Strontium - Total	mg/L	-	0.163	0.332	0.292	0.273	0.184
Thallium - Total	mg/L	-	0.00002	0.000026	0.000018	0.000014	0.000012
Tin - Total	mg/L	-	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Titanium - Total	mg/L	-	0.00544	< 0.00050	0.00089	< 0.00200	0.00044
Uranium - Total	mg/L	-	0.0453	0.121	0.14	0.0892	0.191
Vanadium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Zinc - Total	mg/L	0.50	0.0054	0.0086	0.0098	0.0112	0.0133
Aluminum - Dissolved	mg/L	-	0.0125	0.0151	0.0226	0.0068	< 0.0100
Arsenic - Dissolved	mg/L	-	0.0002	0.0002	0.00026	0.00027	< 0.00100
Cadmium - Dissolved	mg/L	-	0.0000066	< 0.0000050	< 0.0000100	< 0.0000050	< 0.0000500
Calcium - Dissolved	mg/L	-	38.5	77.9	78.8	97.4	79.1
Copper - Dissolved	mg/L	-	0.00098	0.00128	0.00163	0.00207	< 0.00200
Iron - Dissolved	mg/L	-	< 0.010	< 0.010	0.018	0.02	< 0.100
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000050	< 0.000050	< 0.000050	< 0.000500
Magnesium - Dissolved	mg/L	-	29.8	43	41.9	50.8	34.3
Manganese - Dissolved	mg/L	-	0.227	0.038	0.0175	0.0332	0.0653
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00307	0.00588	0.00527	0.00411	0.00484
Nickel - Dissolved	mg/L	-	0.00101	0.00086	0.00085	0.0013	< 0.00500
Potassium - Dissolved	mg/L	-	5.78	9.39	10.5	9.74	6.57
Selenium - Dissolved	mg/L	-	0.000264	0.000444	0.000166	0.000174	< 0.000500
Sodium - Dissolved	mg/L	-	35.6	40.3	55.2	77.5	42.9
Thallium - Dissolved	mg/L	-	0.000014	0.000025	0.000018	0.000014	< 0.000100
Uranium - Dissolved	mg/L	-	0.0438	0.117	0.142	0.0854	0.196
Zinc - Dissolved	mg/L	-	0.0046	0.0081	0.0093	0.0103	0.0171
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	1.7	< 1.0	< 1.0	< 1.0	< 1.0
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-
Phosphorus, Nutrient	mg/L	-	0.0068	0.0057	0.0053	0.0031	0.008

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.7: Water Quality Results for Water Licence Monitoring Location - MP-06

		Sample ID	MP-06	MP-06	MP-06	MP-06
		ALS Laboratory Work Order	WT2317136	WT2320156	YL2301040	BF2300272
		Sample Date & Time	2023-06-12 12:10	2023-07-04 10:10	2023-08-11 13:40	2023-09-09 10:20
Analyte	Units	Water Licence Criteria[1]				
Hardness	mg/L	-	94.6	349	596	829
pH, Lab	pH units	6.0-9.5	7.70	7.97	8.15	7.85
Total Suspended Solids	mg/L	15	1.6	< 1.0	7.1	2.2
Total Dissolved Solids	mg/L	-	161	596	972	1180
Turbidity	NTU	-	7.86	1.76	4.57	11.1
Alkalinity, Total	mg/L	-	39.4	77.2	99.7	131
Ammonia, Total (as N)	mg/L	-	0.134	4.14	0.668	2.46
Chloride	mg/L	-	43.3	89.8	96.3	116
Fluoride	mg/L	-	0.067	0.166	0.422	0.322
Nitrate	mg/L	-	0.548	6.57	18.6	17.2
Total Kjeldahl Nitrogen	mg/L	-	0.489	4.47	1.18	2.32
Sulfate	mg/L	-	36.1	258	440	554
Dissolved Organic Carbon	mg/L	-	3.25	4.31	2.46	3.26
Total Organic Carbon	mg/L	-	3.09	4.85	2.17	3.17
Aluminum - Total	mg/L	-	0.143	0.0138	0.0360	0.0503
Antimony - Total	mg/L	-	0.00014	< 0.00010	0.00012	0.00011
Arsenic - Total	mg/L	0.50	0.00011	0.00020	0.00039	0.00044
Barium - Total	mg/L	-	0.00872	0.0111	0.0229	0.0252
Cadmium - Total	mg/L	-	0.0000053	< 0.0000050	< 0.0000100	0.0000089
Calcium - Total	mg/L	-	19.9	50.4	118	149
Chromium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Cobalt - Total	mg/L	-	0.00044	0.00126	0.00049	0.00081
Copper - Total	mg/L	0.30	0.00052	< 0.00050	< 0.00050	0.00071
Iron - Total	mg/L	-	0.137	0.025	0.074	0.078
Lead - Total	mg/L	0.20	0.000336	< 0.000050	< 0.000050	0.000064
Lithium - Total	mg/L	-	0.0094	0.0144	0.0242	0.0224
Magnesium - Total	mg/L	-	10.9	54.3	73.2	111
Manganese - Total	mg/L	-	0.0799	0.271	0.0241	0.0387
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	0.00249	0.00319	0.00837	0.00920
Nickel - Total	mg/L	0.50	0.00065	0.00155	0.00120	0.00095
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	< 0.050	< 0.050
Potassium - Total	mg/L	-	2.90	9.46	12.6	13.1
Selenium - Total	mg/L	-	0.000129	0.000549	0.000913	0.00116
Sodium - Total	mg/L	-	17.1	59.1	64.5	75.0
Strontium - Total	mg/L	-	0.0883	0.214	0.443	0.481
Thallium - Total	mg/L	-	0.000016	0.000057	0.000078	0.000068
Tin - Total	mg/L	-	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Titanium - Total	mg/L	-	0.00378	< 0.00030	< 0.00030	0.00051
Uranium - Total	mg/L	-	0.0132	0.297	0.554	0.760
Vanadium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Zinc - Total	mg/L	0.50	< 0.0030	< 0.0030	< 0.0030	< 0.0030
Aluminum - Dissolved	mg/L	-	0.0126	0.0025	0.0065	0.0108
Arsenic - Dissolved	mg/L	-	< 0.00010	0.00018	0.00034	< 0.00100
Cadmium - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000500
Calcium - Dissolved	mg/L	-	20.4	51.3	123	139
Copper - Dissolved	mg/L	-	0.00037	0.00033	0.00040	< 0.00200
Iron - Dissolved	mg/L	-	< 0.010	< 0.010	< 0.010	< 0.100
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000050	< 0.000050	< 0.000500
Magnesium - Dissolved	mg/L	-	10.8	56.1	72.8	102
Manganese - Dissolved	mg/L	-	0.0601	0.223	0.0123	0.0219
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	0.00267	0.00329	0.00850	0.00880
Nickel - Dissolved	mg/L	-	0.00052	0.00139	0.00092	< 0.00500
Potassium - Dissolved	mg/L	-	2.90	9.99	13.3	13.0
Selenium - Dissolved	mg/L	-	0.000148	0.000570	0.000816	0.00106
Sodium - Dissolved	mg/L	-	16.5	61.3	64.4	71.9
Thallium - Dissolved	mg/L	-	0.000012	0.000057	0.000077	< 0.000100
Uranium - Dissolved	mg/L	-	0.0127	0.291	0.580	0.753
Zinc - Dissolved	mg/L	-	0.0016	0.0019	0.0014	< 0.0100
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	1.6	< 1.0	< 1.0	< 1.0
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	Not Acutely Toxic	-	-
Phosphorus, Nutrient	mg/L	-	0.0068	0.0053	0.0081	0.0060

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10

[2] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14) .

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B

		Sample ID	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
		ALS Laboratory Work Order	BF2300058	WT2315879	BF2300072	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169
		Sample Date & Time	2023-06-01 10:40	2023-06-06 09:05	2023-06-11 15:30	2023-06-19 13:20	2023-06-26 07:35	2023-07-03 14:35	2023-07-09 11:50	2023-07-17 17:20	2023-07-23 09:30
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	-	296	-	-	-	291	-	-	-
pH, Lab	pH units	6.0-9.5	7.80	7.95	8.04	8.04	8.00	8.28	8.29	8.26	8.13
Total Suspended Solids[2]	mg/L	30	-	-	7.4	3.7	4.2	< 1.7	1.1	1.7	< 1.0
Total Suspended Solids[2]	mg/L	**30**	**62.2**	**80.1**	-	-	-	-	-	-	-
Total Suspended Solids[2]	mg/L	-	232	181	224	132	141	155	154	252	282
Turbidity	NTU	-	265	151	42.5	16.9	17.6	7.08	5.29	3.01	1.67
Ammonia, Total (as N)	mg/L	-	-	0.636	-	-	-	0.150	-	-	-
Nitrate	mg/L	-	-	0.718	-	-	-	1.83	-	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.8: Water Quality Results for Water Licence Monitoring Location - MP-C-B

		Sample ID	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
		ALS Laboratory Work Order	WT2326435	BF2300244	BF2300253	BF2300285	BF2300313	WT2332122
		Sample Date & Time	2023-08-22 13:40	2023-08-27 17:20	2023-09-03 13:10	2023-09-10 14:35	2023-09-24 16:10	2023-10-02 09:45
Analyte	**Units**	**Water Licence Criteria [1]**						
Conductivity	umhos/cm	-	650	-	661	-	-	627
pH, Lab	pH units	6.0-9.5	8.39	8.24	8.19	8.21	8.03	8.17
Total Suspended Solids[2]	mg/L	30	1.1	5.7	< 1.2	< 1.0	2.7	< 1.0
Total Suspended Solids[2]	mg/L	**30**	-	-	-	-	-	-
Total Suspended Solids[2]	mg/L	-	336	372	382	408	439	368
Turbidity	NTU	-	4.90	16.9	2.51	1.68	6.98	4.08
Ammonia, Total (as N)	mg/L	-	0.481	-	0.0760	-	-	0.538
Nitrate	mg/L	-	3.81	-	5.22	-	-	7.76
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

		Sample ID	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
		ALS Laboratory Work Order	BF2300066	BF2300072	BF2300085	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169
		Sample Date & Time	2023-06-08 16:25	2023-06-11 16:15	2023-06-19 13:45	2023-06-23 15:35	2023-06-26 08:45	2023-07-03 16:25	2023-07-09 13:45	2023-07-17 15:25	2023-07-23 08:30
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	476	-	-	-	-	136	-	-	-
pH, Lab	pH units	6.0-9.5	7.51	7.90	7.91	7.72	7.90	7.93	7.83	8.00	8.11
Total Suspended Solids	mg/L	30	5.7	4.7	-	< 1.2	< 1.2	< 1.6	< 1.0	< 1.0	< 1.3
Total Suspended Solids	mg/L	**30**	-	-	**38.9**	-	-	-	-	-	-
Total Dissolved Solids	mg/L	**-**	314	188	100	62	60	78	48	133	118
Turbidity	NTU	-	26.9	23.7	6.22	3.49	1.46	1.50	0.51	0.41	0.31
Ammonia, Total (as N)	mg/L	-	0.0812	-	-	-	-	0.0073	-	-	-
Nitrate	mg/L	-	0.201	-	-	-	-	0.146	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.9: Water Quality Results for Water Licence Monitoring Location - MP-C-H

		Sample ID	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
		ALS Laboratory Work Order	BF2300196	BF2300213	BF2300219	WT2326435	BF2300244	BF2300253	BF2300285	BF2300300	BF2300313	WT2332122
		Sample Date & Time	2023-08-01 10:45	2023-08-07 08:55	2023-08-13 15:45	2023-08-22 12:50	2023-08-27 15:50	2023-09-03 11:00	2023-09-10 22:10	2023-09-17 07:15	2023-09-24 13:25	2023-10-02 09:00
Analyte	**Units**	**Water Licence Criteria [1]**										
Conductivity	umhos/cm	-	442	-	-	-	-	304	-	-	-	272
pH, Lab	pH units	6.0-9.5	8.10	8.18	8.14	8.32	8.13	8.13	8.13	8.05	8.15	8.22
Total Suspended Solids	mg/L	30	< 1.4	< 1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Suspended Solids	mg/L	**30**	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids	mg/L	**-**	232	255	188	150	188	174	177	186	195	164
Turbidity	NTU	-	1.37	1.54	0.93	0.55	0.36	0.15	0.18	< 0.10	0.42	< 0.10
Ammonia, Total (as N)	mg/L	-	0.152	-	-	-	-	0.0093	-	-	-	0.0084
Nitrate	mg/L	-	1.00	-	-	-	-	0.152	-	-	-	0.135
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	-	5.2	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

		Sample ID	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
		ALS Laboratory Work Order	WT2317129	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169	BF2300196	BF2300213
		Sample Date & Time	2023-06-13 12:20	2023-06-19 12:10	2023-06-26 08:20	2023-07-03 14:00	2023-07-09 12:05	2023-07-17 16:55	2023-07-23 11:10	2023-08-01 09:40	2023-08-07 10:10
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	261	-	-	381	-	-	-	553	-
pH, Lab	pH units	6.0-9.5	8.11	8.02	8.01	7.83	7.94	7.81	7.79	7.69	7.82
Total Suspended Solids	mg/L	30	3.7	< 1.0	< 1.1	< 1.6	< 1.0	< 1.0	< 1.0	< 1.4	< 1.4
Total Dissolved Solids	mg/L	-	154	155	162	204	181	250	264	292	293
Turbidity	NTU	-	15.0	4.27	0.83	0.49	0.18	0.24	0.42	0.13	0.23
Ammonia, Total (as N)	mg/L	-	0.0372	-	-	0.0095	-	-	-	0.0053	-
Nitrate	mg/L	-	0.047	-	-	0.084	-	-	-	0.103	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.10: Water Quality Results for Water Licence Monitoring Location - MP-C-J

		Sample ID	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J	MP-C-J
		ALS Laboratory Work Order	BF2300219	WT2326435	BF2300244	BF2300253	BF2300285	BF2300300	BF2300313	WT2332122
		Sample Date & Time	2023-08-13 14:35	2023-08-22 14:25	2023-08-27 17:45	2023-09-03 14:50	2023-09-10 13:45	2023-09-17 11:10	2023-09-24 15:35	2023-10-02 11:25
Analyte	**Units**	**Water Licence Criteria [1]**								
Conductivity	umhos/cm	-	-	-	-	463	-	-	-	488
pH, Lab	pH units	6.0-9.5	7.80	8.16	7.88	7.79	7.95	7.77	7.85	8.24
Total Suspended Solids	mg/L	30	< 1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.4	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	302	186	239	260	250	267	256	281
Turbidity	NTU	-	0.11	0.58	0.46	0.35	2.07	< 0.10	< 0.10	0.45
Ammonia, Total (as N)	mg/L	-	-	-	-	< 0.0050	-	-	-	0.0087
Nitrate	mg/L	-	-	-	-	0.062	-	-	-	0.081
Oil and Grease, Total	mg/L	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-K

		Sample ID	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
		ALS Laboratory Work Order	WT2315879	BF2300072	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169	BF2300196
		Sample Date & Time	2023-06-06 09:45	2023-06-11 15:45	2023-06-19 12:35	2023-06-26 08:00	2023-07-03 14:15	2023-07-09 12:30	2023-07-17 17:40	2023-07-23 10:30	2023-08-01 10:15
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	296	-	-	-	370	-	-	-	771
pH, Lab	pH units	6.0-9.5	8.08	8.09	8.10	8.02	8.17	8.15	8.20	8.14	8.12
Total Suspended Solids	mg/L	30	10.5	< 1.6	1.0	< 1.1	< 1.5	1.2	6.2	< 1.0	< 1.3
Total Dissolved Solids	mg/L	-	174	214	170	205	170	244	312	336	419
Turbidity	NTU	-	63.8	9.18	5.63	4.89	2.90	1.68	3.41	1.00	1.06
Ammonia, Total (as N)	mg/L	-	0.181	-	-	-	0.115	-	-	-	5.55
Nitrate	mg/L	-	0.459	-	-	-	0.430	-	-	-	1.50
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.11: Water Quality Results for Water Licence Monitoring Location - MP-C-K

		Sample ID	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
		ALS Laboratory Work Order	BF2300213	BF2300219	WT2326435	BF2300244	BF2300253	BF2300285	BF2300300	BF2300313	WT2332122
		Sample Date & Time	2023-08-07 10:00	2023-08-13 15:00	2023-08-22 14:05	2023-08-27 17:30	2023-09-03 13:35	2023-09-10 14:00	2023-09-17 10:45	2023-09-24 15:45	2023-10-02 11:45
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	-	-	-	-	898	-	-	-	936
pH, Lab	pH units	6.0-9.5	8.00	8.07	8.19	8.10	8.09	8.10	7.96	8.04	8.14
Total Suspended Solids	mg/L	30	< 1.3	3.2	< 1.0	2.7	< 1.0	< 1.0	10.4	1.7	< 1.0
Total Dissolved Solids	mg/L	-	459	478	530	549	565	558	674	543	592
Turbidity	NTU	-	0.72	2.80	0.66	2.59	0.58	2.79	0.78	0.82	0.23
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.0496	-	-	-	0.0391
Nitrate	mg/L	-	-	-	-	-	0.838	-	-	-	0.941
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

		Sample ID	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01	MP-Q1-01
		ALS Laboratory Work Order	WT2315879	BF2300072	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169
		Sample Date & Time	2023-06-06 11:40	2023-06-11 09:50	2023-06-19 11:35	2023-06-26 09:50	2023-07-03 15:05	2023-07-09 11:10	2023-07-17 16:35	2023-07-23 11:30
Analyte	**Units**	**Water Licence Criteria [1]**								
Conductivity	umhos/cm	-	90.8	-	-	-	134	-	-	-
pH, Lab	pH units	6.0-9.5	7.73	7.56	7.65	7.86	7.88	7.94	7.80	7.89
Total Suspended Solids	mg/L	30	26.9	5.3	< 1.3	< 1.1	< 1.6	< 1.0	2.1	< 1.0
Total Dissolved Solids	mg/L	-	63	75	63	73	90	88	120	107
Turbidity	NTU	-	42.9	7.59	3.77	7.32	4.29	2.88	4.12	3.37
Ammonia, Total (as N)	mg/L	-	0.0430	-	-	-	< 0.0050	-	-	-
Nitrate	mg/L	-	0.175	-	-	-	0.396	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9 and Table 11

Table 7.2.12: Water Quality Results for Water Licence Monitoring Location - MP-Q1-01

		Sample ID	MP-Q1-01	MP-Q1-01
		ALS Laboratory Work Order	BF2300196	WT2326435
		Sample Date & Time	2023-08-01 08:20	2023-08-22 12:15
Analyte	**Units**	**Water Licence Criteria [1]**		
Conductivity	umhos/cm	-	175	-
pH, Lab	pH units	6.0-9.5	7.56	8.09
Total Suspended Solids	mg/L	30	< 1.3	< 1.0
Total Dissolved Solids	mg/L	-	102	83
Turbidity	NTU	-	3.53	5.20
Ammonia, Total (as N)	mg/L	-	0.0052	-
Nitrate	mg/L	-	0.306	-
Oil and Grease, Total	mg/L	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9 and Table 11

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

		Sample ID	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
		ALS Laboratory Work Order	BF2300085	BF2300108	BF2300119	BF2300136	BF2300159	BF2300169	BF2300177	BF2300196
		Sample Date & Time	2023-06-19 12:55	2023-06-26 10:20	2023-07-03 15:25	2023-07-09 11:30	2023-07-17 16:10	2023-07-23 12:00	2023-07-26 11:25	2023-08-01 09:15
Analyte	**Units**	**Water Licence Criteria [1]**								
Conductivity	umhos/cm	-	294	-	226	-	-	-	-	542
pH, Lab	pH units	6.0-9.5	8.06	7.84	7.90	7.92	7.87	7.88	7.75	7.73
Total Suspended Solids[2]	mg/L	**30**	**54.3**	2.6	< 1.5	6.9	10.9	**73.0**	3.9	< 1.3
Total Dissolved Solids	mg/L	**-**	204	149	130	147	254	307	268	335
Turbidity	NTU	-	56.8	12.6	11.1	17.8	28.0	128	15.9	1.61
Ammonia, Total (as N)	mg/L	-	4.83	-	2.26	-	-	-	-	2.43
Nitrate	mg/L	-	10.9	-	7.50	-	-	-	-	21.9
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9 and Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.2.13: Water Quality Results for Water Licence Monitoring Location - MP-Q1-02

		Sample ID	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02	MP-Q1-02
		ALS Laboratory Work Order	BF2300213	BF2300219	WT2326435	BF2300244	BF2300253	BF2300285	BF2300313
		Sample Date & Time	2023-08-07 10:50	2023-08-13 13:55	2023-08-22 12:30	2023-08-27 16:35	2023-09-03 09:50	2023-09-10 10:50	2023-09-24 15:00
Analyte	**Units**	**Water Licence Criteria [1]**							
Conductivity	umhos/cm	-	-	-	-	-	550	-	-
pH, Lab	pH units	6.0-9.5	7.91	8.02	8.01	7.90	7.70	8.00	8.01
Total Suspended Solids	mg/L	**30**	< 1.3	< 1.0	< 1.0	< 1.3	< 1.0	< 1.0	1.7
Total Dissolved Solids	mg/L	**-**	330	298	331	398	362	290	269
Turbidity	NTU	-	2.14	1.32	3.64	1.87	1.71	0.83	2.72
Ammonia, Total (as N)	mg/L	-	-	-	-	-	1.34	-	-
Nitrate	mg/L	-	-	-	-	-	18.9	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 9 and Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01B

		Sample ID	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B	MS-01B
		ALS Laboratory Work Order	WT2300741	WT2302109	WT2303760	WT2305682	WT2308537	WT2311657	WT2315986	WT2319794	WT2324649
		Sample Date & Time	2023-01-17 15:10	2023-01-26 15:50	2023-02-14 15:00	2023-03-08 15:40	2023-04-04 14:30 PM	2023-05-02 14:30	2023-06-06 14:45	2023-07-04 15:15	2023-08-09 15:00
Analyte	Units	Water Licence Criteria [1]									
pH, Lab	pH units	6.0 - 9.5	8.14	-	8.28	8.34	8.21	8.62	8.29	8.20	8.17
Total Suspended Solids	mg/L	35	< 1.0	-	4.7	< 1.4	1.9	8.0	< 1.5	< 1.0	8.2
Ammonia, Total (as N)	mg/L	4.0	0.0362	-	0.0287	0.0211	1.20	0.0412	0.0396	0.0236	0.331
Total Kjeldahl Nitrogen	mg/L	-	1.12	-	1.42	0.966	2.41	1.15	1.24	3.31	2.74
Phosphorus, Total	mg/L	4.0	0.271	-	0.728	1.23	0.615	1.45	1.54	0.562	1.72
Fecal Coliforms	CFU/100mL	1000	-	3	2	< 1	< 1	< 1	3	3	26
BOD	mg/L	30	< 2.0	-	2.3	< 2.0	2.8	2.7	< 2.0	< 2.0	3.7
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.1: Water Quality Results for Water Licence Monitoring Location - MS-01B

