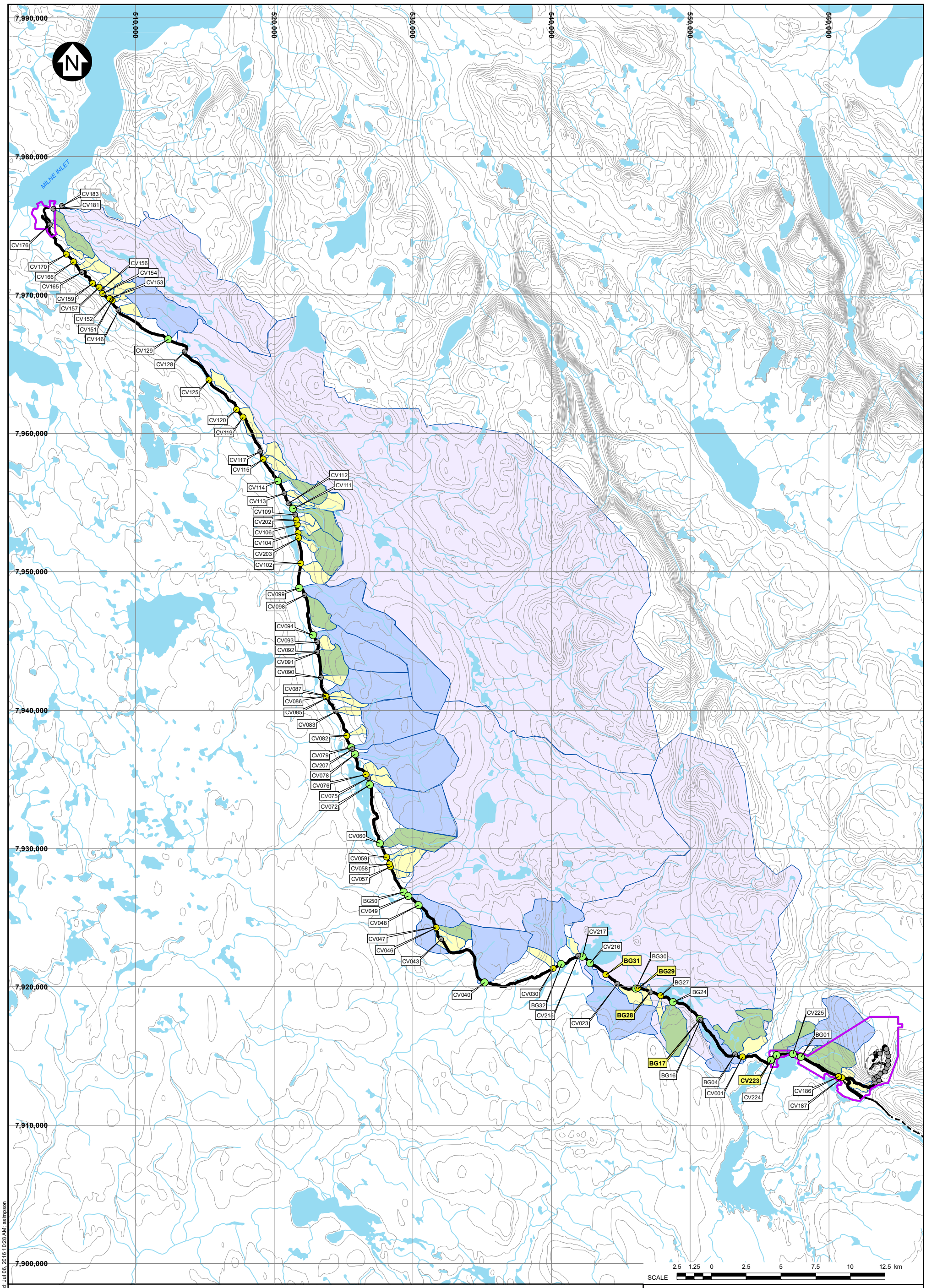


LEGEND:

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

FISH BEARING STATUS

- NO
- POTENTIAL
- YES
- RIVER/STREAM/DRAINAGE
- MILNE INLET TOTE ROAD
- CV223 DENOTES STREAM CROSSINGS WITH SEDIMENTATION PROBLEMS AS DESCRIBED IN NT-NU SPILL REPORT 16-202.

NOTES:

1. COORDINATE GRID IS IN METRES. COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N.
2. BASE MAP: © HER MAJESTY THE QUEEN IN RIGHTS OF CANADA DEPARTMENT OF NATURAL RESOURCES (2009). ALL RIGHTS RESERVED.
3. CONTOUR INTERVAL IS 40 METRES.
4. CATCHMENT BASED ON JULY 2006 INSPECTIONS.
5. 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).

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

BAFFINLAND IRON MINES CORPORATION

MARY RIVER

MILNE INLET TOTE ROAD
FISH BEARING CULVERT STATUS AND CATCHMENTS

Knight Piésold CONSULTING

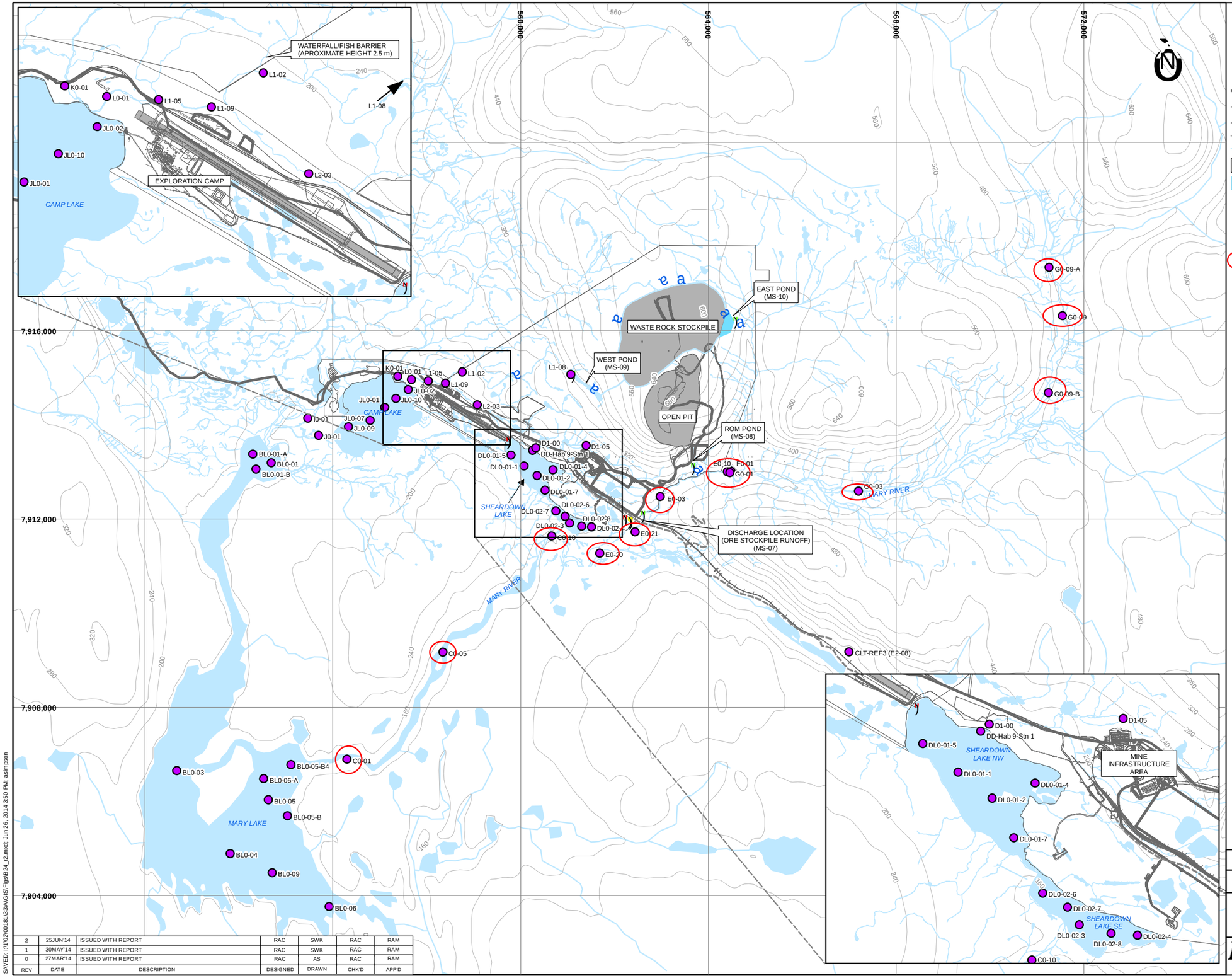
P/A NO. NB102-181/38

REF NO. NB16-00385

FIGURE 3

REV 0

SAVED: I:\1102\00181\38\AG\IS\Figs\B10_r0.mxd: Jul 06, 2016 10:28 AM: asimpson



LEGEND:

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

Mary River Water Quality Sample Locations

NOTES:

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

SCALE 1 0.5 0 1 2 3 4 km

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

CREMP WATER QUALITY STATIONS

Knight Piésold CONSULTING

P/A NO. NB102-181/33 | REF NO. 1

FIGURE 2.11 | REV 2

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	CHK'D	APP'D
2	25JUN'14	ISSUED WITH REPORT	RAC	SWK	RAC	RAM
1	30MAY'14	ISSUED WITH REPORT	RAC	SWK	RAC	RAM
0	27MAR'14	ISSUED WITH REPORT	RAC	AS	RAC	RAM

SAVED: I:\1\02\00181\03\A\GIS\Figs\B24_f2.mxd: Jun 26, 2014 3:50 PM: 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

