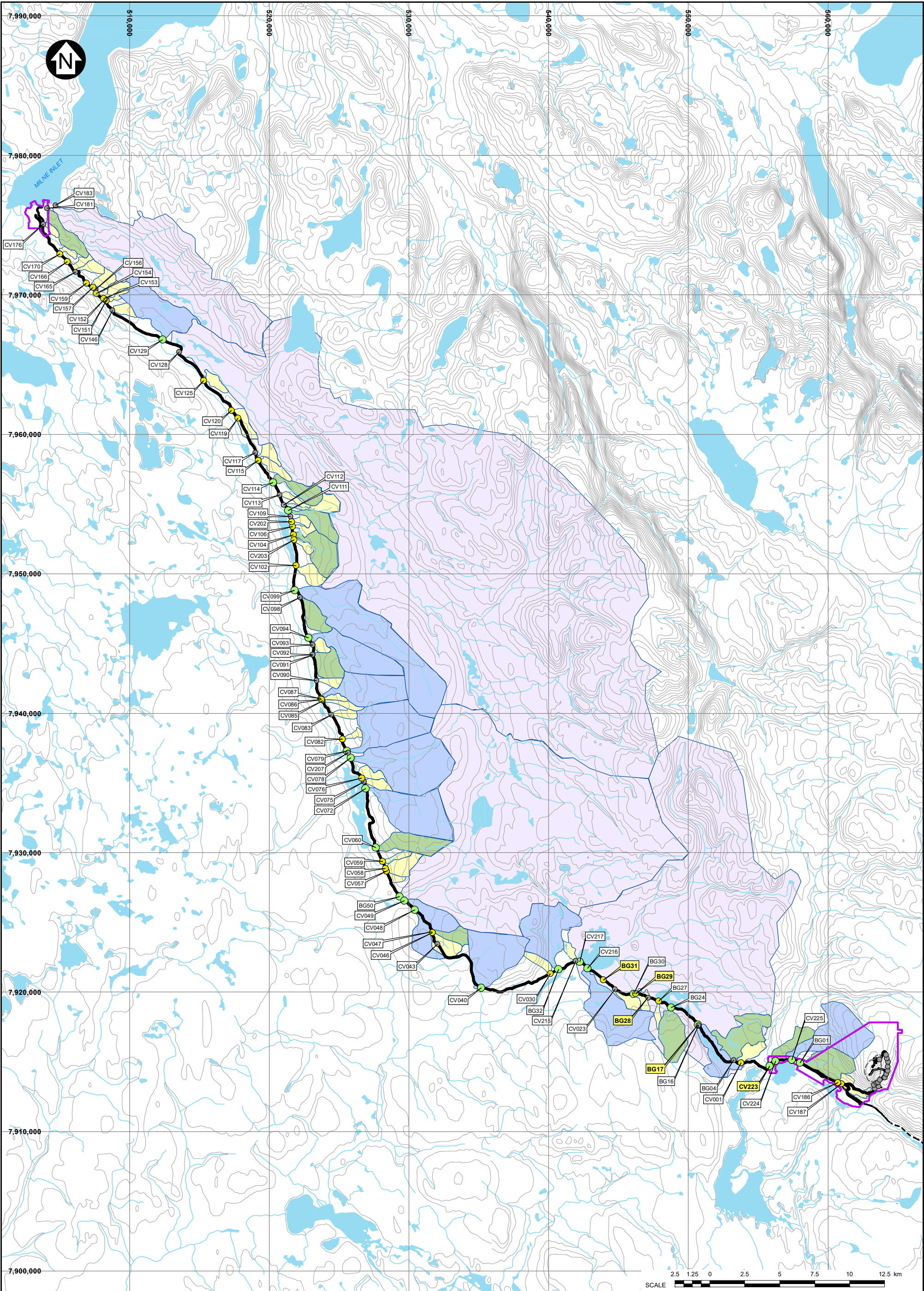




**LEGEND:**

- 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.

**CV223**

**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:\1020018138\GIS\Figs\B10\_r0.mxd, Jul 06, 2016 10:28 AM, asimpson



## **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 |

| 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 |
| L1766923-3    | SDLT-OUT01 | 10-May-16    | Zinc (Zn)-Total              | 0.0061    | mg/L     | ALS |

| Sample Number | Sample ID  | Date Sampled | Parameter Name               | Result    | Units    | Lab |
|---------------|------------|--------------|------------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID | Date Sampled | Parameter Name            | Result    | Units    | Lab |
|---------------|-----------|--------------|---------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID | Date Sampled | Parameter Name               | Result    | Units    | Lab |
|---------------|-----------|--------------|------------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID  | Date Sampled | Parameter Name              | Result    | Units    | Lab |
|---------------|------------|--------------|-----------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID  | Date Sampled | Parameter Name               | Result    | Units    | Lab |
|---------------|------------|--------------|------------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID  | Date Sampled | Parameter Name               | Result    | Units    | Lab |
|---------------|------------|--------------|------------------------------|-----------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID | Date Sampled | Parameter Name              | Result | Units    | Lab |
|---------------|-----------|--------------|-----------------------------|--------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID | Date Sampled | Parameter Name         | Result | Units    | Lab |
|---------------|-----------|--------------|------------------------|--------|----------|-----|
| 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 |
| 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 |

| Sample Number | Sample ID | Date Sampled | Parameter Name         | Result | Units    | Lab |
|---------------|-----------|--------------|------------------------|--------|----------|-----|
| 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 |

