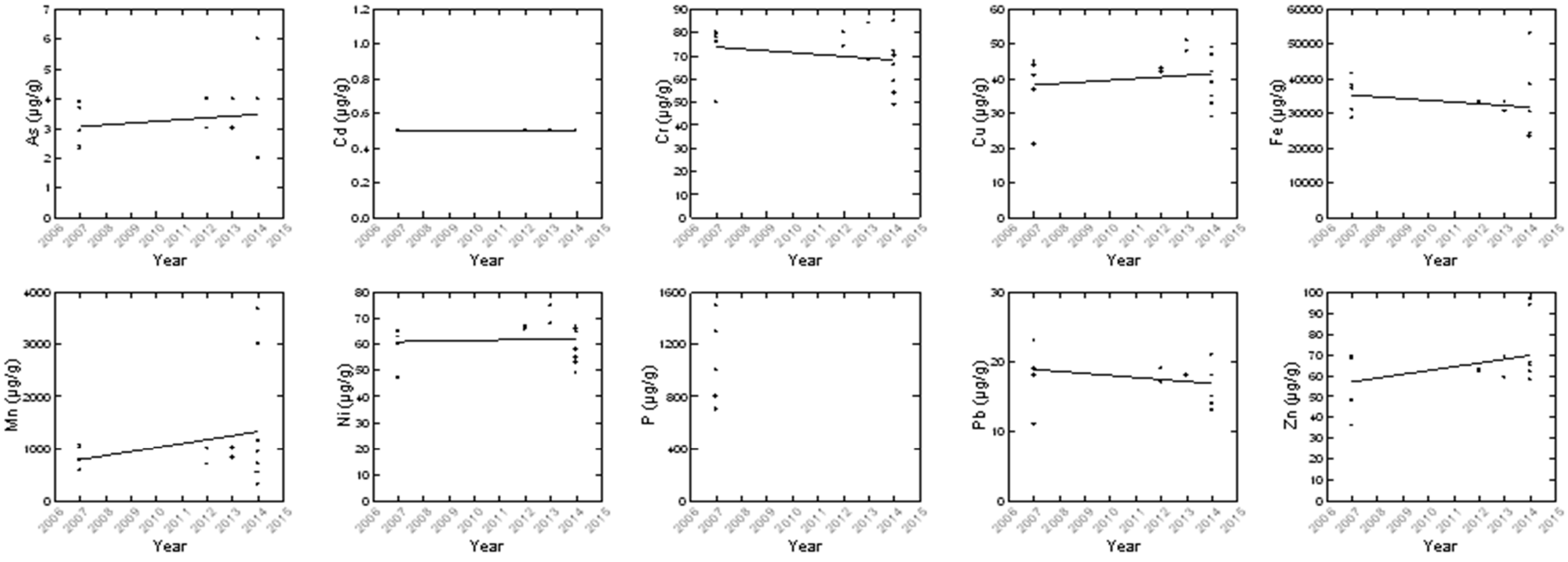


REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT	CM	RAC

BAFFINLAND IRON MINES CORPORATION

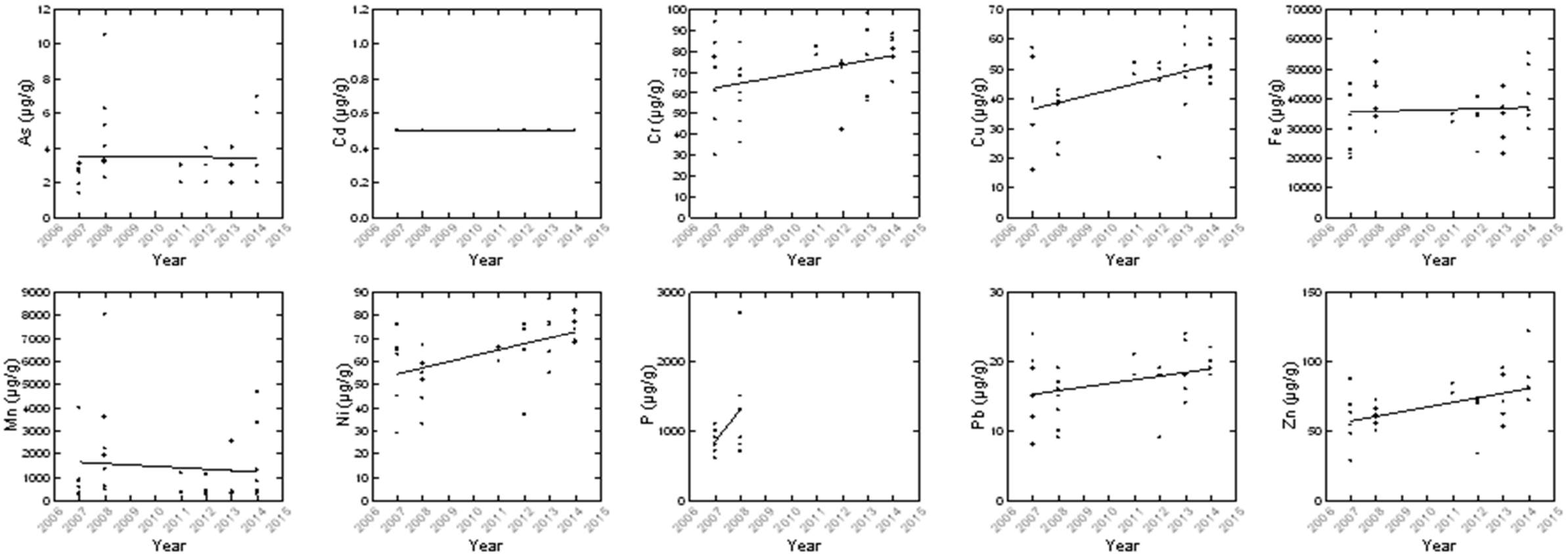
MARY RIVER PROJECT

LINEAR REGRESSION OF KEY METALS
CAMP LAKE SEDIMENT

Knight Piésold CONSULTING

P/A NO. NB102-181/34 | REF. NO. 6

FIGURE B2.2 | REV 0



REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT	CM	RAC

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

LINEAR REGRESSION OF KEY METALS SHEARDOWN LAKE NW SEDIMENT

