



Report on Actions Taken:

**June 7th 2016, Fisheries Act Direction (File number: 4408-2016-05-10-001) and
Response to June 16, 2016, INAC Letter of Non-Compliance Bi-Weekly Report No.
5 for Period August 20 to September 2, 2016**

September 2, 2016

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Appendix A - NT-NU Spill Reports

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Spill Report 16-176 - Camp Lake Tributaries and Camp Lake.

Spill Report 16-181- Mine Haul Road to Mary River and Sheardown Lake Tributary.

Spill Report 16-198 - Camp Lake Tributary 1

Spill Report 16-202 - Milne Inlet Tote Road, Tributaries to Mary Lake, David Lake, and Muriel Lake.

Spill Report 16-202 – Update 1 - Milne Inlet Tote Road, Tributaries to Muriel Lake (BG-31) and David Lake (BG-28)

Appendix B - Surface Water Quality and Acute Toxicity Results for Affected Areas

- B.1 - Sample IDs and Locations
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- C.1 - Spill Report 16-158
- C.2 – Spill Report 16-176
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- C.6 – Milne and Mine Site Drainage Works
- C.7 – Removal of Impacted Snow: Milne Beach and Tote Road Bridges

Report Basis

The document provided, herein, is the fifth bi-weekly progress report as required under the June 7 Fisheries Direction provided by Environment Canada (page 6, Measures to be Taken, Item 1) and reports on the period August 20th through September 2nd. Specifically, the bi-weekly reports are to provide updates on the actions taken to address sedimentation issues and ongoing actions being taken at the site to address Items 2 and 3 as outlined in the Fisheries Direction. Previous actions, including pre-freshet actions, were reported on in the June 24th, 2016, Report on Actions Taken and subsequent Bi-Weekly Reports Nos. 1 to 4, incl.

1. Unauthorized Releases and Contributing Factors

A number of unauthorized releases of sediment were reported to Environment Canada (EC), Indigenous and Northern Affairs Canada (INAC), and the NT-NU Spill Line during the months of May and June. These included the Spill Report numbers 16-158, 16-176, 16-181, 16-198, 116-202, and 116-202 Update No. 1. Copies of the original Spill Reports are provided in Appendix A. During the current reporting period, there were no further unauthorized sediment releases reported.

As of September 2nd, the potentially affected drainages continue to run, for the most part, visually clear of sediment. There were natural slope sloughing events upstream of the project development area and downstream of Deposit 1 on the MMER tributary during the reporting period which resulted in intermittent increased sediment loading in Mary River. Minor Rain events also contributed to sediment loading during this reporting period in Mary River. Monitoring results for late August are included in this report.

Retention of Third Party Expertise

When sediment release events were first observed and reported, third party expertise was retained and these individuals were brought to site. A list of those individuals and support provided was detailed in the June 24th, 2016, Report on Actions Taken. We continue discussions with those various individuals to provide advice as warranted. During the reporting period, the following consultants/contractors provided assistance:

- In early August, Golder was selected as the key consultant to support Baffinland in the development of the Dust Mitigation Action Plan and the Tote Road and Mine Haul Road Mitigation Action Plans. Action and mitigation plans continued to be developed during this reporting period.
- In late August, Nuna was contracted to complete select environmental work for Baffinland. This work included the maintenance and clearing of sediment from the ditching system and sumps before culverts on the Mine Haul road. This work is currently ongoing.

2. Water Quality and Acute Toxicity Sampling Results for Areas of Concern

Spill Reports for sediment releases are provided in Appendix A. Potential receivers for the sediment releases included Sheardown Lake, Sheardown Lake Tributary, Camp Lake, Camp Lake Tributaries, Mary River and Mary River Tributaries, David Lake and David Lake Tributaries, Muriel Lake and Muriel Lake Tributaries.

Available water quality and acute toxicity results for Sheardown Lake, Camp Lake, and Mary River systems are provided in Appendix B. These results include data provided in the previous reports covering the period up to August 30th, 2016, as well as new results that became available during the current reporting period. GPS coordinates and maps are provided to show approximate sample locations as well as the location of structures that were installed to mitigate the sediment concerns.

Water quality results have been compared to the Effluent Quality Discharge Limits for Contact Water (Table 11) provided in the Type "A" Water Licence No. 2AM-MRY1325 for the Mary River Project, which are summarized in the table below:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
Total Suspended Solids (TSS)	15	30
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

Note that in areas where there is or has been active construction, the following effluent discharge limits apply:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
Total Suspended Solids (TSS)	50	100
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

During the current August 20th to September 2nd reporting period, there were a number of water samples on Mary River that exceeded the Maximum Average Concentration of our Type A Water licence on Mary River. An investigation of the source of the sediment indicated that slope sloughing up stream of the project development area primarily contributed to this sediment loading, however low volumes of turbid water from the MMER tributary contributed intermittently to the increased sediment loading in Mary River. Freeze, thaw conditions and minor rain events predominantly caused the sloughing observed.

The Mary River sloughing was approximately 10km upstream of the project development area. Additional sampling was completed at G0-03 to evaluate sediment loading upstream of mine related effects.

The sloughing present above the low flow MMER tributary is approximately 1km upstream of F0-01. Silt fencing was installed on August 27 to reduce the levels of sediment being discharged at F0-01.

Due to the historically non-lethal water quality results over the reporting period for the areas of concern, further acute toxicity analyses was not performed. Previous acute toxicity analyses have shown non-lethal results from the discharge water samples that were collected and reported previously.

Water sampling will continue on a periodic basis, and additional data, including laboratory results that are in progress for this reporting period, will be included in future bi-weekly update reports. To monitor the increased sediment loading in Mary River, primarily resultant from the slope sloughing above the project development area, increased monitoring was performed during this reporting period.

3. Corrective Measures for Reported Spills and Other Concerns

3.1. Immediate actions undertaken to address issues

A number of immediate actions were undertaken to address sediment releases to water bodies that were documented in the Spill Reports submitted to authorities. These actions were presented in previous Reports on Actions Taken.

In the case of the Milne Ore Pad and the Mine Site Ore Pad drainage and collection systems, construction of ditch systems were completed by June 15 and July 15, respectively. As of those dates, the ditching systems were functional and currently performance is under observation and evaluation. Construction

Summary Reports (CSRs) for the facilities are currently in preparation and will be submitted to the Nunavut Water Board within three months after the substantial completion of construction.

3.2. Detailed work completed by area of concern

Any new work actions taken during the August 20 to September 2 reporting period for the areas of concern are provided in Appendix C. Actions taken are appended to the overall action list provided in the previous work action lists. In addition, new photos for the current reporting period are provided as warranted. Appendix C is subdivided as follows:

- Appendix C.1: Spill Report 16-158 - Sheardown Lake Tributaries and Sheardown Lake.
- Appendix C.2: Spill Report 16-176 - Camp Lake Tributaries and Camp Lake.
- Appendix C.3: Spill Report 16-181- Mine Haul Road to Mary River and Sheardown Lake Tributary.
- Appendix C.4: Spill Report 16-198 - Camp Lake Tributary 1
- Appendix C.5: Spill Report 16-202 and Update No. 1 - Milne Inlet Tote Road, Tributaries to Mary Lake, David Lake, and Muriel Lake.
- Appendix C.6: Milne Port Ore Stockpile Drainage Collection System.
- Appendix C.7: Milne Port Beach
- Appendix C.8: Sediment on and under bridges along Tote Road.

4. Next Steps

4.1. Bi-weekly update reports

Bi-weekly update reports will continue to be provided including any additional construction work completed and additional water sampling data. The next report will cover the period from September 2nd to September 16th, 2016.

4.2. Completed construction repairs

Construction repairs for the areas of concern including the Milne Port Ore Stockpile Drainage system and the Mine Site Crusher Stockpile Pad have been substantially completed by the established July 17, 2016, deadline.

4.3. Lessons-learned

Baffinland will conduct an extensive review and analyses of lessons- learned with regard to sedimentation issues along the roads and at the camps. Key conclusions and recommendations will be provided in the Completion Report which will be provided to regulators and inspectors. Baffinland will be open to any comments and recommendations received and will make revisions as is appropriate.

4.4. Long-term action plans

Longer term action plans related to dust mitigation and Tote Road work as related to drainage considerations are underway and will be provided by September 30, 2016.

4.5. Completion Report

A completion report that summarizes the results of all work to date and is signed off by the CEO of the company will be provided by September 30, 2016.

Appendix A

NT-NU Spill Reports

Spill Report 16-158 - Sheardown Lake Tributaries and Sheardown Lake.

Spill Report 16-176 - Camp Lake Tributaries and Camp Lake.

Spill Report 16-181 - Mine Haul Road to Mary River and Sheardown Lake Tributary.

Spill Report 16-198 - Camp Lake Tributary 1

Spill Report 16-202 - Milne Inlet Tote Road, Tributaries to Mary Lake, David Lake, and Muriel Lake.

Spill Report 16-202 – Update 1 - Milne Inlet Tote Road, Tributaries to Muriel Lake (BG-31) and David Lake (BG-28)



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 05-10-2016	REPORT TIME 14:30 HRS	☒ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 16 - 158
B	OCCURRENCE DATE: MONTH – DAY – YEAR 05-07-2016	OCCURRENCE TIME 19:00 HRS			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease No.: Q13C301		WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Project Mine Site, Baffin Island, NU		REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS		LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Suite 300, Oakville, ON L6H 0C3			
G	ANY CONTRACTOR INVOLVED N/A	CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
H	PRODUCT SPILLED sediment / discoloured water	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time	U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE Melting snow	SPILL CAUSE suspected entrained dust	AREA OF CONTAMINATION IN SQUARE METRES N/A		
J	FACTORS AFFECTING SPILL OR RECOVERY Snow covered area, poor access	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On Saturday, May 7, 2016, a snowmelt event occurred at the Mine Site. Runoff containing sediments and discoloured water were observed to flow into Sheardown Tributary and Sheardown Lake at around 1900 HRS. The source of the suspected off-spec drainage was dirty snow located downwind of the Crusher Pad. The event resulted in some siltation/discoloured water in two streams flowing from adjacent areas onto and under the ice of Sheardown Lake. In accordance with the Surface Water Management Plan, controls were implemented that included installation of silt fences and the deployment of flocculent and treated jute to settle sediments prior to discharge. Further actions are planned that will reduce the potential impact from the dirty snow source area. Dirty snow removal, check dam/sump construction, and additional flocculation are being considered. Daily monitoring of the water quality and flow is ongoing. Spill report updates will be provided as warranted. A follow-up report documenting the occurrence and providing recommendations will be submitted within 30 days				
L	REPORTED TO SPILL LINE BY Jim Millard	POSITION Env Manager	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 902-403-1337
M	ANY ALTERNATE CONTACT Allan Knight	POSITION Env Superintendent	EMPLOYER Baffinland	ALTERNATE CONTACT 647-253-0596 LOCATION	ALTERNATE TELEPHONE Ext 6016
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



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OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

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FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 05-17-2016	REPORT TIME 19:00 hrs	☒ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 16 - 176
B	OCCURRENCE DATE: MONTH – DAY – YEAR 05-17-2016	OCCURRENCE TIME 09:00 hrs			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301	WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU		REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES 71 MINUTES 16 SECONDS 46		LONGITUDE DEGREES 79 MINUTES 22 SECONDS 36		
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Sutie 300, Oakville, ON L6H 0C3			
G	ANY CONTRACTOR INVOLVED N/A	CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
H	PRODUCT SPILLED Sediment	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time	U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A	U.N. NUMBER N/A		
I	SPILL SOURCE Melt Water	SPILL CAUSE Warming Temps/Rain	AREA OF CONTAMINATION IN SQUARE METRES N/A		
J	FACTORS AFFECTING SPILL OR RECOVERY Snow covered area, poor access	DESCRIBE ANY ASSISTANCE REQUIRED N/A	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On Tuesday, May 17, 2016, runoff containing sediments was observed to be flowing into Camp Lake Tributary # 1 and into Camp Lake around 0900 HRS. The source of the off-spec drainage was from an area adjacent to the airstrip. The event resulted in some siltation to the stream flowing into Camp Lake. In accordance with the Surface Water Management Plan, controls were implemented that included installation rip rap (6" aggregate) and the deployment of flocculent and treated jute to settle sediments prior to discharge. Further actions are planned that will reduce the potential impact from the source area. Spill report updates will be provided as warranted. A follow-up report documenting the occurrence and providing recommendations will be submitted within 30 days				
L	REPORTED TO SPILL LINE BY Allan Knight	POSITION Env. Superintendent	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 647-253-0596
M	ANY ALTERNATE CONTACT Jim Millard	POSITION Env. Manager	EMPLOYER Baffinland	ALTERNATE CONTACT LOCATION 902-403-1337	ALTERNATE TELEPHONE 6016
REPORT LINE USE ONLY					
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130
LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS	
LEAD AGENCY					
FIRST SUPPORT AGENCY					
SECOND SUPPORT AGENCY					
THIRD SUPPORT AGENCY					



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EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 05-21-2016		REPORT TIME 21:00 hrs		☒ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER 16 - 181
	OCCURRENCE DATE: MONTH – DAY – YEAR 05-20-2016		OCCURRENCE TIME 19:00 hrs			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU				REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE DEGREES MINUTES SECONDS			LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Sutie 300, Oakville, ON L6H 0C3			
G	ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
H	PRODUCT SPILLED Sediment		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time		U.N. NUMBER N/A	
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A	
I	SPILL SOURCE Melt Water		SPILL CAUSE Melting of snow on road base		AREA OF CONTAMINATION IN SQUARE METRES N/A	
J	FACTORS AFFECTING SPILL OR RECOVERY Snow covered area, poor access		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On May 20 and 21, 2016, runoff containing sediment was observed to be flowing from the surface of the Mine Haul Road through several breaks (punch outs) on the outer edge of the road. The punch outs were installed to allow contact water on the road surface to be efficiently discharged from the road surface. On the afternoon of May 19, discharges of contact water increased and it became apparent that there was risk to Mary River and Sheardown tributary/Lake. The berm punch outs were sealed and road contact water has been diverted to three selected locations that will minimize potential flows to downstream fish habitat and water bodies. Check dams, silt fences/curtains, flocculants are being utilized to assist with this initial effort. It is expected that the sediment will settle and will be discharged back to the receiving environment. Report updates will be provided with further information in the near future. This incident is being reported as required by the conditions of Water Licence No. 2AM-MRY1325 and as required by subsection 38(4) of the Fisheries Act.					
L	REPORTED TO SPILL LINE BY Jim Millard	POSITION Env. Manager	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 647-253-0596	
M	ANY ALTERNATE CONTACT Allan Knight	POSITION Env. Superintendent	EMPLOYER Baffinland	ALTERNATE CONTACT LOCATION 902-403-1337	ALTERNATE TELEPHONE 6016	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED	
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						