**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 |
| 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 |
| 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 |

**Note:** No flow observed on July 4 at CLSP-OUT

**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 |
| 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 |
| L1800873-112  | G0-09B    | 18-Jul-16    | pH                     | 7.79   | pH units | ALS |
| L1800873-112  | G0-09B    | 18-Jul-16    | Total Suspended Solids | <2.0   | mg/L     | ALS |
| L1800873-112  | G0-09B    | 18-Jul-16    | Turbidity              | 9.47   | NTU      | ALS |
| IP            | MS-08-US  | 3-Aug-16     | pH                     | IP     | pH units | ALS |
| IP            | MS-08-US  | 3-Aug-16     | Total Suspended Solids | IP     | mg/L     | ALS |
| IP            | MS-08-US  | 3-Aug-16     | Turbidity              | IP     | NTU      | ALS |
| IP            | MS-08-DS  | 3-Aug-16     | pH                     | IP     | pH units | ALS |
| IP            | MS-08-DS  | 3-Aug-16     | Total Suspended Solids | IP     | mg/L     | ALS |
| IP            | MS-08-DS  | 3-Aug-16     | Turbidity              | IP     | NTU      | ALS |

**Note:** IP - Samples are in the process of being analyzed by ALS Global.

**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          | 4.9                     | -                          | -               | -                       |
|            |                    |             | Crossing          | 6.6                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 8.4                     | -                          | -               | -                       |
|            |                    | 2016-06-27  | Upstream          | -                       | -                          | -               | -                       |
|            |                    |             | Culvert           | 16.4                    | -                          | -               | -                       |
|            |                    |             | Downstream        | 8.7                     | -                          | -               | -                       |
|            |                    | 2016-06-29  | Upstream          | 7.0                     | 6.5                        | 7.1             | 15.2                    |
|            |                    |             | Culvert           | 7.4                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 8.3                     | 7.8                        | 7.2             | 16.0                    |
|            |                    | 2016-07-31  | Upstream          | -1.5                    | 0.4                        | 8.1             | <2.0                    |
|            |                    |             | Culvert           | -                       | -                          | -               | -                       |
|            |                    |             | Downstream        | -2.5                    | 0.4                        | 8.1             | <2.0                    |
| BG-17      | Km 90              | 2016-06-09  | Upstream          | 6.0                     | -                          | -               | -                       |
|            |                    |             | Crossing          | 8.0                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 8.7                     | -                          | -               | -                       |
|            |                    | 2016-06-27  | Upstream          | 4.4                     | -                          | -               | -                       |
|            |                    |             | Culvert           | 4.6                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 4.6                     | -                          | -               | -                       |
|            |                    | 2016-06-28  | Upstream          | 4.3                     | -                          | -               | -                       |
|            |                    |             | Culvert           | 4.6                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 4.5                     | -                          | -               | -                       |
|            |                    | 2016-07-03  | Upstream          | 4.0                     | 4.9                        | 7.7             | <2.0                    |
|            |                    |             | Culvert           | 4.3                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 4.7                     | 5.3                        | 7.6             | 2.4                     |
|            |                    | 2016-07-31  | Upstream          | 5.3                     | 8.0                        | 8.0             | 2.8                     |
|            |                    |             | Culvert           | -                       | -                          | -               | -                       |
|            |                    |             | Downstream        | 7.5                     | 8.1                        | 8.0             | 5.6                     |
| BG-28      | km 86.3            | 2016-06-29  | Upstream          | 4.4                     | -                          | -               | -                       |
|            |                    |             | Culvert           | 9.6                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 102.1                   | -                          | -               | -                       |
|            |                    | 2016-07-03  | Upstream          | 2.6                     | 1.2                        | 8.0             | 6.0                     |
|            |                    |             | Culvert           | 8.7                     | 11.9                       | 8.2             | 7.2                     |
|            |                    |             | Downstream        | 11.7                    | 12.5                       | 8.0             | 16.4                    |
|            |                    | 2016-07-17  | Upstream          | 2.9                     | 1.9                        | 8.1             | 6.0                     |
|            |                    |             | Downstream        | 5.3                     | 4.3                        | 8.1             | 5.6                     |
|            |                    | 2016-07-31  | Upstream          | -1.5                    | 1.2                        | 8.1             | 10.0                    |
|            |                    |             | Culvert           | -                       | -                          | -               | -                       |
|            |                    |             | Downstream        | 2.1                     | 3.4                        | 8.4             | 2.8                     |
| BG-29      | km 85              | 2016-06-09  | Upstream          | 34.1                    | -                          | -               | -                       |
|            |                    |             | Crossing          | 29.0                    | -                          | -               | -                       |
|            |                    |             | Downstream        | 24.4                    | -                          | -               | -                       |
|            |                    | 2016-06-29  | Upstream          | 5.8                     | 5.9                        | 7.8             | 2.4                     |
|            |                    |             | Culvert           | 6.4                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 5.4                     | 6.0                        | 7.9             | 4.0                     |
|            |                    | 2016-07-31  | Upstream          | -0.7                    | 1.5                        | 8.2             | 3.2                     |
|            |                    |             | Culvert           | -                       | -                          | -               | -                       |
|            |                    |             | Downstream        | 2.2                     | 2.6                        | 8.0             | 2.0                     |
| BG-31      | km 82              | 2016-06-29  | Upstream          | 6.9                     | -                          | -               | -                       |
|            |                    |             | Culvert           | 4.5                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 16.5                    | -                          | -               | -                       |
|            |                    | 2016-07-03  | Upstream          | 2.8                     | 3.1                        | 7.5             | 2.8                     |
|            |                    |             | Culvert           | 3.4                     | -                          | -               | -                       |
|            |                    |             | Downstream        | 12.3                    | 13.1                       | 7.8             | 14.4                    |
|            |                    | 2016-07-17  | Upstream          | 0.9                     | 1.3                        | 8.0             | 2.0                     |
|            |                    |             | Downstream        | 3.0                     | 2.8                        | 8.0             | 2.0                     |
|            |                    | 2016-07-31  | Upstream          | 6.1                     | 1.1                        | 8.0             | 3.2                     |
|            |                    |             | Culvert           | -                       | -                          | -               | -                       |
|            |                    |             | Downstream        | 4.8                     | 10.0                       | 8.1             | 32.8*                   |