			Sample ID	MS-01B	MS-01B	MS-01B	MS-01B
			ALS Laboratory Work Order	WT2328442	WT2331987	WT2336437	WT2339816
			Sample Date & Time	2023-09-05 15:40	2023-10-03 15:00	2023-11-07 14:35	2023-12-05 14:35
Analyte	Units	Water Licence Criteria [1]					
pH, Lab	pH units	6.0 - 9.5		8.13	8.17	8.21	8.06
Total Suspended Solids	mg/L	35		< 1.0	1.7	< 1.0	< 1.5
Ammonia, Total (as N)	mg/L	4.0		0.0315	0.0965	0.104	0.149
Total Kjeldahl Nitrogen	mg/L	-		1.41	1.89	1.33	1.35
Phosphorus, Total	mg/L	4.0		2.37	2.71	1.63	1.02
Fecal Coliforms	CFU/100mL	1000		< 1	< 1	< 1	< 1
BOD	mg/L	30		< 2.0	< 2.0	< 2.0	4.4
Oil and Grease, Total	mg/L	-		< 5.0	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen		No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic		-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 4.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.2: Water Quality Results for Water Licence Monitoring Location - MS-03B

		Sample ID	MS-03B
		ALS Laboratory Work Order	BF2300310
		Sample Date & Time	2023-09-26 16:00
Analyte	**Units**	**Water Licence Criteria [1]**	
pH, Lab	pH units	6.0 - 9.5	7.79
Total Suspended Solids	mg/L	-	1.5
Total Dissolved Solids	mg/L	-	172
Turbidity	NTU	-	2.51
Lead - Total	mg/L	0.001	< 0.000500
Benzene	ug/L	370	< 0.50
Ethylbenzene	ug/L	90	< 0.50
Toluene	ug/L	2	< 0.50
F1-BTEX	ug/L	-	< 25
F1 (C6-C10)	ug/L	-	< 25
F2 (C10-C16)	ug/L	-	< 100
F3 (C16-C34)	ug/L	-	< 250
F4 (C34-C50)	ug/L	-	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370
Oil and Grease, Total	mg/L	-	< 5.0
	-	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.3.3: Water Quality Results for Water Licence Monitoring Location - MS-06

				Sample ID	MS-06	MS-06	MS-06
				ALS Laboratory Work Order	WT2315880	BF2300233	BF2300262
				Sample Date & Time	2023-06-06 11:30	2023-08-22 13:20	2023-09-05 12:30
Analyte	**Units**	**Water Licence Criteria [1]**	**MDMER Criteria [2]**				
Hardness	mg/L	-	-		107	734	651
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5		7.39	7.63	7.71
Total Suspended Solids	mg/L	15.0	30 (Grab)		4.3	1.5	< 1.3
Total Dissolved Solids	mg/L	-	-		173	1020	936
Turbidity	NTU	-	-		16.5	13.0	9.26
Alkalinity, Total	mg/L	-	-		10.8	72.4	57.2
Ammonia, Total (as N)	mg/L	-	-		1.00	0.0133	0.0067
Chloride	mg/L	-	-		18.2	59.5	56.5
Fluoride	mg/L	-	-		0.059	0.102	< 0.100
Nitrate	mg/L	-	-		2.06	17.4	16.2
Total Kjeldahl Nitrogen	mg/L	-	-		1.69	0.220	0.444
Phosphorus, Total	mg/L	-	-		< 0.050	< 0.500	< 0.500
Sulfate (SO4)	mg/L	-	-		77.4	523	497
Dissolved Organic Carbon	mg/L	-	-		4.69	3.07	2.51
Total Organic Carbon	mg/L	-	-		3.70	2.52	2.20
Aluminum - Total	mg/L	-	-		0.0513	0.0358	0.0454
Arsenic - Total	mg/L	0.5	0.60		< 0.00010	< 0.00100	< 0.00100
Cadmium - Total	mg/L	-	-		0.0000053	< 0.0000500	< 0.0000500
Calcium - Total	mg/L	-	-		12.3	74.2	71.4
Copper - Total	mg/L	0.3	0.60		< 0.00050	< 0.00500	< 0.00500
Iron - Total	mg/L	-	-		0.150	0.213	< 0.100
Lead - Total	mg/L	0.2	0.20		< 0.000050	< 0.000500	< 0.000500
Magnesium - Total	mg/L	-	-		19.2	128	122
Manganese - Total	mg/L	-	-		0.968	0.0228	0.0201
Mercury - Total	mg/L	-	-		< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	-		0.000497	0.00255	0.00224
Nickel - Total	mg/L	0.5	1.00		0.00199	< 0.00500	< 0.00500
Potassium - Total	mg/L	-	-		2.16	16.7	15.1
Selenium - Total	mg/L	-	-		0.000568	0.00173	0.00158
Sodium - Total	mg/L	-	-		5.20	23.5	21.8
Thallium - Total	mg/L	-	-		0.000030	< 0.000100	< 0.000100
Uranium - Total	mg/L	-	-		0.000084	0.00650	0.00606
Zinc - Total	mg/L	0.5	1.00		< 0.0030	< 0.0300	< 0.0300
Aluminum - Dissolved	mg/L	-	-		0.0025	< 0.0100	0.0077
Arsenic - Dissolved	mg/L	-	-		< 0.00010	< 0.00100	0.00024
Cadmium - Dissolved	mg/L	-	-		0.0000062	< 0.0000500	< 0.0000050
Calcium - Dissolved	mg/L	-	-		12.4	74.8	66.2
Copper - Dissolved	mg/L	-	-		< 0.00020	< 0.00200	0.00029
Iron - Dissolved	mg/L	-	-		< 0.010	< 0.100	0.020
Lead - Dissolved	mg/L	-	-		< 0.000050	< 0.000500	< 0.000050
Magnesium - Dissolved	mg/L	-	-		18.5	133	118
Manganese - Dissolved	mg/L	-	-		0.960	0.0132	0.00595
Mercury - Dissolved	mg/L	-	-		< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-		0.000515	0.00270	0.00213
Nickel - Dissolved	mg/L	-	-		0.00168	< 0.00500	0.00081
Potassium - Dissolved	mg/L	-	-		1.96	17.9	15.4
Selenium - Dissolved	mg/L	-	-		0.000635	0.00205	0.00160
Sodium - Dissolved	mg/L	-	-		4.88	24.2	21.2
Thallium - Dissolved	mg/L	-	-		0.000028	< 0.000100	0.000073
Uranium - Dissolved	mg/L	-	-		0.000048	0.00724	0.00587
Zinc - Dissolved	mg/L	-	-		0.0014	< 0.0100	< 0.0010
Oil and Grease, Total	-	No Visible Sheen	-		No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4,5]	N/A	Not Acutely Toxic	Not Acutely Toxic		Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] On the sample collected on September 5, 2023 acute lethality to Rainbow trout was unable to be measured since control validity was not met. Evaluation from Acute lethality laboratory indicates that the chemical concentrations of the effluent unlikely impacted rainbow trout survival

Table 7.3.4: Water Quality Results for Water Licence Monitoring Location - MS-07

				Sample ID	MS-07	MS-07
				ALS Laboratory Work Order	BF2300076	BF2300270-AA
				Sample Date & Time	2023-06-13 10:40	2023-09-08 11:15
Analyte	**Units**	**Water Licence Criteria [1]**	**MDMER Criteria [2]**			
Hardness	mg/L	-	-		116	326
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5		7.01	7.75
Total Suspended Solids	mg/L	15.0	30 (Grab)		7.0	< 1.2
Total Dissolved Solids	mg/L	-	-		206	449
Turbidity	NTU	-	-		24.6	3.97
Alkalinity, Total	mg/L	-	-		12.5	59.3
Ammonia, Total (as N)	mg/L	-	-		1.87	0.645
Chloride	mg/L	-	-		18.8	25.6
Fluoride	mg/L	-	-		0.058	0.077
Nitrate	mg/L	-	-		3.26	8.22
Total Kjeldahl Nitrogen	mg/L	-	-		2.56	0.860
Phosphorus, Total	mg/L	-	-		< 0.050	< 0.050
Sulfate	mg/L	-	-		92.3	207
Dissolved Organic Carbon	mg/L	-	-		7.13	1.42
Total Organic Carbon	mg/L	-	-		7.24	1.35
Aluminum - Total	mg/L	-	-		0.162	0.0300
Arsenic - Total	mg/L	0.5	0.60		< 0.00010	0.00013
Cadmium - Total	mg/L	-	-		0.0000356	0.0000371
Calcium - Total	mg/L	-	-		9.69	42.7
Copper - Total	mg/L	0.3	0.60		0.00182	0.00102
Iron - Total	mg/L	-	-		0.277	0.049
Lead - Total	mg/L	0.2	0.20		0.000645	0.000141
Magnesium - Total	mg/L	-	-		23.0	53.6
Manganese - Total	mg/L	-	-		1.44	0.708
Mercury - Total	mg/L	-	-		< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	-		0.00164	0.00534
Nickel - Total	mg/L	0.5	1.00		0.00301	0.00223
Potassium - Total	mg/L	-	-		3.14	8.03
Selenium - Total	mg/L	-	-		0.000733	0.00140
Sodium - Total	mg/L	-	-		7.38	7.08
Thallium - Total	mg/L	-	-		0.000036	0.000033
Uranium - Total	mg/L	-	-		0.000201	0.00439
Zinc - Total	mg/L	0.5	1.00		< 0.0030	< 0.0030
Aluminum - Dissolved	mg/L	-	-		0.0015	0.0045
Arsenic - Dissolved	mg/L	-	-		< 0.00010	0.00010
Cadmium - Dissolved	mg/L	-	-		0.0000356	0.0000378
Calcium - Dissolved	mg/L	-	-		9.58	42.0
Copper - Dissolved	mg/L	-	-		0.00048	0.00063
Iron - Dissolved	mg/L	-	-		0.011	< 0.010
Lead - Dissolved	mg/L	-	-		< 0.000050	< 0.000050
Magnesium - Dissolved	mg/L	-	-		22.3	53.8
Manganese - Dissolved	mg/L	-	-		1.39	0.639
Mercury - Dissolved	mg/L	-	-		< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-		0.00195	0.00564
Nickel - Dissolved	mg/L	-	-		0.00218	0.00214
Potassium - Dissolved	mg/L	-	-		2.84	8.06
Selenium - Dissolved	mg/L	-	-		0.000723	0.00150
Sodium - Dissolved	mg/L	-	-		7.03	7.28
Thallium - Dissolved	mg/L	-	-		0.000032	0.000034
Uranium - Dissolved	mg/L	-	-		0.000118	0.00452
Zinc - Dissolved	mg/L	-	-		0.0016	0.0011
Oil and Grease, Total	-	No Visible Sheen	-		No Visible Sheen	No Visible Sheen
Acute Lethality [3,4,5]	N/A	Not Acutely Toxic	Not Acutely Toxic		Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] On the sample collected on September 5, 2023 acute lethality to Rainbow trout was unable to be measured since control validity was not met. Evaluation from Acute lethality laboratory indicates that the chemical concentrations of the effluent unlikely impacted rainbow trout survival

Table 7.3.5: Water Quality Results for Water Licence Monitoring Location - MS-08

			Sample ID	MS-08	MS-08	MS-08
			ALS Laboratory Work Order	BF2300144	BF2300187	BF2300259
			Sample Date & Time	2023-07-11 16:20	2023-08-01 11:45	2023-09-03 07:40
Analyte	**Units**	**Water Licence Criteria [1]**	**MDMER Criteria [2]**			
Hardness	mg/L	-	-	98.0	305	1630
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	6.56	6.99	7.88
Total Suspended Solids	mg/L	15.0	30 (Grab)	3.7	3.2	**33.3**
Total Dissolved Solids	mg/L	-	-	150	425	2200
Turbidity	NTU	-	-	9.27	10.3	44.8
Alkalinity, Total	mg/L	-	-	5.5	7.0	11.3
Ammonia, Total (as N)	mg/L	-	-	0.230	0.449	2.08
Chloride	mg/L	-	-	1.73	3.73	20.7
Fluoride	mg/L	-	-	0.040	0.075	0.167
Nitrate	mg/L	-	-	1.33	4.15	18.2
Total Kjeldahl Nitrogen	mg/L	-	-	0.462	0.569	2.36
Phosphorus, Total	mg/L	-	-	< 0.050	< 0.050	< 0.500
Sulfate	mg/L	-	-	87.8	274	1390
Dissolved Organic Carbon	mg/L	-	-	0.81	0.84	3.53
Total Organic Carbon	mg/L	-	-	0.82	0.85	1.54
Aluminum - Total	mg/L	-	-	0.206	0.0367	0.315
Arsenic - Total	mg/L	0.50	0.60	< 0.00010	< 0.00010	< 0.00100
Cadmium - Total	mg/L	-	-	0.0000335	0.0000586	0.000252
Calcium - Total	mg/L	-	-	7.43	27.2	113
Copper - Total	mg/L	0.30	0.60	0.00103	0.00244	0.0226
Iron - Total	mg/L	-	-	0.428	1.48	9.50
Lead - Total	mg/L	0.20	0.20	0.000154	0.000054	< 0.000500
Magnesium - Total	mg/L	-	-	20.2	57.3	340
Manganese - Total	mg/L	-	-	0.533	1.57	11.9
Mercury - Total	mg/L	-	-	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Total	mg/L	-	-	0.00110	0.000522	0.000698
Nickel - Total	mg/L	0.50	1.00	0.0118	0.0197	0.124
Potassium - Total	mg/L	-	-	2.52	3.40	8.01
Selenium - Total	mg/L	-	-	0.000967	0.00224	0.00801
Sodium - Total	mg/L	-	-	0.686	1.26	4.26
Thallium - Total	mg/L	-	-	0.000018	0.000049	0.000156
Uranium - Total	mg/L	-	-	0.000142	0.000183	0.00124
Zinc - Total	mg/L	0.50	1.00	0.0032	0.0043	< 0.0300
Aluminum - Dissolved	mg/L	-	-	0.0012	0.0015	0.0110
Arsenic - Dissolved	mg/L	-	-	< 0.00010	< 0.00010	< 0.00100
Cadmium - Dissolved	mg/L	-	-	0.0000310	0.0000554	0.000116
Calcium - Dissolved	mg/L	-	-	7.27	27.7	112
Copper - Dissolved	mg/L	-	-	0.00033	0.00132	0.0139
Iron - Dissolved	mg/L	-	-	0.021	0.072	< 0.100
Lead - Dissolved	mg/L	-	-	< 0.000050	< 0.000050	< 0.000500
Magnesium - Dissolved	mg/L	-	-	19.4	57.2	329
Manganese - Dissolved	mg/L	-	-	0.506	1.53	11.1
Mercury - Dissolved	mg/L	-	-	< 0.0000050	< 0.0000050	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-	0.00104	0.000356	0.000648
Nickel - Dissolved	mg/L	-	-	0.0107	0.0181	0.0860
Potassium - Dissolved	mg/L	-	-	2.47	3.38	7.29
Selenium - Dissolved	mg/L	-	-	0.000976	0.00217	0.00767
Sodium - Dissolved	mg/L	-	-	0.668	1.26	3.93
Thallium - Dissolved	mg/L	-	-	0.000014	0.000045	0.000140
Uranium - Dissolved	mg/L	-	-	0.000062	0.000042	0.000184
Zinc - Dissolved	mg/L	-	-	0.0027	0.0039	< 0.0100
Oil and Grease, Total	-	No Visible Sheen	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [3,4,]	N/A	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[3] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - KM105-SWMP-SEEP-02

				Sample ID	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02
				ALS Laboratory Sample ID	BF2300049	BF2300052	BF2300070	BF2300106	BF2300123	BF2300122	BF2300138	BF2300146	BF2300160
				Sample Date & Time	2023-05-20 08:00	2023-05-20 12:00	2023-06-11 17:30	2023-06-26 14:25	2023-07-03 10:10	2023-07-05 08:40	2023-07-10 09:15	2023-07-13 17:00	2023-07-18 12:35
Analyte	Units	Water Licence Criteria [1]	Water Licence Criteria [2]	MDMER Criteria [3]									
Conductivity, Lab	us/cm	-	-	-	90.9	89.1	-	139	179	160	196	256	321
Acidity, Concentration	mg/L	-	-	-	< 2.0	< 2.0	-	-	-	-	-	< 2.0	-
Total Alkalinity	mg/L	-	-	-	24.9	25.1	-	-	-	-	-	59.3	-
Hardness	mg/L	-	-	-	29.6	34.9	-	-	-	-	-	106	-
Total Dissolved Solids	mg/L	-	-	-	124	120	98	105	125	122	128	164	180
Total Suspended Solids	mg/L	15 (30 Average)	30	30 (Grab)	**200**	**192**	**600**	**299**	**1560**	**263**	**492**	**253**	**432**
Turbidity	NTU	-	-	-	354	470	973	276	2130	291	488	222	387
pH, Lab	pH units	6.0 - 9.5	6.0 - 9.5	6.0 - 9.5	7.41	7.4	7.68	7.62	7.64	7.6	7.57	7.67	7.6
Total Ammonia	mg/L	-	-	-	0.0294	0.0455	-	0.0355	0.0541	0.0117	0.0161	0.0224	0.0352
Ammonia, Un-ionized	mg/L	-	-	1	< 0.0010	< 0.0010	-	-	< 0.0010	-	< 0.0010	< 0.0010	< 0.0010
Chloride	mg/L	-	-	-	1.73	1.57	-	-	-	-	-	21.9	-
Fluoride	mg/L	-	-	-	0.065	0.063	-	-	-	-	-	0.082	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	0.252	2.05	-	-	-	-	-	< 0.500	-
Nitrate	mg/L	-	-	-	0.492	0.495	-	0.514	-	0.346	-	0.621	-
Phosphorus, Nutrient	mg/L	-	-	-	0.114	0.0903	-	-	-	-	-	0.128	-
Sulfate	mg/L	-	-	-	15	14.3	-	-	-	-	-	29.3	-
Dissolved Organic Carbon	mg/L	-	-	-	3.48	3.38	-	-	-	-	-	1.28	-
Total Organic Carbon	mg/L	-	-	-	3.22	6.39	-	-	-	-	-	2.97	-
Aluminum - Total	mg/L	-	-	-	13.7	12.3	-	-	59.2	-	20.3	7.22	9.3
Antimony - Total	mg/L	-	-	-	< 0.00100	< 0.00100	-	-	< 0.00100	-	< 0.00100	< 0.00100	< 0.00100
Arsenic - Total	mg/L	0.5	-	0.6	< 0.00100	< 0.00100	-	-	0.0036	-	0.00138	< 0.00100	< 0.00100
Barium - Total	mg/L	-	-	-	0.1	0.0954	-	-	0.429	-	0.151	0.0799	0.127
Beryllium - Total	mg/L	-	-	-	0.000625	0.000647	-	-	0.00262	-	0.000983	0.000274	0.000396
Bismuth - Total	mg/L	-	-	-	< 0.000500	< 0.000500	-	-	0.00176	-	0.000622	< 0.000500	< 0.000500
Boron - Total	mg/L	-	-	-	< 0.100	< 0.100	-	-	< 0.100	-	< 0.100	< 0.100	< 0.100
Cadmium - Total	mg/L	-	-	-	0.00014	0.000128	-	-	0.000551	-	0.00021	0.000128	0.00014
Calcium - Total	mg/L	-	-	-	6.06	5.71	-	-	19.9	-	18.3	21.7	28.2
Cesium - Total	mg/L	-	-	-	0.000756	0.000695	-	-	0.00496	-	0.00154	0.000736	0.000771
Chromium - Total	mg/L	-	-	-	0.0244	0.0224	-	-	0.135	-	0.0441	0.0147	0.0173
Cobalt - Total	mg/L	-	-	-	0.00858	0.00754	-	-	0.0407	-	0.0127	0.00533	0.00672
Copper - Total	mg/L	0.3	-	0.6	0.0248	0.0227	-	-	0.109	-	0.0345	0.0147	0.021
Iron - Total	mg/L	-	-	-	20.5	17.7	-	-	95.4	-	31.9	12.1	15.2
Lead - Total	mg/L	0.2	-	0.2	0.00798	0.0071	-	-	0.046	-	0.0146	0.0058	0.00916
Lithium - Total	mg/L	-	-	-	0.0194	0.0163	-	-	0.0693	-	0.0237	< 0.0100	< 0.0100
Magnesium - Total	mg/L	-	-	-	16	14.7	-	-	65.1	-	28.8	20	26.2
Manganese - Total	mg/L	-	-	-	0.282	0.253	-	-	1.56	-	0.468	0.209	0.271
Mercury - Total	mg/L	-	-	-	< 0.0000050	< 0.0000050	-	-	-	-	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	-	-	0.0027	0.00285	-	-	0.00306	-	0.0046	0.00425	0.00428
Nickel - Total	mg/L	0.5	-	1	0.0245	0.0222	-	-	0.14	-	0.0406	0.0172	0.0204
Phosphorus (P) - Total	mg/L	-	-	-	< 0.500	< 0.500	-	-	0.964	-	< 0.500	< 0.500	< 0.500
Potassium - Total	mg/L	-	-	-	7.96	7.51	-	-	24.7	-	11.2	7.2	9.52
Rubidium - Total	mg/L	-	-	-	0.0284	0.0263	-	-	0.144	-	0.0483	0.0256	0.0328
Selenium - Total	mg/L	-	-	-	< 0.000500	< 0.000500	-	-	< 0.000500	-	< 0.000500	< 0.000500	< 0.000500
Silicon - Total	mg/L	-	-	-	20.6	18.6	-	-	67.6	-	31.8	12.3	14
Silver - Total	mg/L	-	-	-	< 0.000100	< 0.000100	-	-	0.000469	-	0.000139	< 0.000100	< 0.000100
Sodium - Total	mg/L	-	-	-	0.983	0.915	-	-	1.74	-	1.98	1.88	2.47
Strontium - Total	mg/L	-	-	-	0.0165	0.0164	-	-	0.0545	-	0.0638	0.0781	0.0945
Sulfur - Total	mg/L	-	-	-	< 5.00	< 5.00	-	-	11.1	-	6.71	7.53	12.8
Tellurium - Total	mg/L	-	-	-	< 0.00200	< 0.00200	-	-	< 0.00200	-	< 0.00200	< 0.00200	< 0.00200
Thallium - Total	mg/L	-	-	-	0.000167	0.000157	-	-	0.00102	-	0.000315	0.000149	0.000214
Thorium - Total	mg/L	-	-	-	0.00439	0.00398	-	-	0.0192	-	0.00496	0.00158	0.00168
Tin - Total	mg/L	-	-	-	< 0.00100	< 0.00100	-	-	0.00157	-	< 0.00100	< 0.00100	< 0.00100
Tin - Total	mg/L	-	-	-	< 0.00100	< 0.00100	-	-	0.00157	-	< 0.00100	< 0.00100	< 0.00100
Tungsten - Total	mg/L	-	-	-	< 0.00100	< 0.00100	-	-	< 0.00100	-	< 0.00100	< 0.00100	< 0.00100
Uranium - Total	mg/L	-	-	-	0.00333	0.00297	-	-	0.0117	-	0.00579	0.00469	0.00754
Vanadium - Total	mg/L	-	-	-	0.0194	0.0176	-	-	0.0913	-	0.0309	0.0128	0.0165

Table 7.3.6: Water Quality Results for Water Licence Monitoring Location - KM105-SWMP-SEEP-02