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1766923-1	SDLT-OUT	10-May-16	Nickel (Ni)-Total	0.0061	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Potassium (K)-Total	3.46	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Selenium (Se)-Total	0.000085	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Sodium (Na)-Total	1.76	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Thallium (Tl)-Total	0.000047	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Uranium (U)-Total	0.00123	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Zinc (Zn)-Total	0.0084	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Aluminum (Al)-Dissolved	0.0278	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Cadmium (Cd)-Dissolved	0.000020	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Calcium (Ca)-Dissolved	6.04	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Copper (Cu)-Dissolved	0.00206	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Iron (Fe)-Dissolved	0.037	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Lead (Pb)-Dissolved	0.000060	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Magnesium (Mg)-Dissolved	4.21	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Manganese (Mn)-Dissolved	0.0212	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Molybdenum (Mo)-Dissolved	0.00134	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Nickel (Ni)-Dissolved	0.00120	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Potassium (K)-Dissolved	2.42	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Selenium (Se)-Dissolved	0.000081	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Sodium (Na)-Dissolved	1.77	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Uranium (U)-Dissolved	0.000493	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Zinc (Zn)-Dissolved	0.0012	mg/L	ALS
L1766923-1	SDLT-OUT	10-May-16	Oil and Grease, Total	<4.0	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	pH	7.46	pH units	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Suspended Solids	29.5	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Dissolved Solids	58	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Turbidity	50.2	NTU	ALS
L1766923-3	SDLT-OUT01	10-May-16	Conductivity	78.9	umhos/cm	ALS
L1766923-3	SDLT-OUT01	10-May-16	Hardness (as CaCO3)	32	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Ammonia, Total (as N)	0.091	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Chloride (Cl)	3.42	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Fluoride (F)	<0.020	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nitrate (as N)	0.413	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Kjeldahl Nitrogen	0.49	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Phosphorus, Total	0.0408	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sulfate (SO4)	7.17	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Dissolved Organic Carbon	5.9	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Total Organic Carbon	6.0	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Aluminum (Al)-Total	1.59	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Arsenic (As)-Total	0.00016	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Cadmium (Cd)-Total	0.000042	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Calcium (Ca)-Total	6.22	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Copper (Cu)-Total	0.0040	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Iron (Fe)-Total	2.03	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Lead (Pb)-Total	0.00105	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Magnesium (Mg)-Total	5.15	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Manganese (Mn)-Total	0.0518	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Molybdenum (Mo)-Total	0.00149	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nickel (Ni)-Total	0.0039	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Potassium (K)-Total	2.92	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Selenium (Se)-Total	0.000083	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sodium (Na)-Total	1.72	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Thallium (Tl)-Total	0.000027	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Uranium (U)-Total	0.000920	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1766923-3	SDLT-OUT01	10-May-16	Zinc (Zn)-Total	0.0061	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Aluminum (Al)-Dissolved	0.0245	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Cadmium (Cd)-Dissolved	0.000019	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Calcium (Ca)-Dissolved	6.04	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Copper (Cu)-Dissolved	0.00200	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Iron (Fe)-Dissolved	0.031	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Lead (Pb)-Dissolved	0.000061	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Magnesium (Mg)-Dissolved	4.18	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Manganese (Mn)-Dissolved	0.0208	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Molybdenum (Mo)-Dissolved	0.00134	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Nickel (Ni)-Dissolved	0.00114	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Potassium (K)-Dissolved	2.39	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Selenium (Se)-Dissolved	0.000097	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Sodium (Na)-Dissolved	1.76	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Uranium (U)-Dissolved	0.000474	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Zinc (Zn)-Dissolved	0.0010	mg/L	ALS
L1766923-3	SDLT-OUT01	10-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	pH	7.37	pH units	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Suspended Solids	23.1	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Dissolved Solids	44	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Turbidity	41.0	NTU	ALS
L1766923-2	LDFG-OUT	10-May-16	Conductivity	65.1	umhos/cm	ALS
L1766923-2	LDFG-OUT	10-May-16	Hardness (as CaCO3)	27	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Alkalinity, Total (as CaCO3)	21	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Ammonia, Total (as N)	0.095	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Chloride (Cl)	1.84	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Fluoride (F)	<0.020	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nitrate (as N)	0.241	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Kjeldahl Nitrogen	0.48	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Phosphorus, Total	0.0219	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sulfate (SO4)	7.37	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Dissolved Organic Carbon	3.3	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Total Organic Carbon	3.3	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Aluminum (Al)-Total	0.985	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Arsenic (As)-Total	0.00010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Calcium (Ca)-Total	5.15	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Copper (Cu)-Total	0.0033	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Iron (Fe)-Total	1.21	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Lead (Pb)-Total	0.00070	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Magnesium (Mg)-Total	4.17	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Manganese (Mn)-Total	0.113	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Mercury (Hg)-Total	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Molybdenum (Mo)-Total	<0.00050	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nickel (Ni)-Total	0.0031	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Potassium (K)-Total	1.53	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Selenium (Se)-Total	0.000085	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sodium (Na)-Total	1.03	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Thallium (Tl)-Total	0.000016	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Uranium (U)-Total	0.000667	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Zinc (Zn)-Total	0.0035	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Aluminum (Al)-Dissolved	0.0077	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Arsenic (As)-Dissolved	<0.00010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Cadmium (Cd)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Calcium (Ca)-Dissolved	5.03	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Copper (Cu)-Dissolved	0.00055	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1766923-2	LDFG-OUT	10-May-16	Iron (Fe)-Dissolved	<0.010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Lead (Pb)-Dissolved	<0.000050	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Magnesium (Mg)-Dissolved	3.57	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Manganese (Mn)-Dissolved	0.0913	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Mercury (Hg)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Molybdenum (Mo)-Dissolved	0.000320	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Nickel (Ni)-Dissolved	0.00074	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Potassium (K)-Dissolved	1.20	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Selenium (Se)-Dissolved	0.000084	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Sodium (Na)-Dissolved	1.06	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Thallium (Tl)-Dissolved	<0.000010	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Uranium (U)-Dissolved	0.000263	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Zinc (Zn)-Dissolved	0.0025	mg/L	ALS
L1766923-2	LDFG-OUT	10-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1767478-1	SDLT-OUT	11-May-16	pH	7.54	pH units	ALS
L1767478-1	SDLT-OUT	11-May-16	Total Suspended Solids	11.2	mg/L	ALS
L1767478-1	SDLT-OUT	11-May-16	Turbidity	30.4	NTU	ALS
L1767478-2	LDFG-OUT	11-May-16	pH	7.47	pH units	ALS
L1767478-2	LDFG-OUT	11-May-16	Total Suspended Solids	6.8	mg/L	ALS
L1767478-2	LDFG-OUT	11-May-16	Turbidity	19.4	NTU	ALS
L1768386-3	SDLT-OUT	13-May-16	pH	7.57	pH units	ALS
L1768386-3	SDLT-OUT	13-May-16	Total Suspended Solids	34.4	mg/L	ALS
L1768386-3	SDLT-OUT	13-May-16	Turbidity	57.4	NTU	ALS
L1768851-5	LDFG-OUT	14-May-16	pH	7.37	pH units	ALS
L1768851-5	LDFG-OUT	14-May-16	Total Suspended Solids	16.8	mg/L	ALS
L1768851-5	LDFG-OUT	14-May-16	Turbidity	30.1	NTU	ALS
L1768864-5	LDFG-OUT	15-May-16	pH	7.22	pH units	ALS
L1768864-5	LDFG-OUT	15-May-16	Total Suspended Solids	27.6	mg/L	ALS
L1768864-5	LDFG-OUT	15-May-16	Total Dissolved Solids	36	mg/L	ALS
L1768864-5	LDFG-OUT	15-May-16	Turbidity	36.5	NTU	ALS
L1769292-5	SDLT-OUT	16-May-16	pH	7.58	pH units	ALS
L1769292-5	SDLT-OUT	16-May-16	Total Suspended Solids	56.0	mg/L	ALS
L1769292-5	SDLT-OUT	16-May-16	Total Dissolved Solids	63	mg/L	ALS
L1769292-5	SDLT-OUT	16-May-16	Turbidity	101.0	NTU	ALS
L1770947-8	LDFG-OUT	18-May-16	pH	7.26	pH units	ALS
L1770947-8	LDFG-OUT	18-May-16	Total Suspended Solids	23.0	mg/L	ALS
L1770947-8	LDFG-OUT	18-May-16	Total Dissolved Solids	44	mg/L	ALS
L1770947-8	LDFG-OUT	18-May-16	Turbidity	56.2	NTU	ALS
L1770947-5	SDLT-OUT	18-May-16	pH	7.57	pH units	ALS
L1770947-5	SDLT-OUT	18-May-16	Total Suspended Solids	135.0	mg/L	ALS
L1770947-5	SDLT-OUT	18-May-16	Total Dissolved Solids	96	mg/L	ALS
L1770947-5	SDLT-OUT	18-May-16	Turbidity	105.0	NTU	ALS
L1771600-3	LDFG-OUT	19-May-16	pH	7.32	pH units	ALS
L1771600-3	LDFG-OUT	19-May-16	Total Suspended Solids	32.4	mg/L	ALS
L1771600-3	LDFG-OUT	19-May-16	Total Dissolved Solids	<20	mg/L	ALS
L1771600-3	LDFG-OUT	19-May-16	Turbidity	71.7	NTU	ALS
L1772161-4	SDLT-OUT	19-May-16	pH	7.6	pH units	ALS
L1772161-4	SDLT-OUT	19-May-16	Total Suspended Solids	52.4	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Total Dissolved Solids	68.0	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Turbidity	68.2	NTU	ALS
L1772161-4	SDLT-OUT	19-May-16	Aluminum (Al)-Total	2.62	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Arsenic (As)-Total	0.00024	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Barium (Ba)-Total	0.0175	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Beryllium (Be)-Total	0.00013	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Bismuth (Bi)-Total	0.000079	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Boron (B)-Total	0.011	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Cadmium (Cd)-Total	0.000033	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Calcium (Ca)-Total	7.95	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1772161-4	SDLT-OUT	19-May-16	Cesium (Cs)-Total	0.000193	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Chromium (Cr)-Total	0.00403	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Cobalt (Co)-Total	0.00163	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Copper (Cu)-Total	0.0044	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Iron (Fe)-Total	3.27	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Lead (Pb)-Total	0.00177	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Lithium (Li)-Total	0.0047	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Magnesium (Mg)-Total	7.04	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Manganese (Mn)-Total	0.0805	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Molybdenum (Mo)-Total	0.00203	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Nickel (Ni)-Total	0.00479	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Potassium (K)-Total	3.67	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Rubidium (Rb)-Total	0.00945	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Selenium (Se)-Total	0.000079	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Silicon (Si)-Total	5.10	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Sodium (Na)-Total	1.97	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Strontium (Sr)-Total	0.0084	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Sulfur (S)-Total	3.20	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Thallium (Tl)-Total	0.000044	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Thorium (Th)-Total	0.00126	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tin (Sn)-Total	0.00014	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Titanium (Ti)-Total	0.110	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Tungsten (W)-Total	0.00011	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Uranium (U)-Total	0.00141	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Vanadium (V)-Total	0.00418	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Zinc (Zn)-Total	0.0076	mg/L	ALS
L1772161-4	SDLT-OUT	19-May-16	Zirconium (Zr)-Total	0.00157	mg/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Benzene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Toluene	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	o-Xylene	<0.30	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	4-Bromofluorobenzene	101.8	%	ALS
L1772161-5	SDLT-OUT	19-May-16	1,4-Difluorobenzene	101.2	%	ALS
L1772161-5	SDLT-OUT	19-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772161-5	SDLT-OUT	19-May-16	F1-BTEX	<25	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772161-4	SDLT-OUT	19-May-16	2-Bromobenzotrifluoride	86.5	%	ALS