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

\*The sampling location was resampled on August 5 to ensure water quality compliance.

\*\* 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/14)  
 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)

## **Appendix C**

### **Sequence of Events and Actions Taken by Spill Report and Other Concerns (With Photos)**

## Appendix C.1 - Spill Report 16-158 - Sheardown Lake Tributaries and Sheardown Lake

**Table C.1 - Spill Report 16-158 - Sequence of Events and Actions Taken**

|                  |                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 7            | Sheardown Lake tributaries, LDFG and SDLT, discovered discharging turbid water into Sheardown Lake . Source of the discoloured, turbid water is thought to be snowmelt downwind of the Mine Site Crusher Pad.                                                                                                                                                                                    |
| May 8            | Siltation control measures (silt fences, flocculent, treated jute) installed in both affected Sheardown Lake tributaries, LDFG and SDLT, to settle out sediments prior to discharge. Monitoring locations established in both affected Sheardown Lake tributaries.                                                                                                                               |
| May 9            | Initial report submitted to Environment Canada, DFO, and INAC via e-mail.                                                                                                                                                                                                                                                                                                                        |
| May 8 - June 8   | Daily sampling program initiated and continued until June 8 at established monitoring locations along both affected tributaries. Water samples were primarily analyzed for TSS, TDS, pH and turbidity. Additional sampling was conducted on May 10, May 19 and May 23 for additional parameters, including acute toxicity, metals, nutrients, hydrocarbons and major ions.                       |
| May 9            | Berms built up along road near culverts, CV-186 and CV-187, to prevent road runoff from directly discharging into Sheardown Lake tributary SDLT.                                                                                                                                                                                                                                                 |
| May 10           | Sediment release from Sheardown Lake tributaries (LDFG and SDLT) reported to the NT-NU Spill Line and regulators ( <b>NT-NU Spill Report - 16-158</b> ).<br>Check Dams #1 and #2 (see Figure 1) installed along Sheardown Lake tributary SDLT downstream of Crusher Pad.                                                                                                                         |
| May 12           | Feasibility of removing sediments from ice surface on Sheardown Lake investigated.<br>Sediment removal was determined to be not feasible due to weakening ice conditions along the shoreline of Sheardown Lake.                                                                                                                                                                                  |
| May 13 - 17      | Additional flocculent, silt fences and treated jute installed along affected Sheardown Lake tributaries SDLT and LDFG.                                                                                                                                                                                                                                                                           |
| May 18           | Environment Canada and INDC inspectors arrive onsite and inspect Milne Port and Tote Road.                                                                                                                                                                                                                                                                                                       |
| May 19           | Environment Canada and INDC inspectors inspect Mine Site.<br>Road built up at CV-186 to prevent road runoff from pooling and directly discharging into Sheardown Lake tributary SDLT.<br>Environment Canada, INDC and Baffinland collect water samples at the outfalls of Sheardown Lake tributaries SDLT and LDFG.                                                                              |
| May 19 - 20      | Flow upstream of Check Dam # 1 is diverted to the Crusher Sedimentation Pond.                                                                                                                                                                                                                                                                                                                    |
| May 20           | Environment Canada and INDC inspectors notify Baffinland that directions under the Fisheries Act will be issued to the Company as a result of surface water runoff conditions observed during their inspection.<br>Additional sources of sedimentation entering the upper reaches of tributary SDLT, including sediment deposit discovered upstream of the Crusher Pad along the Mine Haul Road. |
| May 21           | Mine Haul Road regraded and "berm punchouts" filled in to direct runoff away from Mary River and the upper reaches of tributary SDLT.                                                                                                                                                                                                                                                            |
| May 22           | Silt fences and silt curtain installed along SDLT immediately downstream of Mine Haul Road discovered sedimentation sources.<br>Flocculent stations installed in upper reaches of SDLT to settle out sediment from Mine Haul Road runoff.                                                                                                                                                        |
| May 23           | Constructed check dam directly downstream of the Mine Haul Road "berm punchout" at km 104.5 to collect Mine Haul Road runoff and capture sediment from the Mine Haul Road runoff. (Runoff through this Mine Haul Road berm punchout had resulted in the development of a sediment delta near the upper reaches of tributary SDLT)                                                                |
| May 24           | Kemira Chemicals and AMEC-Foster Wheeler contracted to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.<br>Turbid water samples sent to Kemira Chemicals and AMEC-Fost Wheeler for initial flocculant bucket testing.<br>Constructed check dam downstream of landfill access road along Sheardown Lake tributary LDFG using sandbags.            |
| May 27 - June 23 | Removed loose sediment from sediment delta located downstream of the Mine Haul Road berm punchout at km 104.5. (Sediment delta situated near the bank of tributary SDLT.)                                                                                                                                                                                                                        |