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TEL: (867) 920-8130

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EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 05-31-2016		REPORT TIME 11:00 hrs		☒ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER 16 - 198
	OCCURRENCE DATE: MONTH – DAY – YEAR unknown - within last several days		OCCURRENCE TIME unknown			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU				REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE DEGREES 71 MINUTES 19 SECONDS 46			LONGITUDE DEGREES 79 MINUTES 22 SECONDS 41		
	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Sutie 300, Oakville, ON L6H 0C3			
G	ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
	PRODUCT SPILLED Sediment		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time		U.N. NUMBER N/A	
H	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES 44m3		U.N. NUMBER N/A	
	SPILL SOURCE steep sandy stream bank		SPILL CAUSE warming temperatures		AREA OF CONTAMINATION IN SQUARE METRES 110m2	
J	FACTORS AFFECTING SPILL OR RECOVERY poor access		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A	
	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On Sunday, May 29, 2016, during an environmental inspection of Mine Site drainages a deposit of sediments was discovered in Camp Lake Tributary #1 (CLT1), south of the Tote Road. Upon initial investigation, the source of the sediment was from a stream bank failure. The embankment failure may have been caused by water draining from the airstrip. The event resulted in sandy deposit of material that partially encroached on the stream. Once discovered, silt fences were erected around the sediment deposit. A schedule is being developed for the removal of the sediment and stabilization of the stream embankment at that location. The water will be rerouted from this location and redirected to an area that is more stable. The material is coarse sand and does not appear to be mobile in water. A follow-up report documenting the occurrence and providing recommendations will be submitted within 30 days.					
L	REPORTED TO SPILL LINE BY Jim Millard	POSITION Env. Manager	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 647-253-0596	
	ANY ALTERNATE CONTACT Allan Knight	POSITION Env. Superintendent	EMPLOYER Baffinland	ALTERNATE CONTACT 902-403-1337	ALTERNATE TELEPHONE 6016	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
	LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 06-02-2016		REPORT TIME 0700 HRS		☒ ORIGINAL SPILL REPORT, OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT		REPORT NUMBER 16 - 202
B	OCCURRENCE DATE: MONTH – DAY – YEAR 05-31-2016		OCCURRENCE TIME 2100 HRS				
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"			
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU				REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS			LONGITUDE DEGREES MINUTES SECONDS			
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Sutie 300, Oakville, ON L6H 0C3				
G	ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A				
H	PRODUCT SPILLED Sediment		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time		U.N. NUMBER N/A		
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A		
I	SPILL SOURCE Freshet erosion		SPILL CAUSE warming temperatures		AREA OF CONTAMINATION IN SQUARE METRES N/A		
J	FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A		
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS During an environmental inspection of the Milne Tote Road on May 31, three locations were observed where there was turbid water and sediment present in culvert outlet locations. These locations were stream crossings CV-223 at km 97, BG-17 at km 90, and BG-29 at km 85. The source of the sediment is erosion from spring freshet. There are no fish present at these locations because flows are very low and fish have not yet started to move into the stream. In the meantime silt fences and in-ditch flocculant have been deployed as appropriate. Sediments in culvert outlet basins will be carefully excavated and removed under the supervision of Environment staff within the next several days. In addition, the embankment areas of these streams are scheduled to receive riprap/geotextile shortly.						
L	REPORTED TO SPILL LINE BY Jim Millard	POSITION Env. Manager	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 647-253-0596		
M	ANY ALTERNATE CONTACT Allan Knight	POSITION Env. Superintendent	EMPLOYER Baffinland	ALTERNATE CONTACT 902-403-1337 LOCATION	ALTERNATE TELEPHONE 6016		
REPORT LINE USE ONLY							
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130		
LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED		
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS			
LEAD AGENCY							
FIRST SUPPORT AGENCY							
SECOND SUPPORT AGENCY							
THIRD SUPPORT AGENCY							



Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR 06-19-2016		REPORT TIME 2200 HRS		☐ ORIGINAL SPILL REPORT, OR ☒ UPDATE # 1 TO THE ORIGINAL SPILL REPORT	REPORT NUMBER 16 - 202
	OCCURRENCE DATE: MONTH – DAY – YEAR 06-18-2016		OCCURRENCE TIME Unknown			
C	LAND USE PERMIT NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301			WATER LICENCE NUMBER (IF APPLICABLE) 2AM-MRY1325 Type "A"		
	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION Mary River Mine Site, Baffin Island, NU				REGION ☐ NWT ☒ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN	
E	LATITUDE DEGREES MINUTES SECONDS			LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME Baffinland Iron Mines Corp.		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION 2275 Middle Road East, Sutie 300, Oakville, ON L6H 0C3			
G	ANY CONTRACTOR INVOLVED N/A		CONTRACTOR ADDRESS OR OFFICE LOCATION N/A			
H	PRODUCT SPILLED Sediment		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES Unquantified at present time		U.N. NUMBER N/A	
	SECOND PRODUCT SPILLED (IF APPLICABLE) N/A		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A		U.N. NUMBER N/A	
I	SPILL SOURCE Freshet melting snowpack		SPILL CAUSE warming temperatures		AREA OF CONTAMINATION IN SQUARE METRES N/A	
J	FACTORS AFFECTING SPILL OR RECOVERY N/A		DESCRIBE ANY ASSISTANCE REQUIRED N/A		HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT N/A	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS During an environmental inspection of the Milne Tote Road on June 18, two locations were observed where there was turbid water and sediment present near stream crossings, downstream of Tote Road. These locations were BG-31 at km 82 and BG-28 at km 86.3. The sediment appears to be generated by the melting snow pack adjacent to the road. The streams are not expected to be fish habitat, although flow from these locations is to Muriel Lake (BG-31) and David Lake (BG-28). The sediment is being controlled from entering the lakes at these locations by the construction of check dams and silt curtain for stream BG-31 and by silt fence and silt curtain at BG-28. Previous locations where there was sediment and turbid water at stream crossings CV-223 at km 97, BG-17 at km 90, and BG-29 at km 85, are now running clear and sediment at culvert outlets was removed.					
L	REPORTED TO SPILL LINE BY Jim Millard	POSITION Env. Manager	EMPLOYER Baffinland	LOCATION CALLING FROM Mary River	TELEPHONE 647-253-0596	
M	ANY ALTERNATE CONTACT Allan Knight	POSITION Env. Superintendent	EMPLOYER Baffinland	ALTERNATE CONTACT 902-403-1337	ALTERNATE TELEPHONE 6016	
REPORT LINE USE ONLY						
N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC			SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN		FILE STATUS ☐ OPEN ☐ CLOSED	
AGENCY		CONTACT NAME	CONTACT TIME	REMARKS		
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

Appendix B

Surface Water Quality and Acute Toxicity Results for Affected Areas

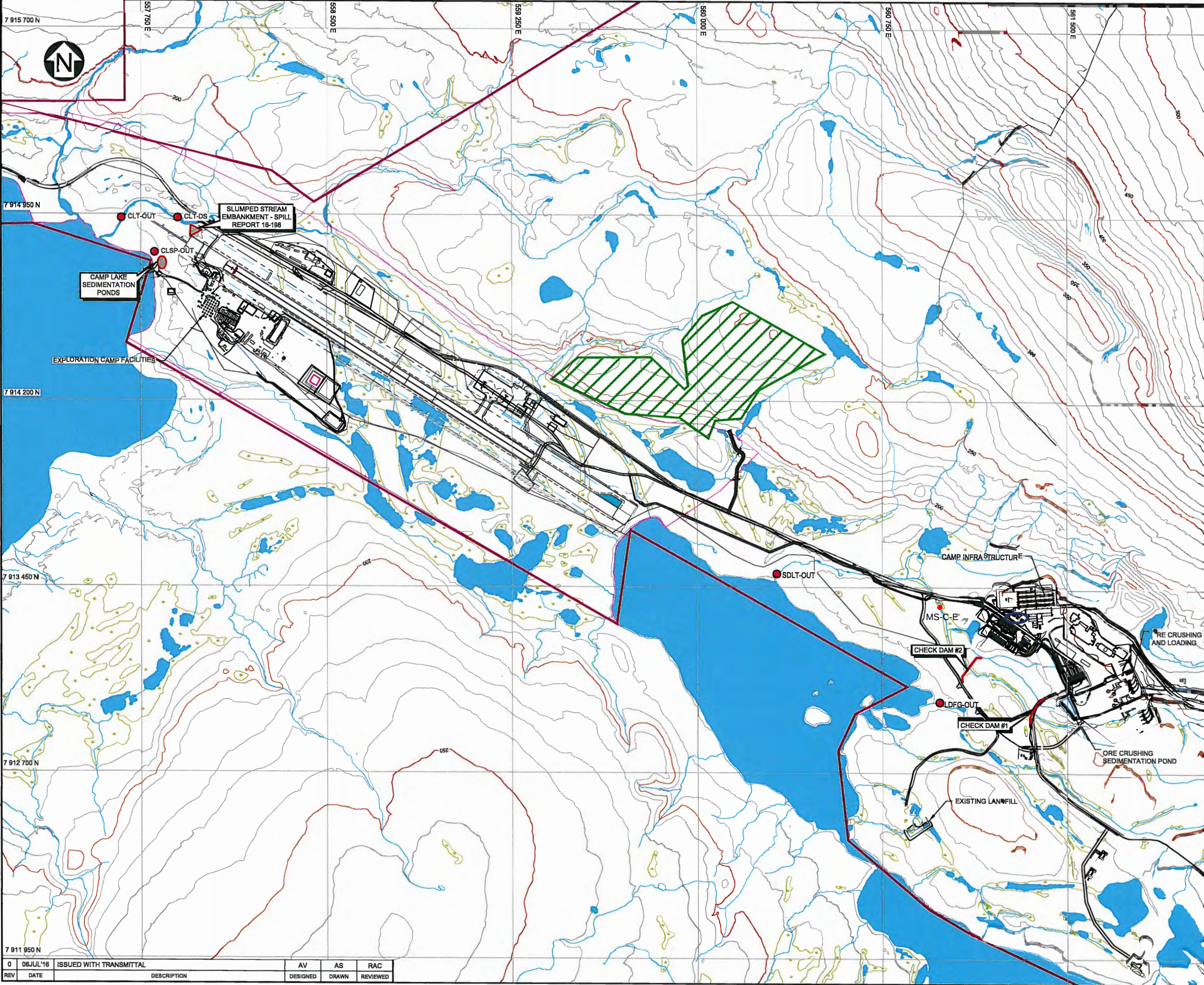
Appendix B.1

Sample IDs and Locations

Table B.1.1 - Sample IDs and Locations

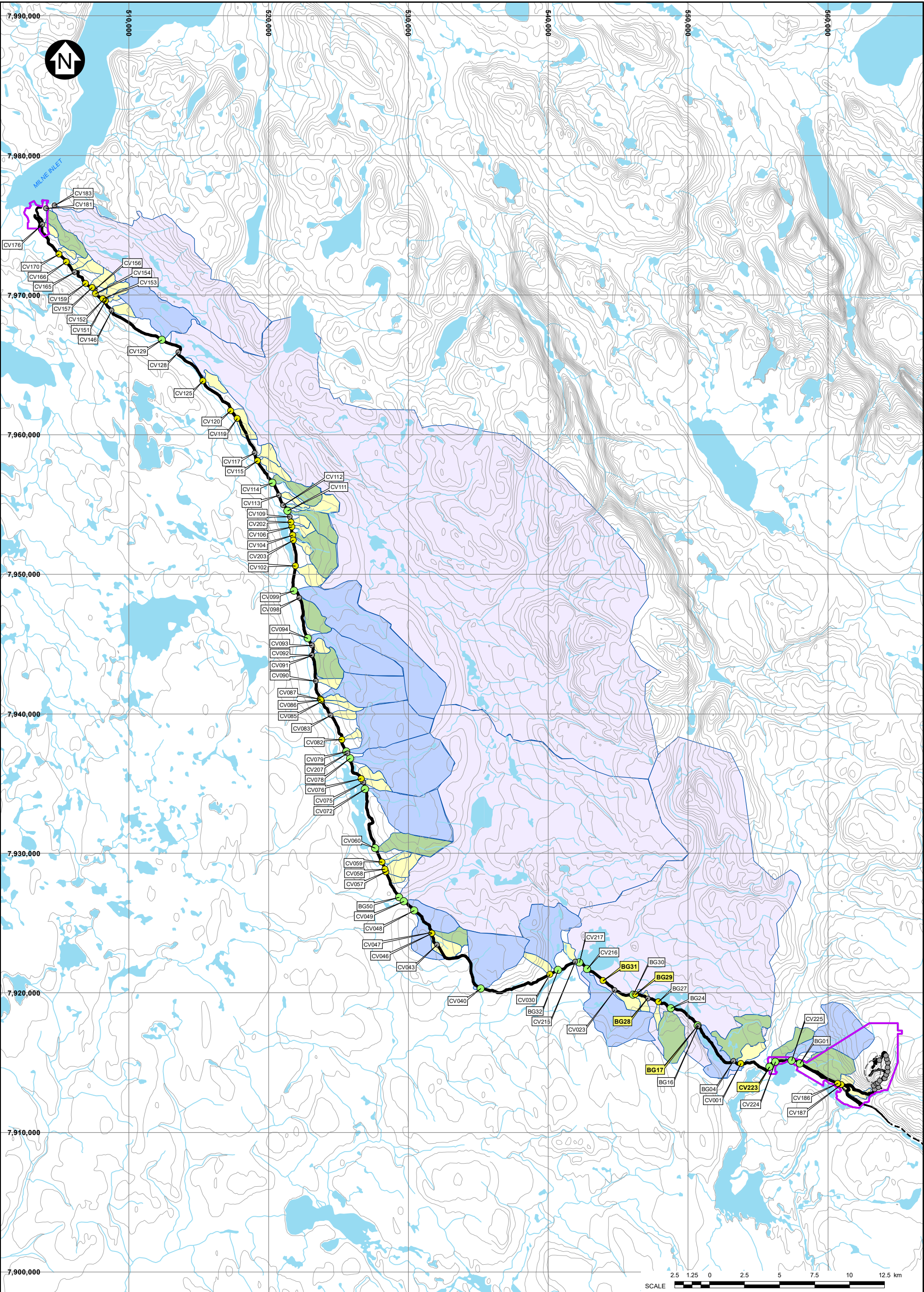
Sample Location	Description	Coordinates (Lat/Long)
CLSP-OUT	Camp Lake Sedimentation Pond Outlet	N 71 19 42.2 W 79 22 55.4
CLT-OUT	Camp Lake Tributary # 1 (100 m upstream of Camp Lake Outfall)	N 71 19 46.8 W 79 23 08.6
CLT-DS CL-DS	Camp Lake Tributary # 1 (100 m downstream of Airstrip Drainage outfall into Camp Lake Tributary #1)	N 71 19 46.6 W 79 22 45.6
SDLT-OUT	Sheardown Lake Tributary (40 m upstream of Sheardown Lake Outfall)	N 71 18 58.3 W 79 18 45.5
LDFG-OUT	Landfill Gate Tributary (40 m upstream of Sheardown Lake Outfall)	N 71 18 41.0 W 79 17 40.6
CD4-IN	Upstream of Check Dam #4	N 71 18 45.8 W 79 13 01.0
CD4-OUT	Downstream of Check Dam #4	N 71 18 43.2 W 79 12 54.2
CV 194A	Culvert that directs discharge from Check Dam # 4 to Mary River	N 71 18 41.6 W 79 12 55.3
MS-C-E	SNP Monitoring Site (290 m upstream of SDLT Outfall)	N 71 18 53.9 W 79 17 39.7
SVCD1-IN	Sheardown Valley Checkdam # 1	N 71 18 38.5 W 79 15 10.8
SVCD1-T1 & SVCD1-T2	Sheardown Valley Checkdam # 1 (1 meter downstream)	N 71 18 38.5 W 79 15 10.8
MS-08-US	Mary River - Upstream of Deposit 1	N 71 18 37.8 W 79 11 13.4
MS-08-DS	Mary River – Downstream of tributary draining Deposit 1	N 71 18 38.9 W 79 12 09.4
G0-09A	Mary River - Upstream of Deposit 1	N 71 20 51.4 W 79 00 11.8
G0-09	Mary River - Upstream of Deposit 1	N 71 20 18.0 W 78 59 46.8
G0-09B	Mary River - Upstream of Deposit 1	N 71 19 25.6 W 79 00 22.2