L1772161-5	SDLT-OUT	19-May-16	3,4-Dichlorotoluene	96.1	%	ALS
L1772274-1	SDLT-OUT	22-May-16	pH	7.57	pH units	ALS
L1772274-1	SDLT-OUT	22-May-16	Total Suspended Solids	23.2	mg/L	ALS
L1772274-1	SDLT-OUT	22-May-16	Total Dissolved Solids	27	mg/L	ALS
L1772274-1	SDLT-OUT	22-May-16	Turbidity	37.0	NTU	ALS
L1772274-4	LDFG-OUT	22-May-16	pH	7.54	pH units	ALS
L1772274-4	LDFG-OUT	22-May-16	Total Suspended Solids	26.7	mg/L	ALS
L1772274-4	LDFG-OUT	22-May-16	Total Dissolved Solids	<20	mg/L	ALS
L1772274-4	LDFG-OUT	22-May-16	Turbidity	73.3	NTU	ALS
L1772636-2	SDLT-OUT	23-May-16	pH	7.67	pH units	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Suspended Solids	17.1	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Dissolved Solids	48	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Turbidity	26.6	NTU	ALS
L1772636-2	SDLT-OUT	23-May-16	Conductivity	67.5	umhos/cm	ALS
L1772636-2	SDLT-OUT	23-May-16	Hardness (as CaCO3)	32	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1772636-2	SDLT-OUT	23-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Chloride (Cl)	2.24	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sulfate (SO4)	4.16	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Dissolved Organic Carbon	5.7	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Total Organic Carbon	12.1	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Aluminum (Al)-Total	0.851	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Arsenic (As)-Total	0.00012	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Barium (Ba)-Total	0.00838	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cadmium (Cd)-Total	0.000021	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Calcium (Ca)-Total	5.89	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cesium (Cs)-Total	0.000068	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Chromium (Cr)-Total	0.00143	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Cobalt (Co)-Total	0.00062	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Copper (Cu)-Total	0.0023	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Iron (Fe)-Total	1.10	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Lead (Pb)-Total	0.00067	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Lithium (Li)-Total	0.0013	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Magnesium (Mg)-Total	4.25	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Manganese (Mn)-Total	0.0323	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Molybdenum (Mo)-Total	0.000878	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Nickel (Ni)-Total	0.00231	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Potassium (K)-Total	1.76	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Rubidium (Rb)-Total	0.00448	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Selenium (Se)-Total	0.000051	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Silicon (Si)-Total	1.93	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sodium (Na)-Total	0.94	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Strontium (Sr)-Total	0.0046	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Sulfur (S)-Total	1.39	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Thallium (Tl)-Total	0.000017	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Thorium (Th)-Total	0.00042	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Titanium (Ti)-Total	0.0352	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Uranium (U)-Total	0.000671	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Vanadium (V)-Total	0.00140	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Zinc (Zn)-Total	0.0046	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Zirconium (Zr)-Total	0.00071	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	o-Xylene	<0.30	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	4-Bromofluorobenzene	99.3	%	ALS
L1772636-2	SDLT-OUT	23-May-16	1,4-Difluorobenzene	101.9	%	ALS
L1772636-2	SDLT-OUT	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	F4 (C34-C50)	<250	ug/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1772636-2	SDLT-OUT	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-2	SDLT-OUT	23-May-16	2-Bromobenzotrifluoride	96	%	ALS
L1772636-2	SDLT-OUT	23-May-16	3,4-Dichlorotoluene	100.6	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	pH	7.63	pH units	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Suspended Solids	22	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Dissolved Solids	50	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Turbidity	28.3	NTU	ALS
L1772636-3	SDLT-OUT01	23-May-16	Conductivity	65.7	umhos/cm	ALS
L1772636-3	SDLT-OUT01	23-May-16	Hardness (as CaCO3)	32	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Alkalinity, Total (as CaCO3)	30	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Chloride (Cl)	2.18	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sulfate (SO4)	3.92	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Dissolved Organic Carbon	4.5	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Organic Carbon	4.1	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Aluminum (Al)-Total	0.897	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Arsenic (As)-Total	0.00013	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Barium (Ba)-Total	0.00880	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Bismuth (Bi)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cadmium (Cd)-Total	0.000022	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Calcium (Ca)-Total	5.82	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cesium (Cs)-Total	0.000069	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Chromium (Cr)-Total	0.00154	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Cobalt (Co)-Total	0.00064	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Copper (Cu)-Total	0.0023	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Iron (Fe)-Total	1.19	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Lead (Pb)-Total	0.00071	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Lithium (Li)-Total	0.0015	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Magnesium (Mg)-Total	4.21	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Manganese (Mn)-Total	0.0334	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Molybdenum (Mo)-Total	0.000884	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Nickel (Ni)-Total	0.00232	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Potassium (K)-Total	1.75	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Rubidium (Rb)-Total	0.00463	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Silicon (Si)-Total	1.96	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sodium (Na)-Total	0.92	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Strontium (Sr)-Total	0.0046	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Sulfur (S)-Total	1.31	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Thallium (Tl)-Total	0.000019	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Thorium (Th)-Total	0.00046	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Titanium (Ti)-Total	0.0381	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Uranium (U)-Total	0.000682	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Vanadium (V)-Total	0.00152	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Zinc (Zn)-Total	0.0040	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Zirconium (Zr)-Total	0.00069	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	o-Xylene	<0.30	ug/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1772636-3	SDLT-OUT01	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	4-Bromofluorobenzene	99.8	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	1,4-Difluorobenzene	101	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-3	SDLT-OUT01	23-May-16	2-Bromobenzotrifluoride	82.8	%	ALS
L1772636-3	SDLT-OUT01	23-May-16	3,4-Dichlorotoluene	97	%	ALS
L1772636-4	LDFG-OUT	23-May-16	pH	7.67	pH units	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Suspended Solids	16.3	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Dissolved Solids	42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Turbidity	52.8	NTU	ALS
L1772636-4	LDFG-OUT	23-May-16	Conductivity	55.0	umhos/cm	ALS
L1772636-4	LDFG-OUT	23-May-16	Hardness (as CaCO3)	29	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Alkalinity, Total (as CaCO3)	27	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Bromide (Br)	<0.10	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Chloride (Cl)	0.94	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sulfate (SO4)	1.48	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Dissolved Organic Carbon	4.3	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Organic Carbon	10.5	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Aluminum (Al)-Total	0.943	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Antimony (Sb)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Arsenic (As)-Total	0.00015	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Barium (Ba)-Total	0.00726	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Beryllium (Be)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Bismuth (Bi)-Total	0.000057	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Boron (B)-Total	<0.010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cadmium (Cd)-Total	<0.000010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Calcium (Ca)-Total	5.42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cesium (Cs)-Total	0.000085	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Chromium (Cr)-Total	0.00149	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Cobalt (Co)-Total	0.00090	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Copper (Cu)-Total	0.0021	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Iron (Fe)-Total	1.17	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Lead (Pb)-Total	0.00091	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Lithium (Li)-Total	0.0019	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Magnesium (Mg)-Total	3.78	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Manganese (Mn)-Total	0.0552	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Molybdenum (Mo)-Total	0.000347	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Nickel (Ni)-Total	0.00224	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Phosphorus (P)-Total	<0.050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Potassium (K)-Total	1.42	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Rubidium (Rb)-Total	0.00390	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Selenium (Se)-Total	<0.000050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Silicon (Si)-Total	2.03	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Silver (Ag)-Total	<0.000050	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sodium (Na)-Total	0.53	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Strontium (Sr)-Total	0.0037	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Sulfur (S)-Total	0.50	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tellurium (Te)-Total	<0.00020	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Thallium (Tl)-Total	0.000014	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Thorium (Th)-Total	0.00054	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tin (Sn)-Total	<0.00010	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Titanium (Ti)-Total	0.0259	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Tungsten (W)-Total	<0.00010	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1772636-4	LDFG-OUT	23-May-16	Uranium (U)-Total	0.000669	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Vanadium (V)-Total	0.00153	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Zinc (Zn)-Total	0.0047	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Zirconium (Zr)-Total	0.00124	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Oil and Grease, Total	<2.0	mg/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Benzene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Ethylbenzene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Toluene	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	o-Xylene	<0.30	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	m+p-Xylenes	<0.40	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Xylenes (Total)	<0.50	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	4-Bromofluorobenzene	99.3	%	ALS
L1772636-4	LDFG-OUT	23-May-16	1,4-Difluorobenzene	101.3	%	ALS
L1772636-4	LDFG-OUT	23-May-16	F1 (C6-C10)	<25	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F1-BTEX	<25	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F2 (C10-C16)	<100	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F3 (C16-C34)	<250	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	F4 (C34-C50)	<250	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	Total Hydrocarbons (C6-C50)	<370	ug/L	ALS
L1772636-4	LDFG-OUT	23-May-16	2-Bromobenzotrifluoride	88.5	%	ALS
L1772636-4	LDFG-OUT	23-May-16	3,4-Dichlorotoluene	96.3	%	ALS
L1773561-2	SDLT-OUT	24-May-16	pH	7.51	pH units	ALS
L1773561-2	SDLT-OUT	24-May-16	Total Suspended Solids	60.0	mg/L	ALS
L1773561-2	SDLT-OUT	24-May-16	Turbidity	54.7	NTU	ALS
L1773561-4	LDFG-OUT	24-May-16	pH	7.56	pH units	ALS
L1773561-4	LDFG-OUT	24-May-16	Total Suspended Solids	8.4	mg/L	ALS
L1773561-4	LDFG-OUT	24-May-16	Turbidity	35.8	NTU	ALS
L1774143-1	SDLT-OUT	26-May-16	pH	7.58	pH units	ALS
L1774143-1	SDLT-OUT	26-May-16	Total Suspended Solids	35.6	mg/L	ALS
L1774143-1	SDLT-OUT	26-May-16	Turbidity	21.1	NTU	ALS
L1774143-3	LDFG-OUT	26-May-16	pH	7.63	pH units	ALS
L1774143-3	LDFG-OUT	26-May-16	Total Suspended Solids	5.6	mg/L	ALS
L1774143-3	LDFG-OUT	26-May-16	Turbidity	13.2	NTU	ALS
L1775014-2	SDLT-OUT	27-May-16	pH	7.68	pH units	ALS
L1775014-2	SDLT-OUT	27-May-16	Total Suspended Solids	13.2	mg/L	ALS
L1775014-2	SDLT-OUT	27-May-16	Turbidity	25.7	NTU	ALS
L1775076-2	SDLT-OUT	28-May-16	pH	7.67	pH units	ALS
L1775076-2	SDLT-OUT	28-May-16	Total Suspended Solids	85.0	mg/L	ALS
L1775076-2	SDLT-OUT	28-May-16	Turbidity	130.0	NTU	ALS
L1775076-3	LDFG-OUT	28-May-16	pH	7.58	pH units	ALS
L1775076-3	LDFG-OUT	28-May-16	Total Suspended Solids	11.0	mg/L	ALS
L1775076-3	LDFG-OUT	28-May-16	Turbidity	80.8	NTU	ALS
L1775126-2	SDLT-OUT	29-May-16	pH	7.52	pH units	ALS
L1775126-2	SDLT-OUT	29-May-16	Total Suspended Solids	7.6	mg/L	ALS
L1775126-2	SDLT-OUT	29-May-16	Turbidity	15.2	NTU	ALS
L1775126-3	LDFG-OUT	29-May-16	pH	7.65	pH units	ALS
L1775126-3	LDFG-OUT	29-May-16	Total Suspended Solids	2.4	mg/L	ALS
L1775126-3	LDFG-OUT	29-May-16	Turbidity	19.0	NTU	ALS
L1775619-3	SDLT-OUT	30-May-16	pH	7.62	pH units	ALS
L1775619-3	SDLT-OUT	30-May-16	Total Suspended Solids	6.8	mg/L	ALS
L1775619-3	SDLT-OUT	30-May-16	Turbidity	11.3	NTU	ALS
L1775619-4	LDFG-OUT	31-May-16	pH	7.78	pH units	ALS
L1775619-4	LDFG-OUT	31-May-16	Total Suspended Solids	2.0	mg/L	ALS
L1775619-4	LDFG-OUT	31-May-16	Turbidity	6.9	NTU	ALS
L1776322-2	SDLT-OUT	1-Jun-16	pH	7.63	pH units	ALS
L1776322-2	SDLT-OUT	1-Jun-16	Total Suspended Solids	7.6	mg/L	ALS
L1776322-2	SDLT-OUT	1-Jun-16	Turbidity	13.8	NTU	ALS
L1776322-1	LDFG-OUT	1-Jun-16	pH	7.83	pH units	ALS
L1776322-1	LDFG-OUT	1-Jun-16	Total Suspended Solids	3.2	mg/L	ALS