|                    |                                                                                                                                                                                         |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 29             | Pumped Exploration Phase Ore Stockpile test pits to isolated natural sump to prevent test pits from overflowing into tributary SDLT.                                                    |
| June 1 - 15        | AMEC-Foster Wheeler Engineer arrives onsite to develop flocculant treatment systems and pilot test additional siltation controls including geotubes..                                   |
| June 8             | Sampling program discontinued as a result of compliant, baseline TSS levels observed consistently over the past several days in both affected Sheardown Lake tributaries SDLT and LDFG. |
| June 12            | Construction of three (3) check dams upstream of SDLT along Mine Haul Road (Sheardown Valley) to allow for water treatment (flocculants) of the Mine Haul Road runoff.                  |
| June 17 - 21       | Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.                                             |
| June 20 - June 21  | Coagulant/flocculant dosing system setup and pilot tested at Check Dam #4 (assisted by Kemira Chemicals).                                                                               |
| June 24 - July 8   | Sheardown Lake Tributaries are running clear for the period.                                                                                                                            |
| July 9 - July 22   | Sheardown Lake Tributaries are running clear for the period.                                                                                                                            |
| July 23 - August 5 | Sheardown Lake Tributaries are running clear for the period.                                                                                                                            |

## Appendix C.1 - Photos



Photo 1 – Outlet at Sheardown Lake Tributary on July 25, 2016



Photo 2 – Upstream at Sheardown Lake Tributary on July 25, 2016



Photo 3 – Flow conditions at Landfill Gate Tributary on July 25, 2016



Photo 4 – Outlet at Landfill Gate Tributary on July 25, 2016

## **Appendix C.2 - Spill Report 16-176 - Camp Lake Tributaries and Camp Lake**

| <b>Table C.2 - Spill Report 16-176 - Sequence of Events and Action Taken</b> |                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                              |                                                                                                                                                                                                                                                                                                         |
| May 17                                                                       | Runoff containing sediments observed flowing from the Mine Site airstrip into Camp Lake Tributary # 1 (CLT1) and Camp Lake.                                                                                                                                                                             |
|                                                                              | Siltation control measures (silt fences, flocculent, jute) installed along CLT1 and airstrip drainages to settle out sediments prior to discharge.                                                                                                                                                      |
|                                                                              | Airstrip swale draining into Camp Lake Tributary #1 lined with 6" aggregate. Culvert installed at North end of airstrip to prevent airstrip runoff from crossing the road into Camp Lake Tributary #1.                                                                                                  |
|                                                                              | Sediment release to Camp Lake Tributary #1 and Camp Lake reported to the NT-NU Spill Line and regulators ( <b>NT-NU Spill Report- 16-176</b> ).                                                                                                                                                         |
| May 18                                                                       | Camp Lake Sedimentation Ponds near the Camp Lake water intake jetty repaired to settle out and capture sediment entrained in runoff from the Exploration Camp pad at the Mine Site.                                                                                                                     |
|                                                                              | Monitoring locations established along Camp Lake Tributary #1 and downstream of the Camp Lake Sedimentation Ponds (refer to Figure 1).                                                                                                                                                                  |
|                                                                              | Environment Canada and AANDC inspectors arrive onsite and inspect Milne Port and Tote Road.                                                                                                                                                                                                             |
| May 18 - June 8                                                              | Conducted daily sampling until June 8 at established monitoring locations. Daily water samples were primarily analyzed for TSS, TDS, pH and turbidity. Additional sampling was conducted on May 23 for additional parameters, including acute toxicity, metals, nutrients, hydrocarbons and major ions. |
| May 18                                                                       | Environment Canada and INAC inspectors arrive onsite and inspect Milne Port and Tote Road.                                                                                                                                                                                                              |
| May 19                                                                       | Environment Canada and INAC inspectors inspect Mine Site.                                                                                                                                                                                                                                               |
|                                                                              | Environment Canada, INAC and Baffinland collect water samples downstream of the Camp Lake Sedimentation Ponds                                                                                                                                                                                           |
| May 20                                                                       | Environment Canada and INAC inspectors notify Baffinland that directions under the Fisheries Act will be issued to the Company as a result of surface water runoff conditions observed during their inspection.                                                                                         |
| May 24                                                                       | Kemira Chemicals and AMEC-Foster Wheeler contracted to assist Baffinland in developing and optimizing mobile flocculant treatment systems.                                                                                                                                                              |
|                                                                              | Turbid water samples sent to Kemira Chemicals and AMEC-Fost Wheeler for initial flocculant bucket testing.                                                                                                                                                                                              |
| June 1 - 15                                                                  | AMEC-Foster Wheeler Engineer arrives onsite to develop flocculant treatment systems and pilot test additional siltation controls including geotubes..                                                                                                                                                   |
| June 8                                                                       | Sampling program discontinued as a result of compliant, baseline TSS levels observed consistently over the past several days at the outfalls of CLT1 and the Camp Lake Sedimentation Ponds.                                                                                                             |

|                    |                                                                                                                                             |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| June 17 - 21       | Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants. |
| June 25 - July 8   | Camp Lake Tributaries are running clear. No sedimentation issues.                                                                           |
| July 9 - July 22   | Camp Lake Tributaries are running clear. No sedimentation issues.                                                                           |
| July 23 - August 5 | Camp Lake Tributaries are running clear.                                                                                                    |
| August 2           | Additional silt fences installed near road crossing (BG-01) to control Tote Road runoff.                                                    |