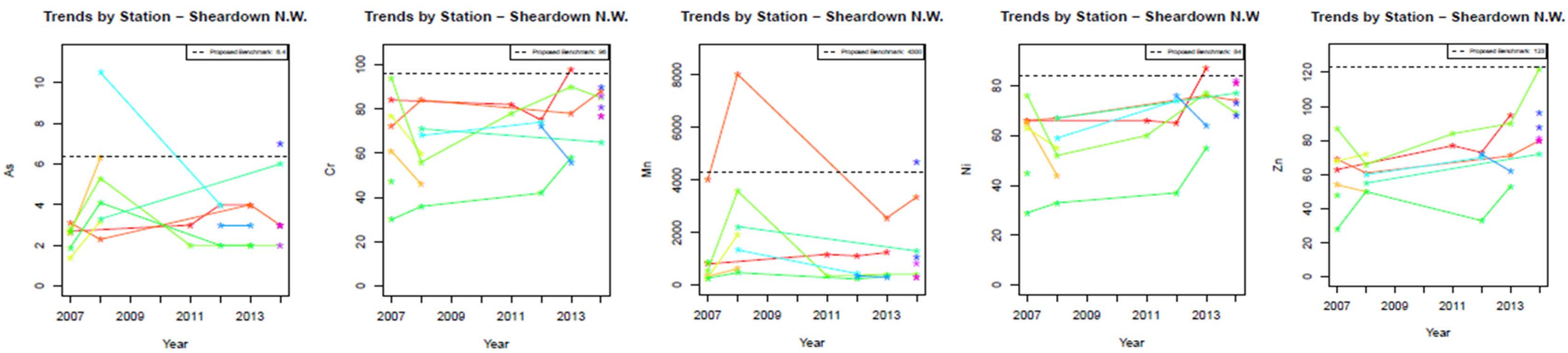
Knight Piésold CONSULTING

P/A NO. NB102-181/34

REF. NO. 6

FIGURE B2.3

REV 0



REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT	CM	RAC

BAFFINLAND IRON MINES CORPORATION

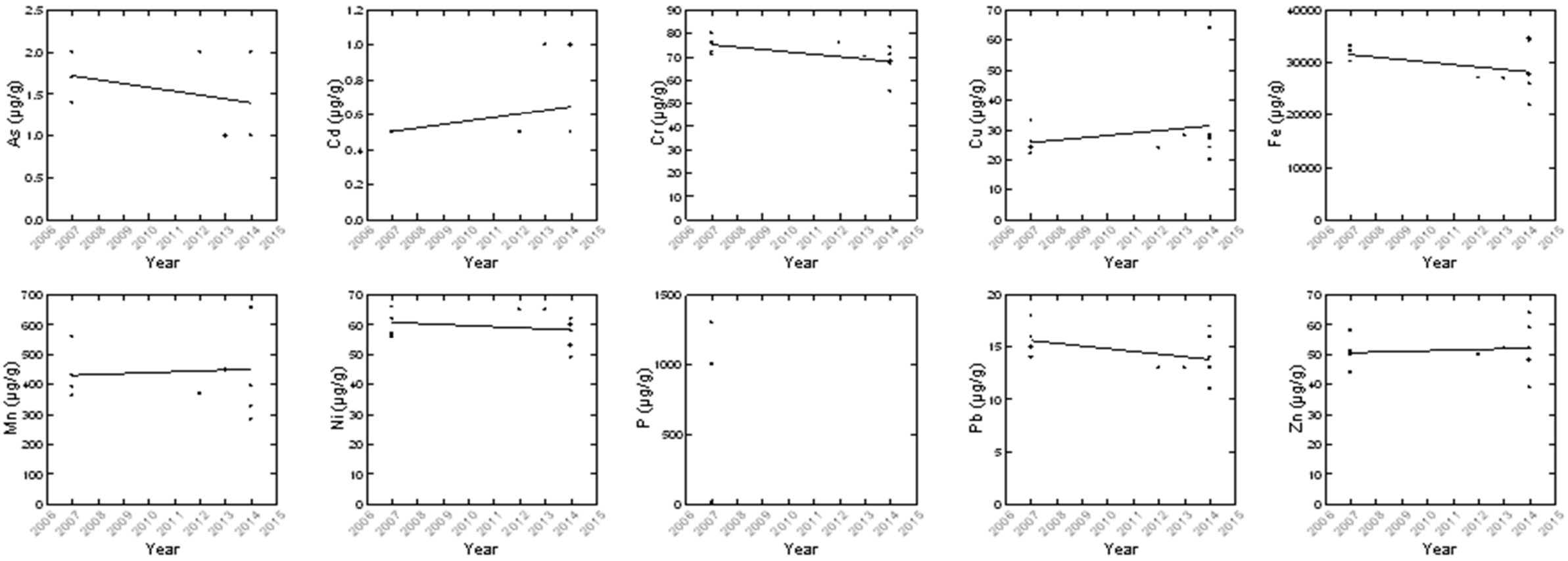
MARY RIVER PROJECT

SEDIMENT CONCENTRATIONS TRENDA OF KEY METALS IN SHEARDOWN LAKE NW SEDIMENT

Knight Piésold CONSULTING

P/A NO. NB102-181/34 | REF. NO. 6

FIGURE B2.4 | REV 0



REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT	CM	RAC

BAFFINLAND IRON MINES CORPORATION

MARY RIVER PROJECT

LINEAR REGRESSION OF KEY METALS SHEARDOWN LAKE SE SEDIMENT

Knight Piésold CONSULTING

P/A NO. NB102-181/34

REF. NO. 6

FIGURE B2.5

REV 0

APPENDIX C

2014 QA/QC

Appendix C1 2014 Blank Sample Results
Appendix C2 2014 Lake Water Quality QA/QC Results
Appendix C3 2014 Sediment Quality QA/QC Results

APPENDIX C1

2014 BLANK SAMPLE RESULTS

(Page C1-1)

Knight Piésold CONSULTING

TABLE C1.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC SAMPLE BLANK SUMMARY