Table B.2.1 - Surface Water Quality for Sheardown Lake Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1776322-1	LDFG-OUT	1-Jun-16	Turbidity	8.7	NTU	ALS
L1777372-2	SDLT-OUT	2-Jun-16	pH	7.60	pH units	ALS
L1777372-2	SDLT-OUT	2-Jun-16	Total Suspended Solids	4.4	mg/L	ALS
L1777372-2	SDLT-OUT	2-Jun-16	Turbidity	9.7	NTU	ALS
L1777372-3	LDFG-OUT	2-Jun-16	pH	7.76	pH units	ALS
L1777372-3	LDFG-OUT	2-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1777372-3	LDFG-OUT	2-Jun-16	Turbidity	8.2	NTU	ALS
L1778021-2	SDLT-OUT	2-Jun-16	pH	7.65	pH units	ALS
L1778021-2	SDLT-OUT	2-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1778021-2	SDLT-OUT	2-Jun-16	Turbidity	6.9	NTU	ALS
L1778486-2	SDLT-OUT	4-Jun-16	pH	7.66	pH units	ALS
L1778486-2	SDLT-OUT	4-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1778486-2	SDLT-OUT	4-Jun-16	Turbidity	7.5	NTU	ALS
L1778538-3	SDLT-OUT	5-Jun-16	pH	7.67	pH units	ALS
L1778538-3	SDLT-OUT	5-Jun-16	Total Suspended Solids	3.2	mg/L	ALS
L1778538-3	SDLT-OUT	5-Jun-16	Turbidity	8.0	NTU	ALS
L1778538-4	LDFG-OUT	5-Jun-16	pH	7.78	pH units	ALS
L1778538-4	LDFG-OUT	5-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1778538-4	LDFG-OUT	5-Jun-16	Turbidity	5.4	NTU	ALS
L1778559-2	SDLT-OUT	6-Jun-16	pH	7.58	pH units	ALS
L1778559-2	SDLT-OUT	6-Jun-16	Total Suspended Solids	17.2	mg/L	ALS
L1778559-2	SDLT-OUT	6-Jun-16	Turbidity	15.7	NTU	ALS
L1778559-3	LDFG-OUT	6-Jun-16	pH	7.83	pH units	ALS
L1778559-3	LDFG-OUT	6-Jun-16	Total Suspended Solids	3.2	mg/L	ALS
L1778559-3	LDFG-OUT	6-Jun-16	Turbidity	8.2	NTU	ALS
L1779241-2	SDLT-OUT	7-Jun-16	pH	7.59	pH units	ALS
L1779241-2	SDLT-OUT	7-Jun-16	Total Suspended Solids	11.2	mg/L	ALS
L1779241-2	SDLT-OUT	7-Jun-16	Turbidity	9.6	NTU	ALS
L1779241-3	LDFG-OUT	7-Jun-16	pH	7.83	pH units	ALS
L1779241-3	LDFG-OUT	7-Jun-16	Total Suspended Solids	2.0	mg/L	ALS
L1779241-3	LDFG-OUT	7-Jun-16	Turbidity	7.6	NTU	ALS
L1779759-2	SDLT-OUT	8-Jun-16	pH	7.49	pH units	ALS
L1779759-2	SDLT-OUT	8-Jun-16	Total Suspended Solids	20.0	mg/L	ALS
L1779759-2	SDLT-OUT	8-Jun-16	Turbidity	24.3	NTU	ALS
L1779759-1	LDFG-OUT	8-Jun-16	pH	7.79	pH units	ALS
L1779759-1	LDFG-OUT	8-Jun-16	Total Suspended Solids	2.0	mg/L	ALS
L1779759-1	LDFG-OUT	8-Jun-16	Turbidity	5.4	NTU	ALS
L1782789-1	SVCD1-IN	13-Jun-16	pH	7.53	pH units	ALS
L1782789-1	SVCD1-IN	13-Jun-16	Total Suspended Solids	231	mg/L	ALS
L1782789-1	SVCD1-IN	13-Jun-16	Turbidity	133	NTU	ALS
L1782789-2	SVCD1-T1	13-Jun-16	pH	7.49	pH units	ALS
L1782789-2	SVCD1-T1	13-Jun-16	Total Suspended Solids	31.6	mg/L	ALS
L1782789-2	SVCD1-T1	13-Jun-16	Turbidity	4.95	NTU	ALS
L1782789-3	SVCD1-T2	13-Jun-16	pH	7.45	pH units	ALS
L1782789-3	SVCD1-T2	13-Jun-16	Total Suspended Solids	21.5	mg/L	ALS
L1782789-3	SVCD1-T2	13-Jun-16	Turbidity	3.89	NTU	ALS
L1787809-5	MS-C-E	21-Jun-16	pH	8.16	pH units	ALS
L1787809-5	MS-C-E	21-Jun-16	Total Suspended Solids	2.0	mg/L	ALS
L1787809-5	MS-C-E	21-Jun-16	Turbidity	-	NTU	ALS
L1790090-3	SDLT-OUT	28-Jun-16	pH	8.15	pH units	ALS
L1790090-3	SDLT-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-3	SDLT-OUT	28-Jun-16	Turbidity	1.4	NTU	ALS
L1792808-2	SDLT-OUT	4-Jul-16	pH	8.17	pH units	ALS
L1792808-2	SDLT-OUT	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792808-2	SDLT-OUT	4-Jul-16	Turbidity	0.8	NTU	ALS
L1797825-2	SDLT-OUT	12-Jul-16	pH	8.19	pH units	ALS
L1797825-2	SDLT-OUT	12-Jul-16	Total Suspended Solids	2.4	mg/L	ALS
L1797825-2	SDLT-OUT	12-Jul-16	Turbidity	1.9	NTU	ALS
L1800469-1	SDLT-OUT	19-Jul-16	pH	8.08	pH units	ALS