## Appendix C.2 – Photos



Photo 1 – Camp Lake Tributary #1 on July 25, 2016



Photo 2 – Upstream Camp Lake Tributary #1 on July 25, 2016

**Table C.3 Spill Report 16-181 - Mine Haul Road to Mary River and Sheardown Lake Tributary**

| Sequence of Events and Actions Taken |                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      |                                                                                                                                                                                                                                                                                                                                                    |
| May 20                               | Runoff containing sediments was observed flowing from the surface of the Mine Haul Road through "berm punch outs" on the outer edge of the road and into the Mary River and Sheardown Lake tributary SDLT.                                                                                                                                         |
|                                      | Sediment deposit discovered near upper reaches of tributary SDLT directly downstream of km 104.5 Mine Haul Road "berm punch out".                                                                                                                                                                                                                  |
| May 21                               | Sediment release to Mary River and Sheardown Lake reported to the NT-NU Spill Line and regulators ( <b>NT-NU Spill Report- 16-181</b> ).                                                                                                                                                                                                           |
|                                      | Mine Haul Road "berm punch outs" are sealed to redirect runoff to check dams and natural sumps to settle out and capture sediment entrained in runoff from the Mine Haul Road.                                                                                                                                                                     |
| May 22                               | Constructed Check Dam #3 near entrance of magazine access road to collect Mine Haul Road runoff and capture sediment.                                                                                                                                                                                                                              |
|                                      | Flocculant installed upstream of Check Dam # 3 on Mine Haul Road.                                                                                                                                                                                                                                                                                  |
| May 23                               | Constructed Check Dam #4 at the end of magazine access road to collect Mine Haul Road runoff.                                                                                                                                                                                                                                                      |
|                                      | Constructed check dam directly downstream of the Mine Haul Road "berm punchout" at km 104.5 to collect Mine Haul Road runoff and capture any additional sediment releases from the Mine Haul Road. (Runoff through this Mine Haul Road berm punchout had resulted in the development of a sediment delta near the upper reaches of tributary SDLT) |
| May 24                               | Flocculant installed upstream of Check Dam #4 on Mine Haul Road.                                                                                                                                                                                                                                                                                   |
| May 26                               | Installed geotextile over the upstream face of Check Dam #4.                                                                                                                                                                                                                                                                                       |
|                                      | Water samples taken upstream and downstream of Check Dam #4                                                                                                                                                                                                                                                                                        |
| May 27 - 31                          | Golder Associates geotechnical engineer arrives at site to provide guidance, assess risk, and develop a list of priority drainage works along the Mine Haul Road                                                                                                                                                                                   |
| May 27 - June 23                     | Removed loose sediment from sediment deposit located downstream of the Mine Haul Road "berm punch out" at km 104.5. (Sediment deposit situated near the bank of tributary SDLT.)                                                                                                                                                                   |
| June 1 - June 15                     | AMEC-Foster Wheeler Engineer arrives onsite to develop flocculant treatment systems and pilot test additional siltation controls including geotubes.                                                                                                                                                                                               |
| June 12                              | Constructed three (3) check dams upstream of SDLT along Mine Haul Road (Sheardown Valley) to allow for water treatment (flocculants) of Mine Haul Road runoff before entering SDLT.                                                                                                                                                                |
|                                      | Installed silt fences and flocculant stations upstream and throughout Sheardown Valley.                                                                                                                                                                                                                                                            |
|                                      | Water samples taken upstream and downstream of Check Dam #4.                                                                                                                                                                                                                                                                                       |

|                    |                                                                                                                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| June 16            | Installed silt fences downstream of the Mine Haul Road culverts discharging to Mary River.                                                                                                                                                            |
| June 17 - 21       | Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.                                                                                                           |
| June 20 - June 21  | Pilot testing of coagulant/flocculant dosing system at Check Dam #4 (assisted by Kemira Chemicals).                                                                                                                                                   |
| June 21            | Installed additional siltation controls, including geotextile, silt fences and flocculant, at km 108.5 of the Mine Haul Road.                                                                                                                         |
| June 25            | Check dam completed at km 108.5, silt fences erected downstream.                                                                                                                                                                                      |
| June 26-27         | Mine Haul Road ditch riprapped between km 108.5 and km 109                                                                                                                                                                                            |
| June 27-29         | Maintenance of ditches and culvert inlets completed - excavation of deposited sediments.                                                                                                                                                              |
| June 25 - July 8   | Tributaries running from Mine Haul Road running relatively clear.                                                                                                                                                                                     |
| July 9 - July 22   | Tributaries running from Mine Haul Road running relatively clear.                                                                                                                                                                                     |
| July 23 - August 5 | Tributaries running from Mine Haul Road running relatively clear.                                                                                                                                                                                     |
| July 25, 26        | Rainfall event causes sloughing of a section of the bank on the Mary River upstream of Deposit 1 and the Mine Site, increasing turbidity of Mary River.                                                                                               |
| August 1, 2        | Additional siltation mitigation measures installed along Mine Haul Road including, silt fences, flocculant blocks and geotubes. Sumps upstream of Mine Haul Road culverts modified to increase residency time of surface water runoff.                |
| August 4           | AMEC-Foster Wheeler Engineer, assisted by Baffinland staff, conducts additional flocculant/coagulant testing using Zetag-8814 polymer-flocculant mix and geotubes to control any additional Mine Haul Road surface water runoff sedimentation issues. |