					Sample ID	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02
					ALS Laboratory Sample ID	BF2300049	BF2300052	BF2300070	BF2300106	BF2300123	BF2300122	BF2300138	BF2300146	BF2300160
					Sample Date & Time	2023-05-20 08:00	2023-05-20 12:00	2023-06-11 17:30	2023-06-26 14:25	2023-07-03 10:10	2023-07-05 08:40	2023-07-10 09:15	2023-07-13 17:00	2023-07-18 12:35
Analyte	**Units**	**Water Licence Criteria [1]**	**Water Licence Criteria [2]**	**MDMER Criteria [3]**										
Zinc - Total	mg/L	0.5	-	1	0.0383	0.0359	-	-	0.183	-	0.0622	< 0.0300	0.0366
Zirconium - Total	mg/L	-	-	-	< 0.00200	< 0.00200	-	-	0.00296	-	< 0.00200	< 0.00200	< 0.00200
Aluminum - Dissolved	mg/L	-	-	-	0.0299	0.0237	-	-	-	-	-	0.0144	-
Antimony - Dissolved	mg/L	-	-	-	< 0.00010	< 0.00010	-	-	-	-	-	< 0.00010	-
Arsenic - Dissolved	mg/L	-	-	-	< 0.00010	< 0.00010	-	-	-	-	-	< 0.00010	-
Barium - Dissolved	mg/L	-	-	-	0.00365	0.0042	-	-	-	-	-	0.0104	-
Beryllium - Dissolved	mg/L	-	-	-	< 0.000020	< 0.000020	-	-	-	-	-	< 0.000020	-
Bismuth - Dissolved	mg/L	-	-	-	< 0.000050	< 0.000050	-	-	-	-	-	< 0.000050	-
Boron - Dissolved	mg/L	-	-	-	< 0.010	< 0.010	-	-	-	-	-	0.01	-
Cadmium - Dissolved	mg/L	-	-	-	0.0000146	0.0000212	-	-	-	-	-	0.0000268	-
Calcium - Dissolved	mg/L	-	-	-	4.84	5.46	-	-	-	-	-	21.3	-
Cesium - Dissolved	mg/L	-	-	-	< 0.000010	< 0.000010	-	-	-	-	-	< 0.000010	-
Chromium - Dissolved	mg/L	-	-	-	< 0.00050	< 0.00050	-	-	-	-	-	< 0.00050	-
Cobalt - Dissolved	mg/L	-	-	-	0.00014	< 0.00010	-	-	-	-	-	0.00017	-
Copper - Dissolved	mg/L	-	-	-	0.00054	0.00053	-	-	-	-	-	0.00085	-
Iron - Dissolved	mg/L	-	-	-	0.033	0.014	-	-	-	-	-	0.013	-
Lead - Dissolved	mg/L	-	-	-	< 0.000050	< 0.000050	-	-	-	-	-	< 0.000050	-
Lithium - Dissolved	mg/L	-	-	-	0.0027	0.0034	-	-	-	-	-	0.0051	-
Magnesium - Dissolved	mg/L	-	-	-	4.25	5.16	-	-	-	-	-	12.8	-
Manganese - Dissolved	mg/L	-	-	-	0.0303	0.037	-	-	-	-	-	0.0434	-
Mercury - Dissolved	mg/L	-	-	-	< 0.0000050	< 0.0000050	-	-	-	-	-	< 0.0000050	-
Molybdenum - Dissolved	mg/L	-	-	-	0.00393	0.00417	-	-	-	-	-	0.00642	-
Nickel - Dissolved	mg/L	-	-	-	< 0.00050	< 0.00050	-	-	-	-	-	0.00061	-
Phosphorus (P) - Dissolved	mg/L	-	-	-	< 0.050	< 0.050	-	-	-	-	-	< 0.050	-
Potassium - Dissolved	mg/L	-	-	-	4.03	5.02	-	-	-	-	-	4.16	-
Rubidium - Dissolved	mg/L	-	-	-	0.00227	0.00298	-	-	-	-	-	0.00331	-
Selenium - Dissolved	mg/L	-	-	-	0.000121	0.0001	-	-	-	-	-	0.000201	-
Silicon - Dissolved	mg/L	-	-	-	0.807	0.947	-	-	-	-	-	1.02	-
Silver - Dissolved	mg/L	-	-	-	< 0.000010	< 0.000010	-	-	-	-	-	< 0.000010	-
Sodium - Dissolved	mg/L	-	-	-	0.807	0.92	-	-	-	-	-	1.78	-
Strontium - Dissolved	mg/L	-	-	-	0.0136	0.0156	-	-	-	-	-	0.0757	-
Sulfur - Dissolved	mg/L	-	-	-	4.67	4.39	-	-	-	-	-	10	-
Tellurium - Dissolved	mg/L	-	-	-	< 0.00020	< 0.00020	-	-	-	-	-	< 0.00020	-
Thallium - Dissolved	mg/L	-	-	-	< 0.000010	< 0.000010	-	-	-	-	-	< 0.000010	-
Thorium - Dissolved	mg/L	-	-	-	< 0.00010	< 0.00010	-	-	-	-	-	< 0.00010	-
Tin - Dissolved	mg/L	-	-	-	< 0.00010	< 0.00010	-	-	-	-	-	< 0.00010	-
Titanium - Dissolved	mg/L	-	-	-	0.0009	0.00039	-	-	-	-	-	0.0004	-
Tungsten - Dissolved	mg/L	-	-	-	< 0.00010	< 0.00010	-	-	-	-	-	0.00038	-
Uranium - Dissolved	mg/L	-	-	-	0.00018	0.000179	-	-	-	-	-	0.00308	-
Vanadium - Dissolved	mg/L	-	-	-	< 0.00050	< 0.00050	-	-	-	-	-	< 0.00050	-
Zinc - Dissolved	mg/L	-	-	-	< 0.0010	< 0.0010	-	-	-	-	-	0.0012	-
Zirconium - Dissolved	mg/L	-	-	-	< 0.00030	< 0.00030	-	-	-	-	-	< 0.00030	-
Oil and Grease, Total	mg/L	-	-	-	-	-	-	<5.0	-	<5.0	-	-	-
	-	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Radium-226	Bq/L	-	-	1.11	0.071	0.0994	-	-	-	-	-	0.0485	0.00868
Acute Lethality [4,5,6]	N/A	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[3] Metal and Daimond Mining Effluent Regulations (MDMER) June 10, 2021, Schedule 4, Table 2.

[4] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[5] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[6] On the sample collected on September 5, 2023 acute lethality to Rainbow trout was unable to be measured since control validity was not met. Evaluation from Acute lethality laboratory indivates that the chemical concentrations of the effluent unlikely impacted rainbow trout survival

Table 7.3.6: Water Quality Results for Water Licenc

		KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02
		BF2300173	BF2300191	BF2300205	BF2300210	BF2300224	BF2300247	BF2300263	BF2300279	BF2300286	BF2300305	BF2300308	BF2300311
		2023-07-25 13:15	2023-08-02 10:10	2023-08-06 16:00	2023-08-08 15:00	2023-08-15 14:15	2023-08-29 17:00	2023-09-05 17:25	2023-09-11 14:20	2023-09-13 13:20	2023-09-19 14:45	2023-09-20 11:10	2023-09-26 09:40
Analyte	**Units**												
Conductivity, Lab	us/cm	413	478	-	498	646	699	1290	696	-	577	568	616
Acidity, Concentration	mg/L	-	4	-	-	3	-	5.8	-	-	3.9	-	-
Total Alkalinity	mg/L	-	106	-	-	106	-	105	-	-	118	-	-
Hardness	mg/L	-	214	-	-	306	-	582	-	-	249	-	-
Total Dissolved Solids	mg/L	259	278	276	288	390	450	902	435	442	336	344	367
Total Suspended Solids	mg/L	**158**	**376**	25.9	24.3	**173**	**54.3**	**62.4**	**47.3**	**103**	10.5	10	11.4
Turbidity	NTU	151	483	27.2	27.6	132	47.2	11.4	26.5	83.4	5.45	6.69	8.02
pH, Lab	pH units	7.67	7.58	7.93	7.83	7.7	7.73	7.69	7.73	7.85	7.75	7.66	7.72
Total Ammonia	mg/L	0.0218	0.0477	-	0.0284	0.0318	0.224	0.0277	0.0135	-	< 0.0050	0.0079	< 0.0050
Ammonia, Un-ionized	mg/L	< 0.0010	< 0.0010	-	-	< 0.0010	0.0014	< 0.0010	< 0.0010	-	< 0.0010	-	< 0.0010
Chloride	mg/L	-	22	-	-	49	-	254	-	-	46.8	-	-
Fluoride	mg/L	-	0.139	-	-	0.133	-	0.114	-	-	0.114	-	-
Total Kjeldahl Nitrogen	mg/L	-	0.55	-	-	0.297	-	0.362	-	-	0.212	-	-
Nitrate	mg/L	-	2.32	-	-	2.89	-	4	3.06	-	2.23	2.22	-
Phosphorus, Nutrient	mg/L	-	0.345	-	-	0.131	-	0.0286	-	-	0.0099	-	-
Sulfate	mg/L	-	83.1	-	-	124	-	144	-	-	90	-	-
Dissolved Organic Carbon	mg/L	-	2.64	-	-	2.13	-	2.39	-	-	1.56	-	-
Total Organic Carbon	mg/L	-	4.63	-	-	2.8	-	1.93	-	-	1.7	-	-
Aluminum - Total	mg/L	7.46	23.8	-	0.936	6.95	2.44	1.7	2.44	-	0.547	-	0.445
Antimony - Total	mg/L	< 0.00100	< 0.00100	-	< 0.00100	< 0.00010	< 0.00100	< 0.00100	< 0.00100	-	< 0.00010	-	< 0.00010
Arsenic - Total	mg/L	< 0.00100	0.00149	-	< 0.00100	0.00059	< 0.00100	< 0.00100	< 0.00100	-	0.00013	-	0.00012
Barium - Total	mg/L	0.0732	0.197	-	0.0334	0.084	0.045	0.0701	0.0467	-	0.0289	-	0.0358
Beryllium - Total	mg/L	0.000342	0.00114	-	< 0.000200	0.000333	< 0.000200	< 0.000200	< 0.000200	-	0.000034	-	0.000026
Bismuth - Total	mg/L	< 0.000500	0.000684	-	< 0.000500	0.000194	< 0.000500	< 0.000500	< 0.000500	-	< 0.000050	-	< 0.000050
Boron - Total	mg/L	< 0.100	< 0.100	-	< 0.100	0.028	< 0.100	< 0.100	< 0.100	-	0.024	-	0.022
Cadmium - Total	mg/L	0.000123	0.000352	-	0.000107	0.000149	0.000214	0.000447	0.000166	-	0.000098	-	0.0000759
Calcium - Total	mg/L	37.6	44	-	47	57.9	59.5	149	71.2	-	53.8	-	54.8
Cesium - Total	mg/L	0.000565	0.00177	-	< 0.000100	0.00051	0.000185	0.000128	0.000186	-	0.000048	-	0.000036
Chromium - Total	mg/L	0.0167	0.0555	-	< 0.00500	0.016	0.00594	< 0.00500	< 0.00500	-	0.0013	-	0.00112
Cobalt - Total	mg/L	0.00477	0.0158	-	< 0.00100	0.00471	0.00477	0.00213	0.00179	-	0.00067	-	0.00058
Copper - Total	mg/L	0.0141	0.0451	-	< 0.00500	0.0131	0.00661	< 0.00500	0.00633	-	0.00316	-	0.00286
Iron - Total	mg/L	11.8	39.2	-	1.56	11	3.92	2.76	3.9	-	0.867	-	0.686
Lead - Total	mg/L	0.00496	0.0172	-	0.000885	0.00452	0.00162	0.00113	0.00174	-	0.00047	-	0.000352
Lithium - Total	mg/L	0.0138	0.0313	-	< 0.0100	0.016	< 0.0100	0.065	0.0225	-	0.0125	-	0.0112
Magnesium - Total	mg/L	31.1	48.7	-	29	43.8	47.4	52.2	41.9	-	32.2	-	37.7
Manganese - Total	mg/L	0.189	0.579	-	0.0395	0.158	1.24	0.335	0.0782	-	0.0208	-	0.0164
Mercury - Total	mg/L	-	< 0.0000050	-	-	< 0.0000050	-	< 0.0000050	-	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	0.0127	0.0121	-	0.0177	0.0173	0.0162	0.0126	0.0117	-	0.0118	-	0.0137
Nickel - Total	mg/L	0.0157	0.0528	-	< 0.00500	0.0149	0.00601	< 0.00500	0.00557	-	0.00188	-	0.00167
Phosphorus (P) - Total	mg/L	< 0.500	< 0.500	-	< 0.500	0.132	< 0.500	< 0.500	< 0.500	-	< 0.050	-	< 0.050
Potassium - Total	mg/L	9.42	16.1	-	7.43	12	6.54	8.87	8.26	-	7.56	-	8.71
Rubidium - Total	mg/L	0.0228	0.0576	-	0.0102	0.0236	0.0118	0.0124	0.012	-	0.00772	-	0.00762
Selenium - Total	mg/L	0.000506	0.000598	-	< 0.000500	0.000674	0.00102	0.00069	< 0.000500	-	0.000345	-	0.000318
Silicon - Total	mg/L	13.4	38	-	3.46	13.4	5.54	4.54	6.17	-	3.05	-	2.9
Silver - Total	mg/L	< 0.000100	0.000193	-	< 0.000100	0.000044	< 0.000100	< 0.000100	< 0.000100	-	< 0.000010	-	< 0.000010
Sodium - Total	mg/L	3.34	4.49	-	4.14	5.98	10	10.6	7.25	-	6.19	-	6.57
Strontium - Total	mg/L	0.134	0.168	-	0.175	0.224	0.173	1.41	0.428	-	0.277	-	0.25
Sulfur - Total	mg/L	26.8	28.4	-	30.2	46.4	60.1	49.2	41.9	-	33.1	-	36.2
Tellurium - Total	mg/L	< 0.00200	< 0.00200	-	< 0.00200	< 0.00020	< 0.00200	< 0.00200	< 0.00200	-	< 0.00020	-	< 0.00020
Thallium - Total	mg/L	0.000126	0.000407	-	< 0.000100	0.000119	< 0.000100	< 0.000100	< 0.000100	-	0.000024	-	0.000024
Thorium - Total	mg/L	0.00194	0.00679	-	< 0.00100	0.0023	< 0.00100	< 0.00100	< 0.00100	-	0.00016	-	0.00014
Tin - Total	mg/L	< 0.00100	< 0.00100	-	< 0.00100	0.00029	< 0.00100	< 0.00100	< 0.00100	-	< 0.00010	-	< 0.00010
Tin - Total	mg/L	< 0.00100	< 0.00100	-	< 0.00100	0.00029	< 0.00100	< 0.00100	< 0.00100	-	< 0.00010	-	< 0.00010
Tungsten - Total	mg/L	< 0.00100	< 0.00100	-	< 0.00100	0.0003	< 0.00100	< 0.00100	0.00263	-	0.00107	-	0.00098
Uranium - Total	mg/L	0.0169	0.0254	-	0.0274	0.0323	0.0173	0.0242	0.0234	-	0.0224	-	0.0212
Vanadium - Total	mg/L	0.012	0.0386	-	< 0.00500	0.0116	< 0.00500	< 0.00500	< 0.00500	-	0.00108	-	0.00088

Table 7.3.6: Water Quality Results for Water Licenc

		KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02	KM105-SWMP-SEEP-02
		BF2300173	BF2300191	BF2300205	BF2300210	BF2300224	BF2300247	BF2300263	BF2300279	BF2300286	BF2300305	BF2300308	BF2300311
		2023-07-25 13:15	2023-08-02 10:10	2023-08-06 16:00	2023-08-08 15:00	2023-08-15 14:15	2023-08-29 17:00	2023-09-05 17:25	2023-09-11 14:20	2023-09-13 13:20	2023-09-19 14:45	2023-09-20 11:10	2023-09-26 09:40
Analyte	**Units**												
Zinc - Total	mg/L	< 0.0300	0.0757	-	< 0.0300	0.0214	< 0.0300	< 0.0300	< 0.0300	-	< 0.0030	-	< 0.0030
Zirconium - Total	mg/L	< 0.00200	0.00225	-	< 0.00200	0.00123	< 0.00200	< 0.00200	< 0.00200	-	0.00024	-	0.00025
Aluminum - Dissolved	mg/L	-	0.0091	-	-	0.0437	-	0.0046	-	-	0.0049	-	-
Antimony - Dissolved	mg/L	-	< 0.00010	-	-	< 0.00010	-	< 0.00010	-	-	< 0.00010	-	-
Arsenic - Dissolved	mg/L	-	< 0.00010	-	-	0.0001	-	< 0.00010	-	-	< 0.00010	-	-
Barium - Dissolved	mg/L	-	0.0231	-	-	0.0346	-	0.0604	-	-	0.0254	-	-
Beryllium - Dissolved	mg/L	-	< 0.000020	-	-	< 0.000020	-	< 0.000020	-	-	< 0.000020	-	-
Bismuth - Dissolved	mg/L	-	< 0.000050	-	-	< 0.000050	-	< 0.000050	-	-	< 0.000050	-	-
Boron - Dissolved	mg/L	-	0.024	-	-	0.024	-	0.035	-	-	0.02	-	-
Cadmium - Dissolved	mg/L	-	0.0000547	-	-	0.0000792	-	0.000397	-	-	0.0000703	-	-
Calcium - Dissolved	mg/L	-	42.2	-	-	59.3	-	150	-	-	51	-	-
Cesium - Dissolved	mg/L	-	< 0.000010	-	-	< 0.000010	-	< 0.000010	-	-	< 0.000010	-	-
Chromium - Dissolved	mg/L	-	< 0.00050	-	-	< 0.00050	-	< 0.00050	-	-	< 0.00050	-	-
Cobalt - Dissolved	mg/L	-	0.00042	-	-	0.00049	-	0.00109	-	-	0.00031	-	-
Copper - Dissolved	mg/L	-	0.00151	-	-	0.00195	-	0.00213	-	-	0.00202	-	-
Iron - Dissolved	mg/L	-	< 0.010	-	-	0.058	-	< 0.010	-	-	< 0.010	-	-
Lead - Dissolved	mg/L	-	< 0.000050	-	-	< 0.000050	-	< 0.000050	-	-	< 0.000050	-	-
Lithium - Dissolved	mg/L	-	0.0086	-	-	0.0098	-	0.0645	-	-	0.0121	-	-
Magnesium - Dissolved	mg/L	-	26.3	-	-	38.3	-	50.4	-	-	29.5	-	-
Manganese - Dissolved	mg/L	-	0.0737	-	-	0.0226	-	0.326	-	-	0.0087	-	-
Mercury - Dissolved	mg/L	-	< 0.0000050	-	-	< 0.0000050	-	< 0.0000050	-	-	< 0.0000050	-	-
Molybdenum - Dissolved	mg/L	-	0.0191	-	-	0.0193	-	0.0133	-	-	0.0123	-	-
Nickel - Dissolved	mg/L	-	0.00092	-	-	0.00102	-	0.00148	-	-	0.00086	-	-
Phosphorus (P) - Dissolved	mg/L	-	< 0.050	-	-	< 0.050	-	< 0.050	-	-	< 0.050	-	-
Potassium - Dissolved	mg/L	-	7.93	-	-	9.94	-	8.99	-	-	7.26	-	-
Rubidium - Dissolved	mg/L	-	0.00621	-	-	0.00861	-	0.00828	-	-	0.00613	-	-
Selenium - Dissolved	mg/L	-	0.000549	-	-	0.000699	-	0.000729	-	-	0.000726	-	-
Silicon - Dissolved	mg/L	-	2.18	-	-	2.16	-	1.96	-	-	2.04	-	-
Silver - Dissolved	mg/L	-	< 0.000010	-	-	< 0.000010	-	< 0.000010	-	-	< 0.000010	-	-
Sodium - Dissolved	mg/L	-	4.14	-	-	6.05	-	11	-	-	5.64	-	-
Strontium - Dissolved	mg/L	-	0.156	-	-	0.223	-	1.47	-	-	0.266	-	-
Sulfur - Dissolved	mg/L	-	30.6	-	-	47.2	-	51.8	-	-	31.7	-	-
Tellurium - Dissolved	mg/L	-	< 0.00020	-	-	< 0.00020	-	< 0.00020	-	-	< 0.00020	-	-
Thallium - Dissolved	mg/L	-	0.000015	-	-	0.000021	-	0.000021	-	-	0.000016	-	-
Thorium - Dissolved	mg/L	-	< 0.00010	-	-	< 0.00010	-	< 0.00010	-	-	< 0.00010	-	-
Tin - Dissolved	mg/L	-	< 0.00010	-	-	< 0.00010	-	< 0.00010	-	-	< 0.00010	-	-
Titanium - Dissolved	mg/L	-	< 0.00030	-	-	0.00276	-	< 0.00030	-	-	< 0.00030	-	-
Tungsten - Dissolved	mg/L	-	0.00011	-	-	0.00016	-	0.00032	-	-	0.0012	-	-
Uranium - Dissolved	mg/L	-	0.019	-	-	0.03	-	0.0251	-	-	0.0201	-	-
Vanadium - Dissolved	mg/L	-	< 0.00050	-	-	< 0.00050	-	< 0.00050	-	-	< 0.00050	-	-
Zinc - Dissolved	mg/L	-	< 0.0010	-	-	0.0016	-	< 0.0010	-	-	< 0.0010	-	-
Zirconium - Dissolved	mg/L	-	< 0.00030	-	-	< 0.00030	-	< 0.00030	-	-	< 0.00030	-	-
Oil and Grease, Total	mg/L	-	<5.0	-	-	-	-	-	<5.0	-	-	<5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Radium-226	Bq/L	0.0448	0.127	-	-	0.0444	-	0.0826	-	-	0.0399	-	-
Acute Lethality [4,5,6]	N/A	-	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	Not Acutely Toxic		

Notes:

Bold highlight indicate results that exceeded the applicable wate

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[3] Metal and Daimond Mining Effluent Regulations (MDMER) June

[4] Acute lethality to Daphnia magna (as per Environment Canada M

[5] Acute lethality to Rainbow trout (as per Environment Canada M

[6] On the sample collected on September 5, 2023 acute lethality to

Table 7.3.7: Water Quality Results for Water Licence Monitoring Location - MS-MRY-06

			Sample ID	MS-MRY-06	MS-MRY-06
			ALS Laboratory Work Order	BF2300211	BF2300264
			Sample Date & Time	2023-08-08 12:00	2023-09-05 16:20
Analyte	**Units**	**Water Licence Criteria [1]**			
pH, Lab	pH units	6.0 - 9.5		7.02	7.84
Total Suspended Solids	mg/L	-		< 1.3	< 1.0
Lead - Total	mg/L	0.001		0.000636	< 0.000050
Oil and Grease, Total	mg/L	-		< 5.0	< 5.0
	-	No Visible Sheen		No Visible Sheen	No Visible Sheen
Benzene	ug/L	370		< 0.50	< 0.50
Ethylbenzene	ug/L	90		< 0.50	< 0.50
Toluene	ug/L	2		< 0.50	< 0.50
F1 (C6-C10)	ug/L	-		< 25	< 25
F2 (C10-C16)	ug/L	-		< 100	< 100
F3 (C16-C34)	ug/L	-		< 250	< 250
F4 (C34-C50)	ug/L	-		< 250	< 250
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-		< 370	< 370

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 8.