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

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1800469-1	SDLT-OUT	19-Jul-16	Total Suspended Solids	3.2	mg/L	ALS
L1800469-1	SDLT-OUT	19-Jul-16	Turbidity	1.6	NTU	ALS
L1803783-2	SDLT-OUT	25-Jul-16	pH	8.14	pH units	ALS
L1803783-2	SDLT-OUT	25-Jul-16	Total Suspended Solids	<2	mg/L	ALS
L1803783-2	SDLT-OUT	25-Jul-16	Turbidity	0.9	NTU	ALS
L1803783-3	LDFG-OUT	25-Jul-16	pH	8.21	pH units	ALS
L1803783-3	LDFG-OUT	25-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1803783-3	LDFG-OUT	25-Jul-16	Turbidity	1.3	NTU	ALS
L1807025-2	SDLT-OUT	1-Aug-16	pH	8.07	pH units	ALS
L1807025-2	SDLT-OUT	1-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1807025-2	SDLT-OUT	1-Aug-16	Turbidity	2.6	NTU	ALS
L1807025-3	LDFG-OUT	1-Aug-16	pH	8.13	pH units	ALS
L1807025-3	LDFG-OUT	1-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1807025-3	LDFG-OUT	1-Aug-16	Turbidity	7.4	NTU	ALS
L1808207-2	SDLT-OUT	2-Aug-16	pH	8.05	pH units	ALS
L1808207-2	SDLT-OUT	2-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1808207-2	SDLT-OUT	2-Aug-16	Turbidity	1.3	NTU	ALS
L1808207-3	LDFG-OUT	2-Aug-16	pH	8.12	pH units	ALS
L1808207-3	LDFG-OUT	2-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1808207-3	LDFG-OUT	2-Aug-16	Turbidity	0.4	NTU	ALS
L1811533-1	SDLT-OUT	9-Aug-16	pH	8.17	pH units	ALS
L1811533-1	SDLT-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-1	SDLT-OUT	9-Aug-16	Turbidity	0.9	NTU	ALS
L1811533-2	LDFG-OUT	9-Aug-16	pH	8.15	pH units	ALS
L1811533-2	LDFG-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-2	LDFG-OUT	9-Aug-16	Turbidity	0.4	NTU	ALS
L1817817-1	SDLT-OUT	23-Aug-16	pH	8.21	pH units	ALS
L1817817-1	SDLT-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-1	SDLT-OUT	23-Aug-16	Turbidity	1.1	NTU	ALS
L1817817-2	LDFG-OUT	23-Aug-16	pH	7.99	pH units	ALS
L1817817-2	LDFG-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-2	LDFG-OUT	23-Aug-16	Turbidity	0.5	NTU	ALS
L1819436-1	LDFG-OUT	25-Aug-16	pH	7.92	pH units	ALS
L1819436-1	LDFG-OUT	25-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1819436-1	LDFG-OUT	25-Aug-16	Turbidity	0.2	NTU	ALS
L1819436-2	SDLT-OUT	25-Aug-16	pH	8.16	pH units	ALS
L1819436-2	SDLT-OUT	25-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1819436-2	SDLT-OUT	25-Aug-16	Turbidity	0.6	NTU	ALS
L1820709	LDFG-OUT	29-Aug-16	pH	7.81	pH units	ALS
L1820709	LDFG-OUT	29-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820709	LDFG-OUT	29-Aug-16	Turbidity	0.2	NTU	ALS
L1820709	SDLT-OUT	29-Aug-16	pH	8.21	pH units	ALS
L1820709	SDLT-OUT	29-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820709	SDLT-OUT	29-Aug-16	Turbidity	0.5	NTU	ALS
L1823702-1	LDFG-OUT	5-Sep-16	pH	7.84	pH units	ALS
L1823702-1	LDFG-OUT	5-Sep-16	Total Suspended Solids	22	mg/L	ALS
L1823702-1	LDFG-OUT	5-Sep-16	Turbidity	0.38	NTU	ALS
L1823702-2	SDLT-OUT	5-Sep-16	pH	8.14	pH units	ALS
L1823702-2	SDLT-OUT	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823702-2	SDLT-OUT	5-Sep-16	Turbidity	1.3	NTU	ALS

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

The high TSS result at LDFG-OUT on Sept. 5 were result of low flow conditions which made it difficult to sample flows without stirring up sediment

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

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

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-1	CL-DS	23-May-16	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

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

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1778538-1	CLSP-OUT	5-Jun-16	Turbidity	17.9	NTU	ALS
L1778559-1	CLT-OUT	6-Jun-16	pH	7.52	pH units	ALS
L1778559-1	CLT-OUT	6-Jun-16	Total Suspended Solids	5.6	mg/L	ALS
L1778559-1	CLT-OUT	6-Jun-16	Turbidity	11.4	NTU	ALS
L1779241-1	CLT-OUT	7-Jun-16	pH	7.60	pH units	ALS
L1779241-1	CLT-OUT	7-Jun-16	Total Suspended Solids	2.8	mg/L	ALS
L1779241-1	CLT-OUT	7-Jun-16	Turbidity	9.68	NTU	ALS
L1779759-3	CLT-OUT	8-Jun-16	pH	7.46	pH units	ALS
L1779759-3	CLT-OUT	8-Jun-16	Total Suspended Solids	4.4	mg/L	ALS
L1779759-3	CLT-OUT	8-Jun-16	Turbidity	9.34	NTU	ALS
L1790090-1	CLSP-OUT	28-Jun-16	pH	7.42	pH units	ALS
L1790090-1	CLSP-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-1	CLSP-OUT	28-Jun-16	Turbidity	1.4	NTU	ALS
L1790090-2	CLT-OUT	28-Jun-16	pH	7.95	pH units	ALS
L1790090-2	CLT-OUT	28-Jun-16	Total Suspended Solids	<2.0	mg/L	ALS
L1790090-2	CLT-OUT	28-Jun-16	Turbidity	2.9	NTU	ALS
L1792808-1	CLT-OUT	4-Jul-16	pH	8.03	pH units	ALS
L1792808-1	CLT-OUT	4-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1792808-1	CLT-OUT	4-Jul-16	Turbidity	0.88	NTU	ALS
L1797825-1	CLT-OUT	12-Jul-16	pH	8.22	pH units	ALS
L1797825-1	CLT-OUT	12-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1797825-1	CLT-OUT	12-Jul-16	Turbidity	0.55	NTU	ALS
L1800469-1	CLT-OUT	19-Jul-16	pH	8.11	pH units	ALS
L1800469-1	CLT-OUT	19-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1800469-1	CLT-OUT	19-Jul-16	Turbidity	0.05	NTU	ALS
L1803783-1	CLT-OUT	25-Jul-16	pH	8.16	pH units	ALS
L1803783-1	CLT-OUT	25-Jul-16	Total Suspended Solids	2.0	mg/L	ALS
L1803783-1	CLT-OUT	25-Jul-16	Turbidity	1.3	NTU	ALS
L1808207-4	CLSP-OUT	3-Aug-16	pH	8.01	pH units	ALS
L1808207-4	CLSP-OUT	3-Aug-16	Total Suspended Solids	20.8	mg/L	ALS
L1808207-4	CLSP-OUT	3-Aug-16	Turbidity	29.3	NTU	ALS
L1808207-1	CLT-OUT	3-Aug-16	pH	8.14	pH units	ALS
L1808207-1	CLT-OUT	3-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1808207-1	CLT-OUT	3-Aug-16	Turbidity	1.2	NTU	ALS
L1809441-1	CLT-OUT	5-Aug-16	pH	8.20	pH units	ALS
L1809441-1	CLT-OUT	5-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1809441-1	CLT-OUT	5-Aug-16	Turbidity	1.3	NTU	ALS
L1811533-4	CLSP-OUT	9-Aug-16	pH	8.30	pH units	ALS
L1811533-4	CLSP-OUT	9-Aug-16	Total Suspended Solids	4.0	mg/L	ALS
L1811533-4	CLSP-OUT	9-Aug-16	Turbidity	8.7	NTU	ALS
L1811533-3	CLT-OUT	9-Aug-16	pH	8.26	pH units	ALS
L1811533-3	CLT-OUT	9-Aug-16	Total Suspended Solids	<2.0	mg/L	ALS
L1811533-3	CLT-OUT	9-Aug-16	Turbidity	1.3	NTU	ALS
L1817817-3	CLT-OUT	23-Aug-16	pH	8.31	pH units	ALS
L1817817-3	CLT-OUT	23-Aug-16	Total Suspended Solids	<2	mg/L	ALS
L1817817-3	CLT-OUT	23-Aug-16	Turbidity	1.0	NTU	ALS
L1819436-3	CLT-OUT	25-Aug-16	pH	8.27	pH units	ALS
L1819436-3	CLT-OUT	25-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1819436-3	CLT-OUT	25-Aug-16	Turbidity	0.7	NTU	ALS
L1820709	CLT-OUT	29-Aug-16	pH	8.36	pH units	ALS
L1820709	CLT-OUT	29-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1820709	CLT-OUT	29-Aug-16	Turbidity	0.8	NTU	ALS
L1823702-3	CLT-OUT	5-Sep-16	pH	8.21	pH units	ALS
L1823702-3	CLT-OUT	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823702-3	CLT-OUT	5-Sep-16	Turbidity	0.75	NTU	ALS