Print Mar/19/15 12:36:16

	Sample ID	FIELD BLANK	FIELD BLANK	FIELD BLANK
	Date Sampled	27/07/2014	22/08/2014	25/08/2014
PARAMETER	**MDL**	**(STREAM)**	**(STREAM)**	**(LAKE)**
Physical Tests				
Alkalinity (Total as CaCO3)	5	<5	<5	<5
Conductivity (µS/cm)	5	<5	<5	<5
Hardness as CaCO3 (Dissolved)	1	<1	<1	<1
Hardness as CaCO3 (Total)	1	<1	<1	<1
pH (pH units)	-	5.82	6.2	5.77
Total Dissolved Solids	1	<1	<1	<1
Total Suspended Solids	2	<2	<2	<2
Turbidity (NTU)	0.1	**0.2**	<0.1	**0.3**
Dissolved Anions				
Bromide	0.25	<0.25	<0.25	<0.25
Chloride	1	<1	<1	<1
Sulphate	1	<1	<1	<1
Nutrients				
Ammonia (Total)	0.02	**0.12**	**0.16**	**0.07**
Nitrate (as N)	0.1	<0.1	<0.1	<0.1
Nitrate+Nitrite (Dissolved)	0.1	<0.1	<0.1	<0.1
Nitrite (as N)	0.005	<0.005	<0.005	<0.005
Nitrogen Kjeldahl (Total)	0.1	<0.1	0.11	<0.1
Phosphorus (Nutrient) Total	0.003	<0.003	<0.003	<0.003
Dissolved Metals				
Aluminum	0.003	<0.003	<0.003	<0.003
Antimony	0.0001	<0.0001	<0.0001	<0.0001
Arsenic	0.0001	<0.0001	<0.0001	<0.0001
Barium	0.00005	<0.00005	**0.00043**	<0.00005
Beryllium	0.0005	<0.0005	<0.0005	<0.0005
Bismuth	0.0005	<0.0005	<0.0005	<0.0005
Boron	0.01	<0.01	<0.01	<0.01
Cadmium	0.00001	<0.00001	<0.00001	<0.00001
Calcium	0.05	<0.05	**0.22**	<0.05
Chromium	0.0005	<0.0005	<0.0005	<0.0005
Cobalt	0.0001	<0.0001	<0.0001	<0.0001
Copper	0.0005	<0.0005	**0.0083**	<0.0005
Iron	0.03	<0.03	<0.03	<0.03
Lead	0.00005	<0.00005	**0.00007**	<0.00005
Lithium	0.001	<0.001	<0.001	<0.001
Magnesium	0.05	<0.05	<0.05	<0.05
Manganese	0.00005	<0.00005	**0.00124**	<0.00005
Mercury	0.00001	<0.00001	<0.00001	<0.00001
Molybdenum	0.00005	<0.00005	<0.00005	<0.00005
Nickel	0.0005	<0.0005	<0.0005	<0.0005
Potassium	0.2	<0.2	<0.2	<0.2
Selenium	0.001	<0.001	<0.001	<0.001
Silicon	0.1	<0.1	<0.1	<0.1
Silver	0.00001	<0.00001	<0.00001	<0.00001
Sodium	0.05	<0.05	<0.05	<0.05
Strontium	0.0001	<0.0001	**0.0008**	<0.0001
Thallium	0.0001	<0.0001	<0.0001	<0.0001
Tin	0.0001	<0.0001	<0.0001	<0.0001
Titanium	0.01	<0.01	<0.01	<0.01
Uranium	0.00001	<0.00001	<0.00001	<0.00001
Vanadium	0.001	<0.001	<0.001	<0.001
Zinc	0.003	<0.003	<0.003	<0.003
Total Metals				
Aluminum	0.003	<0.003	<0.003	<0.003
Antimony	0.0001	<0.0001	<0.0001	<0.0001
Arsenic	0.0001	<0.0001	<0.0001	<0.0001
Barium	0.00005	<0.00005	**0.00047**	<0.00005
Beryllium	0.0005	<0.0005	<0.0005	<0.0005
Bismuth	0.0005	<0.0005	<0.0005	<0.0005
Boron	0.01	<0.01	<0.01	<0.01
Cadmium	0.00001	<0.00001	<0.00001	<0.00001
Calcium	0.05	<0.05	**0.23**	<0.05
Chromium	0.0005	<0.0005	<0.0005	<0.0005
Cobalt	0.0001	<0.0001	<0.0001	<0.0001
Copper	0.0005	<0.0005	**0.0085**	<0.0005
Iron	0.03	<0.03	<0.03	<0.03
Lead	0.00005	<0.00005	**0.00008**	<0.00005
Lithium	0.001	<0.001	<0.001	<0.001
Magnesium	0.05	<0.05	<0.05	<0.05
Manganese	0.00005	<0.00005	**0.00127**	<0.00005
Mercury	0.00001	<0.00001	<0.00001	<0.00001
Molybdenum	0.00005	<0.00005	<0.00005	<0.00005
Nickel	0.0005	<0.0005	<0.0005	<0.0005
Potassium	0.2	<0.2	<0.2	<0.2
Selenium	0.001	<0.001	<0.001	<0.001
Silicon	0.1	<0.1	<0.1	<0.1
Silver	0.00001	<0.00001	<0.00001	<0.00001
Sodium	0.05	<0.05	<0.05	<0.05
Strontium	0.0001	<0.0001	**0.0009**	<0.0001
Thallium	0.0001	<0.0001	<0.0001	<0.0001
Tin	0.0001	<0.0001	<0.0001	<0.0001
Titanium	0.01	<0.01	<0.01	<0.01
Uranium	0.00001	<0.00001	<0.00001	<0.00001
Vanadium	0.001	<0.001	<0.001	<0.001
Zinc	0.003	<0.003	<0.003	<0.003
Organics				
Carbon Organic (Dissolved)	<0.5	<0.5	<0.5	<0.5
Carbon Organic (Total)	<0.5	<0.5	<0.5	<0.5
Chlorophyll-a mg/m3	<0.2	<0.2	-	<0.2
Pheophytin-a mg/m3	<0.2	<0.2	-	**1.3**
Phenol	<0.001	<0.001	<0.001	<0.001

I:\1\02\00181\34\A\Report\Report 6 - 2014 CREMP Monitoring Results\Rev 0\Appendices\Appendix C - QAQC\[Appendices C1 and C2.xlsm]C1.1

NOTES:

1. MDL - METHOD DETECTION LIMIT PROVIDED BY EXOVA LABORATORIES 2014.
2. UNITS ARE IN mg/L UNLESS OTHERWISE STATED.
3. BOLD VALUES INDICATE CONCENTRATIONS GREATER THAN THE MDL.
4. BOLD AND SHADED VALUES INDICATE CONCENTRATIONS GREATER THAN FIVE TIMES THE MDL.

REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT NB102-181/34-6	DKK	RAC

APPENDIX C2

2014 LAKE WATER QUALITY QA/QC RESULTS

(Pages C2-1 to C2-5)

Knight Piésold CONSULTING

TABLE C2.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC LAKE DUPLICATE SAMPLE SUMMARY