Sample Location	Description	Coordinates (Lat/Long)
G0-03	Mary River - Upstream of Deposit 1	N 71 18 22.2 W 79 07 15.9
G0-01	Mary River - Upstream of Deposit 1	N 71 18 37.7 W 79 11 50.8
F0-01	Mary River Tributary draining Deposit 1	N 71 18 38.6 W 79 11 48.3
E0-10	Mary River – Downstream of F0-01	N 71 18 38.4 W 79 11 56.2
E0-03	Mary River – Downstream of Deposit 1	N 71 18 22.6 W 79 14 21.7
E0-21	Mary River – Downstream of Mine Site Treated Wastewater Outfall	N 71 17 58.9 W 79 15 17.2
E0-20	Mary River – Downstream of Mine Site Treated Wastewater Outfall	N 71 17 45.0 W 79 16 34.5
C0-10	Mary River – Downstream of Sheardown Lake Outlet	N 71 17 57.6 W 79 18 15.9
C0-05	Mary River – Downstream of Mine Site	N 71 16 40.2 W 79 22 15.6
C0-01	Mary River – Before Mary Lake	N 71 15 28.5 W 79 25 47.2



P/A NO. NB102-181/38	REF NO. NB16-00385
FIGURE 1 REV 0	

0	06JUL'16	ISSUED WITH TRANSMITTAL	AV	AS	RAC
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED



LEGEND:

- WATER
- SMALL CATCHMENT
- MEDIUM CATCHMENT
- LARGE CATCHMENT
- EXTRA LARGE CATCHMENT

FISH BEARING STATUS

- NO
- POTENTIAL
- YES

RIVER/STREAM/DRAINAGE

MILNE INLET TOTE ROAD

DENOTES STREAM CROSSINGS WITH SEDIMENTATION PROBLEMS AS DESCRIBED IN NT-NU SPILL REPORT 16-202.

NOTES:

- COORDINATE GRID IS IN METRES.
- COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N.
- BASE MAP: © HER MAJESTY THE QUEEN IN RIGHTS OF CANADA DEPARTMENT OF NATURAL RESOURCES (2009). ALL RIGHTS RESERVED.
- CONTOUR INTERVAL IS 40 METRES.
- CATCHMENT BASED ON JULY 2006 INSPECTIONS.
- FISH BEARING STATUS BASED ON HATCH DWG. NO.'S H349000-3000-10-088-0030, H349000-3000-10-088-0031, H349000-3000-10-088-0032, H349000-3000-10-088-0033 (REV 1), AND H349000-3000-10-088-0034 (REV 4).

BAFFINLAND IRON MINES CORPORATION

MARY RIVER

MILNE INLET TOTE ROAD
FISH BEARING CULVERT STATUS
AND CATCHMENTS

Knight Piésold
CONSULTING

PIA NO.
NB102-181/38

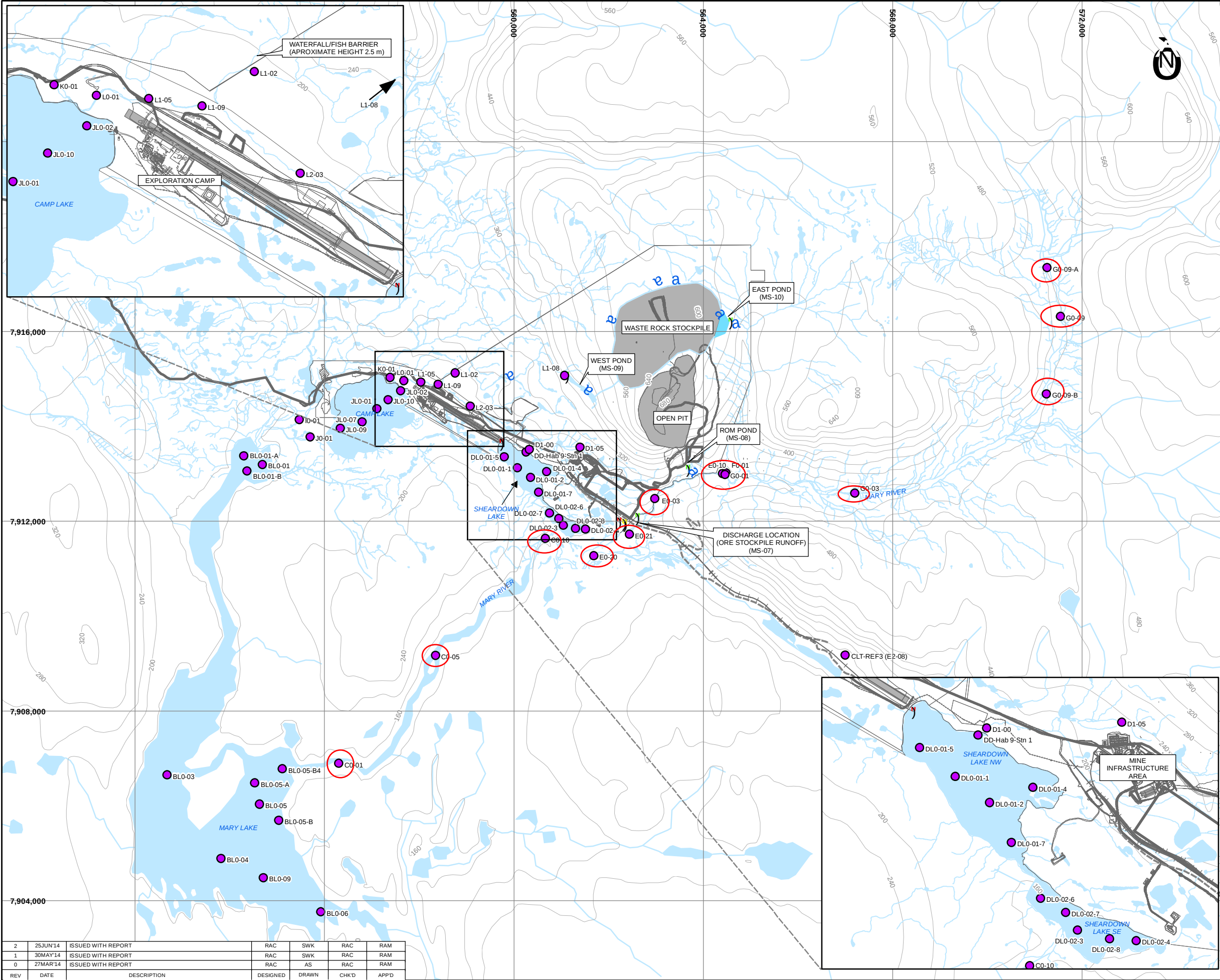
REF NO.
NB16-00385

FIGURE 3

REV
0

0	06JUL'16	ISSUED WITH TRANSMITTAL	JM	AS	RAC
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED

SAVED: I:\10200181\38A\GIS\Figs\B10_r0.mxd, Jul 06, 2016 10:28 AM, asimpson



- LEGEND:**
- WATER QUALITY CREMP STATION
 - SUMMER DISCHARGE LOCATION OF TREATED SEWAGE EFFLUENT
 - WINTER LAND DISCHARGE LOCATION OF TREATED SEWAGE EFFLUENT TO MARY RIVER
 - MINE EFFLUENT FINAL DISCHARGE POINT
 - EXISTING TOTE ROAD
 - PROPOSED RAILWAY ALIGNMENT
 - PROPOSED CONSTRUCTION ACCESS ROAD
 - PROPOSED SITE INFRASTRUCTURE
 - RIVER/STREAM/DRAINAGE
 - PROPOSED SITE INFRASTRUCTURE
 - WATER

Mary River Water Quality Sample Locations

- NOTES:**
- BASE MAP: © HER MAJESTY THE QUEEN IN RIGHTS OF CANADA, DEPARTMENT OF NATURAL RESOURCES (2004). ALL RIGHTS RESERVED.
 - COORDINATE GRID IS UTM (WGS84/NAD83) ZONE17.
 - CONTOUR ARE IN METRES. CONTOUR INTERVAL VARIES.
 - LAKE SAMPLE LOCATIONS VARY SLIGHTLY DURING WINTER MONTHS DUE TO ICE CONDITIONS.
 - INFRASTRUCTURE INFORMATION PROVIDED BY HATCH ON JANUARY 31, 2014.

SCALE 1 0.5 0 1 2 3 4 km

BAFFINLAND IRON MINES CORPORATION		
MARY RIVER PROJECT		
CREMP WATER QUALITY STATIONS		
Knight Piésold CONSULTING	P/A NO. NB102-181/33	REF NO. 1
FIGURE 2.11		REV 2

SAVED: I:\102001813\A\G\IS\Figs\B24_12.mxd; Jun 26, 2014 3:50 PM; asimpson

2	25JUN14	ISSUED WITH REPORT	RAC	SWK	RAC	RAM
1	30MAY14	ISSUED WITH REPORT	RAC	SWK	RAC	RAM
0	27MAR14	ISSUED WITH REPORT	RAC	AS	RAC	RAM
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	CHK'D	APP'D