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

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

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1774143-5	CD4-IN	26-May-16	pH	7.68	pH units	ALS
L1774143-5	CD4-IN	26-May-16	Total Suspended Solids	123.00	mg/L	ALS
L1774143-5	CD4-IN	26-May-16	Turbidity	126.00	NTU	ALS
L1774143-4	CD4-OUT	26-May-16	pH	7.71	pH units	ALS
L1774143-4	CD4-OUT	26-May-16	Total Suspended Solids	59.00	mg/L	ALS
L1774143-4	CD4-OUT	26-May-16	Turbidity	58.50	NTU	ALS
L1782435-2	CD4-OUT	12-Jun-16	pH	7.88	pH units	ALS
L1782435-2	CD4-OUT	12-Jun-16	Total Suspended Solids	39.20	mg/L	ALS
L1782435-2	CD4-OUT	12-Jun-16	Turbidity	33.70	NTU	ALS
L1782435-1	CV194A	12-Jun-16	pH	7.87	pH units	ALS
L1782435-1	CV194A	12-Jun-16	Total Suspended Solids	34.40	mg/L	ALS
L1782435-1	CV194A	12-Jun-16	Turbidity	39.20	NTU	ALS
L1790501-7	G0-03	25-Jun-16	pH	7.22	pH units	ALS
L1790501-7	G0-03	25-Jun-16	Total Suspended Solids	5.20	mg/L	ALS
L1790501-7	G0-03	25-Jun-16	Turbidity	5.57	NTU	ALS
L1790501-6	E0-21	25-Jun-16	pH	7.08	pH units	ALS
L1790501-6	E0-21	25-Jun-16	Total Suspended Solids	8.80	mg/L	ALS
L1790501-6	E0-21	25-Jun-16	Turbidity	5.27	NTU	ALS
L1790501-5	E0-20	25-Jun-16	pH	7.20	pH units	ALS
L1790501-5	E0-20	25-Jun-16	Total Suspended Solids	4.40	mg/L	ALS
L1790501-5	E0-20	25-Jun-16	Turbidity	4.67	NTU	ALS
L1790501-3	C0-10	25-Jun-16	pH	7.23	pH units	ALS
L1790501-3	C0-10	25-Jun-16	Total Suspended Solids	2.80	mg/L	ALS
L1790501-3	C0-10	25-Jun-16	Turbidity	3.94	NTU	ALS
L1790501-2	C0-05	25-Jun-16	pH	7.31	pH units	ALS
L1790501-2	C0-05	25-Jun-16	Total Suspended Solids	2.80	mg/L	ALS
L1790501-2	C0-05	25-Jun-16	Turbidity	4.34	NTU	ALS
L1790501-1	C0-01	25-Jun-16	pH	7.33	pH units	ALS
L1790501-1	C0-01	25-Jun-16	Total Suspended Solids	6.90	mg/L	ALS
L1790501-1	C0-01	25-Jun-16	Turbidity	4.85	NTU	ALS
L1790501-15	G0-01	26-Jun-16	pH	7.15	pH units	ALS
L1790501-15	G0-01	26-Jun-16	Total Suspended Solids	4.00	mg/L	ALS
L1790501-15	G0-01	26-Jun-16	Turbidity	4.33	NTU	ALS
L1790501-14	F0-01	26-Jun-16	pH	7.42	pH units	ALS
L1790501-14	F0-01	26-Jun-16	Total Suspended Solids	6.50	mg/L	ALS
L1790501-14	F0-01	26-Jun-16	Turbidity	7.04	NTU	ALS
L1790501-16	E0-10	26-Jun-16	pH	7.29	pH units	ALS
L1790501-16	E0-10	26-Jun-16	Total Suspended Solids	4.40	mg/L	ALS
L1790501-16	E0-10	26-Jun-16	Turbidity	5.10	NTU	ALS
L1790501-13	E0-03	26-Jun-16	pH	7.18	pH units	ALS
L1790501-13	E0-03	26-Jun-16	Total Suspended Solids	4.80	mg/L	ALS
L1790501-13	E0-03	26-Jun-16	Turbidity	4.07	NTU	ALS
L1790501-12	G0-09A	26-Jun-16	pH	7.08	pH units	ALS
L1790501-12	G0-09A	26-Jun-16	Total Suspended Solids	15.60	mg/L	ALS
L1790501-12	G0-09A	26-Jun-16	Turbidity	12.00	NTU	ALS
L1790501-11	G0-09	26-Jun-16	pH	7.09	pH units	ALS
L1790501-11	G0-09	26-Jun-16	Total Suspended Solids	8.80	mg/L	ALS
L1790501-11	G0-09	26-Jun-16	Turbidity	8.82	NTU	ALS
L1790501-10	G0-09B	26-Jun-16	pH	7.17	pH units	ALS
L1790501-10	G0-09B	26-Jun-16	Total Suspended Solids	6.40	mg/L	ALS
L1790501-10	G0-09B	26-Jun-16	Turbidity	5.54	NTU	ALS
L1800873-11	G0-03	18-Jul-16	pH	7.81	pH units	ALS
L1800873-11	G0-03	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-11	G0-03	18-Jul-16	Turbidity	7.35	NTU	ALS
L1800873-5	E0-21	18-Jul-16	pH	7.77	pH units	ALS
L1800873-5	E0-21	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-5	E0-21	18-Jul-16	Turbidity	7.46	NTU	ALS
L1800873-4	E0-20	18-Jul-16	pH	7.76	pH units	ALS

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1800873-4	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
L1800873-12	G0-09B	18-Jul-16	pH	7.79	pH units	ALS
L1800873-12	G0-09B	18-Jul-16	Total Suspended Solids	<2.0	mg/L	ALS
L1800873-12	G0-09B	18-Jul-16	Turbidity	9.47	NTU	ALS
L1808187-2	MS-08-US	3-Aug-16	pH	8	pH units	ALS
L1808187-2	MS-08-US	3-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1808187-2	MS-08-US	3-Aug-16	Turbidity	9.92	NTU	ALS
L1808187-1	MS-08-DS	3-Aug-16	pH	7.99	pH units	ALS
L1808187-1	MS-08-DS	3-Aug-16	Total Suspended Solids	9.2	mg/L	ALS
L1808187-1	MS-08-DS	3-Aug-16	Turbidity	12	NTU	ALS
L1809441-2	E0-21	5-Aug-16	pH	7.99	pH units	ALS
L1809441-2	E0-21	5-Aug-16	Total Suspended Solids	16.4	mg/L	ALS
L1809441-2	E0-21	5-Aug-16	Turbidity	24.6	NTU	ALS
L1809516-1	MS-08-US	6-Aug-16	pH	8	pH units	ALS
L1809516-1	MS-08-US	6-Aug-16	Total Suspended Solids	3.6	mg/L	ALS
L1809516-1	MS-08-US	6-Aug-16	Turbidity	14	NTU	ALS
L1809516-2	MS-08-DS	6-Aug-16	pH	8.03	pH units	ALS
L1809516-2	MS-08-DS	6-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1809516-2	MS-08-DS	6-Aug-16	Turbidity	16.9	NTU	ALS
L1815793-1	C0-05	18-Aug-16	pH	8.06	pH units	ALS
L1815793-1	C0-05	18-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1815793-1	C0-05	18-Aug-16	Turbidity	16.7	NTU	ALS
L1815793-2	C0-10	18-Aug-16	pH	8.19	pH units	ALS
L1815793-2	C0-10	18-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1815793-2	C0-10	18-Aug-16	Turbidity	18.0	NTU	ALS
L1815793-3	E0-03	18-Aug-16	pH	8.11	pH units	ALS
L1815793-3	E0-03	18-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1815793-3	E0-03	18-Aug-16	Turbidity	22.2	NTU	ALS
L1815793-4	G0-03	18-Aug-16	pH	8.12	pH units	ALS
L1815793-4	G0-03	18-Aug-16	Total Suspended Solids	6.0	mg/L	ALS

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**
L1815793-4	G0-03	18-Aug-16	Turbidity	17.0	NTU	ALS
L1820160-1	E0-10	26-Aug-16	pH	8.16	pH units	ALS
L1820160-1	E0-10	26-Aug-16	Total Suspended Solids	13.6	mg/L	ALS
L1820160-1	E0-10	26-Aug-16	Turbidity	32.5	NTU	ALS
L1820160-2	MS-08-US	26-Aug-16	pH	8.11	pH units	ALS
L1820160-2	MS-08-US	26-Aug-16	Total Suspended Solids	10	mg/L	ALS
L1820160-2	MS-08-US	26-Aug-16	Turbidity	27.8	NTU	ALS
L1820160-3	F0-01	26-Aug-16	pH	8.28	pH units	ALS
L1820160-3	F0-01	26-Aug-16	Total Suspended Solids	40.8	mg/L	ALS
L1820160-3	F0-01	26-Aug-16	Turbidity	44.2	NTU	ALS
L1820240-1	E0-10	27-Aug-16	pH	8.11	pH units	ALS
L1820240-1	E0-10	27-Aug-16	Total Suspended Solids	8.8	mg/L	ALS
L1820240-1	E0-10	27-Aug-16	Turbidity	0.8	NTU	ALS
L1820240-5	MS-08-US	27-Aug-16	pH	8.14	pH units	ALS
L1820240-5	MS-08-US	27-Aug-16	Total Suspended Solids	11.6	mg/L	ALS
L1820240-5	MS-08-US	27-Aug-16	Turbidity	15.6	NTU	ALS
L1820240-3	F0-01	27-Aug-16	pH	8.28	pH units	ALS
L1820240-3	F0-01	27-Aug-16	Total Suspended Solids	4.4	mg/L	ALS
L1820240-3	F0-01	27-Aug-16	Turbidity	187.0	NTU	ALS
L1820238-2	C0-05	28-Aug-16	pH	8.07	pH units	ALS
L1820238-2	C0-05	28-Aug-16	Total Suspended Solids	2.0	mg/L	ALS
L1820238-2	C0-05	28-Aug-16	Turbidity	8.08	NTU	ALS
L1820238-3	C0-10	28-Aug-16	pH	8.14	pH units	ALS
L1820238-3	C0-10	28-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1820238-3	C0-10	28-Aug-16	Turbidity	6.8	NTU	ALS
L1820238-6	E0-03	28-Aug-16	pH	8.06	pH units	ALS
L1820238-6	E0-03	28-Aug-16	Total Suspended Solids	6.4	mg/L	ALS
L1820238-6	E0-03	28-Aug-16	Turbidity	29.8	NTU	ALS
L1820238-10	G0-03	28-Aug-16	pH	8.10	pH units	ALS
L1820238-10	G0-03	28-Aug-16	Total Suspended Solids	25.6	mg/L	ALS
L1820238-10	G0-03	28-Aug-16	Turbidity	14.2	NTU	ALS
L1820238-8	F0-01	28-Aug-16	pH	8.29	pH units	ALS
L1820238-8	F0-01	28-Aug-16	Total Suspended Solids	5.2	mg/L	ALS
L1820238-8	F0-01	28-Aug-16	Turbidity	8.34	NTU	ALS
L1820238-5	E0-21	28-Aug-16	pH	8.15	pH units	ALS
L1820238-5	E0-21	28-Aug-16	Total Suspended Solids	9.2	mg/L	ALS
L1820238-5	E0-21	28-Aug-16	Turbidity	23.0	NTU	ALS
L1820707-2	C0-05	29-Aug-16	pH	8.25	pH units	ALS
L1820707-2	C0-05	29-Aug-16	Total Suspended Solids	2.8	mg/L	ALS
L1820707-2	C0-05	29-Aug-16	Turbidity	9.2	NTU	ALS
L1820707-1	C0-10	29-Aug-16	pH	8.22	pH units	ALS
L1820707-1	C0-10	29-Aug-16	Total Suspended Solids	3.2	mg/L	ALS
L1820707-1	C0-10	29-Aug-16	Turbidity	7.81	NTU	ALS
L1820707-3	E0-03	29-Aug-16	pH	8.23	pH units	ALS
L1820707-3	E0-03	29-Aug-16	Total Suspended Solids	10.4	mg/L	ALS