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CAMP LAKE

Station ID		JL0-02-D	Duplicate	RPD	JL0-02-D	Duplicate	RPD	JL0-02-S	Duplicate	RPD	JL0-02-S	Duplicate	RPD
Date Sampled		27/07/2014		(%)	23/08/2014		(%)	27/07/2014		(%)	23/08/2014		(%)
Physical Tests	**MDL**												
Alkalinity (Total as CaCO3)	5	57	57	0.00%	59	59	0.00%	55	55	0.00%	59	60	1.68%
Conductivity (µS/cm)	5	125	125	0.00%	128	128	0.00%	120	120	0.00%	128	129	0.78%
Hardness as CaCO3 (Dissolved)	1	65	65	0.00%	66	66	0.00%	62	62	0.00%	67	66	1.50%
Hardness as CaCO3 (Total)	1	63	63	0.00%	64	65	1.55%	61	61	0.00%	65	65	0.00%
pH (pH units)	1	7.91	7.91	0.00%	7.95	7.93	0.25%	7.93	7.91	0.25%	7.93	7.94	0.13%
Total Dissolved Solids	1	81	81	0.00%	83	83	0.00%	78	78	0.00%	83	84	1.20%
Total Suspended Solids	2	<2	<2		<2	<2		<2	<2		<2	<2	
Turbidity (NTU)	0.1	0.8	0.5	**46.15%**	0.4	0.4		0.4	0.4		0.5	0.6	18.18%
Bromide (Dissolved)	0.25	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	1	3	3		3	3		3	3		3	3	
Sulphate (Dissolved)	1	2	2		2	2		2	2		2	2	
Nutrients													
Ammonia (Total)	0.02	0.05	0.18		0.04	0.02		0.07	0.16		0.1	0.03	
Nitrate (as N)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrite (as N)	0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)													
Nitrogen Kjeldahl (Total)	0.1	0.34	0.28		0.19	0.18		0.13	0.18		0.21	0.16	
Phosphorus (Nutrient) Dissolved													
Phosphorus (Nutrient) Total	0.003	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Dissolved Metals													
Aluminum (Dissolved)	0.003	<0.003	0.004		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Antimony (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	5.00E-05	0.00485	0.00501	3.25%	0.00534	0.0053	0.75%	0.00481	0.0049	1.85%	0.00544	0.00534	1.86%
Beryllium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	0.05	13.2	13.2	0.00%	14.2	14.2	0.00%	12.6	12.7	0.79%	14.2	14.1	0.71%
Chromium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0005	0.0009	0.0009		0.0009	0.001		0.0008	0.0008		0.0009	0.001	
Iron (Dissolved)	0.03	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03		<0.03	<0.03	
Lead (Dissolved)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Dissolved)	0.05	7.72	7.74	0.26%	7.54	7.53	0.13%	7.37	7.35	0.27%	7.55	7.5	0.66%
Manganese (Dissolved)	5.00E-05	0.00038	0.00042	10.00%	0.00016	0.00019		0.00081	0.00082	1.23%	0.0002	0.00024	
Mercury (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	5.00E-05	<0.00005	<0.00005		0.00021	0.0002		<0.00005	<0.00005		0.00021	0.0002	
Nickel (Dissolved)	0.0005	0.0005	0.0006		0.0006	0.0006		0.0005	<0.0005		0.0006	0.0007	
Potassium (Dissolved)	0.2	0.9	0.9		0.8	0.9		0.8	0.9		0.8	0.9	
Selenium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Dissolved)	0.1	0.4	0.4		0.4	0.4		0.4	0.4		0.4	0.4	
Silver (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Dissolved)	0.05	0.99	0.99	0.00%	0.87	0.86	1.16%	0.96	0.95	1.05%	0.86	0.87	1.16%
Strontium (Dissolved)	0.0001	0.0081	0.0081	0.00%	0.0091	0.0091	0.00%	0.0077	0.0076	1.31%	0.0091	0.0092	1.09%
Thallium (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	1.00E-05	0.00058	0.00058	0.00%	0.00062	0.00062	0.00%	0.00055	0.00057	3.57%	0.00063	0.00063	0.00%
Vanadium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	0.003	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		0.008	0.004	
Total Metals													
Aluminum (Total)	0.003	0.007	0.008		0.008	0.007		0.008	0.007		0.01	0.01	
Antimony (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	5.00E-05	0.00496	0.00499	0.60%	0.00538	0.00541	0.56%	0.00492	0.00475	3.52%	0.00545	0.00544	0.18%
Beryllium (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	0.05	12.8	12.8	0.00%	13.7	13.9	1.45%	12.4	12.3	0.81%	13.8	13.8	0.00%
Chromium (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0005	0.0009	0.0009		0.0009	0.0009		0.0009	0.0009		0.0009	0.0009	
Iron (Total)	0.03	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03		<0.03	<0.03	
Lead (Total)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Total)	0.05	7.57	7.64	0.92%	7.28	7.32	0.55%	7.33	7.29	0.55%	7.32	7.31	0.14%
Manganese (Total)	5.00E-05	0.0019	0.00189	0.53%	0.00144	0.00143	0.70%	0.00172	0.00174	1.16%	0.00144	0.00144	0.00%
Mercury (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	5.00E-05	<0.00005	<0.00005		0.00021	0.00018		<0.00005	<0.00005		0.0002	0.00019	
Nickel (Total)	0.0005	0.0006	0.0006		0.0006	0.0007		0.0005	0.0006		0.0006	0.0007	
Potassium (Total)	0.2	0.9	0.9		0.7	0.8		0.9	0.8		0.7	0.8	
Selenium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Total)	0.1	0.4	0.4		0.4	0.5		0.4	0.4		0.5	0.4	
Silver (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Total)	0.05	0.97	0.97	0.00%	0.84	0.84	0.00%	0.94	0.94	0.00%	0.84	0.84	0.00%
Strontium (Total)	0.0001	0.008	0.008	0.00%	0.0092	0.0091	1.09%	0.0078	0.0077	1.29%	0.0092	0.0092	0.00%
Thallium (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	1.00E-05	0.00057	0.00057	0.00%	0.00062	0.0006	3.28%	0.00055	0.00055	0.00%	0.00063	0.00061	3.23%
Vanadium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	0.003	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Organics													
Carbon Organic (Dissolved)	0.5	1.8	1.7		1.5	1.6		1.6	1.7		1.5	1.4	
Carbon Organic (Total)	0.5	1.8	1.9		1.5	1.5		1.9	1.9		1.6	1.5	
Chlorophyll-a (mg/m^3)	0.2	<0.2	<0.2		0.9	0.9		<0.2	<0.2		0.7	0.5	
Phenols													
Pheophytin-a (mg/m^3)	0.2	<0.2	<0.2		<0.2	0.4		<0.2	<0.2		0.5	0.4	