Appendix B.2

Water Quality Results

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1765595-5	LDFG-OUT	8-May-16	pH	7.49	pH units	ALS
L1765595-5	LDFG-OUT	8-May-16	Total Suspended Solids	47.6	mg/L	ALS
L1765595-5	LDFG-OUT	8-May-16	Total Dissolved Solids	52	mg/L	ALS
L1765595-5	LDFG-OUT	8-May-16	Turbidity	79.5	NTU	ALS
L1765595-8	SDLT-OUT	8-May-16	pH	7.69	pH units	ALS
L1765595-8	SDLT-OUT	8-May-16	Total Suspended Solids	61.2	mg/L	ALS
L1765595-8	SDLT-OUT	8-May-16	Total Dissolved Solids	92	mg/L	ALS
L1765595-8	SDLT-OUT	8-May-16	Turbidity	152	NTU	ALS
L1765674-5	LDFG-OUT	9-May-16	pH	7.44	pH units	ALS
L1765674-5	LDFG-OUT	9-May-16	Total Suspended Solids	21.6	mg/L	ALS
L1765674-5	LDFG-OUT	9-May-16	Total Dissolved Solids	36	mg/L	ALS
L1765674-5	LDFG-OUT	9-May-16	Turbidity	46.8	NTU	ALS
L1765674-8	SDLT-OUT	9-May-16	pH	7.61	pH units	ALS
L1765674-8	SDLT-OUT	9-May-16	Total Suspended Solids	29.6	mg/L	ALS
L1765674-8	SDLT-OUT	9-May-16	Total Dissolved Solids	80	mg/L	ALS
L1765674-8	SDLT-OUT	9-May-16	Turbidity	94.6	NTU	ALS
L1765955-5	LDFG-OUT	9-May-16	pH	7.34	pH units	ALS
L1765955-5	LDFG-OUT	9-May-16	Total Suspended Solids	20.8	mg/L	ALS
L1765955-5	LDFG-OUT	9-May-16	Total Dissolved Solids	40	mg/L	ALS
L1765955-5	LDFG-OUT	9-May-16	Turbidity	44.8	NTU	ALS
L1765955-8	SDLT-OUT	9-May-16	pH	7.66	pH units	ALS
L1765955-8	SDLT-OUT	9-May-16	Total Suspended Solids	95.6	mg/L	ALS
L1765955-8	SDLT-OUT	9-May-16	Total Dissolved Solids	72	mg/L	ALS
L1765955-8	SDLT-OUT	9-May-16	Turbidity	172	NTU	ALS
L1766603-5	LDFG-OUT	10-May-16	pH	7.38	pH units	ALS
L1766603-5	LDFG-OUT	10-May-16	Total Suspended Solids	17.6	mg/L	ALS
L1766603-5	LDFG-OUT	10-May-16	Total Dissolved Solids	44	mg/L	ALS
L1766603-5	LDFG-OUT	10-May-16	Turbidity	41.7	NTU	ALS
L1766603-8	SDLT-OUT	10-May-16	pH	7.47	pH units	ALS
L1766603-8	SDLT-OUT	10-May-16	Total Suspended Solids	29.6	mg/L	ALS
L1766603-8	SDLT-OUT	10-May-16	Total Dissolved Solids	40	mg/L	ALS
L1766603-8	SDLT-OUT	10-May-16	Turbidity	56.3	NTU	ALS
L1766923-1	SDLT-OUT	10-May-16	pH	7.47	pH units	ALS
L1766923-1	SDLT-OUT	10-May-16	Total Suspended Solids	46.3	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Total Dissolved Solids	66	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Turbidity	67.2	NTU	ALS
L1766923-1	SDLT-OUT	10-May-16	Conductivity	79.5	umhos/cm	ALS
L1766923-1	SDLT-OUT	10-May-16	Hardness (as CaCO3)	32	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Alkalinity, Total (as CaCO3)	23	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Ammonia, Total (as N)	0.100	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Chloride (Cl)	3.44	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Fluoride (F)	0.034	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Nitrate (as N)	0.407	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Total Kjeldahl Nitrogen	0.49	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Phosphorus, Total	0.0628	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Sulfate (SO4)	6.96	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Dissolved Organic Carbon	5.2	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Total Organic Carbon	5.9	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Aluminum (Al)-Total	2.95	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Arsenic (As)-Total	0.00027	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Cadmium (Cd)-Total	0.000043	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Calcium (Ca)-Total	6.41	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Copper (Cu)-Total	0.0057	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Iron (Fe)-Total	4.00	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Lead (Pb)-Total	0.00210	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Magnesium (Mg)-Total	6.48	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Manganese (Mn)-Total	0.0867	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Molybdenum (Mo)-Total	0.00147	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1766923-1	SDLT-OUT	10-May-16	Nickel (Ni)-Total	0.0061	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Potassium (K)-Total	3.46	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Selenium (Se)-Total	0.000085	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Sodium (Na)-Total	1.76	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Thallium (Tl)-Total	0.000047	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Uranium (U)-Total	0.00123	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Zinc (Zn)-Total	0.0084	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Aluminum (Al)-Dissolved	0.0278	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Cadmium (Cd)-Dissolved	0.000020	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Calcium (Ca)-Dissolved	6.04	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Copper (Cu)-Dissolved	0.00206	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Iron (Fe)-Dissolved	0.037	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Lead (Pb)-Dissolved	0.000060	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Magnesium (Mg)-Dissolved	4.21	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Manganese (Mn)-Dissolved	0.0212	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Molybdenum (Mo)-Dissolved	0.00134	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Nickel (Ni)-Dissolved	0.00120	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Potassium (K)-Dissolved	2.42	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Selenium (Se)-Dissolved	0.000081	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Sodium (Na)-Dissolved	1.77	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Uranium (U)-Dissolved	0.000493	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Zinc (Zn)-Dissolved	0.0012	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Oil and Grease, Total	<4.0	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	pH	7.46	pH units	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Suspended Solids	29.5	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Dissolved Solids	58	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Turbidity	50.2	NTU	ALS
L1766923-3	SDLT-OUT01	10-May-16	Conductivity	78.9	umhos/cm	ALS
L1766923-3	SDLT-OUT01	10-May-16	Hardness (as CaCO3)	32	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Ammonia, Total (as N)	0.091	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Chloride (Cl)	3.42	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Fluoride (F)	<0.020	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nitrate (as N)	0.413	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Kjeldahl Nitrogen	0.49	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Phosphorus, Total	0.0408	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sulfate (SO4)	7.17	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Dissolved Organic Carbon	5.9	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Organic Carbon	6.0	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Aluminum (Al)-Total	1.59	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Arsenic (As)-Total	0.00016	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Cadmium (Cd)-Total	0.000042	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Calcium (Ca)-Total	6.22	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Copper (Cu)-Total	0.0040	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Iron (Fe)-Total	2.03	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Lead (Pb)-Total	0.00105	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Magnesium (Mg)-Total	5.15	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Manganese (Mn)-Total	0.0518	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Molybdenum (Mo)-Total	0.00149	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nickel (Ni)-Total	0.0039	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Potassium (K)-Total	2.92	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Selenium (Se)-Total	0.000083	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sodium (Na)-Total	1.72	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Thallium (Tl)-Total	0.000027	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Uranium (U)-Total	0.000920	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1766923-3	SDLT-OUT01	10-May-16	Zinc (Zn)-Total	0.0061	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Aluminum (Al)-Dissolved	0.0245	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Cadmium (Cd)-Dissolved	0.000019	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Calcium (Ca)-Dissolved	6.04	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Copper (Cu)-Dissolved	0.00200	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Iron (Fe)-Dissolved	0.031	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Lead (Pb)-Dissolved	0.000061	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Magnesium (Mg)-Dissolved	4.18	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Manganese (Mn)-Dissolved	0.0208	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Molybdenum (Mo)-Dissolved	0.00134	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nickel (Ni)-Dissolved	0.00114	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Potassium (K)-Dissolved	2.39	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Selenium (Se)-Dissolved	0.000097	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sodium (Na)-Dissolved	1.76	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Uranium (U)-Dissolved	0.000474	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Zinc (Zn)-Dissolved	0.0010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	pH	7.37	pH units	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Suspended Solids	23.1	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Dissolved Solids	44	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Turbidity	41.0	NTU	ALS
L1766923-2	LDFG-OUT	10-May-16	Conductivity	65.1	umhos/cm	ALS
L1766923-2	LDFG-OUT	10-May-16	Hardness (as CaCO3)	27	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Alkalinity, Total (as CaCO3)	21	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Ammonia, Total (as N)	0.095	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Chloride (Cl)	1.84	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Fluoride (F)	<0.020	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nitrate (as N)	0.241	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Kjeldahl Nitrogen	0.48	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Phosphorus, Total	0.0219	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sulfate (SO4)	7.37	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Dissolved Organic Carbon	3.3	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Organic Carbon	3.3	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Aluminum (Al)-Total	0.985	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Arsenic (As)-Total	0.00010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Calcium (Ca)-Total	5.15	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Copper (Cu)-Total	0.0033	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Iron (Fe)-Total	1.21	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Lead (Pb)-Total	0.00070	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Magnesium (Mg)-Total	4.17	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Manganese (Mn)-Total	0.113	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nickel (Ni)-Total	0.0031	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Potassium (K)-Total	1.53	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Selenium (Se)-Total	0.000085	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sodium (Na)-Total	1.03	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Thallium (Tl)-Total	0.000016	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Uranium (U)-Total	0.000667	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Zinc (Zn)-Total	0.0035	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Aluminum (Al)-Dissolved	0.0077	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Calcium (Ca)-Dissolved	5.03	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Copper (Cu)-Dissolved	0.00055	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1766923-2	LDFG-OUT	10-May-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Magnesium (Mg)-Dissolved	3.57	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Manganese (Mn)-Dissolved	0.0913	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Molybdenum (Mo)-Dissolved	0.000320	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nickel (Ni)-Dissolved	0.00074	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Potassium (K)-Dissolved	1.20	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Selenium (Se)-Dissolved	0.000084	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sodium (Na)-Dissolved	1.06	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Uranium (U)-Dissolved	0.000263	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Zinc (Zn)-Dissolved	0.0025	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1767478-1	SDLT-OUT	11-May-16	pH	7.54	pH units	ALS
L1767478-1	SDLT-OUT	11-May-16	Total Suspended Solids	11.2	mg/L	ALS
L1767478-1	SDLT-OUT	11-May-16	Turbidity	30.4	NTU	ALS
L1767478-2	LDFG-OUT	11-May-16	pH	7.47	pH units	ALS
L1767478-2	LDFG-OUT	11-May-16	Total Suspended Solids	6.8	mg/L	ALS
L1767478-2	LDFG-OUT	11-May-16	Turbidity	19.4	NTU	ALS
L1768386-3	SDLT-OUT	13-May-16	pH	7.57	pH units	ALS
L1768386-3	SDLT-OUT	13-May-16	Total Suspended Solids	34.4	mg/L	ALS
L1768386-3	SDLT-OUT	13-May-16	Turbidity	57.4	NTU	ALS
L1768851-5	LDFG-OUT	14-May-16	pH	7.37	pH units	ALS
L1768851-5	LDFG-OUT	14-May-16	Total Suspended Solids	16.8	mg/L	ALS
L1768851-5	LDFG-OUT	14-May-16	Turbidity	30.1	NTU	ALS
L1768864-5	LDFG-OUT	15-May-16	pH	7.22	pH units	ALS
L1768864-5	LDFG-OUT	15-May-16	Total Suspended Solids	27.6	mg/L	ALS
L1768864-5	LDFG-OUT	15-May-16	Total Dissolved Solids	36	mg/L	ALS
L1768864-5	LDFG-OUT	15-May-16	Turbidity	36.5	NTU	ALS
L1769292-5	SDLT-OUT	16-May-16	pH	7.58	pH units	ALS
L1769292-5	SDLT-OUT	16-May-16	Total Suspended Solids	56.0	mg/L	ALS
L1769292-5	SDLT-OUT	16-May-16	Total Dissolved Solids	63	mg/L	ALS
L1769292-5	SDLT-OUT	16-May-16	Turbidity	101.0	NTU	ALS
L1770947-8	LDFG-OUT	18-May-16	pH	7.26	pH units	ALS
L1770947-8	LDFG-OUT	18-May-16	Total Suspended Solids	23.0	mg/L	ALS
L1770947-8	LDFG-OUT	18-May-16	Total Dissolved Solids	44	mg/L	ALS
L1770947-8	LDFG-OUT	18-May-16	Turbidity	56.2	NTU	ALS
L1770947-5	SDLT-OUT	18-May-16	pH	7.57	pH units	ALS
L1770947-5	SDLT-OUT	18-May-16	Total Suspended Solids	135.0	mg/L	ALS
L1770947-5	SDLT-OUT	18-May-16	Total Dissolved Solids	96	mg/L	ALS
L1770947-5	SDLT-OUT	18-May-16	Turbidity	105.0	NTU	ALS
L1771600-3	LDFG-OUT	19-May-16	pH	7.32	pH units	ALS
L1771600-3	LDFG-OUT	19-May-16	Total Suspended Solids	32.4	mg/L	ALS
L1771600-3	LDFG-OUT	19-May-16	Total Dissolved Solids	<20	mg/L	ALS
L1771600-3	LDFG-OUT	19-May-16	Turbidity	71.7	NTU	ALS
L1772161-4	SDLT-OUT	19-May-16	pH	7.6	pH units	ALS
L1772161-4	SDLT-OUT	19-May-16	Total Suspended Solids	52.4	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Total Dissolved Solids	68.0	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Turbidity	68.2	NTU	ALS
L1772161-4	SDLT-OUT	19-May-16	Aluminum (Al)-Total	2.62	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Arsenic (As)-Total	0.00024	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Barium (Ba)-Total	0.0175	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Beryllium (Be)-Total	0.00013	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Bismuth (Bi)-Total	0.000079	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Boron (B)-Total	0.011	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Cadmium (Cd)-Total	0.000033	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Calcium (Ca)-Total	7.95	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772161-4	SDLT-OUT	19-May-16	Cesium (Cs)-Total	0.000193	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Chromium (Cr)-Total	0.00403	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Cobalt (Co)-Total	0.00163	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Copper (Cu)-Total	0.0044	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Iron (Fe)-Total	3.27	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Lead (Pb)-Total	0.00177	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Lithium (Li)-Total	0.0047	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Magnesium (Mg)-Total	7.04	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Manganese (Mn)-Total	0.0805	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Molybdenum (Mo)-Total	0.00203	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Nickel (Ni)-Total	0.00479	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Potassium (K)-Total	3.67	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Rubidium (Rb)-Total	0.00945	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Selenium (Se)-Total	0.000079	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Silicon (Si)-Total	5.10	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Sodium (Na)-Total	1.97	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Strontium (Sr)-Total	0.0084	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Sulfur (S)-Total	3.20	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Thallium (Tl)-Total	0.000044	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Thorium (Th)-Total	0.00126	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tin (Sn)-Total	0.00014	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Titanium (Ti)-Total	0.110	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tungsten (W)-Total	0.00011	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Uranium (U)-Total	0.00141	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Vanadium (V)-Total	0.00418	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Zinc (Zn)-Total	0.0076	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Zirconium (Zr)-Total	0.00157	mg/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Benzene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Toluene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	o-Xylene	<0.30	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	4-Bromofluorobenzene	101.8	%	ALS
L1772161-5	SDLT-OUT	19-May-16	1,4-Difluorobenzene	101.2	%	ALS
L1772161-5	SDLT-OUT	19-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	F1-BTEX	<25	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	2-Bromobenzotrifluoride	86.5	%	ALS
L1772161-5	SDLT-OUT	19-May-16	3,4-Dichlorotoluene	96.1	%	ALS
L1772274-1	SDLT-OUT	22-May-16	pH	7.57	pH units	ALS
L1772274-1	SDLT-OUT	22-May-16	Total Suspended Solids	23.2	mg/L	ALS
L1772274-1	SDLT-OUT	22-May-16	Total Dissolved Solids	27	mg/L	ALS
L1772274-1	SDLT-OUT	22-May-16	Turbidity	37.0	NTU	ALS
L1772274-4	LDFG-OUT	22-May-16	pH	7.54	pH units	ALS