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

		Sample ID	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
		ALS Laboratory Work Order	BF2300103	BF2300127	BF2300156	BF2300174	BF2300190	BF2300214
		Sample Date & Time	2023-06-24 13:30	2023-07-04 10:00	2023-07-17 12:25	2023-07-24 10:05	2023-08-02 11:50	2023-08-07 11:48
Analyte	Units	Water Licence Criteria [1]						
Hardness	mg/L	-	20.8	26.6	41.2	-	45.3	-
pH, Lab	pH units	6.0 - 9.5	7.26	7.63	7.61	7.75	8.05	7.92
Total Suspended Solids	mg/L	15	< 1.2	3.1	< 1.0	1.0	< 1.0	< 1.4
Total Dissolved Solids	mg/L	-	42	< 20	67	58	48	55
Turbidity	NTU	-	1.45	0.97	1.08	1.91	0.48	0.36
Alkalinity, Total	mg/L	-	22.8	27.0	45.8	-	68.0	-
Ammonia, Total (as N)	mg/L	-	0.0092	< 0.0050	< 0.0050	-	< 0.0050	-
Chloride	mg/L	-	1.03	2.40	3.36	-	3.18	-
Fluoride	mg/L	-	< 0.020	< 0.020	< 0.020	-	< 0.020	-
Nitrate	mg/L	-	0.041	< 0.020	0.036	-	0.118	-
Total Kjeldahl Nitrogen	mg/L	-	0.101	< 0.050	< 0.050	-	< 0.050	-
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	< 0.050	-	< 0.050	-
Sulfate	mg/L	-	0.64	0.71	1.27	-	1.99	-
Dissolved Organic Carbon	mg/L	-	1.57	0.89	1.06	-	1.39	-
Total Organic Carbon	mg/L	-	1.95	1.18	1.07	-	1.70	-
Aluminum - Total	mg/L	-	0.0334	0.0523	0.0212	-	0.0184	-
Arsenic - Total	mg/L	0.50	< 0.00010	< 0.00010	< 0.00010	-	< 0.00010	-
Cadmium - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	-	0.0000063	-
Calcium - Total	mg/L	-	4.03	5.10	7.84	-	8.81	-
Copper - Total	mg/L	0.30	0.00108	0.00105	0.00149	-	0.00204	-
Iron - Total	mg/L	-	0.044	0.075	0.024	-	0.022	-
Lead - Total	mg/L	0.20	< 0.000050	0.000059	< 0.000050	-	< 0.000050	-
Magnesium - Total	mg/L	-	2.60	3.36	5.26	-	5.65	-
Manganese - Total	mg/L	-	0.00108	0.00152	0.00094	-	0.00070	-
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.000183	0.000147	0.000322	-	0.000860	-
Nickel - Total	mg/L	0.50	< 0.00050	< 0.00050	< 0.00050	-	< 0.00050	-
Potassium - Total	mg/L	-	0.674	0.781	1.11	-	1.72	-
Selenium - Total	mg/L	-	< 0.000050	< 0.000050	< 0.000050	-	0.000050	-
Sodium - Total	mg/L	-	0.254	0.283	0.399	-	0.466	-
Thallium - Total	mg/L	-	< 0.000010	< 0.000010	< 0.000010	-	0.000016	-
Uranium - Total	mg/L	-	0.000131	0.000167	0.000560	-	0.00121	-
Zinc - Total	mg/L	0.50	< 0.0030	< 0.0030	< 0.0030	-	< 0.0030	-
Aluminum - Dissolved	mg/L	-	0.0105	0.0072	0.0068	-	0.0068	-
Arsenic - Dissolved	mg/L	-	< 0.00010	< 0.00010	< 0.00010	-	< 0.00010	-
Cadmium - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	-	< 0.0000050	-
Calcium - Dissolved	mg/L	-	3.96	4.94	7.95	-	9.29	-
Copper - Dissolved	mg/L	-	0.00103	0.00089	0.00140	-	0.00191	-
Iron - Dissolved	mg/L	-	< 0.010	< 0.010	< 0.010	-	< 0.010	-
Lead - Dissolved	mg/L	-	< 0.000050	< 0.000050	< 0.000050	-	< 0.000050	-
Magnesium - Dissolved	mg/L	-	2.73	3.33	5.09	-	5.75	-
Manganese - Dissolved	mg/L	-	0.00044	0.00035	0.00040	-	0.00039	-
Mercury - Dissolved	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	-	< 0.0000050	-
Molybdenum - Dissolved	mg/L	-	0.000153	0.000150	0.000364	-	0.000866	-
Nickel - Dissolved	mg/L	-	< 0.00050	< 0.00050	< 0.00050	-	< 0.00050	-
Potassium - Dissolved	mg/L	-	0.745	0.753	1.21	-	1.80	-
Selenium - Dissolved	mg/L	-	< 0.000050	< 0.000050	< 0.000050	-	0.000061	-
Sodium - Dissolved	mg/L	-	0.296	0.283	0.424	-	0.487	-
Thallium - Dissolved	mg/L	-	< 0.000010	< 0.000010	< 0.000010	-	0.000010	-
Uranium - Dissolved	mg/L	-	0.000122	0.000151	0.000594	-	0.00117	-
Zinc - Dissolved	mg/L	-	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	Not Acutely Toxic	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.8: Water Quality Results for Water Licence Monitoring Location - MS-MRY-09

		Sample ID	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09	MS-MRY-09
		ALS Laboratory Work Order	BF2300227	BF2300251	BF2300258	BF2300291	BF2300309	BF2300312
		Sample Date & Time	2023-08-17 11:45	2023-08-30 09:50	2023-09-03 15:50	2023-09-14 15:45	2023-09-20 08:50	2023-09-25 15:00
Analyte	Units	Water Licence Criteria [1]						
Hardness	mg/L	-	-	-	93.2	-	-	-
pH, Lab	pH units	6.0 - 9.5	7.71	7.84	7.89	7.60	7.84	7.97
Total Suspended Solids	mg/L	15	< 1.0	< 1.0	< 1.0	1.3	1.3	1.7
Total Dissolved Solids	mg/L	-	74	108	98	100	88	95
Turbidity	NTU	-	0.54	1.10	0.96	1.14	0.52	0.35
Alkalinity, Total	mg/L	-	-	-	79.8	-	-	-
Ammonia, Total (as N)	mg/L	-	-	-	< 0.0050	-	-	-
Chloride	mg/L	-	-	-	12.5	-	-	-
Fluoride	mg/L	-	-	-	< 0.020	-	-	-
Nitrate	mg/L	-	-	-	0.037	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	0.086	-	-	-
Phosphorus, Total	mg/L	-	-	-	< 0.050	-	-	-
Sulfate	mg/L	-	-	-	3.17	-	-	-
Dissolved Organic Carbon	mg/L	-	-	-	2.00	-	-	-
Total Organic Carbon	mg/L	-	-	-	1.84	-	-	-
Aluminum - Total	mg/L	-	-	-	0.0220	-	-	-
Arsenic - Total	mg/L	0.50	-	-	< 0.00010	-	-	-
Cadmium - Total	mg/L	-	-	-	< 0.0000050	-	-	-
Calcium - Total	mg/L	-	-	-	17.7	-	-	-
Copper - Total	mg/L	0.30	-	-	0.00235	-	-	-
Iron - Total	mg/L	-	-	-	0.026	-	-	-
Lead - Total	mg/L	0.20	-	-	< 0.000050	-	-	-
Magnesium - Total	mg/L	-	-	-	11.9	-	-	-
Manganese - Total	mg/L	-	-	-	0.00066	-	-	-
Mercury - Total	mg/L	-	-	-	< 0.0000050	-	-	-
Molybdenum - Total	mg/L	-	-	-	0.00111	-	-	-
Nickel - Total	mg/L	0.50	-	-	< 0.00050	-	-	-
Potassium - Total	mg/L	-	-	-	2.45	-	-	-
Selenium - Total	mg/L	-	-	-	0.000053	-	-	-
Sodium - Total	mg/L	-	-	-	0.762	-	-	-
Thallium - Total	mg/L	-	-	-	0.000014	-	-	-
Uranium - Total	mg/L	-	-	-	0.00534	-	-	-
Zinc - Total	mg/L	0.50	-	-	< 0.0030	-	-	-
Aluminum - Dissolved	mg/L	-	-	-	0.0061	-	-	-
Arsenic - Dissolved	mg/L	-	-	-	< 0.00010	-	-	-
Cadmium - Dissolved	mg/L	-	-	-	< 0.0000050	-	-	-
Calcium - Dissolved	mg/L	-	-	-	16.3	-	-	-
Copper - Dissolved	mg/L	-	-	-	0.00200	-	-	-
Iron - Dissolved	mg/L	-	-	-	< 0.010	-	-	-
Lead - Dissolved	mg/L	-	-	-	< 0.000050	-	-	-
Magnesium - Dissolved	mg/L	-	-	-	10.8	-	-	-
Manganese - Dissolved	mg/L	-	-	-	0.00023	-	-	-
Mercury - Dissolved	mg/L	-	-	-	< 0.0000050	-	-	-
Molybdenum - Dissolved	mg/L	-	-	-	0.00110	-	-	-
Nickel - Dissolved	mg/L	-	-	-	< 0.00050	-	-	-
Potassium - Dissolved	mg/L	-	-	-	2.15	-	-	-
Selenium - Dissolved	mg/L	-	-	-	0.000097	-	-	-
Sodium - Dissolved	mg/L	-	-	-	0.671	-	-	-
Thallium - Dissolved	mg/L	-	-	-	0.000011	-	-	-
Uranium - Dissolved	mg/L	-	-	-	0.00488	-	-	-
Zinc - Dissolved	mg/L	-	-	-	< 0.0010	-	-	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1]Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.9: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13A

		Sample ID	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A	MS-MRY-13A
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300087	BF2300105	BF2300140	BF2300157	BF2300170	BF2300230	BF2300251
		Sample Date & Time	2023-06-05 09:45	2023-06-12 09:00	2023-06-20 10:00	2023-06-26 09:40	2023-07-10 13:10	2023-07-17 09:40	2023-07-23 11:05	2023-08-20 16:30	2023-08-30 14:15
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	45.0	-	-	-	559	-	-	903	-
pH, Lab	pH units	6.0 - 9.5	7.24	7.22	7.44	7.72	7.96	7.89	7.88	8.13	7.84
Total Suspended Solids	mg/L	15.0	11.4	1.8	< 1.0	5.3	< 1.0	< 1.0	< 1.0	< 1.2	8.7
Total Dissolved Solids	mg/L	-	62	43	61	107	350	411	487	593	588
Turbidity	NTU	-	116	21.3	14.4	3.51	0.49	0.28	0.36	0.58	1.85
Alkalinity, Total	mg/L	-	14.6	-	-	-	136	-	-	206	-
Dissolved Organic Carbon	mg/L	-	3.12	-	-	-	5.68	-	-	9.04	-
Total Organic Carbon	mg/L	-	3.63	-	-	-	4.40	-	-	5.27	-
Aluminum - Total	mg/L	-	1.22	-	-	-	0.0111	-	-	0.0090	-
Antimony - Total	mg/L	-	0.00108	-	-	-	0.00015	-	-	0.00034	-
Arsenic - Total	mg/L	0.50	< 0.00100	-	-	-	0.00019	-	-	0.00019	-
Barium - Total	mg/L	-	0.0117	-	-	-	0.0375	-	-	0.0550	-
Cadmium - Total	mg/L	-	< 0.0000500	-	-	-	0.0000104	-	-	0.0000394	-
Chromium - Total	mg/L	-	< 0.00500	-	-	-	0.00060	-	-	< 0.00050	-
Cobalt - Total	mg/L	-	0.00224	-	-	-	0.00015	-	-	0.00023	-
Copper - Total	mg/L	0.30	< 0.00500	-	-	-	0.00154	-	-	0.00228	-
Iron - Total	mg/L	-	1.53	-	-	-	0.020	-	-	0.019	-
Lead - Total	mg/L	0.20	0.000939	-	-	-	< 0.000050	-	-	0.000116	-
Lithium - Total	mg/L	-	< 0.0100	-	-	-	0.0267	-	-	0.0440	-
Manganese - Total	mg/L	-	0.0727	-	-	-	0.00437	-	-	0.00172	-
Mercury - Total	mg/L	-	< 0.0000050	-	-	-	< 0.0000050	-	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.00108	-	-	-	0.000529	-	-	0.000566	-
Nickel - Total	mg/L	0.50	< 0.00500	-	-	-	0.0110	-	-	0.0132	-
Selenium - Total	mg/L	-	< 0.000500	-	-	-	< 0.000050	-	-	0.000086	-
Strontium - Total	mg/L	-	0.00807	-	-	-	0.0430	-	-	0.0685	-
Thallium - Total	mg/L	-	< 0.000100	-	-	-	0.000015	-	-	0.000022	-
Tin - Total	mg/L	-	< 0.00100	-	-	-	< 0.00010	-	-	< 0.00010	-
Titanium - Total	mg/L	-	0.0364	-	-	-	< 0.00060	-	-	0.00039	-
Uranium - Total	mg/L	-	0.000550	-	-	-	0.00193	-	-	0.00939	-
Vanadium - Total	mg/L	-	< 0.00500	-	-	-	< 0.00050	-	-	< 0.00050	-
Zinc - Total	mg/L	0.50	< 0.0300	-	-	-	0.0032	-	-	0.0030	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	< 1.0	-	-	-	< 1.0	-	-	< 1.0	-
F1 (C6-C10)	ug/L	-	< 25	-	-	-	< 25	-	-	< 25	-
F2 (C10-C16)	ug/L	-	< 100	-	-	-	< 100	-	-	< 100	-
F3 (C16-C34)	ug/L	-	< 250	-	-	-	< 250	-	-	< 250	-
F4 (C34-C50)	ug/L	-	< 250	-	-	-	< 250	-	-	< 250	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	-	-	-	< 370	-	-	< 370	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7.

Table 7.3.10: Water Quality Results for Water Licence Monitoring Location - MS-MRY-13B

		Sample ID	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B	MS-MRY-13B
		ALS Laboratory Work Order	BF2300105	BF2300170	BF2300190	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300317	BF2300312
		Sample Date & Time	2023-06-26 10:00	2023-07-23 10:45	2023-08-02 13:50	2023-08-08 08:30	2023-08-17 13:45	2023-08-22 13:30	2023-08-30 13:55	2023-09-03 10:45	2023-09-10 13:10	2023-09-25 13:05
Analyte	Units	Water Licence Criteria [1]										
Conductivity	umhos/cm	-	407	764	911	-	-	-	-	1190	-	-
pH, Lab	pH units	6.0 - 9.5	7.95	7.97	8.39	8.00	8.09	7.96	7.85	7.79	7.90	7.71
Total Suspended Solids	mg/L	15.0	1.9	5.2	2.2	1.8	2.3	< 1.0	< 1.0	2.0	< 1.2	< 1.0
Total Dissolved Solids	mg/L	-	222	484	578	659	758	718	886	820	846	1100
Turbidity	NTU	-	1.88	1.20	0.40	1.04	1.36	0.33	1.21	0.56	0.18	4.72
Alkalinity, Total	mg/L	-	106	170	181	-	-	-	-	184	-	-
Dissolved Organic Carbon	mg/L	-	3.79	5.52	6.20	-	-	-	-	15.5	-	-
Total Organic Carbon	mg/L	-	4.67	5.97	6.52	-	-	-	-	6.51	-	-
Aluminum - Total	mg/L	-	0.0470	0.0317	0.0495	-	-	-	-	< 0.0300	-	-
Antimony - Total	mg/L	-	0.00011	< 0.00100	< 0.00100	-	-	-	-	< 0.00100	-	-
Arsenic - Total	mg/L	0.50	0.00014	< 0.00100	< 0.00100	-	-	-	-	< 0.00100	-	-
Barium - Total	mg/L	-	0.0221	0.0418	0.0524	-	-	-	-	0.0592	-	-
Cadmium - Total	mg/L	-	0.0000067	< 0.0000500	< 0.0000500	-	-	-	-	< 0.0000500	-	-
Chromium - Total	mg/L	-	< 0.00050	< 0.00500	< 0.00500	-	-	-	-	< 0.00500	-	-
Cobalt - Total	mg/L	-	0.00015	< 0.00100	< 0.00100	-	-	-	-	< 0.00100	-	-
Copper - Total	mg/L	0.30	0.00117	< 0.00500	< 0.00500	-	-	-	-	< 0.00500	-	-
Iron - Total	mg/L	-	0.102	< 0.100	< 0.100	-	-	-	-	< 0.100	-	-
Lead - Total	mg/L	0.20	< 0.000050	< 0.000500	< 0.000500	-	-	-	-	< 0.000500	-	-
Lithium - Total	mg/L	-	0.0308	0.0432	0.0444	-	-	-	-	0.193	-	-
Manganese - Total	mg/L	-	0.00291	0.00423	0.00333	-	-	-	-	0.00228	-	-
Mercury - Total	mg/L	-	< 0.0000050	< 0.0000050	< 0.0000050	-	-	-	-	< 0.0000050	-	-
Molybdenum - Total	mg/L	-	0.000390	< 0.000500	< 0.000500	-	-	-	-	< 0.000500	-	-
Nickel - Total	mg/L	0.50	0.00847	0.0126	0.0140	-	-	-	-	0.0144	-	-
Selenium - Total	mg/L	-	< 0.000050	< 0.000500	< 0.000500	-	-	-	-	< 0.000500	-	-
Strontium - Total	mg/L	-	0.0482	0.0938	0.122	-	-	-	-	0.183	-	-
Thallium - Total	mg/L	-	0.000011	< 0.000100	< 0.000100	-	-	-	-	< 0.000100	-	-
Tin - Total	mg/L	-	< 0.00010	< 0.00100	< 0.00100	-	-	-	-	< 0.00100	-	-
Titanium - Total	mg/L	-	0.00338	< 0.00300	< 0.00300	-	-	-	-	< 0.00300	-	-
Uranium - Total	mg/L	-	0.00278	0.00653	0.00687	-	-	-	-	0.0136	-	-
Vanadium - Total	mg/L	-	< 0.00050	< 0.00500	< 0.00500	-	-	-	-	< 0.00500	-	-
Zinc - Total	mg/L	0.50	< 0.0030	< 0.0300	< 0.0300	-	-	-	-	< 0.0300	-	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0	-	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	1.1	< 1.0	< 1.0	-	-	-	-	< 1.0	-	-
F1 (C6-C10)	ug/L	-	< 25	< 25	< 25	-	-	-	-	< 25	-	-
F2 (C10-C16)	ug/L	-	< 100	< 100	< 100	-	-	-	-	< 100	-	-
F3 (C16-C34)	ug/L	-	< 250	< 250	< 250	-	-	-	-	< 250	-	-
F4 (C34-C50)	ug/L	-	< 250	< 250	< 250	-	-	-	-	< 250	-	-
Total Petroleum Hydrocarbons (C6-C50)	ug/L	-	< 370	< 370	< 370	-	-	-	-	< 370	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 7.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-C-A

		Sample ID	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 14:45	2023-06-12 11:30	2023-06-21 07:50	2023-06-25 10:25	2023-07-04 07:20	2023-07-10 02:45	2023-07-17 13:20	2023-07-23 09:55	2023-08-01 15:30
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	75.5	-	-	-	166	-	-	-	338
pH, Lab	pH units	6.0 - 9.5	7.45	7.49	7.57	7.38	7.74	7.70	7.84	7.81	8.13
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**421**	**43.5**	**124**	17.2	29.1	20.4	4.1	2.3	1.4
Total Dissolved Solids	mg/L	-	175	113	178	110	100	113	157	164	181
Turbidity	NTU	-	968	181	397	119	114	105	16.7	8.35	2.09
Ammonia, Total (as N)	mg/L	-	0.0617	-	-	-	0.0107	-	-	-	< 0.0050
Nitrate (as N)	mg/L	-	0.258	-	-	-	0.380	-	-	-	1.07
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.11: Water Quality Results for Water Licence Monitoring Location - MS-C-A

		Sample ID	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A	MS-C-A
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312
		Sample Date & Time	2023-08-08 10:35	2023-08-17 15:00	2023-08-22 10:40	2023-08-30 09:50	2023-09-04 10:45	2023-09-10 09:50	2023-09-17 12:45	2023-09-25 14:45
Analyte	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	-	-	545	-	-	-
pH, Lab	pH units	6.0 - 9.5	7.97	7.97	7.67	7.70	7.78	7.75	7.81	7.84
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	< 1.3	< 1.0	1.9	3.8	1.6	< 1.0	< 1.0	1.7
Total Dissolved Solids	mg/L	-	190	293	319	293	319	360	293	265
Turbidity	NTU	-	2.64	2.42	4.46	10.2	4.81	1.45	0.90	0.99
Ammonia, Total (as N)	mg/L	-	-	-	-	-	< 0.0050	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	2.82	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-B

		Sample ID	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 15:00	2023-06-12 11:45	2023-06-21 08:05	2023-06-25 10:35	2023-07-04 07:55	2023-07-11 09:20	2023-07-17 13:40	2023-07-23 10:10	2023-08-01 16:00
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	75.4	-	-	-	168	-	-	-	351
pH, Lab	pH units	6.0 - 9.5	7.41	7.45	7.56	7.45	7.62	7.66	7.75	7.69	8.17
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**432**	**41.7**	**122**	21.4	27.6	15.9	13.6	3.0	5.2
Total Dissolved Solids	mg/L	-	171	112	186	111	118	113	157	168	193
Turbidity	NTU	-	962	187	403	276	111	84.5	17.0	8.49	2.73
Ammonia, Total (as N)	mg/L	-	0.0625	-	-	-	0.0101	-	-	-	< 0.0050
Nitrate (as N)	mg/L	-	0.260	-	-	-	0.383	-	-	-	1.13
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.12: Water Quality Results for Water Licence Monitoring Location - MS-C-B

		Sample ID	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B	MS-C-B
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312
		Sample Date & Time	2023-08-08 11:10	2023-08-17 15:20	2023-08-22 11:00	2023-08-30 10:30	2023-09-04 11:00	2023-09-10 10:35	2023-09-17 12:55	2023-09-25 15:45
Analyte	**Units**	**Water Licence Criteria [1]**								
Conductivity	umhos/cm	-	-	-	-	-	556	-	-	-
pH, Lab	pH units	6.0 - 9.5	7.79	7.86	7.70	7.67	7.79	7.72	7.62	7.68
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	1.4	1.2	1.8	4.0	1.7	28.3	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	208	291	322	286	327	360	310	279
Turbidity	NTU	-	10.2	3.24	5.66	11.0	4.84	4.76	0.77	0.67
Ammonia, Total (as N)	mg/L	-	-	-	-	-	< 0.0050	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	2.89	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-C