***Appendix C.3 – Photos Not Required (No Change from Report Update No. 1)***

## Appendix C.4 - Spill Report 16-198 - Camp Lake Tributary 1

| Table C.4 - Spill Report 16-198 - Sequence of Events and Actions Taken |                                                                                                                                                                                                                                                       |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 31                                                                 | Sediment deposit along the bank of Camp Lake Tributary #1 (CLT1) discovered near the North end of the Mine Site airstrip. The source of the sediment deposit is determined to be from a slumping section of stream bank along Camp Lake Tributary #1. |
|                                                                        | Sediment release to Camp Lake Tributary #1 reported to the NT-NU Spill Line and regulators ( <b>NT-NU Spill Report 16-198</b> ).                                                                                                                      |
| June 1                                                                 | Installed silt fences around perimeter of sediment deposit to prevent migration of sediment into tributary.                                                                                                                                           |
|                                                                        | Removed sediment deposit from stream bank. Lined face of slumping stream bank with geotextile and reinforced with 6" aggregate to prevent similar incidents.                                                                                          |
| June 1 - 15                                                            | AMEC-Foster Wheeler Engineer arrives onsite to develop flocculant treatment systems and pilot test additional siltation controls including geotubes..                                                                                                 |
| June 17 - 21                                                           | Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.                                                                                                           |
| June 25 - July 8                                                       | Area of slumping remains stable over the reporting period.                                                                                                                                                                                            |
| July 9 - July 22                                                       | Area of slumping remains stable over the reporting period.                                                                                                                                                                                            |
| July 23 - August 5                                                     | Area of slumping remains stable over the reporting period.                                                                                                                                                                                            |

## Appendix C.4 – Photos



Photo 1 – Update on stable slope face by Camp Lake Tributary #1 on August 1, 2016.

**Table C.5.1 Spill Report 16-202 and Update No. 1, Tote Road.**

| <b>Sequence of Events and Actions Taken</b> |                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 20                                      | Environment Canada and INAC inspectors notify Baffinland that directions under the Fisheries Act will be issued to the Company as a result of surface water runoff conditions observed during their inspection. This included conditions at various locations on the Tote Road. |
| May 20 - present                            | Siltation control measures (silt fences, silt curtains, flocculent, treated jute) installed at various locations along the Tote Road to address potential sedimentation and turbidity issues                                                                                    |
| May 20 - present                            | Operational resources are allocated to deal with sediment issues on Tote Road including removal of sediments using excavator, installation of geotextile and riprap in critical locations.                                                                                      |
| May 31                                      | Several active areas of sedimentation and turbidity observed and reported to the NT-NU Spill Line and EC and INAC Inspectors. These include stream crossings CV-223 (km 97), BG-17 (km 90), and BG-29 (km 85). NT-NU Spill Report - 16-202                                      |
| May 31 to present                           | Additional resources are dedicated to fixing potential sedimentation problems on the Tote Road between km 75 and km 100. These include trucks, excavators, labourers, etc., and a dedicated construction manager.                                                               |
| June 19                                     | Sediment release observed at two additional locations along the Tote Road at stream crossing BG-31 at km 82 and at crossing BG-28 at km 86.3. ( <b>NT-NU Spill Report - 16-202, Update No. 1</b> ).                                                                             |
| June 19 to present                          | Sediment controls put in place to curtail sediment release to Muriel and David Lakes.                                                                                                                                                                                           |
|                                             | <b>REFER TO TABLE C.5.2 FOR DETAILS OF SPECIFIC ACTIONS TAKEN ON THE TOTE ROAD TO MINIMIZE SEDIMENTATION ISSUES.</b>                                                                                                                                                            |