MARY LAKE

Station ID		BL0-01-D	Duplicate	RPD	BL0-01-S	Duplicate	RPD	BL0-03-D	Duplicate	RPD	BL0-03-D	Duplicate	RPD
Date Sampled		26/08/2014		(%)	26/08/2014		(%)	01/05/2014		(%)	26/07/2014		(%)
Physical Tests	**MDL**												
Alkalinity (Total as CaCO3)	5	62	62	0.00%	62	62	0.00%	38	39	2.60%	25	24	
Conductivity (µS/cm)	5	131	130	0.77%	130	130	0.00%				53	53	0.00%
Hardness as CaCO3 (Dissolved)	1	67	67	0.00%	67	68	1.48%	37.7	38.5	2.10%	25	25	0.00%
Hardness as CaCO3 (Total)	1	66	66	0.00%	66	66	0.00%	38.7	37	4.49%	26	26	0.00%
pH (pH units)	1	8.05	8.08	0.37%	8.03	8.08	0.62%	6.75	6.77	0.30%	7.58	7.58	0.00%
Total Dissolved Solids	1	85	84	1.18%	84	84	0.00%	51	51	0.00%	34	34	0.00%
Total Suspended Solids	2	<2	<2		<2	<2		<2	<2		<2	<2	
Turbidity (NTU)	0.1	0.9	1	10.53%	0.9	1	10.53%	0.2	0.1		2.2	1	**75.00%**
Bromide (Dissolved)	0.25	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	1	2	2		2	2		2	2		1	1	
Sulphate (Dissolved)	1	2	2		2	2		1	1		1	1	
Nutrients													
Ammonia (Total)	0.02	0.05	0.05		0.12	0.11	8.70%	0.06	0.06		0.07	0.07	
Nitrate (as N)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrite (as N)	0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)													
Nitrogen Kjeldahl (Total)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	0.2		0.11	0.11	
Phosphorus (Nutrient) Dissolved													
Phosphorus (Nutrient) Total	0.003	<0.003	0.004		<0.003	0.004		0.011	0.003		<0.003	<0.003	
Dissolved Metals													
Aluminum (Dissolved)	0.003	0.004	0.004		0.004	0.008		0.0022	0.0014		0.006	0.006	
Antimony (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	5.00E-05	0.00503	0.0052	3.32%	0.00499	0.00498	0.20%	0.00404	0.00405	0.25%	0.0023	0.00239	3.84%
Beryllium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0001	<0.0001		<0.0005	<0.0005	
Bismuth (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	0.05	13.5	13.4	0.74%	13.5	13.6	0.74%	7.74	7.91	2.17%	5.12	5.13	0.20%
Chromium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0001	<0.0001		<0.0005	<0.0005	
Cobalt (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0005	0.0007	0.0007		0.0007	0.0008		0.00055	0.00048		<0.0005	<0.0005	
Iron (Dissolved)	0.03	<0.03	<0.03		<0.03	<0.03		<0.01	<0.01		<0.03	<0.03	
Lead (Dissolved)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.0005	<0.0005		<0.001	<0.001	
Magnesium (Dissolved)	0.05	8.11	8.07	0.49%	8.14	8.22	0.98%	4.46	4.55	2.00%	2.96	2.98	0.67%
Manganese (Dissolved)	5.00E-05	0.00085	0.00086	1.17%	0.00094	0.00095	1.06%	0.000227	0.000207		0.00111	0.00114	2.67%
Mercury (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	5.00E-05	0.00006	0.00007		0.00007	0.00006		0.000109	0.000104		<0.00005	<0.00005	
Nickel (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Potassium (Dissolved)	0.2	0.7	0.7		0.6	0.8		0.521	0.517	0.77%	0.3	0.4	
Selenium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.0001	<0.0001		<0.001	<0.001	
Silicon (Dissolved)	0.1	0.7	0.7	0.00%	0.7	0.7	0.00%	0.31	0.32	3.17%	0.3	0.3	
Silver (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Dissolved)	0.05	1.48	1.48	0.00%	1.44	1.44	0.00%	1.14	1.14	0.00%	0.62	0.62	0.00%