		Sample ID	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
		ALS Laboratory Work Order	BF2300053	BF2300064	BF2300077	BF2300087	BF2300101	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-05-22 16:10	2023-06-05 12:45	2023-06-12 10:30	2023-06-20 15:00	2023-06-25 13:35	2023-07-10 14:10	2023-07-17 12:30	2023-07-23 12:10	2023-08-01 15:00
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	403	-	584	-	-	893	-	-	1090
pH, Lab	pH units	6.0 - 9.5	7.85	7.72	7.66	7.87	7.91	7.88	7.88	7.97	8.45
Total Suspended Solids[2,3]	mg/L	Grab 30, Average 15	**502**	**389**	6.7	**69.8**	**50.0**	3.4	< 1.0	3.8	1.8
Total Dissolved Solids	mg/L	-	282	285	348	343	480	567	582	650	690
Turbidity	NTU	-	746	982	18.4	240	128	4.06	1.87	6.60	1.00
Ammonia, Total (as N)	mg/L	-	0.974	-	0.816	-	-	0.0129	-	-	0.0114
Nitrate (as N)	mg/L	-	2.38	-	3.14	-	-	4.64	-	-	7.20
Oil and Grease, Total	mg/L	-	5.6	-	< 5.0	-	-	< 5.0	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

[3] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.13: Water Quality Results for Water Licence Monitoring Location - MS-C-C

		Sample ID	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C	MS-C-C
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300312
		Sample Date & Time	2023-08-08 10:00	2023-08-17 14:40	2023-08-22 12:55	2023-08-30 11:40	2023-09-04 09:45	2023-09-10 15:25	2023-09-26 15:15
Analyte	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	-	862	-	-
pH, Lab	pH units	6.0 - 9.5	8.02	8.21	7.97	7.89	7.91	7.99	8.06
Total Suspended Solids[2,3]	mg/L	Grab 30, Average 15	< 1.4	2.3	4.4	2.1	4.5	1.8	19.3
Total Dissolved Solids	mg/L	-	748	673	578	554	534	532	580
Turbidity	NTU	-	1.04	2.88	9.91	4.45	6.36	2.21	38.2
Ammonia, Total (as N)	mg/L	-	-	-	-	-	< 0.0050	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	5.80	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-D

		Sample ID	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
		ALS Laboratory Work Order	BF2300053	BF2300064	BF2300077	BF2300087	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170
		Sample Date & Time	2023-05-22 16:05	2023-06-05 12:55	2023-06-12 10:00	2023-06-20 10:40	2023-06-25 13:20	2023-07-03 16:00	2023-07-10 14:00	2023-07-17 12:10	2023-07-23 12:00
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	356	-	422	-	-	1120	-	-	-
pH, Lab	pH units	6.0 - 9.5	7.80	7.71	7.86	7.85	8.18	8.37	8.43	8.39	8.32
Total Suspended Solids[2,3]	mg/L	Grab 30, Average 15	**282**	**144**	22.0	21.0	**60.8**	7.9	10.5	1.7	3.5
Total Dissolved Solids	mg/L	-	244	183	250	264	428	698	664	641	633
Turbidity	NTU	-	435	401	91.0	103	119	6.51	12.5	4.22	5.23
Ammonia, Total (as N)	mg/L	-	0.775	-	0.384	-	-	0.103	-	-	-
Nitrate (as N)	mg/L	-	1.81	-	1.39	-	-	3.57	-	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

[3] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.14: Water Quality Results for Water Licence Monitoring Location - MS-C-D

		Sample ID	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D	MS-C-D
		ALS Laboratory Work Order	BF2300190	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312	BF2300315
		Sample Date & Time	2023-08-01 14:20	2023-08-08 09:35	2023-08-17 14:25	2023-08-22 12:40	2023-08-30 11:20	2023-09-03 13:45	2023-09-10 15:10	2023-09-17 11:50	2023-09-26 14:00	2023-10-03 10:10
Analyte	**Units**	**Water Licence Criteria [1]**										
Conductivity	umhos/cm	-	1010	-	-	-	-	799	-	-	-	805
pH, Lab	pH units	6.0 - 9.5	8.61	8.36	8.36	8.08	7.93	8.18	8.24	8.11	8.17	8.09
Total Suspended Solids[2,3]	mg/L	Grab 30, Average 15	2.5	< 1.4	10.5	4.4	10.0	3.3	1.8	2.0	10.2	< 1.0
Total Dissolved Solids	mg/L	-	600	592	630	563	475	505	490	562	512	514
Turbidity	NTU	-	1.79	2.32	12.9	13.3	29.6	23.9	3.78	2.59	27.4	1.48
Ammonia, Total (as N)	mg/L	-	0.0168	-	-	-	-	0.0356	-	-	-	0.0416
Nitrate (as N)	mg/L	-	3.14	-	-	-	-	4.46	-	-	-	4.35
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for May exceeded maximum average TSS concentration discharge limits because only one (1) sample was collected in May due to no flow conditions during other scheduled May sampling events.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-E

		Sample ID	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300087	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 13:15	2023-06-12 09:35	2023-06-20 15:55	2023-06-25 13:05	2023-07-03 15:45	2023-07-10 13:40	2023-07-17 00:00	2023-07-23 11:45	2023-08-01 14:00
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	129	-	-	-	874	-	-	-	1010
pH, Lab	pH units	6.0 - 9.5	7.32	7.63	7.93	8.05	8.11	8.08	8.05	7.96	8.29
Total Suspended Solids	mg/L	Grab 30, Average 15	**50.0**	25.3	13.4	**47.2**	15.3	1.0	< 1.0	< 1.0	2.6
Total Dissolved Solids	mg/L	-	100	115	205	302	516	498	612	563	652
Turbidity	NTU	-	245	75.5	94.6	59.9	3.73	2.02	1.58	2.42	1.52
Ammonia, Total (as N)	mg/L	-	0.121	-	-	-	0.0230	-	-	-	0.0233
Nitrate (as N)	mg/L	-	0.284	-	-	-	2.60	-	-	-	3.90
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.15: Water Quality Results for Water Licence Monitoring Location - MS-C-E

		Sample ID	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E	MS-C-E
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312	BF2300315
		Sample Date & Time	2023-08-08 09:20	2023-08-17 14:10	2023-08-22 12:25	2023-08-30 11:00	2023-09-03 13:20	2023-09-10 15:00	2023-09-17 11:45	2023-09-26 14:40	2023-10-02 16:05
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	-	-	-	-	854	-	-	-	857
pH, Lab	pH units	6.0 - 9.5	7.92	8.07	7.93	7.82	7.98	8.00	7.72	8.00	7.73
Total Suspended Solids	mg/L	Grab 30, Average 15	2.2	4.0	< 1.0	14.6	3.3	1.4	2.2	2.7	5.0
Total Dissolved Solids	mg/L	-	660	689	605	524	602	602	590	549	568
Turbidity	NTU	-	1.64	2.80	2.84	14.3	8.72	2.50	1.22	10.2	1.03
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.0065	-	-	-	0.0095
Nitrate (as N)	mg/L	-	-	-	-	-	5.86	-	-	-	5.04
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-F

		Sample ID	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 15:25	2023-06-12 12:10	2023-06-21 09:05	2023-06-25 11:45	2023-07-04 08:30	2023-07-11 10:20	2023-07-17 13:00	2023-07-23 09:35	2023-08-01 16:20
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	83.5	-	-	-	166	-	-	-	393
pH, Lab	pH units	6.0 - 9.5	7.51	7.37	7.54	7.40	7.60	7.86	7.91	7.91	8.32
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**540**	**82.7**	**132**	**187**	**68.8**	**72.6**	26.5	11.6	2.8
Total Dissolved Solids	mg/L	-	142	116	200	122	102	136	160	188	214
Turbidity	NTU	-	1090	265	450	276	183	193	52.5	27.6	7.83
Ammonia, Total (as N)	mg/L	-	0.0869	-	-	-	0.0276	-	-	-	0.0055
Nitrate (as N)	mg/L	-	0.356	-	-	-	0.372	-	-	-	1.43
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.3.16: Water Quality Results for Water Licence Monitoring Location - MS-C-F

		Sample ID	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F	MS-C-F
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300312
		Sample Date & Time	2023-08-08 15:45	2023-08-17 15:35	2023-08-22 12:00	2023-08-30 09:10	2023-09-04 12:00	2023-09-10 09:30	2023-09-26 14:00
Analyte	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	-	-	-	653	-	-
pH, Lab	pH units	6.0 - 9.5	8.09	7.98	7.65	7.75	7.88	7.90	7.82
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	3.2	12.1	6.8	11.3	12.7	4.5	9.9
Total Dissolved Solids	mg/L	-	237	350	346	338	396	450	328
Turbidity	NTU	-	0.26	18.0	14.0	24.6	24.2	6.16	11.2
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.0464	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	3.50	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-G

		Sample ID	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
		ALS Laboratory Work Order	BF2300077	BF2300087	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190	BF2300214	BF2300227
		Sample Date & Time	2023-06-12 13:10	2023-06-20 09:25	2023-07-04 14:05	2023-07-10 09:15	2023-07-17 10:10	2023-07-23 11:30	2023-08-02 15:40	2023-08-08 16:10	2023-08-17 09:30
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	112	-	133	-	-	-	215	-	-
pH, Lab	pH units	6.0 - 9.5	7.42	7.63	7.63	7.79	7.55	7.66	8.13	7.79	7.34
Total Suspended Solids	mg/L	Grab 30, Average 15	2.2	< 1.0	< 1.5	< 1.0	< 1.4	< 1.0	< 1.0	< 1.3	1.0
Total Dissolved Solids	mg/L	-	71	55	54	76	88	111	133	158	123
Turbidity	NTU	-	21.9	13.3	2.20	2.02	0.12	0.67	0.20	0.20	0.17
Ammonia, Total (as N)	mg/L	-	0.295	-	0.0152	-	-	-	0.0126	-	-
Nitrate (as N)	mg/L	-	0.251	-	0.624	-	-	-	2.75	-	-
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	-	< 5.0	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.17: Water Quality Results for Water Licence Monitoring Location - MS-C-G

		Sample ID	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G	MS-C-G
		ALS Laboratory Work Order	BF2300234	BF2300251	BF2300258	BF2300276	BF2300294	BF2300312	BF2300315
		Sample Date & Time	2023-08-22 14:00	2023-08-31 08:45	2023-09-03 08:40	2023-09-10 11:20	2023-09-17 09:05	2023-09-25 11:35	2023-10-03 11:15
Analyte	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	234	241	-	267	-	231
pH, Lab	pH units	6.0 - 9.5	7.77	7.45	7.65	7.71	7.53	7.61	7.71
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.0	< 1.0	< 1.0	< 1.4	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	141	154	148	136	155	135	138
Turbidity	NTU	-	0.24	0.79	0.29	0.29	0.12	< 0.10	0.98
Ammonia, Total (as N)	mg/L	-	-	0.825	0.903	-	1.24	-	0.392
Nitrate (as N)	mg/L	-	-	7.08	7.82	-	8.26	-	3.95
Oil and Grease, Total	mg/L	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-H

		Sample ID	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300087	BF2300105	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 12:05	2023-06-12 13:45	2023-06-20 08:40	2023-06-26 08:35	2023-07-03 14:15	2023-07-10 09:50	2023-07-17 10:45	2023-07-23 13:25	2023-08-02 03:15
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm	-	80.0	-	-	-	255	-	-	-	281
pH, Lab	pH units	6.0 - 9.5	7.34	7.36	7.88	8.00	7.99	7.84	7.94	7.95	8.38
Total Suspended Solids	mg/L	Grab 30, Average 15	5.3	2.2	< 1.0	< 1.1	4.1	< 1.0	< 1.0	< 1.3	< 1.0
Total Dissolved Solids	mg/L	-	70	48	120	124	117	134	137	136	141
Turbidity	NTU	-	30.7	15.8	7.25	4.17	0.65	0.37	0.29	0.45	0.22
Ammonia, Total (as N)	mg/L	-	0.230	-	-	-	0.0230	-	-	-	0.0088
Nitrate (as N)	mg/L	-	2.24	-	-	-	1.40	-	-	-	0.231
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.18: Water Quality Results for Water Licence Monitoring Location - MS-C-H

		Sample ID	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H	MS-C-H
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300317	BF2300296	BF2300312
		Sample Date & Time	2023-08-08 16:45	2023-08-17 10:00	2023-08-22 14:30	2023-08-31 09:30	2023-09-03 09:10	2023-09-10 12:00	2023-09-17 10:35	2023-09-25 12:15
Analyte	Units	Water Licence Criteria [1]								
Conductivity	umhos/cm	-	-	-	-	-	270	-	-	-
pH, Lab	pH units	6.0 - 9.5	8.13	8.04	8.02	7.92	8.11	7.98	8.12	8.10
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.3	< 1.3	< 1.0	< 1.0	< 1.0	< 1.4	< 1.4	< 1.0
Total Dissolved Solids	mg/L	-	159	152	162	156	161	140	150	150
Turbidity	NTU	-	0.93	0.34	0.17	0.65	0.28	0.23	0.41	2.38
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.0118	-	-	-
Nitrate (as N)	mg/L	-	-	-	-	-	2.06	-	-	-
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

		Sample ID	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 16:20	2023-06-13 08:55	2023-06-21 10:45	2023-06-25 09:15	2023-07-03 10:25	2023-07-10 10:40	2023-07-17 14:50	2023-07-23 12:45	2023-08-01 08:50
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	53.1	-	-	-	90.3	-	-	-	266
pH, Lab	pH units	6.0 - 9.5	7.27	7.61	7.75	7.77	7.96	7.84	7.96	7.93	8.27
Total Suspended Solids	mg/L	Grab 30, Average 15	8.0	1.1	< 1.0	< 1.4	< 1.5	< 1.0	< 1.0	1.7	< 1.4
Total Dissolved Solids	mg/L	-	44	63	62	65	25	61	85	116	143
Turbidity	NTU	-	28.8	5.53	3.50	1.17	2.19	2.24	0.56	1.11	0.17
Ammonia, Total (as N)	mg/L	-	0.0365	-	-	-	0.0058	-	-	-	< 0.0050
Nitrate (as N)	mg/L	-	0.048	-	-	-	< 0.020	-	-	-	< 0.020
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.19: Water Quality Results for Water Licence Monitoring Location - MQ-C-A

		Sample ID	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A	MQ-C-A
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312	BF2300315
		Sample Date & Time	2023-08-07 16:20	2023-08-17 16:00	2023-08-22 08:45	2023-08-31 10:10	2023-09-04 12:28	2023-09-10 16:25	2023-09-17 13:45	2023-09-25 09:45	2023-10-03 09:30
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	-	-	-	-	340	-	-	-	326
pH, Lab	pH units	6.0 - 9.5	7.98	8.07	7.92	7.85	8.06	8.06	8.06	8.10	8.01
Total Suspended Solids	mg/L	Grab 30, Average 15	< 1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.4	< 1.0	< 1.0	< 1.0
Total Dissolved Solids	mg/L	-	124	185	185	173	180	172	185	193	188
Turbidity	NTU	-	2.48	0.30	0.25	0.78	0.24	0.10	< 0.10	0.10	0.42
Ammonia, Total (as N)	mg/L	-	-	-	-	-	< 0.0050	-	-	-	< 0.0050
Nitrate (as N)	mg/L	-	-	-	-	-	< 0.020	-	-	-	< 0.020
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow Trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

			Sample ID	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
			ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	WT2319993	BF2300190
			Sample Date & Time	2023-06-05 15:45	2023-06-12 14:15	2023-06-21 09:45	2023-06-25 08:40	2023-07-03 11:30	2023-07-10 11:50	2023-07-17 14:20	2023-07-23 12:30	2023-08-01 10:30
Analyte	**Units**	**Water Licence Criteria [1]**										
Conductivity	umhos/cm	-		82.2	-	-	-	184	-	-	-	418
pH, Lab	pH units	6.0 - 9.5		8.08	7.42	7.87	7.71	7.71	7.89	7.90	7.95	8.23
Total Suspended Solids[4]	mg/L	Grab 30, Average 15		**785**	**34.0**	**63.4**	**421**	**292**	17.7	3.0	3.0	5.2
Total Dissolved Solids	mg/L	-		193	54	178	188	174	102	152	180	226
Turbidity	NTU	-		1120	66.9	213	373	319	42.7	12.1	8.46	12.6
Ammonia, Total (as N)	mg/L	-		0.0648	-	-	-	0.0933	-	-	-	0.0231
Nitrate (as N)	mg/L	-		0.378	-	-	-	1.11	-	-	-	2.42
Oil and Grease, Total	mg/L	-		< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen		No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic		Not Acutely Toxic	-	-	-	Not Acutely Toxic	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.3.20: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

		Sample ID	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B	MQ-C-B
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300296	BF2300312	BF2300315
		Sample Date & Time	2023-08-07 17:00	2023-08-17 16:45	2023-08-22 09:40	2023-08-31 10:55	2023-09-04 13:25	2023-09-10 16:00	2023-09-17 14:50	2023-09-26 17:50	2023-10-02 15:20
Analyte	Units	Water Licence Criteria [1]									
Conductivity	umhos/cm	-	-	-	-	-	296	-	-	-	322
pH, Lab	pH units	6.0 - 9.5	7.96	8.10	7.95	7.88	8.09	8.04	7.92	8.11	7.96
Total Suspended Solids[4]	mg/L	Grab 30, Average 15	2.7	2.6	< 1.0	< 1.3	1.9	< 1.4	< 1.0	13.1	< 1.0
Total Dissolved Solids	mg/L	-	202	176	170	163	171	155	173	162	183
Turbidity	NTU	-	7.61	3.08	1.49	4.86	5.70	0.95	0.90	34.2	1.58
Ammonia, Total (as N)	mg/L	-	-	-	-	-	0.0073	-	-	-	< 0.0050
Nitrate (as N)	mg/L	-	-	-	-	-	0.045	-	-	-	0.048
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic	-	-	-	Not Acutely Toxic

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for June and July exceeded maximum average TSS concentration discharge limits.

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

		Sample ID	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
		ALS Laboratory Work Order	BF2300064	BF2300077	BF2300089	BF2300101	BF2300127	BF2300140	BF2300157	BF2300170	BF2300190
		Sample Date & Time	2023-06-05 16:35	2023-06-12 14:50	2023-06-21 10:30	2023-06-25 09:35	2023-07-03 10:55	2023-07-10 11:00	2023-07-17 15:00	2023-07-23 13:00	2023-08-01 09:30
Analyte	**Units**	**Water Licence Criteria [1]**									
Conductivity	umhos/cm		204	-	-	-	124	-	-	-	212
pH, Lab	pH units	6.0 - 9.5	7.57	7.47	7.82	7.77	7.69	7.84	7.82	7.84	8.32
Total Suspended Solids [4]	mg/L	Grab 30, Average 15	**49.1**	**36.4**	6.0	3.8	5.9	5.5	2.3	< 1.0	3.1
Total Dissolved Solids	mg/L		111	138	114	100	54	83	95	102	107
Turbidity	NTU		119	79.5	42.9	27.2	19.4	19.7	10.5	7.92	1.98
Ammonia, Total (as N)	mg/L		0.0255	-	-	-	0.0111	-	-	-	0.0117
Nitrate (as N)	mg/L		0.358	-	-	-	0.098	-	-	-	0.028
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.3.21: Water Quality Results for Water Licence Monitoring Location - MQ-C-B

		Sample ID	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D	MQ-C-D
		ALS Laboratory Work Order	BF2300214	BF2300227	BF2300234	BF2300251	BF2300258	BF2300276	BF2300283	BF2300296	BF2300312	BF2300315
		Sample Date & Time	2023-08-07 08:15	2023-08-17 16:15	2023-08-22 09:00	2023-08-31 10:20	2023-09-04 12:45	2023-09-10 16:40	2023-09-13 13:00	2023-09-17 13:55	2023-09-25 10:10	2023-10-03 09:05
Analyte	Units	Water Licence Criteria [1]										
Conductivity	umhos/cm		-	-	-	-	331	-	-	344	-	342
pH, Lab	pH units	6.0 - 9.5	8.03	8.16	7.94	7.77	8.06	8.00	7.89	7.76	7.95	7.84
Total Suspended Solids [4]	mg/L	Grab 30, Average 15	< 1.3	3.9	3.8	5.7	6.1	2.3	3.0	3.6	4.2	2.1
Total Dissolved Solids	mg/L		113	145	139	178	186	172	195	176	178	204
Turbidity	NTU		4.19	4.20	8.76	17.8	14.6	5.84	6.41	4.96	6.56	6.21
Ammonia, Total (as N)	mg/L		-	-	-	-	0.0152	-	-	0.0122	-	0.0216
Nitrate (as N)	mg/L		-	-	-	-	0.602	-	-	0.642	-	0.639
Oil and Grease, Total	mg/L	-	-	-	-	-	< 5.0	-	-	< 5.0	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality [2,3]	N/A	Not Acutely Toxic	-	-	-	-	-	-	-	Not Acutely Toxic	-	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.4.1: Water Quality Results for Water Licence Monitoring Location - BG-24-DS

			Sample ID	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS	BG-24-DS
			ALS Laboratory Sample ID	BF2300112-020	BF2300118-005	BF2300137-005	BF2300162-001	BF2300189-030	WT2326415-007	BF2300302-019
			Sample Date & Time	2023-06-26 11:30	2023-07-02 10:55	2023-07-09 10:10	2023-07-16 16:10	2023-07-31 09:35	2023-08-20 11:15	2023-09-18 14:30
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.75	7.44	7.60	8.01	8.08	8.28	7.94
Total Dissolved Solids	mg/L	-	-	48	25	43	68	105	143	215
Total Suspended Solids	mg/L	30	See note[1]	3.8	2.3	1.4	< 1.0	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	2.56	2.67	1.67	0.93	0.71	0.56	0.46

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.2: Water Quality Results for Water Licence Monitoring Location - BG-24-US

			Sample ID	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US	BG-24-US
			ALS Laboratory Sample ID	BF2300112-021	BF2300118-007	BF2300137-007	BF2300162-002	BF2300189-031	WT2326415-008	BF2300302-020
			Sample Date & Time	2023-06-26 11:50	2023-07-02 11:05	2023-07-09 10:20	2023-07-16 16:45	2023-07-31 09:40	2023-08-20 11:30	2023-09-18 14:35
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.55	7.24	7.59	7.95	8.09	8.33	7.91
Total Dissolved Solids	mg/L	-	-	32	22	36	67	98	132	230
Total Suspended Solids	mg/L	30	See note[1]	4.1	< 1.4	1.6	1.2	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	0.78	1.32	1.17	1.14	0.57	0.50	< 0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.3: Water Quality Results for Water Licence Monitoring Location - BG-30-DS

			Sample ID	BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS	BG-30-DS
			ALS Laboratory Sample ID	BF2300112-022	BF2300118-008	BF2300137-008	BF2300162-003	BF2300189-027	WT2326415-009
			Sample Date & Time	2023-06-26 12:35	2023-07-02 11:30	2023-07-09 10:40	2023-07-16 17:45	2023-07-31 08:55	2023-08-20 11:50
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.48	7.53	7.82	8.02	8.13	8.38
Total Dissolved Solids	mg/L	-	-	44	45	59	88	112	166
Total Suspended Solids	mg/L	30	See note[1]	4.9	14.7	2.7	1.2	< 1.4	< 1.0
Turbidity	NTU	-	-	5.02	10.4	1.87	1.39	1.45	1.50

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.4: Water Quality Results for Water Licence Monitoring Location - BG-30-US