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**
L1820707-3	E0-03	29-Aug-16	Turbidity	21.5	NTU	ALS
L1820707-5	G0-03	29-Aug-16	pH	8.18	pH units	ALS
L1820707-5	G0-03	29-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1820707-5	G0-03	29-Aug-16	Turbidity	21.6	NTU	ALS
L1820707-4	F0-01	29-Aug-16	pH	8.4	pH units	ALS
L1820707-4	F0-01	29-Aug-16	Total Suspended Solids	16.8	mg/L	ALS
L1820707-4	F0-01	29-Aug-16	Turbidity	19.4	NTU	ALS
L1821468-2	C0-05	30-Aug-16	pH	8.17	pH units	ALS
L1821468-2	C0-05	30-Aug-16	Total Suspended Solids	6.8	mg/L	ALS
L1821468-2	C0-05	30-Aug-16	Turbidity	24.5	NTU	ALS
L1821468-1	C0-10	30-Aug-16	pH	8.19	pH units	ALS
L1821468-1	C0-10	30-Aug-16	Total Suspended Solids	18.4	mg/L	ALS
L1821468-1	C0-10	30-Aug-16	Turbidity	66.2	NTU	ALS
L1821468-3	E0-03	30-Aug-16	pH	8.15	pH units	ALS
L1821468-3	E0-03	30-Aug-16	Total Suspended Solids	10.8	mg/L	ALS
L1821468-3	E0-03	30-Aug-16	Turbidity	36.5	NTU	ALS
L1821468-5	G0-03	30-Aug-16	pH	8.20	pH units	ALS
L1821468-5	G0-03	30-Aug-16	Total Suspended Solids	4.4	mg/L	ALS
L1821468-5	G0-03	30-Aug-16	Turbidity	12.4	NTU	ALS
L1821468-4	F0-01	30-Aug-16	pH	8.35	pH units	ALS
L1821468-4	F0-01	30-Aug-16	Total Suspended Solids	15.2	mg/L	ALS
L1821468-4	F0-01	30-Aug-16	Turbidity	29.2	NTU	ALS
L1821468-6	E0-21	30-Aug-16	pH	8.15	pH units	ALS
L1821468-6	E0-21	30-Aug-16	Total Suspended Solids	16.4	mg/L	ALS
L1821468-6	E0-21	30-Aug-16	Turbidity	63.5	NTU	ALS
L1822551-2	C0-05	31-Aug-16	pH	8.11	pH units	ALS
L1822551-2	C0-05	31-Aug-16	Total Suspended Solids	2	mg/L	ALS
L1822551-2	C0-05	31-Aug-16	Turbidity	6.95	NTU	ALS
L1822551-1	C0-10	31-Aug-16	pH	8.17	pH units	ALS
L1822551-1	C0-10	31-Aug-16	Total Suspended Solids	2.4	mg/L	ALS
L1822551-1	C0-10	31-Aug-16	Turbidity	6.3	NTU	ALS
L1822551-3	E0-03	31-Aug-16	pH	8.11	pH units	ALS
L1822551-3	E0-03	31-Aug-16	Total Suspended Solids	5.6	mg/L	ALS
L1822551-3	E0-03	31-Aug-16	Turbidity	12.9	NTU	ALS
L1822551-5	G0-03	31-Aug-16	pH	8.10	pH units	ALS
L1822551-5	G0-03	31-Aug-16	Total Suspended Solids	9.6	mg/L	ALS
L1822551-5	G0-03	31-Aug-16	Turbidity	26.2	NTU	ALS
L1822551-4	F0-01	31-Aug-16	pH	8.28	pH units	ALS
L1822551-4	F0-01	31-Aug-16	Total Suspended Solids	6.0	mg/L	ALS
L1822551-4	F0-01	31-Aug-16	Turbidity	7.9	NTU	ALS
L1823057-2	C0-05	1-Sep-16	pH	8.09	pH units	ALS
L1823057-2	C0-05	1-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823057-2	C0-05	1-Sep-16	Turbidity	5.27	NTU	ALS
L1823057-1	C0-10	1-Sep-16	pH	8.1	pH units	ALS
L1823057-1	C0-10	1-Sep-16	Total Suspended Solids	2.4	mg/L	ALS

Table B.2.3 - Surface Water Quality for Mary River and Mary River Tributaries						
Sample Number	**Sample ID**	**Date Sampled**	**Parameter Name**	**Result**	**Units**	**Lab**
L1823057-1	C0-10	1-Sep-16	Turbidity	4.55	NTU	ALS
L1823057-3	E0-03	1-Sep-16	pH	8.1	pH units	ALS
L1823057-3	E0-03	1-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823057-3	E0-03	1-Sep-16	Turbidity	5.2	NTU	ALS
L1823057-5	G0-03	1-Sep-16	pH	8.1	pH units	ALS
L1823057-5	G0-03	1-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823057-5	G0-03	1-Sep-16	Turbidity	4.71	NTU	ALS
L1823057-4	F0-01	1-Sep-16	pH	8.28	pH units	ALS
L1823057-4	F0-01	1-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1823057-4	F0-01	1-Sep-16	Turbidity	2.31	NTU	ALS
L1824518-1	C0-10	5-Sep-16	pH	8.18	pH units	ALS
L1824518-1	C0-10	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824518-1	C0-10	5-Sep-16	Turbidity	1.89	NTU	ALS
L1824518-2	C0-05	5-Sep-16	pH	8.11	pH units	ALS
L1824518-2	C0-05	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824518-2	C0-05	5-Sep-16	Turbidity	2.13	NTU	ALS
L1824518-3	E0-03	5-Sep-16	pH	8.21	pH units	ALS
L1824518-3	E0-03	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824518-3	E0-03	5-Sep-16	Turbidity	2.56	NTU	ALS
L1824518-4	F0-01	5-Sep-16	pH	8.37	pH units	ALS
L1824518-4	F0-01	5-Sep-16	Total Suspended Solids	<2.0	mg/L	ALS
L1824518-4	F0-01	5-Sep-16	Turbidity	1.64	NTU	ALS
L1824518-5	G0-03	5-Sep-16	pH	8.08	pH units	ALS
L1824518-5	G0-03	5-Sep-16	Total Suspended Solids	2	mg/L	ALS
L1824518-5	G0-03	5-Sep-16	Turbidity	2.81	NTU	ALS
N/A	MS-08-US	12-Sep-16	pH	IP	pH units	ALS
N/A	MS-08-US	12-Sep-16	Total Suspended Solids	IP	mg/L	ALS
N/A	MS-08-US	12-Sep-16	Turbidity	IP	NTU	ALS

Note: High TSS results for E0-21 on August 5 were result of high flows following precipitation events.
High TSS results for F0-01 on August 26 were result of slope sloughing upstream.
High TSS results for G0-03 on August 28 were result of slope sloughing upstream.
High TSS results for F0-01 on August 29 were result of slope sloughing upstream.
High TSS results for C0-10 on August 30 were result of slope sloughing upstream.
High TSS results for F0-01 on August 30 were result of slope sloughing upstream.
High TSS results for E0-21 on August 30 were result of slope sloughing upstream.

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

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

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)
BG-28	km 86.3	2016-07-31	Upstream	-1.50	1.19	8.09	10.00
			Culvert	-	-	-	-
			Downstream	2.10	3.38	8.37	2.80
		2016-08-13	Upstream	5.50	2.27	8.07	2.00
			Culvert	-	-	-	-
			Downstream	6.10	2.21	8.12	6.00
		2016-08-13	Upstream	5.50	2.27	8.07	2.00
			Culvert	-	-	-	-
			Downstream	6.10	2.21	8.12	6.00
		2016-08-26	Upstream	-3.30	0.53	7.79	2.24
			Culvert	-	-	-	-
			Downstream	-0.70	2.25	8.23	2.24
BG-29	km 85	2016-06-09	Upstream	34.10	-	-	-
			Crossing	29.00	-	-	-
			Downstream	24.40	-	-	-
		2016-06-29	Upstream	5.80	5.90	7.80	2.40
			Culvert	6.40	-	-	-
			Downstream	5.40	6.01	7.94	4.00
		2016-07-31	Upstream	-0.70	1.53	8.15	3.20
			Culvert	-	-	-	
			Downstream	2.20	2.60	7.98	2.00
		2016-08-12	Upstream	6.60	1.38	8.19	4.00
			Culvert	-	-	-	-
			Downstream	0.70	1.53	8.22	3.20
		2016-08-26	Upstream	-3.20	0.70	8.23	2.40
			Culvert	-	-	-	-
			Downstream	-2.40	1.26	8.00	2.40
BG-31	km 82	2016-06-29	Upstream	6.90	-	-	-
			Culvert	4.50	-	-	-
			Downstream	16.50	-	-	-
		2016-07-03	Upstream	2.80	3.11	7.51	2.80
			Culvert	3.40	-	-	-
			Downstream	12.30	13.10	7.79	14.40
		2016-07-17	Upstream	0.90	1.28	7.97	2.00
			Downstream	3.00	2.81	8.02	2.00
		2016-07-31	Upstream	6.10	1.13	7.98	3.20
			Culvert	-	-	-	-
			Downstream	4.80	9.96	8.07	32.8*
		2016-08-12	Upstream	-3.20	17.40	7.96	6.00
			Culvert	-	-	-	-
			Downstream	-4.80	13.50	8.04	10.00
		2016-08-26	Upstream	10.60	10.40	7.93	4.00
			Culvert	-	-	-	-
			Downstream	27.50	22.30	8.00	19.20
BG-01	KM 100	2016-08-26	Upstream	-1.30	0.72	8.27	<2.0
			Culvert	-	-	-	-
			Downstream	-2.00	1.22	8.27	5.20

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

Low flow, winter storms and freeze up prevented the collection of water samples at BG-17, BG-28, BG-29, BG-31 and CV-223 during the reporting period.