L1772274-4	LDFG-OUT	22-May-16	Total Suspended Solids	26.7	mg/L	ALS
L1772274-4	LDFG-OUT	22-May-16	Total Dissolved Solids	<20	mg/L	ALS
L1772274-4	LDFG-OUT	22-May-16	Turbidity	73.3	NTU	ALS
L1772636-2	SDLT-OUT	23-May-16	pH	7.67	pH units	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Suspended Solids	17.1	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Dissolved Solids	48	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Turbidity	26.6	NTU	ALS
L1772636-2	SDLT-OUT	23-May-16	Conductivity	67.5	umhos/cm	ALS
L1772636-2	SDLT-OUT	23-May-16	Hardness (as CaCO3)	32	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-2	SDLT-OUT	23-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Chloride (Cl)	2.24	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sulfate (SO4)	4.16	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Dissolved Organic Carbon	5.7	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Organic Carbon	12.1	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Aluminum (Al)-Total	0.851	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Arsenic (As)-Total	0.00012	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Barium (Ba)-Total	0.00838	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cadmium (Cd)-Total	0.000021	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Calcium (Ca)-Total	5.89	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cesium (Cs)-Total	0.000068	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Chromium (Cr)-Total	0.00143	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cobalt (Co)-Total	0.00062	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Copper (Cu)-Total	0.0023	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Iron (Fe)-Total	1.10	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Lead (Pb)-Total	0.00067	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Lithium (Li)-Total	0.0013	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Magnesium (Mg)-Total	4.25	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Manganese (Mn)-Total	0.0323	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Molybdenum (Mo)-Total	0.000878	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Nickel (Ni)-Total	0.00231	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Potassium (K)-Total	1.76	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Rubidium (Rb)-Total	0.00448	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Selenium (Se)-Total	0.000051	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Silicon (Si)-Total	1.93	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sodium (Na)-Total	0.94	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Strontium (Sr)-Total	0.0046	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sulfur (S)-Total	1.39	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Thallium (Tl)-Total	0.000017	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Thorium (Th)-Total	0.00042	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Titanium (Ti)-Total	0.0352	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Uranium (U)-Total	0.000671	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Vanadium (V)-Total	0.00140	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Zinc (Zn)-Total	0.0046	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Zirconium (Zr)-Total	0.00071	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	o-Xylene	<0.30	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	4-Bromofluorobenzene	99.3	%	ALS
L1772636-2	SDLT-OUT	23-May-16	1,4-Difluorobenzene	101.9	%	ALS
L1772636-2	SDLT-OUT	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F4 (C34-C50)	<250	ug/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-2	SDLT-OUT	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	2-Bromobenzotrifluoride	96	%	ALS
L1772636-2	SDLT-OUT	23-May-16	3,4-Dichlorotoluene	100.6	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	pH	7.63	pH units	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Suspended Solids	22	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Dissolved Solids	50	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Turbidity	28.3	NTU	ALS
L1772636-3	SDLT-OUT01	23-May-16	Conductivity	65.7	umhos/cm	ALS
L1772636-3	SDLT-OUT01	23-May-16	Hardness (as CaCO3)	32	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Alkalinity, Total (as CaCO3)	30	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Chloride (Cl)	2.18	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sulfate (SO4)	3.92	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Dissolved Organic Carbon	4.5	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Organic Carbon	4.1	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Aluminum (Al)-Total	0.897	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Arsenic (As)-Total	0.00013	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Barium (Ba)-Total	0.00880	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cadmium (Cd)-Total	0.000022	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Calcium (Ca)-Total	5.82	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cesium (Cs)-Total	0.000069	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Chromium (Cr)-Total	0.00154	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cobalt (Co)-Total	0.00064	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Copper (Cu)-Total	0.0023	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Iron (Fe)-Total	1.19	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Lead (Pb)-Total	0.00071	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Lithium (Li)-Total	0.0015	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Magnesium (Mg)-Total	4.21	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Manganese (Mn)-Total	0.0334	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Molybdenum (Mo)-Total	0.000884	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Nickel (Ni)-Total	0.00232	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Potassium (K)-Total	1.75	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Rubidium (Rb)-Total	0.00463	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Silicon (Si)-Total	1.96	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sodium (Na)-Total	0.92	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Strontium (Sr)-Total	0.0046	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sulfur (S)-Total	1.31	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Thallium (Tl)-Total	0.000019	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Thorium (Th)-Total	0.00046	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Titanium (Ti)-Total	0.0381	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Uranium (U)-Total	0.000682	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Vanadium (V)-Total	0.00152	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Zinc (Zn)-Total	0.0040	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Zirconium (Zr)-Total	0.00069	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	o-Xylene	<0.30	ug/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-3	SDLT-OUT01	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	4-Bromofluorobenzene	99.8	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	1,4-Difluorobenzene	101	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	2-Bromobenzotrifluoride	82.8	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	3,4-Dichlorotoluene	97	%	ALS
L1772636-4	LDFG-OUT	23-May-16	pH	7.67	pH units	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Suspended Solids	16.3	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Dissolved Solids	42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Turbidity	52.8	NTU	ALS
L1772636-4	LDFG-OUT	23-May-16	Conductivity	55.0	umhos/cm	ALS
L1772636-4	LDFG-OUT	23-May-16	Hardness (as CaCO3)	29	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Chloride (Cl)	0.94	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sulfate (SO4)	1.48	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Dissolved Organic Carbon	4.3	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Organic Carbon	10.5	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Aluminum (Al)-Total	0.943	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Arsenic (As)-Total	0.00015	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Barium (Ba)-Total	0.00726	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Bismuth (Bi)-Total	0.000057	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Calcium (Ca)-Total	5.42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cesium (Cs)-Total	0.000085	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Chromium (Cr)-Total	0.00149	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cobalt (Co)-Total	0.00090	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Copper (Cu)-Total	0.0021	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Iron (Fe)-Total	1.17	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Lead (Pb)-Total	0.00091	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Lithium (Li)-Total	0.0019	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Magnesium (Mg)-Total	3.78	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Manganese (Mn)-Total	0.0552	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Molybdenum (Mo)-Total	0.000347	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Nickel (Ni)-Total	0.00224	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Potassium (K)-Total	1.42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Rubidium (Rb)-Total	0.00390	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Silicon (Si)-Total	2.03	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sodium (Na)-Total	0.53	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Strontium (Sr)-Total	0.0037	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sulfur (S)-Total	0.50	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Thallium (Tl)-Total	0.000014	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Thorium (Th)-Total	0.00054	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Titanium (Ti)-Total	0.0259	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-4	LDFG-OUT	23-May-16	Uranium (U)-Total	0.000669	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Vanadium (V)-Total	0.00153	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Zinc (Zn)-Total	0.0047	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Zirconium (Zr)-Total	0.00124	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	o-Xylene	<0.30	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	4-Bromofluorobenzene	99.3	%	ALS
L1772636-4	LDFG-OUT	23-May-16	1,4-Difluorobenzene	101.3	%	ALS
L1772636-4	LDFG-OUT	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	2-Bromobenzotrifluoride	88.5	%	ALS
L1772636-4	LDFG-OUT	23-May-16	3,4-Dichlorotoluene	96.3	%	ALS
L1773561-2	SDLT-OUT	24-May-16	pH	7.51	pH units	ALS
L1773561-2	SDLT-OUT	24-May-16	Total Suspended Solids	60.0	mg/L	ALS
L1773561-2	SDLT-OUT	24-May-16	Turbidity	54.7	NTU	ALS
L1773561-4	LDFG-OUT	24-May-16	pH	7.56	pH units	ALS
L1773561-4	LDFG-OUT	24-May-16	Total Suspended Solids	8.4	mg/L	ALS
L1773561-4	LDFG-OUT	24-May-16	Turbidity	35.8	NTU	ALS
L1774143-1	SDLT-OUT	26-May-16	pH	7.58	pH units	ALS
L1774143-1	SDLT-OUT	26-May-16	Total Suspended Solids	35.6	mg/L	ALS
L1774143-1	SDLT-OUT	26-May-16	Turbidity	21.1	NTU	ALS
L1774143-3	LDFG-OUT	26-May-16	pH	7.63	pH units	ALS
L1774143-3	LDFG-OUT	26-May-16	Total Suspended Solids	5.6	mg/L	ALS
L1774143-3	LDFG-OUT	26-May-16	Turbidity	13.2	NTU	ALS
L1775014-2	SDLT-OUT	27-May-16	pH	7.68	pH units	ALS
L1775014-2	SDLT-OUT	27-May-16	Total Suspended Solids	13.2	mg/L	ALS
L1775014-2	SDLT-OUT	27-May-16	Turbidity	25.7	NTU	ALS
L1775076-2	SDLT-OUT	28-May-16	pH	7.67	pH units	ALS
L1775076-2	SDLT-OUT	28-May-16	Total Suspended Solids	85.0	mg/L	ALS
L1775076-2	SDLT-OUT	28-May-16	Turbidity	130.0	NTU	ALS
L1775076-3	LDFG-OUT	28-May-16	pH	7.58	pH units	ALS
L1775076-3	LDFG-OUT	28-May-16	Total Suspended Solids	11.0	mg/L	ALS
L1775076-3	LDFG-OUT	28-May-16	Turbidity	80.8	NTU	ALS
L1775126-2	SDLT-OUT	29-May-16	pH	7.52	pH units	ALS
L1775126-2	SDLT-OUT	29-May-16	Total Suspended Solids	7.6	mg/L	ALS
L1775126-2	SDLT-OUT	29-May-16	Turbidity	15.2	NTU	ALS
L1775126-3	LDFG-OUT	29-May-16	pH	7.65	pH units	ALS
L1775126-3	LDFG-OUT	29-May-16	Total Suspended Solids	2.4	mg/L	ALS
L1775126-3	LDFG-OUT	29-May-16	Turbidity	19.0	NTU	ALS
L1775619-3	SDLT-OUT	30-May-16	pH	7.62	pH units	ALS
L1775619-3	SDLT-OUT	30-May-16	Total Suspended Solids	6.8	mg/L	ALS
L1775619-3	SDLT-OUT	30-May-16	Turbidity	11.3	NTU	ALS
L1775619-4	LDFG-OUT	31-May-16	pH	7.78	pH units	ALS
L1775619-4	LDFG-OUT	31-May-16	Total Suspended Solids	2.0	mg/L	ALS
L1775619-4	LDFG-OUT	31-May-16	Turbidity	6.9	NTU	ALS
L1776322-2	SDLT-OUT	1-Jun-16	pH	7.63	pH units	ALS
L1776322-2	SDLT-OUT	1-Jun-16	Total Suspended Solids	7.6	mg/L	ALS
L1776322-2	SDLT-OUT	1-Jun-16	Turbidity	13.8	NTU	ALS
L1776322-1	LDFG-OUT	1-Jun-16	pH	7.83	pH units	ALS
L1776322-1	LDFG-OUT	1-Jun-16	Total Suspended Solids	3.2	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1776322-1	LDFG-OUT	1-Jun-16	Turbidity	8.7	NTU	ALS
L1777372-2	SDLT-OUT	2-Jun-16	pH	7.60	pH units	ALS
L1777372-2	SDLT-OUT	2-Jun-16	Total Suspended Solids	4.4	mg/L	ALS
L1777372-2	SDLT-OUT	2-Jun-16	Turbidity	9.7	NTU	ALS
L1777372-3	LDFG-OUT	2-Jun-16	pH	7.76	pH units	ALS
L1777372-3	LDFG-OUT	2-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1777372-3	LDFG-OUT	2-Jun-16	Turbidity	8.2	NTU	ALS
L1778021-2	SDLT-OUT	2-Jun-16	pH	7.65	pH units	ALS
L1778021-2	SDLT-OUT	2-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1778021-2	SDLT-OUT	2-Jun-16	Turbidity	6.9	NTU	ALS
L1778486-2	SDLT-OUT	4-Jun-16	pH	7.66	pH units	ALS
L1778486-2	SDLT-OUT	4-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1778486-2	SDLT-OUT	4-Jun-16	Turbidity	7.5	NTU	ALS
L1778538-3	SDLT-OUT	5-Jun-16	pH	7.67	pH units	ALS
L1778538-3	SDLT-OUT	5-Jun-16	Total Suspended Solids	3.2	mg/L	ALS
L1778538-3	SDLT-OUT	5-Jun-16	Turbidity	8.0	NTU	ALS
L1778538-4	LDFG-OUT	5-Jun-16	pH	7.78	pH units	ALS
L1778538-4	LDFG-OUT	5-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1778538-4	LDFG-OUT	5-Jun-16	Turbidity	5.4	NTU	ALS
L1778559-2	SDLT-OUT	6-Jun-16	pH	7.58	pH units	ALS
L1778559-2	SDLT-OUT	6-Jun-16	Total Suspended Solids	17.2	mg/L	ALS
L1778559-2	SDLT-OUT	6-Jun-16	Turbidity	15.7	NTU	ALS
L1778559-3	LDFG-OUT	6-Jun-16	pH	7.83	pH units	ALS
L1778559-3	LDFG-OUT	6-Jun-16	Total Suspended Solids	3.2	mg/L	ALS
L1778559-3	LDFG-OUT	6-Jun-16	Turbidity	8.2	NTU	ALS
L1779241-2	SDLT-OUT	7-Jun-16	pH	7.59	pH units	ALS
L1779241-2	SDLT-OUT	7-Jun-16	Total Suspended Solids	11.2	mg/L	ALS
L1779241-2	SDLT-OUT	7-Jun-16	Turbidity	9.6	NTU	ALS
L1779241-3	LDFG-OUT	7-Jun-16	pH	7.83	pH units	ALS
L1779241-3	LDFG-OUT	7-Jun-16	Total Suspended Solids	2.0	mg/L	ALS
L1779241-3	LDFG-OUT	7-Jun-16	Turbidity	7.6	NTU	ALS
L1779759-2	SDLT-OUT	8-Jun-16	pH	7.49	pH units	ALS
L1779759-2	SDLT-OUT	8-Jun-16	Total Suspended Solids	20.0	mg/L	ALS
L1779759-2	SDLT-OUT	8-Jun-16	Turbidity	24.3	NTU	ALS
L1779759-1	LDFG-OUT	8-Jun-16	pH	7.79	pH units	ALS
L1779759-1	LDFG-OUT	8-Jun-16	Total Suspended Solids	2.0	mg/L	ALS
L1779759-1	LDFG-OUT	8-Jun-16	Turbidity	5.4	NTU	ALS
L1782789-1	SVCD1-IN	13-Jun-16	pH	7.53	pH units	ALS
L1782789-1	SVCD1-IN	13-Jun-16	Total Suspended Solids	231	mg/L	ALS
L1782789-1	SVCD1-IN	13-Jun-16	Turbidity	133	NTU	ALS
L1782789-2	SVCD1-T1	13-Jun-16	pH	7.49	pH units	ALS
L1782789-2	SVCD1-T1	13-Jun-16	Total Suspended Solids	31.6	mg/L	ALS
L1782789-2	SVCD1-T1	13-Jun-16	Turbidity	4.95	NTU	ALS
L1782789-3	SVCD1-T2	13-Jun-16	pH	7.45	pH units	ALS
L1782789-3	SVCD1-T2	13-Jun-16	Total Suspended Solids	21.5	mg/L	ALS
L1782789-3	SVCD1-T2	13-Jun-16	Turbidity	3.89	NTU	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	2.0	mg/L	ALS
L1787809-5	MS-C-E	21-Jun-16	Turbidity	-	NTU	ALS
L1790090-3	SDLT-OUT	28-Jun-16	pH	8.15	pH units	ALS
L1790090-3	SDLT-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-3	SDLT-OUT	28-Jun-16	Turbidity	1.4	NTU	ALS
L1792808-2	SDLT-OUT	4-Jul-16	pH	8.17	pH units	ALS
L1792808-2	SDLT-OUT	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792808-2	SDLT-OUT	4-Jul-16	Turbidity	0.8	NTU	ALS
L1797825-2	SDLT-OUT	12-Jul-16	pH	8.19	pH units	ALS
L1797825-2	SDLT-OUT	12-Jul-16	Total Suspended Solids	2.4	mg/L	ALS
L1797825-2	SDLT-OUT	12-Jul-16	Turbidity	1.9	NTU	ALS
L1800469-1	SDLT-OUT	19-Jul-16	pH	8.08	pH units	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1800469-1	SDLT-OUT	19-Jul-16	Total Suspended Solids	3.2	mg/L	ALS
L1800469-1	SDLT-OUT	19-Jul-16	Turbidity	1.6	NTU	ALS
L1803783-2	SDLT-OUT	25-Jul-16	pH	8.14	pH units	ALS
L1803783-2	SDLT-OUT	25-Jul-16	Total Suspended Solids	<2	mg/L	ALS
L1803783-2	SDLT-OUT	25-Jul-16	Turbidity	0.9	NTU	ALS
L1803783-3	LDFG-OUT	25-Jul-16	pH	8.21	pH units	ALS
L1803783-3	LDFG-OUT	25-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1803783-3	LDFG-OUT	25-Jul-16	Turbidity	1.3	NTU	ALS
L1807025-2	SDLT-OUT	1-Aug-16	pH	8.07	pH units	ALS
L1807025-2	SDLT-OUT	1-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1807025-2	SDLT-OUT	1-Aug-16	Turbidity	2.6	NTU	ALS
L1807025-3	LDFG-OUT	1-Aug-16	pH	8.13	pH units	ALS
L1807025-3	LDFG-OUT	1-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1807025-3	LDFG-OUT	1-Aug-16	Turbidity	7.4	NTU	ALS
L1808207-2	SDLT-OUT	2-Aug-16	pH	8.05	pH units	ALS
L1808207-2	SDLT-OUT	2-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1808207-2	SDLT-OUT	2-Aug-16	Turbidity	1.3	NTU	ALS
L1808207-3	LDFG-OUT	2-Aug-16	pH	8.12	pH units	ALS
L1808207-3	LDFG-OUT	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1808207-3	LDFG-OUT	2-Aug-16	Turbidity	0.4	NTU	ALS
L1811533-1	SDLT-OUT	9-Aug-16	pH	8.17	pH units	ALS
L1811533-1	SDLT-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-1	SDLT-OUT	9-Aug-16	Turbidity	0.9	NTU	ALS
L1811533-2	LDFG-OUT	9-Aug-16	pH	8.15	pH units	ALS
L1811533-2	LDFG-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-2	LDFG-OUT	9-Aug-16	Turbidity	0.4	NTU	ALS
L1817817-1	SDLT-OUT	23-Aug-16	pH	8.21	pH units	ALS
L1817817-1	SDLT-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-1	SDLT-OUT	23-Aug-16	Turbidity	1.1	NTU	ALS
L1817817-2	LDFG-OUT	23-Aug-16	pH	7.99	pH units	ALS
L1817817-2	LDFG-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-2	LDFG-OUT	23-Aug-16	Turbidity	0.5	NTU	ALS
L1819436-1	LDFG-OUT	25-Aug-16	pH	7.92	pH units	ALS
L1819436-1	LDFG-OUT	25-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1819436-1	LDFG-OUT	25-Aug-16	Turbidity	0.2	NTU	ALS
L1819436-2	SDLT-OUT	25-Aug-16	pH	8.16	pH units	ALS
L1819436-2	SDLT-OUT	25-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1819436-2	SDLT-OUT	25-Aug-16	Turbidity	0.6	NTU	ALS
L1820709	LDFG-OUT	29-Aug-16	pH	7.81	pH units	ALS
L1820709	LDFG-OUT	29-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820709	LDFG-OUT	29-Aug-16	Turbidity	0.2	NTU	ALS
L1820709	SDLT-OUT	29-Aug-16	pH	8.21	pH units	ALS
L1820709	SDLT-OUT	29-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820709	SDLT-OUT	29-Aug-16	Turbidity	0.5	NTU	ALS