			Sample ID	BG-30-US	BG-30-US	BG-30-US	BG-30-US	BG-30-US	BG-30-US
			ALS Laboratory Sample ID	BF2300112-023	BF2300118-010	BF2300137-009	BF2300162-004	BF2300189-029	WT2326415-010
			Sample Date & Time	2023-06-26 12:45	2023-07-02 11:35	2023-07-09 10:50	2023-07-16 17:50	2023-07-31 09:15	2023-08-20 11:55
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.48	7.54	7.78	7.99	8.02	8.38
Total Dissolved Solids	mg/L	-	-	32	39	37	82	114	160
Total Suspended Solids	mg/L	30	See note[1]	6.2	5.0	1.7	1.9	< 1.3	< 1.0
Turbidity	NTU	-	-	5.98	6.76	2.10	1.46	1.81	0.83

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.5: Water Quality Results for Water Licence Monitoring Location - BG-32-DS

			Sample ID	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS	BG-32-DS
			ALS Laboratory Sample ID	BF2300075-010	BF2300096-004	BF2300112-024	BF2300118-014	BF2300137-012	BF2300162-005	BF2300189-022	WT2326415-013
			Sample Date & Time	2023-06-12 13:35	2023-06-19 11:20	2023-06-26 13:05	2023-07-02 12:30	2023-07-09 11:35	2023-07-16 10:10	2023-07-30 14:55	2023-08-20 13:20
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.86	7.23	7.60	7.64	7.70	7.89	7.99	8.33
Total Dissolved Solids	mg/L	-	-	69	65	62	51	62	138	158	155
Total Suspended Solids	mg/L	30	See note[1]	**140**	2.0	2.3	13.3	3.2	< 1.0	< 1.3	1.4
Turbidity	NTU	-	-	128	4.40	2.44	5.77	2.76	1.20	1.07	0.55

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.6: Water Quality Results for Water Licence Monitoring Location - BG-32-US

			Sample ID	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US	BG-32-US
			ALS Laboratory Sample ID	BF2300075-011	BF2300096-005	BF2300112-025	BF2300118-015	BF2300137-014	BF2300162-006	BF2300189-024	WT2326415-014
			Sample Date & Time	2023-06-12 13:50	2023-06-19 11:30	2023-06-26 13:10	2023-07-02 12:40	2023-07-09 11:45	2023-07-16 10:20	2023-07-30 15:00	2023-08-20 13:25
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.56	7.23	7.61	7.66	7.61	7.91	7.99	8.25
Total Dissolved Solids	mg/L	-	-	50	62	65	46	62	145	171	162
Total Suspended Solids	mg/L	30	See note[1]	19.5	1.6	< 1.4	12.6	< 1.0	< 1.0	< 1.3	< 1.0
Turbidity	NTU	-	-	35.3	3.37	2.36	8.90	1.34	1.08	1.22	0.58

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.7: Water Quality Results for Water Licence Monitoring Location - BG-50-DS

			Sample ID	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS	BG-50-DS
			ALS Laboratory Sample ID	BF2300112-007	BF2300118-018	BF2300137-018	BF2300162-007	BF2300189-018	WT2326415-017
			Sample Date & Time	2023-06-25 13:30	2023-07-02 13:55	2023-07-09 12:50	2023-07-16 11:55	2023-07-30 13:40	2023-08-20 16:15
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.09.5	7.69	7.70	7.70	7.83	8.11	8.17
Total Dissolved Solids	mg/L	-	-	44	53	48	48	60	64
Total Suspended Solids	mg/L	30	See note[1]	3.1	< 1.4	1.2	< 1.0	< 1.3	1.8
Turbidity	NTU	-	-	1.52	1.11	1.00	0.72	1.12	1.17

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.8: Water Quality Results for Water Licence Monitoring Location - BG-50-US

			Sample ID	BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US	BG-50-US
			ALS Laboratory Sample ID	BF2300112-008	BF2300118-019	BF2300137-019	BF2300162-008	BF2300189-019	WT2326415-018
			Sample Date & Time	2023-06-25 13:55	2023-07-02 14:00	2023-07-09 13:00	2023-07-16 12:15	2023-07-30 13:50	2023-08-20 16:30
Analyte	**Units**	**Water Licence Criteria**	**Screening Criteria**						
pH, Lab	pH units	9.5	6.09.5	7.76	7.69	7.72	7.78	8.00	8.17
Total Dissolved Solids	mg/L	-	-	46	56	40	53	51	76
Total Suspended Solids	mg/L	30	See note[1]	3.2	< 1.4	< 1.0	< 1.0	< 1.3	1.2
Turbidity	NTU	-	-	1.22	0.60	0.77	1.01	0.33	0.57

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.9: Water Quality Results for Water Licence Monitoring Location - CV-001-DS

			Sample ID	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS	CV-001-DS
			ALS Laboratory Sample ID	BF2300112-018	BF2300118-003	BF2300137-003	BF2300162-009	BF2300189-032	WT2326415-004	BF2300302-021
			Sample Date & Time	2023-06-26 10:50	2023-07-02 10:25	2023-07-09 09:45	2023-07-16 15:30	2023-07-31 10:10	2023-08-20 10:45	2023-09-19 09:15
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.38	7.46	7.48	7.54	7.32	8.12	7.65
Total Dissolved Solids	mg/L	-	-	46	43	43	88	140	106	121
Total Suspended Solids	mg/L	30	See note[1]	1.8	1.4	< 1.0	1.3	< 1.4	2.0	< 1.4
Turbidity	NTU	-	-	3.59	1.46	1.75	2.53	23.7	3.06	2.51

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.10: Water Quality Results for Water Licence Monitoring Location - CV-001-US

			Sample ID	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US	CV-001-US
			ALS Laboratory Sample ID	BF2300112-019	BF2300118-004	BF2300137-004	BF2300162-010	BF2300189-034	WT2326415-005	BF2300302-023
			Sample Date & Time	2023-06-26 10:55	2023-07-02 10:30	2023-07-09 09:50	2023-07-16 15:40	2023-07-31 10:20	2023-08-20 10:55	2023-09-19 09:30
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.40	7.54	7.53	7.69	7.09	8.19	7.55
Total Dissolved Solids	mg/L	-	-	40	36	59	75	117	100	132
Total Suspended Solids	mg/L	30	See note[1]	< 1.3	2.7	3.9	< 1.0	4.5	1.3	< 1.3
Turbidity	NTU	-	-	3.03	2.09	1.86	0.99	16.2	2.65	3.78

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.11: Water Quality Results for Water Licence Monitoring Location - CV-040-DS

			Sample ID	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS	CV-040-DS
			ALS Laboratory Sample ID	BF2300075-008	BF2300096-006	BF2300112-010	BF2300118-016	BF2300137-016	BF2300162-011	BF2300189-020	WT2326415-015	BF2300302-014
			Sample Date & Time	2023-06-12 11:30	2023-06-19 12:45	2023-06-25 15:15	2023-07-02 13:10	2023-07-09 12:15	2023-07-16 10:50	2023-07-30 14:25	2023-08-20 14:00	2023-09-18 13:10
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	8.22	7.98	7.49	7.56	7.38	8.05	8.32	8.45	8.09
Total Dissolved Solids	mg/L	-	-	148	100	30	24	23	100	148	193	255
Total Suspended Solids	mg/L	30	See note[1]	**1800**	**114**	76.1	3.2	5.4	< 1.0	< 1.3	1.9	< 1.0
Turbidity	NTU	-	-	572	98.2	20.0	2.06	1.93	0.43	1.61	1.07	0.61

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.12: Water Quality Results for Water Licence Monitoring Location - CV-040-US

			Sample ID	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US	CV-040-US
			ALS Laboratory Sample ID	BF2300075-009	BF2300096-007	BF2300112-011	BF2300118-017	BF2300137-017	BF2300162-012	BF2300189-021	WT2326415-016	BF2300302-015
			Sample Date & Time	2023-06-12 11:45	2023-06-19 13:00	2023-06-25 15:30	2023-07-02 13:20	2023-07-09 12:15	2023-07-16 11:10	2023-07-30 14:35	2023-08-20 14:25	2023-09-18 13:15
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	8.21	7.84	7.46	7.44	7.45	8.10	8.33	8.50	8.11
Total Dissolved Solids	mg/L	-	-	141	76	24	28	36	98	168	206	260
Total Suspended Solids	mg/L	30	See note[1]	812	41.7	72.4	2.2	2.1	< 1.0	< 1.3	< 1.0	< 1.1
Turbidity	NTU	-	-	617	24.2	15.6	1.42	1.38	0.44	0.35	0.22	0.30

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.13: Water Quality Results for Water Licence Monitoring Location - CV-060-DS

			Sample ID	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS	CV-060-DS
			ALS Laboratory Sample ID	BF2300096-008	BF2300112-026	BF2300118-020	BF2300137-020	BF2300162-013	BF2300189-016	WT2326415-043	BF2300302-012
			Sample Date & Time	2023-06-19 14:40	2023-06-26 14:25	2023-07-02 14:30	2023-07-09 13:25	2023-07-16 13:20	2023-07-30 12:35	2023-08-21 14:40	2023-09-18 12:05
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.68	7.82	7.88	7.74	8.11	8.09	8.20	7.89
Total Dissolved Solids	mg/L	-	-	72	74	76	74	114	142	110	190
Total Suspended Solids	mg/L	30	See note[1]	8.2	< 1.4	< 1.3	< 1.0	< 1.0	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	7.48	2.48	0.38	0.33	0.38	1.23	0.52	1.24

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.14: Water Quality Results for Water Licence Monitoring Location - CV-060-US

			Sample ID	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US	CV-060-US
			ALS Laboratory Sample ID	BF2300096-009	BF2300112-027	BF2300118-021	BF2300137-021	BF2300162-014	BF2300189-017	WT2326415-045	BF2300302-013
			Sample Date & Time	2023-06-19 14:50	2023-06-26 14:30	2023-07-02 14:35	2023-07-09 13:35	2023-07-16 13:30	2023-07-30 12:40	2023-08-21 14:50	2023-09-18 12:10
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.66	7.82	7.85	7.98	8.12	8.11	8.27	7.83
Total Dissolved Solids	mg/L	-	-	68	76	93	68	121	142	104	195
Total Suspended Solids	mg/L	30	See note[1]	2.3	< 1.3	< 1.4	< 1.0	< 1.0	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	3.81	2.89	0.26	1.19	1.11	0.35	0.23	0.81

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.15: Water Quality Results for Water Licence Monitoring Location - CV-072-C-DS

			Sample ID	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS	CV-072-C-DS
			ALS Laboratory Sample ID	BF2300096-010	BF2300112-028	BF2300118-022	BF2300137-022	BF2300162-015	BF2300189-014	WT2326415-040
			Sample Date & Time	2023-06-19 15:30	2023-06-26 14:45	2023-07-02 14:55	2023-07-09 14:05	2023-07-16 14:10	2023-07-30 11:40	2023-08-21 14:10
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.97	7.81	7.88	7.94	7.86	8.14	8.33
Total Dissolved Solids	mg/L	-	-	65	57	62	41	69	78	107
Total Suspended Solids	mg/L	30	See note[1]	2.7	1.4	1.4	1.0	< 1.0	< 1.3	< 1.0
Turbidity	NTU	-	-	2.88	1.45	1.87	0.97	0.40	0.58	0.27

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.16: Water Quality Results for Water Licence Monitoring Location - CV-072-C-US

			Sample ID	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US	CV-072-C-US
			ALS Laboratory Sample ID	BF2300096-011	BF2300112-029	BF2300118-023	BF2300137-023	BF2300162-016	BF2300189-015	WT2326415-041
			Sample Date & Time	2023-06-19 15:45	2023-06-26 14:55	2023-07-02 15:05	2023-07-09 14:10	2023-07-16 14:20	2023-07-30 11:50	2023-08-21 14:20
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.90	7.74	7.78	7.83	7.94	8.06	8.33
Total Dissolved Solids	mg/L	-	-	68	51	28	48	76	85	88
Total Suspended Solids	mg/L	30	See note[1]	1.3	1.8	< 1.4	< 1.0	< 1.0	< 1.4	< 1.0
Turbidity	NTU	-	-	2.36	1.13	0.99	1.82	0.36	0.16	0.26

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.17: Water Quality Results for Water Licence Monitoring Location - CV-078-DS

Sample ID				CV-078-DS[2]	QP-CC6[2]	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS	CV-078-DS
ALS Laboratory Sample ID				BF2300096-028	BF2300096-030	BF2300112-001	BF2300118-024	BF2300137-024	BF2300162-017	BF2300189-012	WT2326415-037	BF2300302-010
Sample Date & Time				2023-06-20 11:55	2023-06-20 11:55	2023-06-25 00:00	2023-07-02 15:15	2023-07-09 14:25	2023-07-16 14:50	2023-07-30 11:10	2023-08-21 13:25	2023-09-18 11:20
Analyte	**Units**	**Water Licence Criteria**	**Screening Criteria**									
pH, Lab	pH units	9.5	6.0-9.5	7.89	7.91	7.59	7.73	7.84	8.09	8.22	8.46	8.17
Total Dissolved Solids	mg/L	-	-	54	55	27	52	45	91	122	132	186
Total Suspended Solids	mg/L	30	See note[1]	74.5	63.9	7.6	2.7	1.1	< 1.0	< 1.4	< 1.0	< 1.2
Turbidity	NTU	-	-	19.8	14.5	1.68	0.90	1.40	0.29	0.45	0.27	0.26

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

[2] High flow velocity in the stream causing suspension of sand from the stream bed occurred during collection of the June 20 CV-078-DS sample, resulting in an unrepresentative TSS result. This is supported by field duplicate sample QP-CC6 results which do not indicate a potential Project related change.

Table 7.4.18: Water Quality Results for Water Licence Monitoring Location - CV-078-US

			Sample ID	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US	CV-078-US
			ALS Laboratory Sample ID	BF2300096-029	BF2300112-006	BF2300118-025	BF2300137-025	BF2300162-018	BF2300189-013	WT2326415-038	BF2300302-011
			Sample Date & Time	2023-06-20 12:05	2023-06-25 12:30	2023-07-02 15:30	2023-07-09 14:35	2023-07-16 15:10	2023-07-30 11:20	2023-08-21 13:45	2023-09-18 11:30
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.72	7.39	7.71	7.81	8.05	8.25	8.38	8.24
Total Dissolved Solids	mg/L	-	-	45	28	48	38	86	108	136	190
Total Suspended Solids	mg/L	30	See note[1]	17.4	2.5	1.4	1.7	< 1.2	< 1.3	< 1.0	< 1.4
Turbidity	NTU	-	-	8.47	0.61	1.39	1.42	1.29	< 0.10	< 0.10	0.14

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.19: Water Quality Results for Water Licence Monitoring Location - CV-093-DS

			Sample ID	CV-093-DS	CV-093-DS	CV-093-DS
			ALS Laboratory Sample ID	BF2300118-026	BF2300137-026	WT2326415-035
			Sample Date & Time	2023-07-02 16:00	2023-07-09 14:55	2023-08-21 12:35
Analyte	**Units**	**Water Licence Criteria**	**Screening Criteria**			
pH, Lab	pH units	9.5	6.0-9.5	8.05	8.04	8.33
Total Dissolved Solids	mg/L	-	-	95	90	126
Total Suspended Solids	mg/L	30	See note[1]	1.4	3.5	9.4
Turbidity	NTU	-	-	1.48	1.96	1.40

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.20: Water Quality Results for Water Licence Monitoring Location - CV-093-US

			Sample ID	CV-093-US	CV-093-US	CV-093-US
			ALS Laboratory Sample ID	BF2300118-027	BF2300137-027	WT2326415-036
			Sample Date & Time	2023-07-02 16:05	2023-07-09 15:05	2023-08-21 12:50
Analyte	**Units**	**Water Licence Criteria**	**Screening Criteria**			
pH, Lab	pH units	9.5	6.0-9.5	8.03	8.01	8.38
Total Dissolved Solids	mg/L	-	-	92	84	121
Total Suspended Solids	mg/L	30	See note[1]	< 1.4	1.5	1.7
Turbidity	NTU	-	-	0.47	0.46	0.80

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.21: Water Quality Results for Water Licence Monitoring Location - CV-099-DS

			Sample ID	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS	CV-099-DS
			ALS Laboratory Sample ID	BF2300075-006	BF2300096-012	BF2300112-004	BF2300118-028	BF2300137-028	BF2300162-019	BF2300189-010	WT2326415-033	BF2300302-007
			Sample Date & Time	2023-06-11 12:45	2023-06-19 16:35	2023-06-25 10:15	2023-07-02 16:25	2023-07-09 15:20	2023-07-16 16:20	2023-07-30 10:20	2023-08-21 11:50	2023-09-18 10:40
Analyte	Units	Water Licence Criteria	Screening Criteria									
pH, Lab	pH units	9.5	6.0-9.5	8.07	7.88	7.76	7.87	7.87	8.05	8.20	8.34	8.24
Total Dissolved Solids	mg/L	-	-	108	62	40	60	33	71	100	106	214
Total Suspended Solids	mg/L	30	See note[1]	19.1	26.0	3.7	20.4	4.5	1.3	< 1.4	< 1.0	< 1.0
Turbidity	NTU	-	-	56.9	11.6	0.76	9.63	3.50	1.31	0.16	0.35	0.12

Notes:
Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.22: Water Quality Results for Water Licence Monitoring Location - CV-099-US

			Sample ID	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US	CV-099-US
			ALS Laboratory Sample ID	BF2300075-007	BF2300096-013	BF2300112-005	BF2300118-029	BF2300137-029	BF2300162-020	BF2300189-011	WT2326415-034	BF2300302-009
			Sample Date & Time	2023-06-11 13:10	2023-06-19 16:45	2023-06-25 10:40	2023-07-02 16:45	2023-07-09 15:25	2023-07-16 16:40	2023-07-30 10:30	2023-08-21 12:10	2023-09-18 10:45
Analyte	**Units**	**Water Licence Criteria**	**Screening Criteria**									
pH, Lab	pH units	9.5	6.0-9.5	7.92	7.72	7.73	7.70	7.70	8.02	8.17	8.35	8.24
Total Dissolved Solids	mg/L	-	-	78	64	36	54	28	72	98	109	212
Total Suspended Solids	mg/L	30	See note[1]	5.0	5.4	2.8	19.8	7.3	< 1.0	< 1.4	< 1.0	< 1.0
Turbidity	NTU	-	-	11.3	3.00	0.76	5.10	3.55	0.90	0.15	0.35	0.93

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.23: Water Quality Results for Water Licence Monitoring Location - CV-106-DS

			Sample ID	CV-106-DS	CV-106-DS	CV-106-DS	CV-106-DS	CV-106-DS	CV-106-DS
			ALS Laboratory Sample ID	BF2300096-026	BF2300112-030	BF2300118-030	BF2300137-030	BF2300162-021	WT2326415-031
			Sample Date & Time	2023-06-20 11:05	2023-06-26 15:30	2023-07-02 17:05	2023-07-09 15:45	2023-07-16 12:45	2023-08-21 11:25
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.93	7.90	8.05	7.95	8.04	8.09
Total Dissolved Solids	mg/L	-	-	64	84	98	68	102	230
Total Suspended Solids	mg/L	30	See note[1]	19.7	2.7	14.7	5.6	6.7	< 1.0
Turbidity	NTU	-	-	19.6	4.39	13.4	3.56	8.83	0.52

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.24: Water Quality Results for Water Licence Monitoring Location - CV-106-US

			Sample ID	CV-106-US	CV-106-US	CV-106-US	CV-106-US	CV-106-US	CV-106-US
			ALS Laboratory Sample ID	BF2300096-027	BF2300112-031	BF2300118-031	BF2300137-031	BF2300162-022	WT2326415-032
			Sample Date & Time	2023-06-20 11:10	2023-06-26 15:35	2023-07-02 17:10	2023-07-09 15:50	2023-07-16 12:55	2023-08-21 11:30
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.67	7.83	8.06	7.57	7.84	8.29
Total Dissolved Solids	mg/L	-	-	49	78	98	60	71	110
Total Suspended Solids	mg/L	30	See note[1]	1.6	< 1.4	< 1.3	< 1.0	1.9	< 1.0
Turbidity	NTU	-	-	2.36	1.15	0.37	0.92	1.24	0.30

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.25: Water Quality Results for Water Licence Monitoring Location - CV-112-DS

			Sample ID	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS	CV-112-DS
			ALS Laboratory Sample ID	BF2300096-024	BF2300112-033	BF2300118-035	BF2300137-043	BF2300162-023	BF2300189-008	WT2326415-029
			Sample Date & Time	2023-06-20 10:40	2023-06-26 15:45	2023-07-03 09:40	2023-07-10 10:15	2023-07-16 12:25	2023-07-30 09:30	2023-08-21 10:50
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.67	7.74	7.85	7.98	8.14	8.21	8.50
Total Dissolved Solids	mg/L	-	-	50	41	85	82	102	126	153
Total Suspended Solids	mg/L	30	See note[1]	18.1	1.6	< 1.3	< 1.0	< 1.0	< 1.4	1.2
Turbidity	NTU	-	-	11.4	1.25	0.99	0.94	0.85	0.58	0.58

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.26: Water Quality Results for Water Licence Monitoring Location - CV-112-US

			Sample ID	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US	CV-112-US
			ALS Laboratory Sample ID	BF2300096-025	BF2300112-034	BF2300118-036	BF2300137-045	BF2300162-024	BF2300189-009	WT2326415-030
			Sample Date & Time	2023-06-20 10:45	2023-06-26 15:50	2023-07-03 09:40	2023-07-10 10:20	2023-07-16 12:35	2023-07-30 09:40	2023-08-21 10:55
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.54	7.68	7.78	7.79	8.16	8.27	8.46
Total Dissolved Solids	mg/L	-	-	44	28	82	89	90	132	163
Total Suspended Solids	mg/L	30	See note[1]	4.0	< 1.3	< 1.4	< 1.0	< 1.0	< 1.4	< 1.0
Turbidity	NTU	-	-	2.16	1.03	0.96	0.51	0.50	0.48	0.10

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.27: Water Quality Results for Water Licence Monitoring Location - CV-115-DS

			Sample ID	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS	CV-115-DS
			ALS Laboratory Sample ID	BF2300075-003	BF2300096-022	BF2300112-035	BF2300118-041	BF2300137-040	WT2326415-027
			Sample Date & Time	2023-06-11 11:05	2023-06-20 10:15	2023-06-26 16:05	2023-07-03 11:20	2023-07-10 09:45	2023-08-21 10:30
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.85	7.88	8.02	8.19	8.23	8.54
Total Dissolved Solids	mg/L	-	-	60	62	85	120	164	186
Total Suspended Solids	mg/L	30	See note[1]	16.0	10.3	< 1.4	< 1.2	3.8	< 1.0
Turbidity	NTU	-	-	17.9	9.73	2.88	1.94	1.44	2.27

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.28: Water Quality Results for Water Licence Monitoring Location - CV-115-US

			Sample ID	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US	CV-115-US
			ALS Laboratory Sample ID	BF2300075-005	BF2300096-023	BF2300112-036	BF2300118-042	BF2300137-041	WT2326415-028
			Sample Date & Time	2023-06-11 11:25	2023-06-20 10:25	2023-06-26 16:10	2023-07-03 11:35	2023-07-10 09:55	2023-08-21 10:35
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.72	7.73	7.89	8.00	7.91	8.36
Total Dissolved Solids	mg/L	-	-	51	60	84	110	150	187
Total Suspended Solids	mg/L	30	See note[1]	3.1	< 1.0	< 1.4	< 1.4	< 1.0	< 1.0
Turbidity	NTU	-	-	8.92	0.50	0.33	0.63	1.47	0.23