Table C.5.2 Spill Report 16-202 and Update No. 1, Tote Road Work Completed

| Tote Road Chainage | Reason Work was/is Required                                                                                                       | Proposed Control                                                                                                                                               | Comments                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| km 77              | Surface water flow through natural and excavated ditch contributing turbidy to drainage in to outflow of Muriel Lake              | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | To be completed.                               |
| 82-83              | Surface water flow through excavated trench/on grade along Tote Roadcausing sediment to deposit on ice of Muriel lake             | Install two check dams at km 82.1. Requires strategy for long term stabilization/sediment control                                                              | Completed                                      |
| 83-83.2            | Surface water flow through excavated ditch of fine sand contributig to turbidity in to head waters of BG30 HADD                   | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 83.2-83.4          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to head waters of BG30 HADD                   | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 83.4-83.6          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to head waters of BG30 HADD                   | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 83.7-83.9          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to head waters of BG30 HADD                   | Lay geotextile liner in ditch and line with rip rap rock & Check dams                                                                                          | Completed                                      |
| 83.9-84.0          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to head waters of BG30 HADD                   | Lay geotextile liner in ditch and line with rip rap rock & Check dam                                                                                           | Completed                                      |
| 84.0-84.2          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to BG29 and feeds the creek in to Muriel Lake | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 84.2-84.3          | Surface water flow through excavated ditch of fine sand contributig to turbidity in to BG29                                       | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 85.25-85.35        | Surface water flow through excavated ditch of fine sand contributig to turbidity in downstream drainages.                         | Ditch fully lined with geotextile and riprap for the entire length.                                                                                            | Completed                                      |
| 85.6-85.8          | Ditch feeding Lake to BG29 CV contains some sedimentdue to ditch excavation                                                       | Lay geotextile liner in ditch and line with rip rap rock, silt curtain drainage in to lake                                                                     | Completed. Silt Curtain installed.             |
| 85.65-85.9         | Surface water flow through excavated ditch of fine sand contributig to turbidity in downstream drainages.                         | Ditch fully lined with geotextile and riprap for the entire length.                                                                                            | Completed.                                     |
| 85.8-86.1          | Ditch stabilization required as trench feeds CV in to David Lake                                                                  | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 86.1- 86.25        | Surface water flow through excavated ditch of fine sand contributig to turbidity in downstream drainages.                         | Riprap extentended for 40 , ditch line reestablished and check dam installed at outlent of culvert                                                             | Completed.                                     |
| 86.2-86.3          | Ditch stabilization required as trench feeds CV in to David Lake                                                                  | Lay geotextile liner in ditch and line with rip rap rock                                                                                                       | Completed                                      |
| 86.3-86.5(cv)      | Low flow condition only and trench requires significant earthworks in this area.                                                  | No mitigation in ditch. Install check dam on north side of culvert inlet                                                                                       | Completed                                      |
| 86.5-86.8          | Low flow condition only and trench requires significant earthworks in this area.                                                  | No mitigation in ditch. Install check dam across creek drainage at km 86.8                                                                                     | Completed                                      |
| 86.8-87.3          | Flooded ditch acting as settling pond with very low flow from pool. Ditch requires significant earthworks in this area            | Install check dam at km 86.8                                                                                                                                   | Completed                                      |
| 87.3-87.5(cv)      | Large pool in ditch area acting as a settling pond and irregular trench requires significant earthworks.                          | No immediate action                                                                                                                                            | Not completed yet, requires long term strategy |
| 87.5-87.6(cv)      | Ditch stabilization required as trench feeds culver in to David Lake                                                              | Lay geotextile liner in ditch and line with rip rap rock and install small check dams                                                                          | Completed                                      |
| 87.6-88.0          | Ditch stabilization required as trench feeds CV in to David Lake                                                                  | No action at this time. Very small catchment area and ditch is dry.                                                                                            | Not completed yet, requires long term strategy |
| 88.0-88.2(cv)      | Ditch stabilization required as trench feeds CV in to David Lake                                                                  | No action at this time in ditch. Very flat areas with no flow. Install rip rap at NW drainage in to culvert inlet and place a small CD upstream                | Check Dam installed.                           |
| 88.2-88.4          | Ditching in culvert feeding David Lake                                                                                            | Lay geotextile liner in ditch and line with rip rap rock, laid geotextile and armoured eroded creek bed that ties in to drainage , and the culvert inlet basin | Completed. Silt Curtain installed.             |
| 88.4-88.5 (CV)     |                                                                                                                                   | No action at this time                                                                                                                                         |                                                |
| 88.5-88.6          | Open Ditch.                                                                                                                       | Install Check dam at km 88.6 at north end of pool                                                                                                              | Completed                                      |