Note: SDLT-OUT01 is a duplicate of SDLT-OUT. No flow observed on July 4 at LDFG-OUT

Table B.2.2 - Surface Water Quality for Camp Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1770947-11	CLT-DS	18-May-16	pH	7.52	pH units	ALS
L1770947-11	CLT-DS	18-May-16	Total Suspended Solids	38.8	mg/L	ALS
L1770947-11	CLT-DS	18-May-16	Total Dissolved Solids	96	mg/L	ALS
L1770947-11	CLT-DS	18-May-16	Turbidity	41.0	NTU	ALS
L1771600-2	CLT-DS	19-May-16	pH	7.50	pH units	ALS
L1771600-2	CLT-DS	19-May-16	Total Suspended Solids	179	mg/L	ALS
L1771600-2	CLT-DS	19-May-16	Total Dissolved Solids	44	mg/L	ALS
L1771600-2	CLT-DS	19-May-16	Turbidity	91.5	NTU	ALS
L1772274-3	CLT-OUT	22-May-16	pH	7.68	pH units	ALS
L1772274-3	CLT-OUT	22-May-16	Total Suspended Solids	5.6	mg/L	ALS
L1772274-3	CLT-OUT	22-May-16	Total Dissolved Solids	64	mg/L	ALS
L1772274-3	CLT-OUT	22-May-16	Turbidity	21.0	NTU	ALS
L1772274-2	CLSP-OUT	22-May-16	pH	7.69	pH units	ALS
L1772274-2	CLSP-OUT	22-May-16	Total Suspended Solids	76.7	mg/L	ALS
L1772274-2	CLSP-OUT	22-May-16	Total Dissolved Solids	38	mg/L	ALS
L1772274-2	CLSP-OUT	22-May-16	Turbidity	142	NTU	ALS
L1772636-1	CL-DS	23-May-16	pH	7.78	pH units	ALS
L1772636-1	CL-DS	23-May-16	Total Suspended Solids	87.9	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Total Dissolved Solids	68	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Turbidity	140	NTU	ALS
L1772636-1	CL-DS	23-May-16	Conductivity	67.6	umhos/cm	ALS
L1772636-1	CL-DS	23-May-16	Hardness (as CaCO3)	45	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Chloride (Cl)	2.54	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Sulfate (SO4)	1.96	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Dissolved Organic Carbon	3.2	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Total Organic Carbon	10.0	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Aluminum (Al)-Total	4.82	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Antimony (Sb)-Total	0.00020	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Arsenic (As)-Total	0.00057	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Barium (Ba)-Total	0.0272	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Beryllium (Be)-Total	0.00032	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Bismuth (Bi)-Total	0.000212	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Boron (B)-Total	0.011	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Cadmium (Cd)-Total	0.000052	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Calcium (Ca)-Total	6.60	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Cesium (Cs)-Total	0.000424	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Chromium (Cr)-Total	0.0105	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Cobalt (Co)-Total	0.00409	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Copper (Cu)-Total	0.0079	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Iron (Fe)-Total	5.53	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Lead (Pb)-Total	0.00669	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Lithium (Li)-Total	0.0081	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Magnesium (Mg)-Total	6.94	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Manganese (Mn)-Total	0.122	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Molybdenum (Mo)-Total	0.00165	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Nickel (Ni)-Total	0.0181	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Phosphorus (P)-Total	0.098	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Potassium (K)-Total	3.89	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Rubidium (Rb)-Total	0.0138	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Selenium (Se)-Total	0.000054	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Silicon (Si)-Total	10.5	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Sodium (Na)-Total	1.81	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Strontium (Sr)-Total	0.0188	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Sulfur (S)-Total	0.60	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Thallium (Tl)-Total	0.000072	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Thorium (Th)-Total	0.00456	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Tin (Sn)-Total	0.00031	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Titanium (Ti)-Total	0.178	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Tungsten (W)-Total	0.00167	mg/L	ALS

Table B.2.2 - Surface Water Quality for Camp Lake Tributaries						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-1	CL-DS	23-May-16	Uranium (U)-Total	0.00441	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Vanadium (V)-Total	0.00804	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Zinc (Zn)-Total	0.0181	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Zirconium (Zr)-Total	0.00300	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-1	CL-DS	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-1	CL-DS	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-1	CL-DS	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-1	CL-DS	23-May-16	o-Xylene	<0.30	ug/L	ALS
L1772636-1	CL-DS	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-1	CL-DS	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-1	CL-DS	23-May-16	4-Bromofluorobenzene	99.8	%	ALS
L1772636-1	CL-DS	23-May-16	1,4-Difluorobenzene	101.8	%	ALS
L1772636-1	CL-DS	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-1	CL-DS	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-1	CL-DS	23-May-16	F2 (C10-C16)	120	ug/L	ALS
L1772636-1	CL-DS	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-1	CL-DS	23-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772636-1	CL-DS	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-1	CL-DS	23-May-16	2-Bromobenzotrifluoride	98.2	%	ALS
L1772636-1	CL-DS	23-May-16	3,4-Dichlorotoluene	99.1	%	ALS
L1773561-3	CLT-OUT	24-May-16	pH	7.50	pH units	ALS
L1773561-3	CLT-OUT	24-May-16	Total Suspended Solids	10.8	mg/L	ALS
L1773561-3	CLT-OUT	24-May-16	Turbidity	20.9	NTU	ALS
L1773561-1	CLSP-OUT	24-May-16	pH	7.63	pH units	ALS
L1773561-1	CLSP-OUT	24-May-16	Total Suspended Solids	74.0	mg/L	ALS
L1773561-1	CLSP-OUT	24-May-16	Turbidity	94.2	NTU	ALS
L1774143-2	CLT-OUT	26-May-16	pH	7.61	pH units	ALS
L1774143-2	CLT-OUT	26-May-16	Total Suspended Solids	24.8	mg/L	ALS
L1774143-2	CLT-OUT	26-May-16	Turbidity	30.3	NTU	ALS
L1775014-1	CLT-OUT	27-May-16	pH	7.74	pH units	ALS
L1775014-1	CLT-OUT	27-May-16	Total Suspended Solids	25.6	mg/L	ALS
L1775014-1	CLT-OUT	27-May-16	Turbidity	36.8	NTU	ALS
L1775076-1	CLT-OUT	28-May-16	pH	7.63	pH units	ALS
L1775076-1	CLT-OUT	28-May-16	Total Suspended Solids	69.0	mg/L	ALS
L1775076-1	CLT-OUT	28-May-16	Turbidity	85.0	NTU	ALS
L1775126-1	CLT-OUT	29-May-16	pH	7.59	pH units	ALS
L1775126-1	CLT-OUT	29-May-16	Total Suspended Solids	3.2	mg/L	ALS
L1775126-1	CLT-OUT	29-May-16	Turbidity	15.6	NTU	ALS
L1775126-4	CLSP-OUT	29-May-16	pH	7.73	pH units	ALS
L1775126-4	CLSP-OUT	29-May-16	Total Suspended Solids	38.0	mg/L	ALS
L1775126-4	CLSP-OUT	29-May-16	Turbidity	87.9	NTU	ALS
L1775619-2	CLT-OUT	30-May-16	pH	7.70	pH units	ALS
L1775619-2	CLT-OUT	30-May-16	Total Suspended Solids	8.0	mg/L	ALS
L1775619-2	CLT-OUT	30-May-16	Turbidity	20.8	NTU	ALS
L1775619-1	CLSP-OUT	30-May-16	pH	7.76	pH units	ALS
L1775619-1	CLSP-OUT	30-May-16	Total Suspended Solids	21.6	mg/L	ALS
L1775619-1	CLSP-OUT	30-May-16	Turbidity	37.2	NTU	ALS
L1776322-3	CLT-OUT	1-Jun-16	pH	7.71	pH units	ALS
L1776322-3	CLT-OUT	1-Jun-16	Total Suspended Solids	5.2	mg/L	ALS
L1776322-3	CLT-OUT	1-Jun-16	Turbidity	15.3	NTU	ALS
L1777372-1	CLT-OUT	2-Jun-16	pH	7.76	pH units	ALS
L1777372-1	CLT-OUT	2-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1777372-1	CLT-OUT	2-Jun-16	Turbidity	11.9	NTU	ALS
L1778021-1	CLT-OUT	2-Jun-16	pH	7.83	pH units	ALS
L1778021-1	CLT-OUT	2-Jun-16	Total Suspended Solids	3.2	mg/L	ALS
L1778021-1	CLT-OUT	2-Jun-16	Turbidity	11.3	NTU	ALS
L1778486-1	CLT-OUT	4-Jun-16	pH	7.90	pH units	ALS
L1778486-1	CLT-OUT	4-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1778486-1	CLT-OUT	4-Jun-16	Turbidity	9.3	NTU	ALS
L1778538-2	CLT-OUT	5-Jun-16	pH	7.79	pH units	ALS
L1778538-2	CLT-OUT	5-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1778538-2	CLT-OUT	5-Jun-16	Turbidity	11.9	NTU	ALS