Strontium (Dissolved)	0.0001	0.0077	0.0076	1.31%	0.0077	0.0078	1.29%	0.00568	0.00575	1.22%	0.0034	0.0033	2.99%
Thallium (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.00001	<0.00001		<0.0001	<0.0001	
Tin (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	1.00E-05	0.00111	0.00114	2.67%	0.00112	0.0011	1.80%	0.000575	0.000565	1.75%	0.00029	0.00029	0.00%
Vanadium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	0.003	0.003	<0.003		<0.003	<0.003		0.0023	<0.00033		<0.003	<0.003	
Total Metals													
Aluminum (Total)	0.003	0.03	0.03	0.00%	0.027	0.027	0.00%	0.0065	0.0036		0.07	0.073	4.20%
Antimony (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	5.00E-05	0.00528	0.00518	1.91%	0.00524	0.00518	1.15%	0.00399	0.0039	2.28%	0.00282	0.0027	4.35%
Beryllium (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.00002	<0.00002		<0.0005	<0.0005	
Bismuth (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	0.05	13.2	13.2	0.00%	13.3	13.3	0.00%	8.13	7.52	7.80%	5.3	5.33	0.56%
Chromium (Total)	0.0005	<0.0005	<0.0005		<0.0005	0.0343		0.00015	<0.00002		<0.0005	<0.0005	
Cobalt (Total)	0.0001	<0.0001	<0.0001		<0.0001	0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0005	0.0008	0.0008		0.0008	0.0011		0.00123	<0.0002		0.0005	0.0005	
Iron (Total)	0.03	0.04	0.04		0.04	0.16		<0.003	<0.003		0.09	0.09	
Lead (Total)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		0.00016	<0.00005		0.00008	0.00007	
Lithium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.00005	<0.00005		<0.001	<0.001	
Magnesium (Total)	0.05	7.99	8.05	0.75%	8.07	8.06	0.12%	4.47	4.42	1.12%	3.11	3.13	0.64%
Manganese (Total)	5.00E-05	0.00183	0.00177	3.33%	0.00167	0.00464	**94.14%**	0.000506	0.000372	**30.52%**	0.00279	0.0028	0.36%
Mercury (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	5.00E-05	0.00007	0.00006		0.00006	0.00034		0.000133	0.000128		0.00007	<0.00005	
Nickel (Total)	0.0005	<0.0005	<0.0005		<0.0005	0.0131		<0.0005	<0.0005		<0.0005	<0.0005	
Potassium (Total)	0.2	0.7	0.7		0.7	0.7		0.522	0.495	5.31%	0.4	0.3	
Selenium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.00001	<0.00001		<0.001	<0.001	
Silicon (Total)	0.1	0.8	0.8	0.00%	0.8	0.7	13.33%	0.32	0.3	6.45%	0.4	0.4	
Silver (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Total)	0.05	1.47	1.47	0.00%	1.44	1.43	0.70%	1.17	1.11	5.26%	0.54	0.55	1.83%
Strontium (Total)	0.0001	0.0078	0.0077	1.29%	0.0078	0.0076	2.60%	0.00608	0.00609	0.16%	0.0034	0.0035	2.90%
Thallium (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.000001	<0.000001		<0.0001	<0.0001	
Tin (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	1.00E-05	0.00115	0.00113	1.75%	0.00113	0.00111	1.79%	0.000604	0.000613	1.48%	0.00032	0.00031	3.17%
Vanadium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	0.003	<0.003	<0.003		0.005	0.004		0.0082	<0.003		<0.003	<0.003	
Organics													
Carbon Organic (Dissolved)	0.5	1.4	1.4		1.4	1.5		1	1.1		1.2	1.2	
Carbon Organic (Total)	0.5	1.7	1.6		1.7	1.8		1.1	1.1		1.4	1.7	
Chlorophyll-a (mg/m^3)	0.2	0.4	0.5		1.1	1.6	**37.04%**	<0.2	<0.2		<0.2	2.3	
Phenols								<0.001	<0.001				
Pheophytin-a (mg/m^3)	0.2	0.3	0.2		0.3	<0.2		<0.2	<0.2		<0.2	<0.2	

MARY LAKE (continued)