** 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 - Daphnia magna**	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 - Daphnia magna**	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 - Daphnia magna**	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 - Daphnia magna**	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 - Daphnia magna**	non-lethal	*mortality %*	*Aquatox*
47812	LDFG-OUT	23-May-16	*Acute Toxicity - Rainbow Trout***	non-lethal	*mortality %*	*Aquatox*

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

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

SDLT-OUT01 is a duplicate of SDLT-OUT

Table B.3.2 - Acute Toxicity Results for Camp Lake Tributaries

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Units	Lab
L1772636-1	CL-DS	23-May-16	*Acute Toxicity - Daphnia magna**	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 to 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 (**NT-NU Spill Report - 16-158**).
	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. Sediment removal was determined to be not feasible due to weakening ice conditions along the shoreline of Sheardown Lake.
May 13 to 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.
	Road built up at CV-186 to prevent road runoff from pooling and directly discharging into Sheardown Lake tributary SDLT.
	Environment Canada, INDC and Baffinland collect water samples at the outfalls of Sheardown Lake tributaries SDLT and LDFG.
May 19 to 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.
	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.
	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.
	Turbid water samples sent to Kemira Chemicals and AMEC-Fost Wheeler for initial flocculant bucket testing.
	Constructed check dam downstream of landfill access road along Sheardown Lake tributary LDFG using sandbags.
May 27 to June 23	Removed lose 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.)

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 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 to 21	Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.
June 20 to June 21	Coagulant/flocculant dosing system setup and pilot tested at Check Dam #4 (assissted by Kemira Chemicals).
June 24 to July 8	Sheardown Lake Tributaries are running clear for the period.
July 9 to July 22	Sheardown Lake Tributaries are running clear for the period.
July 23 to August 5	Sheardown Lake Tributaries are running clear for the period.
August 2	Additional silt fences installed near road crossing (CV-186) to control road runoff.
August 6 to 19	Silt fences and silt curtains inspected and repaired as required across the site.
August 20 to Sept 2	Sheardown Lake Tributaries are running clear for the period. Silt fences and silt curtains inspected and repaired as required across the site.
September 2 to 16	Sheardown Lake Tributaries are running clear for the period.

Appendix C.1 - Photos

Photo 1 – Outlet at Sheardown Lake Tributary on September 5, 2016

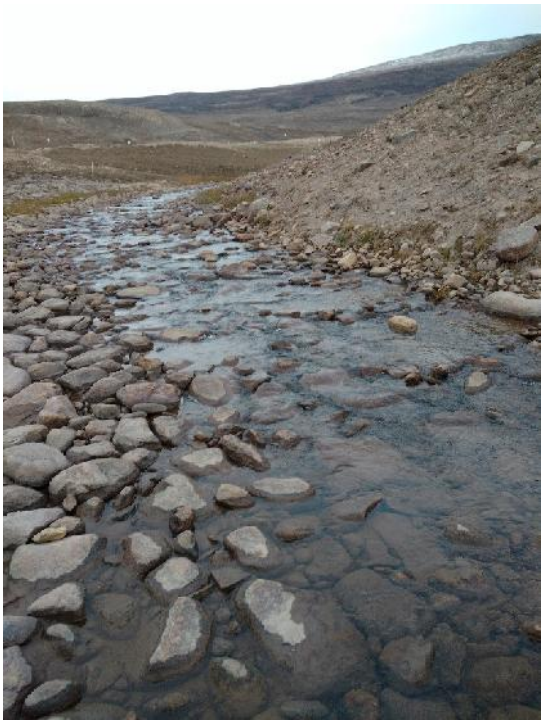


Photo 2 – Upstream of the outlet of Sheardown Lake Tributary on September 5, 2016

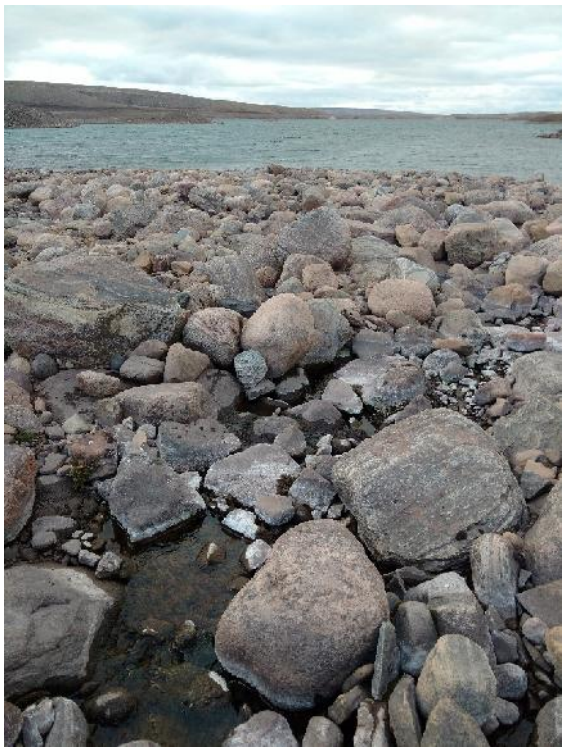


Photo 3 – Outlet at Landfill Gate Tributary on September 5, 2016

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

Table C.2 - Spill Report 16-176 - Sequence of Events and Action Taken

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 (**NT-NU Spill Report- 16-176**).
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 to 21	Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.

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

Table C.2 - Spill Report 16-176 - Sequence of Events and Action Taken

June 25 to July 8	Camp Lake Tributaries are running clear. No sedimenation issues.
July 9 to July 22	Camp Lake Tributaries are running clear. No sedimenation issues.
July 23 to August 5	Camp Lake Tributaries are running clear.
August 2	Additional silt fences installed near road crossing (BG-01) to control Tote Road runoff.
August 6 to 19	August 6 to 19 Silt fences and silt curtains inspected and repaired as required across the site.
August 20 to Sept 2	Camp Lake Tributary is running clear with CLSP-OUT dry during the report period. Silt fences inspected and repaired as required.
August 27	Rip rap installed at culverts downstream of the Airstrip drainage
September 2 to 16	Camp Lake Tributary is running clear with CLSP-OUT dry during the report period. Silt fences inspected and repaired as required.

Appendix C.2 – Photos

Photo 1 – Outlet of Camp Lake Tributary on September 5, 2016

Photo 2 – Upstream of Camp Lake Tributary outlet on September 5, 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 obsevered 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 (**NT-NU Spill Report- 16-181**).
	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 lose 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.

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

Sequence of Events and Actions Taken	
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 (assissted 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 to July 8	Tributaries running from Mine Haul Road running relatively clear.
July 9 to July 22	Tributaries running from Mine Haul Road running relatively clear.
July 23 to 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 Mine Haul Road surface water runoff sedimentation issues.
Augst 6 to 19	Silt fences and silt curtains inspected and repaired as required, installation of additional in stream flocculant.
August 26	Mary River was observed flowing more turbid than normal
August 27 to Sept 1	Slope sloughing upstream of the project development area above Mary River identifed. Increased monitoring of Mary River to evaluate the effects.
	Slope sloughing above the MMER tributary which drains to Mary River identified. Silt fences installed to mitigate the slope sloughing.
	Silt fences inspected and repaired as required
September 2 to 16	Mary River and Mine Haul Road tributaries draining into the Mary River and Sheardown Lake flowing clear. No sedimentation issues during reporting period.

Appendix C.3 – Photos

Photo 1 – Upstream of C0-05 on the Mary River on September 5, 2016

Photo 2 – Upstream of G0-03 on the Mary River on September 5, 2016

Appendix C.4 - Spill Report 16-198 - Camp Lake Tributary 1	
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 (**NT-NU Spill Report 16-198**).
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 to 15	AMEC-Foster Wheeler Engineer arrives onsite to develop flocculant treatment systems and pilot test additional siltation controls including geotubes..
June 17 to 21	Kemira Chemicals Chemist arrives onsite to assist Baffinland in developing and optimizing mobile water treatment systems using flocculants.
June 25 to July 8	Area of slumping remains stable over the reporting period.
July 9 to July 22	Area of slumping remains stable over the reporting period.
July 23 to August 5	Area of slumping remains stable over the reporting period.
August 6 to 19	Area of slumping remains stable over the reporting period.
August 20 to Sept 2	Area of slumping remains stable over the reporting period.
September 2 to 16	Area of slumping remains stable over the reporting period.

Appendix C.4 – Photos Not Required (No Change from Report Update No. 5)

Table C.5.1 Spill Report 16-202 and Update No. 1, Tote Road.	
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 as a result of surface water runoff conditions observed during their inspection. This included conditions at various locations on the Tote Road.
May 20 to present	Siltation control measures (silt fences, silt curtains, flocculent, treated jute) installed at various locations along the Tote Road to address potential sedimentation and turbidy issues
May 20 to present	Operational resources are allocated to deal with sedment issues on Tote Road including remvoal of sediments using exacator, installation of geotextile and riprap in critical locations.
May 31	Several active of areas of sedimenation 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 sedimenation prooblems 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. (**NT-NU Spill Report - 16-202, Update No. 1**).
June 19 to present	Sediment controls put in place to curtail sediment release to Muriel and David Lakes.
	REFER TO TABLE C.5.2 FOR DETAILS OF SPECIFIC ACTIONS TAKEN ON THE TOTE ROAD TO MINIMIZE SEDIMENTATION ISSUES.

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
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.

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
~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 – Freeze up downstream of CV-223 (km 97) on September 12, 2016

Photo 2 – Frozen stream downstream of BG-28 (km 86.3) on September 12, 2016

Photo 3 – Frozen stream downstream of BG-31 (km 82) on September 12, 2016

Table C.6 Construction of Ditches and Drainage System Around Milne Port Ore Stockpile and Mine Site Crusher	
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 June 24	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 to July 8	Mine Site - Installation of final ditching system is underway for Crusher Stockpile Pad.
July 9 to July 22	Mine Site Cursher Stockpile Pad - Ditching sytem construciton substantially completed and operational July 15 Milne Port Ore Pad Stockpile Pad - Ditching system construction operational.
July 23 to Aug 5	Ditching systems completed and operating as designed. No drainage issues. Operational monitoring underway.
August 6 to Aug 19	Ditching systems completed and operating as designed. No drainage issues. Operational monitoring underway.
August 20 to Sept 2	Ditching systems completed and operating as designed. No drainage issues. Operational monitoring underway.

Table C.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 to 23	Dirty snow removed from Milne Beach using Loader.
May 21 to 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.