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.29: Water Quality Results for Water Licence Monitoring Location - CV-128-DS

			Sample ID	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS	CV-128-DS
			ALS Laboratory Sample ID	BF2300096-020	BF2300112-002	BF2300118-039	BF2300137-038	BF2300162-025	BF2300189-006	WT2326415-025	BF2300302-005
			Sample Date & Time	2023-06-20 09:45	2023-06-25 08:00	2023-07-03 10:40	2023-07-10 09:15	2023-07-16 11:05	2023-07-30 08:45	2023-08-21 09:25	2023-09-18 09:25
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.58	7.93	7.74	7.80	7.91	7.92	8.16	8.00
Total Dissolved Solids	mg/L	-	-	51	59	77	50	38	44	45	95
Total Suspended Solids	mg/L	30	See note[1]	7.0	7.8	< 1.3	3.6	3.8	< 1.3	1.2	< 1.2
Turbidity	NTU	-	-	4.08	1.14	1.37	2.81	3.41	0.68	0.55	0.11

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.30: Water Quality Results for Water Licence Monitoring Location - CV-128-US

			Sample ID	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US	CV-128-US
			ALS Laboratory Sample ID	BF2300096-021	BF2300112-003	BF2300118-040	BF2300137-039	BF2300162-026	BF2300189-007	WT2326415-026	BF2300302-006
			Sample Date & Time	2023-06-20 09:50	2023-06-25 08:35	2023-07-03 10:50	2023-07-10 09:20	2023-07-16 11:25	2023-07-30 08:55	2023-08-21 09:40	2023-09-18 09:30
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.49	7.91	7.74	7.70	7.76	7.87	8.15	7.99
Total Dissolved Solids	mg/L	-	-	54	65	84	53	43	50	63	95
Total Suspended Solids	mg/L	30	See note[1]	1.8	3.2	< 1.3	2.7	2.3	< 1.3	1.2	< 1.0
Turbidity	NTU	-	-	3.24	0.88	2.14	2.59	3.47	1.43	0.50	0.34

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.31: Water Quality Results for Water Licence Monitoring Location - CV-129-DS

			Sample ID	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS	CV-129-DS
			ALS Laboratory Sample ID	BF2300096-018	BF2300112-037	BF2300118-037	BF2300137-036	BF2300162-027	BF2300189-003	WT2326415-023	BF2300302-003
			Sample Date & Time	2023-06-20 08:55	2023-06-26 16:35	2023-07-03 10:15	2023-07-10 08:55	2023-07-16 10:35	2023-07-30 08:15	2023-08-21 09:10	2023-09-18 09:00
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.60	7.81	7.80	7.94	8.00	8.00	8.43	8.13
Total Dissolved Solids	mg/L	-	-	56	41	83	74	75	102	94	144
Total Suspended Solids	mg/L	30	See note[1]	5.3	< 1.4	< 1.3	< 1.0	< 1.0	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	4.73	0.86	0.26	0.26	0.30	0.20	0.34	0.31

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.32: Water Quality Results for Water Licence Monitoring Location - CV-129-US

			Sample ID	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US	CV-129-US
			ALS Laboratory Sample ID	BF2300096-019	BF2300112-038	BF2300118-038	BF2300137-037	BF2300162-028	BF2300189-004	WT2326415-024	BF2300302-004
			Sample Date & Time	2023-06-20 09:05	2023-06-26 16:40	2023-07-03 10:20	2023-07-10 09:00	2023-07-16 10:45	2023-07-30 08:25	2023-08-21 09:15	2023-09-18 09:05
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.54	7.63	7.81	7.91	8.06	8.04	8.35	8.10
Total Dissolved Solids	mg/L	-	-	56	48	80	70	76	97	99	146
Total Suspended Solids	mg/L	30	See note[1]	< 1.0	< 1.4	< 1.3	< 1.0	< 1.0	< 1.3	< 1.0	< 1.0
Turbidity	NTU	-	-	1.06	0.36	0.16	0.30	0.21	0.12	0.22	0.37

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.33: Water Quality Results for Water Licence Monitoring Location - CV-154-A-DS

			Sample ID	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS	CV-154-A-DS
			ALS Laboratory Sample ID	BF2300096-016	BF2300112-039	BF2300118-043	BF2300137-034	BF2300162-029	WT2326415-021	BF2300302-001
			Sample Date & Time	2023-06-20 08:20	2023-06-26 16:55	2023-07-03 11:55	2023-07-10 08:35	2023-07-16 10:05	2023-08-21 08:30	2023-09-18 08:30
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.73	7.86	8.02	8.04	8.01	8.46	8.10
Total Dissolved Solids	mg/L	-	-	52	88	48	109	138	178	217
Total Suspended Solids	mg/L	30	See note[1]	10.7	18.9	1.4	2.4	1.0	11.8	< 1.0
Turbidity	NTU	-	-	9.81	17.0	1.54	1.61	2.53	8.84	0.44

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.34: Water Quality Results for Water Licence Monitoring Location - CV-154-A-US

			Sample ID	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US	CV-154-A-US
			ALS Laboratory Sample ID	BF2300096-017	BF2300112-040	BF2300118-044	BF2300137-035	BF2300162-030	WT2326415-022	BF2300302-002
			Sample Date & Time	2023-06-20 08:30	2023-06-26 17:05	2023-07-03 12:00	2023-07-10 08:40	2023-07-16 10:15	2023-08-21 08:35	2023-09-18 08:35
Analyte	Units	Water Licence Criteria	Screening Criteria							
pH, Lab	pH units	9.5	6.0-9.5	7.72	7.86	8.01	8.06	8.16	8.50	7.88
Total Dissolved Solids	mg/L	-	-	63	84	64	96	128	164	226
Total Suspended Solids	mg/L	30	See note[1]	5.0	19.7	< 1.3	< 1.0	2.5	5.7	< 1.0
Turbidity	NTU	-	-	5.49	22.1	1.41	1.72	5.44	11.6	0.23

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.35: Water Quality Results for Water Licence Monitoring Location - CV-167-DS

			Sample ID	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS	CV-167-DS
			ALS Laboratory Sample ID	BF2300075-001	BF2300096-014	BF2300112-041	BF2300118-033	BF2300137-032	BF2300162-031	BF2300189-001	WT2326415-019
			Sample Date & Time	2023-06-11 09:10	2023-06-20 07:45	2023-06-26 17:15	2023-07-03 09:05	2023-07-10 08:10	2023-07-16 09:10	2023-07-30 07:25	2023-08-21 08:05
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.78	7.68	7.86	7.95	7.95	8.05	7.98	8.33
Total Dissolved Solids	mg/L	-	-	86	55	45	100	93	104	136	188
Total Suspended Solids	mg/L	30	See note[1]	27.9	8.3	< 1.3	< 1.3	< 1.0	1.4	< 1.4	7.3
Turbidity	NTU	-	-	53.4	7.73	2.06	2.36	1.85	2.40	1.74	23.8

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.36: Water Quality Results for Water Licence Monitoring Location - CV-167-US

			Sample ID	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US	CV-167-US
			ALS Laboratory Sample ID	BF2300075-002	BF2300096-015	BF2300112-042	BF2300118-034	BF2300137-033	BF2300162-032	BF2300189-002	WT2326415-020
			Sample Date & Time	2023-06-11 09:25	2023-06-20 08:00	2023-06-26 17:25	2023-07-03 09:15	2023-07-10 08:15	2023-07-16 09:25	2023-07-30 07:35	2023-08-21 08:15
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.09.5	7.69	7.67	7.84	7.99	8.01	8.12	8.19	8.41
Total Dissolved Solids	mg/L	-	-	78	55	48	90	80	102	127	176
Total Suspended Solids	mg/L	30	See note[1]	7.8	3	< 1.4	< 1.4	< 1.3	1.3	< 1.3	3.4
Turbidity	NTU	-	-	51.4	5.2	1.65	1.67	1.38	1.92	1.74	9.39

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.37: Water Quality Results for Water Licence Monitoring Location - CV-217-DS

			Sample ID	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS	CV-217-DS
		ALS Laboratory Sample ID		BF2300096-001	BF2300112-012	BF2300118-011	BF2300137-010	BF2300162-033	BF2300189-025	WT2326415-011	BF2300302-017
		Sample Date & Time		2023-06-19 10:50	2023-06-25 16:55	2023-07-02 11:55	2023-07-09 11:15	2023-07-16 18:05	2023-07-30 15:20	2023-08-20 12:15	2023-09-18 13:50
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.38	7.38	7.31	7.53	7.68	7.88	7.76	7.73
Total Dissolved Solids	mg/L	-	-	71	34	26	42	33	39	42	90
Total Suspended Solids	mg/L	30	See note[1]	15.8	14.1	< 1.3	2.6	< 1.0	1.8	< 1.0	< 1.0
Turbidity	NTU	-	-	47.1	1.97	2.09	2.89	2.98	1.77	1.10	0.85

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.38: Water Quality Results for Water Licence Monitoring Location - CV-217-US

			Sample ID	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US	CV-217-US
			ALS Laboratory Sample ID	BF2300096-003	BF2300112-013	BF2300118-012	BF2300137-011	BF2300162-034	BF2300189-026	WT2326415-012	BF2300302-018
			Sample Date & Time	2023-06-19 11:00	2023-06-25 17:10	2023-07-02 12:10	2023-07-09 11:25	2023-07-16 18:30	2023-07-30 15:30	2023-08-20 12:30	2023-09-18 14:00
Analyte	Units	Water Licence Criteria	Screening Criteria								
pH, Lab	pH units	9.5	6.0-9.5	7.28	7.18	7.27	7.52	7.56	7.7	7.74	7.73
Total Dissolved Solids	mg/L	-	-	62	20	26	36	44	36	47	58
Total Suspended Solids	mg/L	30	See note[1]	4.7	10.8	9.9	1.3	4.1	< 1.3	24.2	1.0
Turbidity	NTU	-	-	11.7	3	4.26	2.23	3.47	1.85	7.86	0.67

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.39: Water Quality Results for Water Licence Monitoring Location - CV-223-DS

			Sample ID	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS	CV-223-DS
			ALS Laboratory Sample ID	BF2300112-014	BF2300118-001	BF2300137-001	BF2300162-035	BF2300189-035	WT2326415-001
			Sample Date & Time	2023-06-26 09:45	2023-07-02 09:55	2023-07-09 09:15	2023-07-16 14:50	2023-07-31 10:55	2023-08-20 10:25
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.21	7.04	7.58	7.5	7.63	8.07
Total Dissolved Solids	mg/L	-	-	29	< 19	39	34	42	72
Total Suspended Solids	mg/L	30	See note[1]	3.5	1.4	3	1.9	< 1.3	1.4
Turbidity	NTU	-	-	5.31	1.58	2.88	2.75	0.88	1.59

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.4.40: Water Quality Results for Water Licence Monitoring Location - CV-223-US

			Sample ID	CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US	CV-223-US
			ALS Laboratory Sample ID	BF2300112-016	BF2300118-002	BF2300137-002	BF2300162-036	BF2300189-036	WT2326415-002
			Sample Date & Time	2023-06-26 09:55	2023-07-02 10:05	2023-07-09 09:20	2023-07-16 15:10	2023-07-31 11:10	2023-08-20 10:35
Analyte	Units	Water Licence Criteria	Screening Criteria						
pH, Lab	pH units	9.5	6.0-9.5	7.16	7.09	7.26	7.38	7.66	8.12
Total Dissolved Solids	mg/L	-	-	27	22	< 20	24	60	66
Total Suspended Solids	mg/L	30	See note[1]	< 1.3	< 1.4	2.7	3.3	< 1.3	< 1.0
Turbidity	NTU	-	-	1.41	1.72	1.88	2.3	1.13	1.3

Notes:

Bold highlight indicate results that were greater than the applicable water quality screening criteria.

[1] When upstream TSS concentrations are less than 250 mg/L, a potential Project related change is defined as a greater than 50 mg/L increase in the downstream concentration. Where concentrations are greater than 250 mg/L in the upstream sample, a potential Project related change is defined as a greater than 20% increase in the downstream sample.

Reference: Roads Management Plan (BAF-PH1-830-P16-0023).

Table 7.5.1: Water Quality Results for Water Licence Monitoring Location - MS-SN-01

Sample ID			MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01	MS-SN-01
ALS Laboratory Sample ID			BF2300068	BF2300081	BF2300097	BF2300104	BF2300125	BF2300141	BF2300198
Sample Date & Time			2023-06-10 11:45	2023-06-15 11:15	2023-06-22 13:40	2023-06-26 13:40	2023-07-03 07:55	2023-07-11 11:55	2023-08-04 14:30
Analyte	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	51.9	-	-	-	200	-	304
pH, Lab	pH units	6.0 - 9.5	7.39	7.48	7.80	7.91	7.88	8.09	7.96
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**33.3**	23.0	10.6	3.6	2.2	< 1.0	< 1.4
Total Dissolved Solids	mg/L	-	68	58	68	80	92	133	154
Turbidity	NTU	-	93.4	37.0	22.2	18.0	3.66	3.44	0.71
Ammonia, Total (as N)	mg/L	-	0.0415	-	-	-	< 0.0050	-	< 0.0050
Nitrate	mg/L	-	0.089	-	-	-	0.047	-	0.323
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.5.2: Water Quality Results for Water Licence Monitoring Location - MS-SN-02

Sample ID			MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02	MS-SN-02
ALS Laboratory Sample ID			BF2300068	BF2300081	BF2300097	BF2300104	BF2300125	BF2300141
Sample Date & Time			2023-06-10 09:15	2023-06-15 15:20	2023-06-22 15:58	2023-06-26 10:45	2023-07-03 08:35	2023-07-11 10:40
Analyte	Units	Water Licence Criteria [1]						
Conductivity	umhos/cm	-	104	-	-	-	332	-
pH, Lab	pH units	6.0 - 9.5	7.45	7.73	7.95	7.94	8.01	8.11
Total Suspended Solids	mg/L	Grab 30, Average 15	4.3	9.2	5.9	< 1.2	< 1.7	2.7
Total Dissolved Solids	mg/L	-	93	144	121	160	163	162
Turbidity	NTU	-	64.1	86.6	39.2	4.59	0.67	10.0
Ammonia, Total (as N)	mg/L	-	0.0380	-	-	-	0.0066	-
Nitrate	mg/L	-	1.51	-	-	-	1.48	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.3: Water Quality Results for Water Licence Monitoring Location - TR-SN-01

Sample ID			TR-SN-01	TR-SN-01	TR-SN-01
ALS Laboratory Sample ID			BF2300111	WT2320159	BF2300139
Sample Date & Time			2023-06-25 09:40	2023-07-04 15:40	2023-07-10 17:40
Analyte	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	86.4	55.6	-
pH, Lab	pH units	6.0 - 9.5	7.83	7.77	7.75
Total Suspended Solids	mg/L	Grab 30, Average 15	1.9	1.9	4.8
Total Dissolved Solids	mg/L	-	41	30	37
Turbidity	NTU	-	0.63	0.86	2.27
Ammonia, Total (as N)	mg/L	-	< 0.0050	< 0.0050	-
Nitrate	mg/L	-	< 0.020	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.4: Water Quality Results for Water Licence Monitoring Location - TR-SN-02

Sample ID			TR-SN-02	TR-SN-02	TR-SN-02	TR-SN-02
ALS Laboratory Sample ID			BF2300084	BF2300111	WT2320159	BF2300139
Sample Date & Time			2023-06-19 13:50	2023-06-25 14:30	2023-07-04 14:20	2023-07-10 16:35
Analyte	Units	Water Licence Criteria [1]				
Conductivity	umhos/cm	-	62.9	-	97.3	-
pH, Lab	pH units	6.0 - 9.5	7.79	7.73	7.91	7.85
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**48.0**	3.6	4.2	1.7
Total Dissolved Solids	mg/L	-	37	56	55	68
Turbidity	NTU	-	15.8	2.02	0.97	1.52
Ammonia, Total (as N)	mg/L	-	0.0266	-	0.0053	-
Nitrate	mg/L	-	0.065	-	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.5.5: Water Quality Results for Water Licence Monitoring Location - TR-SN-04

Sample ID			TR-SN-04	TR-SN-04	TR-SN-04
ALS Laboratory Sample ID			BF2300139	BF2300209	BF2300257
Sample Date & Time			2023-07-10 14:40	2023-08-07 11:00	2023-09-04 12:20
Analyte	Units	Water Licence Criteria [1]			
Conductivity	umhos/cm	-	124	210	209
pH, Lab	pH units	6.0 - 9.5	7.57	7.54	7.86
Total Suspended Solids	mg/L	Grab 30, Average 15	5.9	< 1.3	1.9
Total Dissolved Solids	mg/L	-	64	131	118
Turbidity	NTU	-	38.3	8.98	4.87
Ammonia, Total (as N)	mg/L	-	0.0179	0.0060	0.0217
Nitrate	mg/L	-	0.027	< 0.020	0.033
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.6: Water Quality Results for Water Licence Monitoring Location - TR-SN-06

Sample ID			TR-SN-06	TR-SN-06	TR-SN-06	TR-SN-06
ALS Laboratory Sample ID			BF2300111	WT2320159	BF2300139	BF2300209
Sample Date & Time			2023-06-26 10:15	2023-07-04 12:00	2023-07-10 13:45	2023-08-06 12:45
Analyte	Units	Water Licence Criteria [1]				
Conductivity	umhos/cm	-	39.7	29.3	-	102
pH, Lab	pH units	6.0 - 9.5	7.22	7.30	6.97	7.69
Total Suspended Solids	mg/L	Grab 30, Average 15	3.0	2.7	2.0	< 1.3
Total Dissolved Solids	mg/L	-	22	26	36	64
Turbidity	NTU	-	1.76	0.96	2.42	1.06
Ammonia, Total (as N)	mg/L	-	0.0068	0.0175	-	0.0178
Nitrate	mg/L	-	0.032	0.037	-	< 0.020
Oil and Grease, Total	mg/L	-	< 5.0	< 5.0	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.5.7: Water Quality Results for Water Licence Monitoring Location - TR-SN-07

Sample ID			TR-SN-07	TR-SN-07	TR-SN-07	TR-SN-07	TR-SN-07
ALS Laboratory Sample ID			BF2300074	BF2300084	BF2300111	WT2320159	BF2300139
Sample Date & Time			2023-06-12 12:35	2023-06-19 12:25	2023-06-25 16:10	2023-07-04 13:40	2023-07-10 16:05
Analyte	Units	Water Licence Criteria [1]					
Conductivity	umhos/cm	-	122	-	-	155	-
pH, Lab	pH units	6.0 - 9.5	8.16	7.49	7.67	8.10	7.98
Total Suspended Solids[2]	mg/L	Grab 30, Average 15	**314**	**33.2**	**41.0**	**63.9**	5.2
Total Dissolved Solids	mg/L	-	160	50	56	99	129
Turbidity	NTU	-	627	28.5	27.2	19.4	3.37
Ammonia, Total (as N)	mg/L	-	0.0420	-	-	0.0131	-
Nitrate	mg/L	-	0.068	-	-	< 0.020	-
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-
	-	No Visible Sheen	0	0	0	0	0

Notes:

Bold highlighted values indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June, July exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

		Location Name	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
		ALS Laboratory Work Order	WT2318175	BF2300110	BF2300120	BF2300134	BF2300168	BF2300197	BF2300212
		Sample Date	2023-06-19 11:10	2023-06-26 10:05	2023-07-04 11:35	2023-07-09 11:20	2023-07-23 11:45	2023-08-01 08:50	2023-08-07 10:35
Analyte	**Units**	**Water Licence Criteria [1]**							
Conductivity	umhos/cm	-	120	-	275	-	-	357	-
pH, Lab	pH units	6.0 - 9.5	7.69	7.86	7.97	8.05	8.22	8.19	8.16
Total Suspended Solids	mg/L	Grab 30, Average 15	2.6	7.6	2.1	3.8	1.7	< 1.3	1.8
Total Dissolved Solids	mg/L	-	43	138	149	119	200	208	207
Turbidity	NTU	-	5.16	10.1	0.30	3.68	2.10	2.06	2.12
Ammonia, Total (as N)	mg/L	-	0.113	-	0.144	-	-	0.107	-
Nitrate	mg/L	-	0.294	-	0.361	-	-	0.264	-
Oil and Grease, Total	mg/L	-	< 5.0	-	< 5.0	-	-	< 5.0	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MP-Q1-P1

		Location Name	MP-Q1-P1	MP-Q1-P1	MP-Q1-P1
		ALS Laboratory Work Order	BF2300220	WT2326433	BF2300254
		Sample Date	2023-08-13 14:15	2023-08-22 12:20	2023-09-03 15:50
Analyte	**Units**	**Water Licence Criteria [1]**			
Conductivity	umhos/cm	-	-	-	343
pH, Lab	pH units	6.0 - 9.5	8.16	8.19	8.14
Total Suspended Solids	mg/L	Grab 30, Average 15	1.7	2.2	3.5
Total Dissolved Solids	mg/L	-	221	172	207
Turbidity	NTU	-	3.51	3.93	3.50
Ammonia, Total (as N)	mg/L	-	-	-	0.134
Nitrate	mg/L	-	-	-	0.635
Oil and Grease, Total	mg/L	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MS-RW-01

		Location Name	MS-RW-01	MS-RW-01	MS-RW-01
		ALS Laboratory Work Order	BF2300142	BF2300163	BF2300175
		Sample Date	2023-07-11 10:30	2023-07-17 10:35	2023-07-24 09:15
Analyte	**Units**	**Water Licence Criteria [1]**			
pH, Lab	pH units	6.0 - 9.5	7.83	7.97	7.99
Total Suspended Solids	mg/L	Grab 30, Average 15	7.1	**54.6**	5.5
Total Dissolved Solids	mg/L	-	231	263	287
Turbidity	NTU	-	14.1	20.7	7.09
Oil & Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for July exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MS-RW-02

		Location Name	MS-RW-02	MS-RW-02
		ALS Laboratory Work Order	BF2300175	BF2300201
		Sample Date	2023-07-24 14:00	2023-08-05 09:55
Analyte	**Units**	**Water Licence Criteria [1]**		
pH, Lab	pH units	6.0 - 9.5	8.25	8.15
Total Suspended Solids	mg/L	Grab 30, Average 15	7.8	6.7
Total Dissolved Solids	mg/L	-	159	163
Turbidity	NTU	-	15.8	13.1
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

		Location Name	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
		ALS Laboratory Work Order	BF2300082	BF2300083	BF2300113	WT2319991	BF2300142	BF2300164	BF2300179
		Sample Date	2023-06-16 08:10	2023-06-19 14:55	2023-06-28 11:25	2023-07-03 08:30	2023-07-11 08:45	2023-07-19 16:00	2023-07-26 16:25
Analyte	Units	Water Licence Criteria [1]							
Conductivity	umhos/cm	-	-	114	-	330	-	-	-
pH, Lab	pH units	6.0 - 9.5	7.33	7.49	7.31	7.59	7.18	7.33	7.67
Total Suspended Solids	mg/L	Grab 30, Average 15	25.7	20.4	8.6	31.9	12.3	15.1	< 3.1
Total Dissolved Solids	mg/L	-	120	124	124	251	335	404	370
Turbidity	NTU	-	116	111	78.5	81.2	48.9	33.7	7.95
Ammonia, Total (as N)	mg/L	-	-	0.443	-	0.712	-	-	-
Nitrate	mg/L	-	-	0.119	-	0.087	-	-	-
Oil and Grease, Total	mg/L	-	-	< 5.0	-	< 5.0	-	-	-
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	-	Not Acutely Toxic	-	Not Acutely Toxic	-	-	-