Table B.2.2 - Surface Water Quality for Camp Lake Tributaries						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1778538-1	CLSP-OUT	5-Jun-16	pH	7.46	pH units	ALS
L1778538-1	CLSP-OUT	5-Jun-16	Total Suspended Solids	7.2	mg/L	ALS
L1778538-1	CLSP-OUT	5-Jun-16	Turbidity	17.9	NTU	ALS
L1778559-1	CLT-OUT	6-Jun-16	pH	7.52	pH units	ALS
L1778559-1	CLT-OUT	6-Jun-16	Total Suspended Solids	5.6	mg/L	ALS
L1778559-1	CLT-OUT	6-Jun-16	Turbidity	11.4	NTU	ALS
L1779241-1	CLT-OUT	7-Jun-16	pH	7.60	pH units	ALS
L1779241-1	CLT-OUT	7-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1779241-1	CLT-OUT	7-Jun-16	Turbidity	9.68	NTU	ALS
L1779759-3	CLT-OUT	8-Jun-16	pH	7.46	pH units	ALS
L1779759-3	CLT-OUT	8-Jun-16	Total Suspended Solids	4.4	mg/L	ALS
L1779759-3	CLT-OUT	8-Jun-16	Turbidity	9.34	NTU	ALS
L1790090-1	CLSP-OUT	28-Jun-16	pH	7.42	pH units	ALS
L1790090-1	CLSP-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-1	CLSP-OUT	28-Jun-16	Turbidity	1.4	NTU	ALS
L1790090-2	CLT-OUT	28-Jun-16	pH	7.95	pH units	ALS
L1790090-2	CLT-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-2	CLT-OUT	28-Jun-16	Turbidity	2.9	NTU	ALS
L1792808-1	CLT-OUT	4-Jul-16	pH	8.03	pH units	ALS
L1792808-1	CLT-OUT	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792808-1	CLT-OUT	4-Jul-16	Turbidity	0.88	NTU	ALS
L1797825-1	CLT-OUT	12-Jul-16	pH	8.22	pH units	ALS
L1797825-1	CLT-OUT	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797825-1	CLT-OUT	12-Jul-16	Turbidity	0.55	NTU	ALS
L1800469-1	CLT-OUT	19-Jul-16	pH	8.11	pH units	ALS
L1800469-1	CLT-OUT	19-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1800469-1	CLT-OUT	19-Jul-16	Turbidity	0.05	NTU	ALS
L1803783-1	CLT-OUT	25-Jul-16	pH	8.16	pH units	ALS
L1803783-1	CLT-OUT	25-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1803783-1	CLT-OUT	25-Jul-16	Turbidity	1.3	NTU	ALS
L1808207-4	CLSP-OUT	3-Aug-16	pH	8.01	pH units	ALS
L1808207-4	CLSP-OUT	3-Aug-16	Total Suspended Solids	20.8*	mg/L	ALS
L1808207-4	CLSP-OUT	3-Aug-16	Turbidity	29.3	NTU	ALS
L1808207-1	CLT-OUT	3-Aug-16	pH	8.14	pH units	ALS
L1808207-1	CLT-OUT	3-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1808207-1	CLT-OUT	3-Aug-16	Turbidity	1.2	NTU	ALS
L1809441-1	CLT-OUT	5-Aug-16	pH	8.20	pH units	ALS
L1809441-1	CLT-OUT	5-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1809441-1	CLT-OUT	5-Aug-16	Turbidity	1.3	NTU	ALS
L1811533-4	CLSP-OUT	9-Aug-16	pH	8.30	pH units	ALS
L1811533-4	CLSP-OUT	9-Aug-16	Total Suspended Solids	4.0	mg/L	ALS
L1811533-4	CLSP-OUT	9-Aug-16	Turbidity	8.7	NTU	ALS
L1811533-3	CLT-OUT	9-Aug-16	pH	8.26	pH units	ALS
L1811533-3	CLT-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-3	CLT-OUT	9-Aug-16	Turbidity	1.3	NTU	ALS
L1817817-3	CLT-OUT	23-Aug-16	pH	8.31	pH units	ALS
L1817817-3	CLT-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-3	CLT-OUT	23-Aug-16	Turbidity	1.0	NTU	ALS
L1819436-3	CLT-OUT	25-Aug-16	pH	8.27	pH units	ALS
L1819436-3	CLT-OUT	25-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1819436-3	CLT-OUT	25-Aug-16	Turbidity	0.7	NTU	ALS
L1820709	CLT-OUT	29-Aug-16	pH	8.36	pH units	ALS
L1820709	CLT-OUT	29-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1820709	CLT-OUT	29-Aug-16	Turbidity	0.8	NTU	ALS

Note: *High TSS results for CLSP-OUT and CLT-OUT on August 3 were result of high flows following precipitation events.

Note: No Flows observed at CLSP-OUT on August 9, 23, 25 and 29

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1774143-5	CD4-IN	26-May-16	pH	7.68	pH units	ALS
L1774143-5	CD4-IN	26-May-16	Total Suspended Solids	123.00	mg/L	ALS
L1774143-5	CD4-IN	26-May-16	Turbidity	126.00	NTU	ALS
L1774143-4	CD4-OUT	26-May-16	pH	7.71	pH units	ALS
L1774143-4	CD4-OUT	26-May-16	Total Suspended Solids	59.00	mg/L	ALS
L1774143-4	CD4-OUT	26-May-16	Turbidity	58.50	NTU	ALS
L1782435-2	CD4-OUT	12-Jun-16	pH	7.88	pH units	ALS
L1782435-2	CD4-OUT	12-Jun-16	Total Suspended Solids	39.20	mg/L	ALS
L1782435-2	CD4-OUT	12-Jun-16	Turbidity	33.70	NTU	ALS
L1782435-1	CV194A	12-Jun-16	pH	7.87	pH units	ALS
L1782435-1	CV194A	12-Jun-16	Total Suspended Solids	34.40	mg/L	ALS
L1782435-1	CV194A	12-Jun-16	Turbidity	39.20	NTU	ALS
L1790501-7	G0-03	25-Jun-16	pH	7.22	pH units	ALS
L1790501-7	G0-03	25-Jun-16	Total Suspended Solids	5.20	mg/L	ALS
L1790501-7	G0-03	25-Jun-16	Turbidity	5.57	NTU	ALS
L1790501-6	E0-21	25-Jun-16	pH	7.08	pH units	ALS
L1790501-6	E0-21	25-Jun-16	Total Suspended Solids	8.80	mg/L	ALS
L1790501-6	E0-21	25-Jun-16	Turbidity	5.27	NTU	ALS
L1790501-5	E0-20	25-Jun-16	pH	7.20	pH units	ALS
L1790501-5	E0-20	25-Jun-16	Total Suspended Solids	4.40	mg/L	ALS
L1790501-5	E0-20	25-Jun-16	Turbidity	4.67	NTU	ALS
L1790501-3	C0-10	25-Jun-16	pH	7.23	pH units	ALS
L1790501-3	C0-10	25-Jun-16	Total Suspended Solids	2.80	mg/L	ALS
L1790501-3	C0-10	25-Jun-16	Turbidity	3.94	NTU	ALS
L1790501-2	C0-05	25-Jun-16	pH	7.31	pH units	ALS
L1790501-2	C0-05	25-Jun-16	Total Suspended Solids	2.80	mg/L	ALS
L1790501-2	C0-05	25-Jun-16	Turbidity	4.34	NTU	ALS
L1790501-1	C0-01	25-Jun-16	pH	7.33	pH units	ALS
L1790501-1	C0-01	25-Jun-16	Total Suspended Solids	6.90	mg/L	ALS
L1790501-1	C0-01	25-Jun-16	Turbidity	4.85	NTU	ALS
L1790501-15	G0-01	26-Jun-16	pH	7.15	pH units	ALS
L1790501-15	G0-01	26-Jun-16	Total Suspended Solids	4.00	mg/L	ALS
L1790501-15	G0-01	26-Jun-16	Turbidity	4.33	NTU	ALS
L1790501-14	F0-01	26-Jun-16	pH	7.42	pH units	ALS
L1790501-14	F0-01	26-Jun-16	Total Suspended Solids	6.50	mg/L	ALS
L1790501-14	F0-01	26-Jun-16	Turbidity	7.04	NTU	ALS
L1790501-16	E0-10	26-Jun-16	pH	7.29	pH units	ALS
L1790501-16	E0-10	26-Jun-16	Total Suspended Solids	4.40	mg/L	ALS
L1790501-16	E0-10	26-Jun-16	Turbidity	5.10	NTU	ALS
L1790501-13	E0-03	26-Jun-16	pH	7.18	pH units	ALS
L1790501-13	E0-03	26-Jun-16	Total Suspended Solids	4.80	mg/L	ALS
L1790501-13	E0-03	26-Jun-16	Turbidity	4.07	NTU	ALS
L1790501-12	G0-09A	26-Jun-16	pH	7.08	pH units	ALS
L1790501-12	G0-09A	26-Jun-16	Total Suspended Solids	15.60	mg/L	ALS
L1790501-12	G0-09A	26-Jun-16	Turbidity	12.00	NTU	ALS
L1790501-11	G0-09	26-Jun-16	pH	7.09	pH units	ALS
L1790501-11	G0-09	26-Jun-16	Total Suspended Solids	8.80	mg/L	ALS
L1790501-11	G0-09	26-Jun-16	Turbidity	8.82	NTU	ALS
L1790501-10	G0-09B	26-Jun-16	pH	7.17	pH units	ALS
L1790501-10	G0-09B	26-Jun-16	Total Suspended Solids	6.40	mg/L	ALS
L1790501-10	G0-09B	26-Jun-16	Turbidity	5.54	NTU	ALS
L1800873-11	G0-03	18-Jul-16	pH	7.81	pH units	ALS
L1800873-11	G0-03	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-11	G0-03	18-Jul-16	Turbidity	7.35	NTU	ALS
L1800873-5	E0-21	18-Jul-16	pH	7.77	pH units	ALS
L1800873-5	E0-21	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-5	E0-21	18-Jul-16	Turbidity	7.46	NTU	ALS
L1800873-4	E0-20	18-Jul-16	pH	7.76	pH units	ALS
L1800873-4	E0-20	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-4	E0-20	18-Jul-16	Turbidity	7.30	NTU	ALS
L1800873-3	C0-10	18-Jul-16	pH	7.62	pH units	ALS
L1800873-3	C0-10	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-3	C0-10	18-Jul-16	Turbidity	7.95	NTU	ALS
L1800873-2	C0-05	18-Jul-16	pH	7.82	pH units	ALS

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1800873-2	C0-05	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-2	C0-05	18-Jul-16	Turbidity	8.42	NTU	ALS
L1800873-1	C0-01	18-Jul-16	pH	7.89	pH units	ALS
L1800873-1	C0-01	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-1	C0-01	18-Jul-16	Turbidity	5.26	NTU	ALS
L1800873-10	G0-01	18-Jul-16	pH	7.84	pH units	ALS
L1800873-10	G0-01	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-10	G0-01	18-Jul-16	Turbidity	6.93	NTU	ALS
L1800873-9	F0-01	18-Jul-16	pH	8.13	pH units	ALS
L1800873-9	F0-01	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-9	F0-01	18-Jul-16	Turbidity	3.96	NTU	ALS
L1800873-8	E0-10	18-Jul-16	pH	7.88	pH units	ALS
L1800873-8	E0-10	18-Jul-16	Total Suspended Solids	2.00	mg/L	ALS
L1800873-8	E0-10	18-Jul-16	Turbidity	6.51	NTU	ALS
L1800873-7	E0-03	18-Jul-16	pH	7.79	pH units	ALS
L1800873-7	E0-03	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-7	E0-03	18-Jul-16	Turbidity	7.43	NTU	ALS
L1800873-14	G0-09A	18-Jul-16	pH	7.75	pH units	ALS
L1800873-14	G0-09A	18-Jul-16	Total Suspended Solids	2.00	mg/L	ALS
L1800873-14	G0-09A	18-Jul-16	Turbidity	12.10	NTU	ALS
L1800873-13	G0-09	18-Jul-16	pH	7.82	pH units	ALS
L1800873-13	G0-09	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-13	G0-09	18-Jul-16	Turbidity	9.24	NTU	ALS
L1800873-12	G0-09B	18-Jul-16	pH	7.79	pH units	ALS
L1800873-12	G0-09B	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-12	G0-09B	18-Jul-16	Turbidity	9.47	NTU	ALS
L1808187-2	MS-08-US	3-Aug-16	pH	8	pH units	ALS
L1808187-2	MS-08-US	3-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1808187-2	MS-08-US	3-Aug-16	Turbidity	9.92	NTU	ALS
L1808187-1	MS-08-DS	3-Aug-16	pH	7.99	pH units	ALS
L1808187-1	MS-08-DS	3-Aug-16	Total Suspended Solids	9.2	mg/L	ALS
L1808187-1	MS-08-DS	3-Aug-16	Turbidity	12	NTU	ALS
L1809441-2	E0-21	5-Aug-16	pH	7.99	pH units	ALS
L1809441-2	E0-21	5-Aug-16	Total Suspended Solids	16.4*	mg/L	ALS
L1809441-2	E0-21	5-Aug-16	Turbidity	24.6	NTU	ALS
L1809516-1	MS-08-US	6-Aug-16	pH	8	pH units	ALS
L1809516-1	MS-08-US	6-Aug-16	Total Suspended Solids	3.6	mg/L	ALS
L1809516-1	MS-08-US	6-Aug-16	Turbidity	14	NTU	ALS
L1809516-2	MS-08-DS	6-Aug-16	pH	8.03	pH units	ALS
L1809516-2	MS-08-DS	6-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1809516-2	MS-08-DS	6-Aug-16	Turbidity	16.9	NTU	ALS
L1815793-1	C0-05	18-Aug-16	pH	8.06	pH units	ALS
L1815793-1	C0-05	18-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1815793-1	C0-05	18-Aug-16	Turbidity	16.7	NTU	ALS
L1815793-2	C0-10	18-Aug-16	pH	8.19	pH units	ALS
L1815793-2	C0-10	18-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1815793-2	C0-10	18-Aug-16	Turbidity	18.0	NTU	ALS
L1815793-3	E0-03	18-Aug-16	pH	8.11	pH units	ALS
L1815793-3	E0-03	18-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1815793-3	E0-03	18-Aug-16	Turbidity	22.2	NTU	ALS
L1815793-4	G0-03	18-Aug-16	pH	8.12	pH units	ALS
L1815793-4	G0-03	18-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1815793-4	G0-03	18-Aug-16	Turbidity	17.0	NTU	ALS
L1820160-1	E0-10	26-Aug-16	pH	8.16	pH units	ALS
L1820160-1	E0-10	26-Aug-16	Total Suspended Solids	13.6	mg/L	ALS
L1820160-1	E0-10	26-Aug-16	Turbidity	32.5	NTU	ALS
L1820160-2	MS-08-US	26-Aug-16	pH	8.11	pH units	ALS
L1820160-2	MS-08-US	26-Aug-16	Total Suspended Solids	10	mg/L	ALS
L1820160-2	MS-08-US	26-Aug-16	Turbidity	27.8	NTU	ALS
L1820160-3	F0-01	26-Aug-16	pH	8.28	pH units	ALS
L1820160-3	F0-01	26-Aug-16	Total Suspended Solids	40.8	mg/L	ALS
L1820160-3	F0-01	26-Aug-16	Turbidity	44.2	NTU	ALS