| Tote Road Chainage | Reason Work was/is Required                                                                                                                      | Proposed Control                                                                                                                                                                          | Comments                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 88.7-88.9          | Open Ditch.                                                                                                                                      | Southern pool to CV is flat with no drainage. No action at this time.                                                                                                                     | Not completed.                                                                                                                                              |
| 88.9-89.2          | Open Ditch.                                                                                                                                      | Lay geotextile liner in ditch and line with rip rap rock                                                                                                                                  | Not completed.                                                                                                                                              |
| km 89.9            | Permafrost degradation pond culvert plugged and risk of pond overtopping in to David Lake Tributary                                              | Steam clean culvert open and drain pond                                                                                                                                                   | Complete June 11.                                                                                                                                           |
| km 90.2            | Erosion from snow melt/creek off of Hill                                                                                                         | Stabilize drainage from vegetation down to ditch with rip rap                                                                                                                             | Complete June 11.                                                                                                                                           |
| km 90.2-90.4       | Base of steep embankment excavated and causing slope instability along the 300 meter stretch.                                                    | Geo and armour areas not yet failing to prevent future (0-2 year) failure of slope as in other adjacent areas. Reassessment of areas requires input from permafrost engineer.             | Not yet completed.                                                                                                                                          |
| km 90.3            | Steep slopes in two areas along embankment in process of failing due to disturbance at base of slope, and surface run off/permafrost degradation | Sluffed embankment reinforced with rip rap berm and silt fence applied. Permanent engineered solution required for long term stabilization                                                | Immediate actions completed.                                                                                                                                |
| ~91.4-91.7         | Ditching of fine sand on drainage on either side of culvert producing very turbid water feeding creek to David Lake                              | Construct ditches at crest of km 92 hill. Lay geotextile liner in ditch and line with rip rap rock. Excavate and backhaul excess fine sand to temporary storage location at km 97 laydown | Completed.                                                                                                                                                  |
| km 97              | Water draining off rip ripped shoulder and embankment through low lying sediment rich delta to Tom's creek                                       | Install new silt fence at discharge                                                                                                                                                       | Completed June.                                                                                                                                             |
| km97-CV223         | Sediment laden snow in draianage. Potential for erosion from slope around culvert inlet                                                          | Remove sediment laden snow and armour slopes.                                                                                                                                             | Snow removed from West and East drainages, East culvert slope lined with geo and armoured with rip rap.                                                     |
| Km 96 - CV224      | Sediment laden snow in draianage. Potential for erosion from ditches in to culvert drainage                                                      | Remove sediment laden snow and armour approach ditches and slopes.                                                                                                                        | Sediment removed from inlet drainage. Rip rap removed and geotextile lined and rip rapped South East ditch 20 m. SW drainage lined with geo and rip rapped. |
| km 95 - CV001      | Sediment laden snow in drainage.                                                                                                                 | Remove sediment laden snow                                                                                                                                                                | Snow Removed.                                                                                                                                               |
| km 94 - BG004      | Potential for erosion from ditches in to culvert drainage                                                                                        | Line NW and SW drainages (~30 m each) with geotextile and armoured with rip rap.                                                                                                          | NW and SW drainages (~30 m each) lined with geotextile and armoured with rip rap.                                                                           |
| km 90 - BG17       | Sediment laden snow in draianage. Potential for erosion from SE ditches in to culvert drainage                                                   | Remove sediment laden snow and armour SE approach ditches and slopes.                                                                                                                     | Sediment laden snow removed from inlet basin. SE drainage ditch lined with geo and armoured with rip rap fro ~70 m down to creek. Complete June 3           |
| km 96 CV224        | Post completion of controls, ice melted under geo allowing embankment to erode into creek bed                                                    | Remove sediment from creek bed and sediment covered snow from drainage & edge of embankment. Extend geotextile liner along SE enbankment and line with rip rap rock.                      | Completed.                                                                                                                                                  |
| km 91 BG14         | Ditching on in ditch and along embankment creating turbid water feeding creek to David Lake                                                      | Repair and reinforce check dam at upstream of CV. Excavate and backhaul excess fine sand to a location to be designated?                                                                  | Check dam completed. Excess sand removed.                                                                                                                   |

## Appendix C.5 – Photos at various locations along the Tote Road



Photo 1 – Water flowing downstream of CV223 on July 31, 2016



Photo 2 – Downstream of CV078 flowing clear on July 31, 2016



Photo 3 – Clear flow downstream of BG-17 on July 31, 2016



Photo 4 – Outlet of BG-28 flowing clear on July 31, 2016



Photo 5 – BG-29 flowing clear downstream on July 31, 2016



Photo 6 – BG -31 flowing clear downstream of culvert on July 31, 2016

**Table C.6 Construction of Ditches and Drainage System Around Milne Port Ore Stockpile and Mine Site Crusher Stockpile**  
**Sequence of Events and Actions Taken**

|                   |                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prior to May 20   | Milne and Mine Site - Ongoing monitoring of surface water adjacent to the ore stockpile to ensure that there was no adverse impacts due to surface water runoff or seepage.                                                                                                                                                                                          |
| May 20            | Environment Canada and INAC inspectors notify Baffinland that directions under the Fisheries Act will be issued to the Company due partially to the incomplete drainage works around the Milne Ore Stockpile Facility and the Mine Crusher Stockpile Area and Crusher Ore Pad. Written Direction provided June 7. INAC letter of non-compliance received on June 16. |
| May 23            | Document provided to Environment Canada and INAC Inspectors: Milne Stockpile Pad Water Drainage System – Excecution Plan and Schedule. Completion date of July 17.                                                                                                                                                                                                   |
| May 24 to present | Milne - The drainage system ditches are functionally operational by June 7.                                                                                                                                                                                                                                                                                          |
| June 22           | Milne - Ditching system presently fully operational, minor items to be included including survey for as-built report and clean-up of the area.                                                                                                                                                                                                                       |
| June 25 - July 8  | Mine Site - Installation of final ditching system is underway for Crusher Stockpile Pad.                                                                                                                                                                                                                                                                             |
| July 9 - July 22  | Mine Site Cursher Stockpile Pad - Ditching sytem construciton substantially completed and operational July 15<br>Milne Port Ore Pad Stockpile Pad - Ditching system construction operational.                                                                                                                                                                        |
| July 23 - Aug 5   | Ditching systems completed and operating as designed. No drainage issues.                                                                                                                                                                                                                                                                                            |

***Appendix C.6 – Photos Not Required (No Change from Report Update No. 2)***

**Table D.7 Impacted Snow Removal from Milne Beach and Tote Road Bridges**  
**Sequence of Events and Actions Taken**

|             |                                                                                                                                                                                                                                                   |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| May 20      | Environment Canada and INAC inspectors notify Baffinland that directions under the Fisheries Act will be issued to the Company. One of the items of concern was dirty snow west of the Ore Loader at Milne and on/under bridges on the Tote Road. |
| May 21-23   | Dirty snow removed from Milne Beach using Loader.                                                                                                                                                                                                 |
| May 21 - 25 | Crews mobilized to clean under bridges on Tote Road. Effort is partially successful by hampered by warmer temperatures and soft slushy conditions which posed safety hazard.                                                                      |