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for July exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - TR-BP-01

		Location Name	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01	TR-BP-01
		ALS Laboratory Work Order	BF2300201	BF2300217	BF2300223	BF2300252	BF2300269	BF2300314
		Sample Date	2023-08-05 10:55	2023-08-10 11:00	2023-08-13 12:35	2023-09-02 10:30	2023-09-06 15:00	2023-09-30 12:40
Analyte	**Units**	**Water Licence Criteria [1]**						
Conductivity	umhos/cm	-	688	-	-	-	-	1290
pH, Lab	pH units	6.0 - 9.5	7.38	7.69	7.38	7.67	7.61	7.64
Total Suspended Solids	mg/L	Grab 30, Average 15	11.0	4.6	10.0	2.1	1.7	4.4
Total Dissolved Solids	mg/L	-	544	530	648	798	917	925
Turbidity	NTU	-	10.4	3.77	5.93	3.24	3.21	6.63
Ammonia, Total (as N)	mg/L	-	1.37	-	-	-	-	1.47
Nitrate	mg/L	-	0.058	-	-	-	-	0.412
Oil and Grease, Total	mg/L	-	< 5.0	-	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Acute Lethality[2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	-	-	-	Not Acutely Toxic

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

[4] Average TSS for July exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - TR-BP-02

		Location Name	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02	TR-BP-02
		ALS Laboratory Work Order	BF2300073	BF2300086	BF2300109	WT2320157	BF2300135	BF2300181	BF2300184	BF2300204
		Sample Date	2023-06-12 09:50	2023-06-19 15:00	2023-06-26 08:45	2023-07-04 15:00	2023-07-09 13:55	2023-07-27 15:35	2023-07-30 12:20	2023-08-06 08:55
Analyte	**Units**	**Water Licence Criteria [1]**								
Conductivity	umhos/cm	-	127	-	-	207	-	-	-	411
pH, Lab	pH units	6.0 - 9.5	8.04	7.98	7.99	8.11	8.09	8.24	8.03	8.21
Total Suspended Solids	mg/L	Grab 30, Average 15	26	14.8	8.3	3.1	3.6	4.5	19.1	< 1.4
Total Dissolved Solids	mg/L	-	96	98	74	113	102	172	184	220
Turbidity	NTU	-	82.7	34.1	10.8	13.4	8.35	9.09	11.7	3.30
Ammonia, Total (as N)	mg/L	-	0.0545	-	-	0.0068	-	-	-	0.0185
Nitrate	mg/L	-	0.098	-	-	< 0.020	-	-	-	< 0.020
Oil and Grease, Total	mg/L	-	< 5.0	-	-	< 5.0	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - TR-BP-02

		Location Name	TR-BP-02	TR-BP-02	TR-BP-02
		ALS Laboratory Work Order	BF2300218	BF2300231	BF2300256
		Sample Date	2023-08-13 13:00	2023-08-21 14:30	2023-09-04 10:20
Analyte	**Units**	**Water Licence Criteria [1]**			
Conductivity	umhos/cm	-	-	-	358
pH, Lab	pH units	6.0 - 9.5	8.21	8.13	8.16
Total Suspended Solids	mg/L	Grab 30, Average 15	1.0	< 1.0	1.4
Total Dissolved Solids	mg/L	-	232	178	210
Turbidity	NTU	-	1.54	2.68	3.14
Ammonia, Total (as N)	mg/L	-	-	-	0.0107
Nitrate	mg/L	-	-	-	0.094
Oil and Grease, Total	mg/L	-	-	-	< 5.0
	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen

Notes:

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MS-07

		Sample ID	MS-07	MS-07	MS-07	MS-07
		ALS Laboratory Work Order	BF2300076	BF2300132	BF2300143	BF2300164
		Sample Date & Time	2023-06-13 10:40	2023-07-06 11:10	2023-07-11 11:45	2023-07-19 15:35
Analyte	**Units**	**Water Licence Criteria [1]**				
Hardness	mg/L	-	116	-	177	-
Conductivity	umhos/cm	-	332	443	-	-
pH, Lab	pH units	6.0 - 9.5	7.01	7.41	7.67	7.77
Total Suspended Solids	mg/L	15.0	7	1.8	2.1	4.9
Total Dissolved Solids	mg/L	-	206	252	273	278
Turbidity	NTU	-	24.6	5.86	9.08	19
Alkalinity, Total	mg/L	-	12.5	-	41.1	-
Ammonia, Total (as N)	mg/L	-	1.87	1.68	1.56	-
Chloride	mg/L	-	18.8	-	20.7	-
Fluoride	mg/L	-	0.058	-	0.076	-
Nitrate	mg/L	-	3.26	-	4.82	-
Total Kjeldahl Nitrogen	mg/L	-	2.56	-	2.13	-
Phosphorus, Total	mg/L	-	< 0.050	< 0.050	< 0.050	-
Sulfate	mg/L	-	92.3	-	124	-
Dissolved Organic Carbon	mg/L	-	7.13	-	1.37	-
Total Organic Carbon	mg/L	-	7.24	-	0.94	-
Aluminum - Total	mg/L	-	0.162	0.0593	0.0297	-
Antimony - Total	mg/L	-	< 0.00010	< 0.00010	< 0.00010	-
Arsenic - Total	mg/L	0.50	< 0.00010	0.0001	< 0.00010	-
Barium - Total	mg/L	-	0.00879	0.0122	0.013	-
Cadmium - Total	mg/L	-	0.0000356	0.0000383	0.000045	-
Calcium - Total	mg/L	-	9.69	15.6	17.2	-
Chromium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	-
Cobalt - Total	mg/L	-	0.0038	0.00466	0.00364	-
Copper - Total	mg/L	0.30	0.00182	< 0.00050	0.00132	-
Iron - Total	mg/L	-	0.277	0.115	0.055	-
Lead - Total	mg/L	0.20	0.000645	0.000084	0.000216	-
Lithium - Total	mg/L	-	0.0108	0.0117	0.0114	-
Magnesium - Total	mg/L	-	23	32	32.6	-
Manganese - Total	mg/L	-	1.44	2.07	1.8	-
Mercury - Total	mg/L	-	< 0.0000050	-	< 0.0000050	-
Molybdenum - Total	mg/L	-	0.00164	0.00372	0.00418	-
Nickel - Total	mg/L	0.50	0.00301	0.00335	0.00289	-
Potassium - Total	mg/L	-	3.14	5.57	5.98	-
Selenium - Total	mg/L	-	0.000733	0.000748	0.000775	-
Sodium - Total	mg/L	-	7.38	8.46	8.34	-
Strontium - Total	mg/L	-	0.0315	0.0399	0.0424	-
Thallium - Total	mg/L	-	0.000036	0.000048	0.000045	-
Tin - Total	mg/L	-	< 0.00010	< 0.00010	< 0.00010	-
Titanium - Total	mg/L	-	0.00699	0.00201	< 0.00090	-
Uranium - Total	mg/L	-	0.000201	0.000959	0.00129	-
Vanadium - Total	mg/L	-	< 0.00050	< 0.00050	< 0.00050	-
Zinc - Total	mg/L	0.50	< 0.0030	< 0.0030	< 0.0030	-
Aluminum - Dissolved	mg/L	-	0.0015	-	0.005	-
Arsenic - Dissolved	mg/L	-	< 0.00010	-	< 0.00010	-
Cadmium - Dissolved	mg/L	-	0.0000356	-	0.0000393	-
Calcium - Dissolved	mg/L	-	9.58	-	18.3	-
Copper - Dissolved	mg/L	-	0.00048	-	0.00046	-
Iron - Dissolved	mg/L	-	0.011	-	< 0.010	-
Lead - Dissolved	mg/L	-	< 0.000050	-	< 0.000050	-
Magnesium - Dissolved	mg/L	-	22.3	-	31.9	-
Manganese - Dissolved	mg/L	-	1.39	-	1.74	-
Mercury - Dissolved	mg/L	-	< 0.0000050	-	< 0.0000050	-
Molybdenum - Dissolved	mg/L	-	0.00195	-	0.00434	-
Nickel - Dissolved	mg/L	-	0.00218	-	0.00258	-
Potassium - Dissolved	mg/L	-	2.84	-	6.07	-
Selenium - Dissolved	mg/L	-	0.000723	-	0.000804	-
Sodium - Dissolved	mg/L	-	7.03	-	8.01	-
Thallium - Dissolved	mg/L	-	0.000032	-	0.000047	-
Uranium - Dissolved	mg/L	-	0.000118	-	0.00125	-
Zinc - Dissolved	mg/L	-	0.0016	-	0.0023	-
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	-	-	< 1.0	-
Acute Lethality[2,3]	N/A	Not Acutely Toxic	Not Acutely Toxic	-	Not Acutely Toxic	-
Phosphorus, Nutrient	mg/L	-	0.005	-	0.0024	-

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.6: Water Quality Results for Water Licence Monitoring Location - MS-07

		Sample ID	MS-07	MS-07
		ALS Laboratory Work Order	BF2300179	BF2300270-AA
		Sample Date & Time	2023-07-26 17:00	2023-09-08 11:15
Analyte	**Units**	**Water Licence Criteria [1]**		
Hardness	mg/L	-	-	326
Conductivity	umhos/cm	-	-	676
pH, Lab	pH units	6.0 - 9.5	7.81	7.75
Total Suspended Solids	mg/L	15.0	15.4	< 1.2
Total Dissolved Solids	mg/L	-	297	449
Turbidity	NTU	-	25	3.97
Alkalinity, Total	mg/L	-	-	59.3
Ammonia, Total (as N)	mg/L	-	-	0.645
Chloride	mg/L	-	-	25.6
Fluoride	mg/L	-	-	0.077
Nitrate	mg/L	-	-	8.22
Total Kjeldahl Nitrogen	mg/L	-	-	0.86
Phosphorus, Total	mg/L	-	-	< 0.050
Sulfate	mg/L	-	-	207
Dissolved Organic Carbon	mg/L	-	-	1.42
Total Organic Carbon	mg/L	-	-	1.35
Aluminum - Total	mg/L	-	-	0.03
Antimony - Total	mg/L	-	-	< 0.00010
Arsenic - Total	mg/L	0.50	-	0.00013
Barium - Total	mg/L	-	-	0.0178
Cadmium - Total	mg/L	-	-	0.0000371
Calcium - Total	mg/L	-	-	42.7
Chromium - Total	mg/L	-	-	< 0.00050
Cobalt - Total	mg/L	-	-	0.00273
Copper - Total	mg/L	0.30	-	0.00102
Iron - Total	mg/L	-	-	0.049
Lead - Total	mg/L	0.20	-	0.000141
Lithium - Total	mg/L	-	-	0.0088
Magnesium - Total	mg/L	-	-	53.6
Manganese - Total	mg/L	-	-	0.708
Mercury - Total	mg/L	-	-	< 0.0000050
Molybdenum - Total	mg/L	-	-	0.00534
Nickel - Total	mg/L	0.50	-	0.00223
Potassium - Total	mg/L	-	-	8.03
Selenium - Total	mg/L	-	-	0.0014
Sodium - Total	mg/L	-	-	7.08
Strontium - Total	mg/L	-	-	0.0757
Thallium - Total	mg/L	-	-	0.000033
Tin - Total	mg/L	-	-	< 0.00010
Titanium - Total	mg/L	-	-	0.00086
Uranium - Total	mg/L	-	-	0.00439
Vanadium - Total	mg/L	-	-	< 0.00050
Zinc - Total	mg/L	0.50	-	< 0.0030
Aluminum - Dissolved	mg/L	-	-	0.0045
Arsenic - Dissolved	mg/L	-	-	0.0001
Cadmium - Dissolved	mg/L	-	-	0.0000378
Calcium - Dissolved	mg/L	-	-	42
Copper - Dissolved	mg/L	-	-	0.00063
Iron - Dissolved	mg/L	-	-	< 0.010
Lead - Dissolved	mg/L	-	-	< 0.000050
Magnesium - Dissolved	mg/L	-	-	53.8
Manganese - Dissolved	mg/L	-	-	0.639
Mercury - Dissolved	mg/L	-	-	< 0.0000050
Molybdenum - Dissolved	mg/L	-	-	0.00564
Nickel - Dissolved	mg/L	-	-	0.00214
Potassium - Dissolved	mg/L	-	-	8.06
Selenium - Dissolved	mg/L	-	-	0.0015
Sodium - Dissolved	mg/L	-	-	7.28
Thallium - Dissolved	mg/L	-	-	0.000034
Uranium - Dissolved	mg/L	-	-	0.00452
Zinc - Dissolved	mg/L	-	-	0.0011
Oil and Grease, Total	-	No Visible Sheen	No Visible Sheen	No Visible Sheen
Phenols	ug/L	-	-	-
Acute Lethality[2,3]	N/A	Not Acutely Toxic	-	Not Acutely Toxic
Phosphorus, Nutrient	mg/L	-	-	< 0.0020

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 10: Effluent Quality

[2] Acute lethality to Rainbow trout (as per Environment Canada Method EPS/1/RM/13).

[3] Acute lethality to Daphnia magna (as per Environment Canada Method EPS/1/RM/14).

Table 7.6.1: Water Quality Results for Water Licence Monitoring Location - CLSP-OUT

		Location Name	CLSP-OUT	CLSP-OUT	CLSP-OUT	CLSP-OUT
		ALS Laboratory Sample ID	BF2300062-002	BF2300069-002	BF2300080-001	BF2300088-004
		Sample Date & Time	2023-06-05 15:30	2023-06-10 12:25	2023-06-14 11:50	2023-06-21 15:55
Analyte	Units	Water License Criteria [1]				
pH, Lab	pH units	6.0 - 9.5	8.48	7.98	7.93	7.77
Total Dissolved Solids	mg/L	-	171	167	217	132
Total Suspended Solids	mg/L	Grab 30, Average 15	**626**	**450**	**2,420**	**1,080**
Turbidity	NTU	-	1,030	683	2,430	1,180

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6.2: Water Quality Results for Water Licence Monitoring Location - CLT-OUT

		Location Name	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT	CLT-OUT
		ALS Laboratory Sample ID	BF2300061-001	BF2300062-001	BF2300069-003	BF2300080-002	BF2300088-005	BF2300107-003	BF2300121-005
		Sample Date & Time	2023-06-04 12:26	2023-06-05 15:10	2023-06-10 12:50	2023-06-14 14:10	2023-06-21 16:10	2023-06-27 10:30	2023-07-05 11:50
Analyte	**Units**	**Water License Criteria [1]**							
pH, Lab	pH units	6.0 - 9.5	8.58	7.79	7.59	7.61	7.57	7.77	7.65
Total Dissolved Solids	mg/L	-	100	114	80	58	48	62	53
Total Suspended Solids	mg/L	Grab 30, Average 15	**3,020**	**447**	**70.2**	**59.4**	9.3	1.6	< 1.5
Turbidity	NTU	-	>4,000	286	109	73.3	16.1	7.22	3.05

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6.3: Water Quality Results for Water Licence Monitoring Location - LDFG-OUT

		Location Name	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT	LDFG-OUT
		ALS Laboratory Sample ID	BF2300044-002	BF2300047-001	BF2300048-001	BF2300061-002	BF2300062-003	BF2300080-003	BF2300088-001	BF2300107-001	BF2300121-001
		Sample Date & Time	2023-05-15 09:05	2023-05-16 12:45	2023-05-19 13:05	2023-06-04 13:56	2023-06-05 17:30	2023-06-14 09:00	2023-06-21 14:15	2023-06-27 08:35	2023-07-05 09:50
Analyte	Units	Water License Criteria [1]									
pH, Lab	pH units	6.0 - 9.5	7.18	7.10	7.03	7.51	7.21	7.62	7.94	8.01	8.10
Total Dissolved Solids	mg/L	-	35	44	20	69	42	105	137	160	163
Total Suspended Solids	mg/L	Grab 30, Average 15	13.1	7.7	19.0	**132**	**88.5**	9.5	9.2	1.9	< 1.6
Turbidity	NTU	-	35.1	57.2	104	300	229	53.4	68.9	9.59	12.3

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6.4: Water Quality Results for Water Licence Monitoring Location - SDLT-OUT

		Location Name	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT
		ALS Laboratory Sample ID	BF2300019-001	BF2300020-002	BF2300021-001	BF2300023-001	BF2300024-001	BF2300025-001	BF2300026-001	BF2300032-001	BF2300033-001
		Sample Date & Time	2023-05-01 15:55	2023-05-02 15:00	2023-05-03 07:55	2023-05-04 13:40	2023-05-05 14:40	2023-05-08 15:30	2023-05-09 15:00	2023-05-10 10:40	2023-05-11 15:35
Analyte	Units	Water License Criteria [1]									
pH, Lab	pH units	6.0 - 9.5	7.76	7.73	7.95	7.55	7.61	7.53	7.53	7.45	7.65
Total Dissolved Solids	mg/L	-	202	98	115	88	97	105	108	128	144
Total Suspended Solids	mg/L	Grab 30, Average 15	**448**	**113**	12.7	**48.8**	13.0	**186**	**111**	**49.1**	**253**
Turbidity	NTU	-	921	193	87.7	115	78.2	327	199	185	466

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.8.4: Water Quality Results for Water Licence Monitoring Location - SDLT-OUT

		Location Name	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT
		ALS Laboratory Sample ID	BF2300034-001	BF2300038-001	BF2300043-001	BF2300044-001	BF2300047-003	BF2300048-002	BF2300055-001	BF2300059-001	BF2300061-003
		Sample Date & Time	2023-05-12 08:15	2023-05-13 13:30	2023-05-14 15:00	2023-05-15 08:05	2023-05-16 14:00	2023-05-19 13:45	2023-05-25 13:50	2023-06-01 12:35	2023-06-04 14:44
Analyte	Units	Water License Criteria [1]									
pH, Lab	pH units	6.0 - 9.5	7.43	7.37	7.43	7.45	7.38	7.45	7.44	7.48	8.30
Total Dissolved Solids	mg/L	-	93	127	126	121	113	90	126	93	115
Total Suspended Solids	mg/L	Grab 30, Average 15	**56.7**	**145**	**49.5**	4.0	**194**	**170**	**75.5**	**115**	**2520**
Turbidity	NTU	-	171	294	217	156	410	362	208	223	3280

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.8.4: Water Quality Results for Water Licence Monitoring Location - SDLT-OUT

		Location Name	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT	SDLT-OUT
		ALS Laboratory Sample ID	BF2300062-005	BF2300069-001	BF2300080-005	BF2300088-003	BF2300100-001	BF2300107-002	BF2300121-004
		Sample Date & Time	2023-06-05 17:50	2023-06-10 11:15	2023-06-14 09:50	2023-06-21 14:50	2023-06-24 08:40	2023-06-27 09:05	2023-07-05 10:50
Analyte	Units	Water License Criteria [1]							
pH, Lab	pH units	6.0 - 9.5	7.49	7.53	7.53	7.64	7.62	7.83	7.63
Total Dissolved Solids	mg/L	-	140	148	130	146	105	100	124
Total Suspended Solids	mg/L	Grab 30, Average 15	**444**	**191**	**87.4**	**48.7**	15.0	7.5	12.4
Turbidity	NTU	-	663	409	236	251	128	74.0	74.0

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11

[2] Average TSS for May and June exceeded maximum average TSS concentration discharge limits.

Table 7.6.5: Water Quality Results for Water Licence Monitoring Location - MP-C-B

		Location Name	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B	MP-C-B
		ALS Laboratory Sample ID	BF2300058-001	BF2300063-001	WT2315879-001	BF2300072-003	BF2300085-005	BF2300108-001
		Sample Date & Time	2023-06-01 10:40	2023-06-04 09:40	2023-06-06 09:05	2023-06-11 15:30	2023-06-19 13:20	2023-06-26 07:35
Analyte	**Units**	**Water Licence Criteria [1]**						
pH, Lab	pH units	6.0 - 9.5	7.80	7.88	7.95	8.04	8.04	8.00
Total Dissolved Solids	mg/L	-	232	239	181	224	132	141
Total Suspended Solids	mg/L	Grab 30, Average 15	**62.2**	**134**	**80.1**	7.4	3.7	4.2
Turbidity	NTU	-	265	374	151	42.5	16.9	17.6

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Average TSS for June exceeded maximum average TSS concentration discharge limits.

Table 7.6.6: Water Quality Results for Water Licence Monitoring Location - MP-C-H

		Location Name	MP-C-H	MP-C-H	MP-C-H	MP-C-H	MP-C-H
		ALS Laboratory Sample ID	BF2300066-001	BF2300072-005	BF2300085-007	BF2300085-008	BF2300108-005
		Sample Date & Time	2023-06-08 16:25	2023-06-11 16:15	2023-06-19 13:45	2023-06-23 15:35	2023-06-26 08:45
Analyte	**Units**	**Water Licence Criteria [1]**					
pH, Lab	pH units	6.0 - 9.5	7.51	7.90	7.91	7.72	7.90
Total Dissolved Solids	mg/L	-	314	188	100	62	60
Total Suspended Solids	mg/L	Grab 30, Average 15	5.7	4.7	**38.9[2]**	< 1.2	< 1.2
Turbidity	NTU	-	26.9	23.7	6.22	3.49	1.46

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

[2] Unrepresentative TSS result due to collection of substrate in sample bottle; resampled on June 23 with result below laboratory detection level.

Table 7.6.7: Water Quality Results for Water Licence Monitoring Location - MP-C-J

		Location Name	MP-C-J	MP-C-J	MP-C-J
		ALS Laboratory Sample ID	WT2317129-001	BF2300085-002	BF2300108-004
		Sample Date & Time	2023-06-13 12:20	2023-06-19 12:10	2023-06-26 08:20
Analyte	**Units**	**Water Licence Criteria [1]**			
pH, Lab	pH units	6.0 - 9.5	8.11	8.02	8.01
Total Dissolved Solids	mg/L	-	154	155	162
Total Suspended Solids	mg/L	Grab 30, Average 15	3.7	< 1.0	< 1.1
Turbidity	NTU		15.0	4.27	0.83

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.

Table 7.6.8: Water Quality Results for Water Licence Monitoring Location - MP-C-K

		Location Name	MP-C-K	MP-C-K	MP-C-K	MP-C-K	MP-C-K
		ALS Laboratory Sample ID	BF2300063-002	WT2315879-003	BF2300072-004	BF2300085-003	BF2300108-002
		Sample Date & Time	2023-06-04 10:35	2023-06-06 09:45	2023-06-11 15:45	2023-06-19 12:35	2023-06-26 08:00
Analyte	Units	Water Licence Criteria [1]					
pH, Lab	pH units	6.0 - 9.5	6.75	8.08	8.09	8.10	8.02
Total Dissolved Solids	mg/L	-	241	174	214	170	205
Total Suspended Solids	mg/L	Grab 30, Average 15	7.3	10.5	< 1.6	1.0	< 1.1
Turbidity	NTU		14.3	63.8	9.18	5.63	4.89

Notes:

Bold highlight indicate results that exceeded the applicable water quality criteria.

[1] Type A Water Licence (2AM-MRY1325 - Amend. 1) - Table 11.