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1820240-1	E0-10	27-Aug-16	pH	8.11	pH units	ALS
L1820240-1	E0-10	27-Aug-16	Total Suspended Solids	8.8	mg/L	ALS
L1820240-1	E0-10	27-Aug-16	Turbidity	0.8	NTU	ALS
L1820240-5	MS-08-US	27-Aug-16	pH	8.14	pH units	ALS
L1820240-5	MS-08-US	27-Aug-16	Total Suspended Solids	11.6	mg/L	ALS
L1820240-5	MS-08-US	27-Aug-16	Turbidity	15.6	NTU	ALS
L1820240-3	F0-01	27-Aug-16	pH	8.28	pH units	ALS
L1820240-3	F0-01	27-Aug-16	Total Suspended Solids	4.4	mg/L	ALS
L1820240-3	F0-01	27-Aug-16	Turbidity	187.0	NTU	ALS
L1820238-2	C0-05	28-Aug-16	pH	8.07	pH units	ALS
L1820238-2	C0-05	28-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820238-2	C0-05	28-Aug-16	Turbidity	8.08	NTU	ALS
L1820238-3	C0-10	28-Aug-16	pH	8.14	pH units	ALS
L1820238-3	C0-10	28-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1820238-3	C0-10	28-Aug-16	Turbidity	6.8	NTU	ALS
L1820238-6	E0-03	28-Aug-16	pH	8.06	pH units	ALS
L1820238-6	E0-03	28-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1820238-6	E0-03	28-Aug-16	Turbidity	29.8	NTU	ALS
L1820238-10	G0-03	28-Aug-16	pH	8.10	pH units	ALS
L1820238-10	G0-03	28-Aug-16	Total Suspended Solids	25.6	mg/L	ALS
L1820238-10	G0-03	28-Aug-16	Turbidity	14.2	NTU	ALS
L1820238-8	F0-01	28-Aug-16	pH	8.29	pH units	ALS
L1820238-8	F0-01	28-Aug-16	Total Suspended Solids	5.2	mg/L	ALS
L1820238-8	F0-01	28-Aug-16	Turbidity	8.34	NTU	ALS
L1820238-5	E0-21	28-Aug-16	pH	8.15	pH units	ALS
L1820238-5	E0-21	28-Aug-16	Total Suspended Solids	9.2	mg/L	ALS
L1820238-5	E0-21	28-Aug-16	Turbidity	23.0	NTU	ALS
L1820707-2	C0-05	29-Aug-16	pH	8.25	pH units	ALS
L1820707-2	C0-05	29-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1820707-2	C0-05	29-Aug-16	Turbidity	9.2	NTU	ALS
L1820707-1	C0-10	29-Aug-16	pH	8.22	pH units	ALS
L1820707-1	C0-10	29-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1820707-1	C0-10	29-Aug-16	Turbidity	7.81	NTU	ALS
L1820707-3	E0-03	29-Aug-16	pH	8.23	pH units	ALS
L1820707-3	E0-03	29-Aug-16	Total Suspended Solids	10.4	mg/L	ALS
L1820707-3	E0-03	29-Aug-16	Turbidity	21.5	NTU	ALS
L1820707-5	G0-03	29-Aug-16	pH	8.18	pH units	ALS
L1820707-5	G0-03	29-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1820707-5	G0-03	29-Aug-16	Turbidity	21.6	NTU	ALS
L1820707-4	F0-01	29-Aug-16	pH	8.4	pH units	ALS
L1820707-4	F0-01	29-Aug-16	Total Suspended Solids	16.8	mg/L	ALS
L1820707-4	F0-01	29-Aug-16	Turbidity	19.4	NTU	ALS
L1821468-2	C0-05	30-Aug-16	pH	8.17	pH units	ALS
L1821468-2	C0-05	30-Aug-16	Total Suspended Solids	6.8	mg/L	ALS
L1821468-2	C0-05	30-Aug-16	Turbidity	24.5	NTU	ALS
L1821468-1	C0-10	30-Aug-16	pH	8.19	pH units	ALS
L1821468-1	C0-10	30-Aug-16	Total Suspended Solids	18.4	mg/L	ALS
L1821468-1	C0-10	30-Aug-16	Turbidity	66.2	NTU	ALS
L1821468-3	E0-03	30-Aug-16	pH	8.15	pH units	ALS

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1821468-3	E0-03	30-Aug-16	Total Suspended Solids	10.8	mg/L	ALS
L1821468-3	E0-03	30-Aug-16	Turbidity	36.5	NTU	ALS
L1821468-5	G0-03	30-Aug-16	pH	8.20	pH units	ALS
L1821468-5	G0-03	30-Aug-16	Total Suspended Solids	4.4	mg/L	ALS
L1821468-5	G0-03	30-Aug-16	Turbidity	12.4	NTU	ALS
L1821468-4	F0-01	30-Aug-16	pH	8.35	pH units	ALS
L1821468-4	F0-01	30-Aug-16	Total Suspended Solids	15.2	mg/L	ALS
L1821468-4	F0-01	30-Aug-16	Turbidity	29.2	NTU	ALS
L1821468-6	E0-21	30-Aug-16	pH	8.15	pH units	ALS
L1821468-6	E0-21	30-Aug-16	Total Suspended Solids	16.4	mg/L	ALS
L1821468-6	E0-21	30-Aug-16	Turbidity	63.5	NTU	ALS
L1822551-2	C0-05	31-Aug-16	pH	8.11	pH units	ALS
L1822551-2	C0-05	31-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1822551-2	C0-05	31-Aug-16	Turbidity	6.95	NTU	ALS
L1822551-1	C0-10	31-Aug-16	pH	8.17	pH units	ALS
L1822551-1	C0-10	31-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1822551-1	C0-10	31-Aug-16	Turbidity	6.3	NTU	ALS
L1822551-3	E0-03	31-Aug-16	pH	8.11	pH units	ALS
L1822551-3	E0-03	31-Aug-16	Total Suspended Solids	5.6	mg/L	ALS
L1822551-3	E0-03	31-Aug-16	Turbidity	12.9	NTU	ALS
L1822551-5	G0-03	31-Aug-16	pH	8.10	pH units	ALS
L1822551-5	G0-03	31-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1822551-5	G0-03	31-Aug-16	Turbidity	26.2	NTU	ALS
L1822551-4	F0-01	31-Aug-16	pH	8.28	pH units	ALS
L1822551-4	F0-01	31-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1822551-4	F0-01	31-Aug-16	Turbidity	7.9	NTU	ALS
L1823057-2	C0-05	1-Sep-16	pH	Pending	pH units	ALS
L1823057-2	C0-05	1-Sep-16	Total Suspended Solids	Pending	mg/L	ALS
L1823057-2	C0-05	1-Sep-16	Turbidity	Pending	NTU	ALS
L1823057-1	C0-10	1-Sep-16	pH	Pending	pH units	ALS
L1823057-1	C0-10	1-Sep-16	Total Suspended Solids	Pending	mg/L	ALS
L1823057-1	C0-10	1-Sep-16	Turbidity	Pending	NTU	ALS
L1823057-3	E0-03	1-Sep-16	pH	Pending	pH units	ALS
L1823057-3	E0-03	1-Sep-16	Total Suspended Solids	Pending	mg/L	ALS
L1823057-3	E0-03	1-Sep-16	Turbidity	Pending	NTU	ALS
L1823057-5	G0-03	1-Sep-16	pH	Pending	pH units	ALS
L1823057-5	G0-03	1-Sep-16	Total Suspended Solids	Pending	mg/L	ALS
L1823057-5	G0-03	1-Sep-16	Turbidity	Pending	NTU	ALS
L1823057-4	F0-01	1-Sep-16	pH	Pending	pH units	ALS
L1823057-4	F0-01	1-Sep-16	Total Suspended Solids	Pending	mg/L	ALS
L1823057-4	F0-01	1-Sep-16	Turbidity	Pending	NTU	ALS

Note: *High TSS results for E0-21 on August 5 were result of high flows following precipitation events.

Note: *High TSS results for F0-01 on August 26 were result of slope sloughing upstream.

Note: *High TSS results for G0-03 on August 28 were result of slope sloughing upstream.

Note: *High TSS results for F0-01 on August 29 were result of slope sloughing upstream.

Note: *High TSS results for C0-10 on August 30 were result of slope sloughing upstream.

Note: *High TSS results for F0-01 on August 30 were result of slope sloughing upstream.

Note: *High TSS results for E0-21 on August 30 were result of slope sloughing upstream.

Table B.2.4 - Surface Water Quality for Tote Road Stream Crossings

Culvert ID	Tote Road Location	Sample Date	Crossing Location	Field Turbidity (NTU)**	Laboratory-Turbidity (NTU)	Laboratory - pH	Laboratory - TSS (mg/L)
CV223	Km 97	2016-06-09	Upstream	4.90	-	-	-
			Crossing	6.64	-	-	-
			Downstream	8.42	-	-	-
		2016-06-27	Upstream	-	-	-	-
			Culvert	16.40	-	-	-
			Downstream	8.70	-	-	-
		2016-06-29	Upstream	7.00	6.49	7.13	15.20
			Culvert	7.40	-	-	-
			Downstream	8.30	7.75	7.20	16.00
		2016-07-31	Upstream	-1.50	0.42	8.10	<2.0
			Culvert	-	-	-	-
			Downstream	-2.50	0.40	8.12	<2.0
		2016-08-13	Upstream	2.80	0.47	8.20	<2.0
			Culvert	-	-	-	-
			Downstream	3.20	0.72	8.32	5.60
		2016-08-13	Upstream	2.80	0.47	8.20	<2.0
			Culvert	-	-	-	-
			Downstream	3.20	0.72	8.32	5.60
		2016-08-26	Upstream	-3.60	0.30	8.22	<2
			Culvert	-	-	-	-
			Downstream	-2.40	0.42	8.23	<2
BG-17	Km 90	2016-06-09	Upstream	6.01	-	-	-
			Crossing	8.01	-	-	-
			Downstream	8.70	-	-	-
		2016-06-27	Upstream	4.40	-	-	-
			Culvert	4.60	-	-	-
			Downstream	4.60	-	-	-
		2016-06-28	Upstream	4.30	-	-	-
			Culvert	4.60	-	-	-
			Downstream	4.50	-	-	-
		2016-07-03	Upstream	4.00	4.94	7.67	<2.0
			Culvert	4.30	-	-	-
			Downstream	4.70	5.25	7.64	2.40
		2016-07-31	Upstream	5.30	8.03	7.96	2.80
			Culvert	-	-	-	-
			Downstream	7.50	8.07	7.96	5.60
		2016-08-12	Upstream	15.60	10.20	8.02	4.00
			Culvert	-	-	-	-
			Downstream	13.60	10.20	7.94	5.60
		2016-08-26	Upstream	13.40	13.20	7.92	4.80
			Culvert	-	-	-	-
			Downstream	15.00	14.30	7.91	4.80
BG-28	km 86.3	2016-06-29	Upstream	4.40	-	-	-
			Culvert	9.60	-	-	-
			Downstream	102.10	-	-	-
		2016-07-03	Upstream	2.60	1.18	7.98	6.00
			Culvert	8.70	11.90	8.15	7.20
			Downstream	11.70	12.50	8.02	16.40
		2016-07-17	Upstream	2.90	1.87	8.08	6.00
			Downstream	5.30	4.33	8.14	5.60
		2016-07-31	Upstream	-1.50	1.19	8.09	10.00
			Culvert	-	-	-	-
			Downstream	2.10	3.38	8.37	2.80
		2016-08-13	Upstream	5.50	2.27	8.07	2.00
			Culvert	-	-	-	-
			Downstream	6.10	2.21	8.12	6.00
		2016-08-13	Upstream	5.50	2.27	8.07	2.00
			Culvert	-	-	-	-

Table B.2.4 - Surface Water Quality for Tote Road Stream Crossings

Culvert ID	Tote Road Location	Sample Date	Crossing Location	Field Turbidity (NTU)**	Laboratory-Turbidity (NTU)	Laboratory - pH	Laboratory - TSS (mg/L)
		2016-08-26	Downstream	6.10	2.21	8.12	6.00
			Upstream	-3.30	0.53	7.79	2.24
			Culvert	-	-	-	-
			Downstream	-0.70	2.25	8.23	2.24
BG-29	km 85	2016-06-09	Upstream	34.10	-	-	-
			Crossing	29.00	-	-	-
			Downstream	24.40	-	-	-
		2016-06-29	Upstream	5.80	5.90	7.80	2.40
			Culvert	6.40	-	-	-
			Downstream	5.40	6.01	7.94	4.00
		2016-07-31	Upstream	-0.70	1.53	8.15	3.20
			Culvert	-	-	-	-
			Downstream	2.20	2.60	7.98	2.00
		2016-08-12	Upstream	6.60	1.38	8.19	4.00
			Culvert	-	-	-	-
			Downstream	0.70	1.53	8.22	3.20
		2016-08-26	Upstream	-3.20	0.70	8.23	2.40
			Culvert	-	-	-	-
			Downstream	-2.40	1.26	8.00	2.40
BG-31	km 82	2016-06-29	Upstream	6.90	-	-	-
			Culvert	4.50	-	-	-
			Downstream	16.50	-	-	-
		2016-07-03	Upstream	2.80	3.11	7.51	2.80
			Culvert	3.40	-	-	-
			Downstream	12.30	13.10	7.79	14.40
		2016-07-17	Upstream	0.90	1.28	7.97	2.00
			Downstream	3.00	2.81	8.02	2.00
		2016-07-31	Upstream	6.10	1.13	7.98	3.20
			Culvert	-	-	-	-
			Downstream	4.80	9.96	8.07	32.8*
		2016-08-12	Upstream	-3.20	17.40	7.96	6.00
			Culvert	-	-	-	-
			Downstream	-4.80	13.50	8.04	10.00
		2016-08-26	Upstream	10.60	10.40	7.93	4.00
			Culvert	-	-	-	-
			Downstream	27.50	22.30	8.00	19.20
BG-01	KM 100	2016-08-26	Upstream	-1.30	0.72	8.27	<2.0
			Culvert	-	-	-	-
			Downstream	-2.00	1.22	8.27	5.20

Note: *The elevated TSS result at BG-31 downstream on July 31st was a result of sampling error.

** A ProDSS YSI was used to measure field turbidity readings.

Appendix B.3
Acute Toxicity Results

Table B.3.1 - Acute Toxicity Results for Sheardown Lake Tributaries						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
47699	SDLT-OUT	10-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
47699	SDLT-OUT	10-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox
47701	SDLT-OUT01	10-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
47701	SDLT-OUT01	10-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox
47700	LDFG-OUT	10-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
47700	LDFG-OUT	10-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox
47811	SDLT-OUT	23-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
47811	SDLT-OUT	23-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox
47812	LDFG-OUT	23-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
47812	LDFG-OUT	23-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox

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

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

SDLT-OUT01 is a duplicate of SDLT-OUT

Table B.3.2 - Acute Toxicity Results for Camp Lake Tributaries						
Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-1	CL-DS	23-May-16	Acute Toxicity - <i>Daphnia magna</i> *	non-lethal	mortality %	Aquatox
L1772636-1	CL-DS	23-May-16	Acute Toxicity - Rainbow Trout**	non-lethal	mortality %	Aquatox

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

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