Station ID		BL0-03-S	Duplicate	RPD	BL0-03-S	Duplicate	RPD	BL0-04-D	Duplicate	RPD	BL0-04-S	Duplicate	RPD	BL0-04-S	Duplicate	RPD
Date Sampled		01/05/2014		(%)	26/07/2014		(%)	01/05/2014		(%)	01/05/2014		(%)	25/08/2014		(%)
Physical Tests	**MDL**															
Alkalinity (Total as CaCO3)	5	41	41	0.00%	25	25	0.00%	35	37	5.56%	41	43	4.76%	32	33	3.08%
Conductivity (µS/cm)	5				54	54	0.00%							70	71	1.42%
Hardness as CaCO3 (Dissolved)	1	40.6	41	0.98%	26	26	0.00%	37.2	37	0.54%	42.3	43.3	2.34%	34	35	2.90%
Hardness as CaCO3 (Total)	1	42.6	41.5	2.62%	27	27	0.00%	36.8	36.4	1.09%	43.8	43.8	0.00%	34	34	0.00%
pH (pH units)	1	7.13	6.78	5.03%	7.58	7.62	0.53%	6.76	6.75	0.15%	6.83	6.83	0.00%	7.7	7.7	0.00%
Total Dissolved Solids	1	56	57	1.77%	35	35	0.00%	51	51	0.00%	58	58	0.00%	46	46	0.00%
Total Suspended Solids	2	<2	<2		<2	6		<2	<2		<2	<2		<2	2	
Turbidity (NTU)	0.1	0.2	0.2		1	1.9	**62.07%**	0.2	0.2		0.1	0.2		3.2	1.5	**72.34%**
Bromide (Dissolved)	0.25	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	1	3	3		1	1		2	2		3	3		1	2	
Sulphate (Dissolved)	1	1	2		1	1		1	1		2	2		1	1	
Nutrients																
Ammonia (Total)	0.02	0.05	0.06		0.13	0.12	8.00%	0.06	0.07		0.05	0.06		0.07	0.05	
Nitrate (as N)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrite (as N)	0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)																
Nitrogen Kjeldahl (Total)	0.1	<0.1	<0.1		0.16	0.15		<0.1	<0.1		0.14	0.14		0.18	0.3	
Phosphorus (Nutrient) Dissolved																
Phosphorus (Nutrient) Total	0.003	<0.003	0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		0.013	0.015	
Dissolved Metals																
Aluminum (Dissolved)	0.003	0.0015	0.0027		0.007	0.008		0.0023	0.0037		0.0014	0.0023		0.006	0.008	
Antimony (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	5.00E-05	0.00407	0.00435	6.65%	0.00242	0.00243	0.41%	0.00411	0.00401	2.46%	0.00452	0.00454	0.44%	0.00322	0.00336	4.26%
Beryllium (Dissolved)	0.0005	<0.0001	<0.0001		<0.0005	<0.0005		<0.0001	<0.0001		<0.0001	<0.0001		<0.0005	<0.0005	
Bismuth (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	0.05	8.34	8.42	0.95%	5.37	5.36	0.19%	7.65	7.61	0.52%	8.72	8.89	1.93%	7.34	7.46	1.62%
Chromium (Dissolved)	0.0005	<0.0001	<0.0001		<0.0005	<0.0005		<0.0001	<0.0001		<0.0001	<0.0001		<0.0005	<0.0005	
Cobalt (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0005	0.00052	0.00052		<0.0005	<0.0005		0.00048	0.00046		0.00051	0.00053		0.0006	0.0006	
Iron (Dissolved)	0.03	<0.01	<0.01		<0.03	<0.03		<0.01	<0.01		<0.01	<0.01		<0.03	<0.03	
Lead (Dissolved)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	0.001	0.00058	<0.0005		<0.001	<0.001		<0.0005	<0.0005		<0.0005	<0.0005		<0.001	<0.001	
Magnesium (Dissolved)	0.05	4.8	4.85	1.04%	3.1	3.1	0.00%	4.4	4.37	0.68%	4.98	5.12	2.77%	3.86	3.91	1.29%
Manganese (Dissolved)	5.00E-05	0.000239	0.000296		0.00129	0.00127	1.56%	0.000196	0.000255		0.000195	0.000205		0.00028	0.0003	6.90%
Mercury (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	5.00E-05	0.000127	0.000118		<0.00005	<0.00005		0.000118	0.00012		0.000124	0.00013		<0.00005	<0.00005	
Nickel (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Potassium (Dissolved)	0.2	0.556	0.573	3.01%	0.3	0.4		0.52	0.499	4.12%	0.582	0.585	0.51%	0.4	0.4	
Selenium (Dissolved)	0.001	<0.0001	<0.0001		<0.001	<0.001		<0.0001	<0.0001		<0.0001	<0.0001		<0.001	<0.001	
Silicon (Dissolved)	0.1	0.31	0.31	0.00%	0.3	0.3		0.36	0.36	0.00%	0.31	0.31	0.00%	0.5	0.5	0.00%
Silver (Dissolved)	1.00E-05	<0.000001	<0.000001		<0.00001	<0.00001		<0.000001	<0.000001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Dissolved)	0.05	1.21	1.23	1.64%	0.63	0.64	1.57%	1.13	1.11	1.79%	1.26	1.27	0.79%	0.61	0.63	3.23%
Strontium (Dissolved)	0.0001	0.00612	0.00621	1.46%	0.0034	0.0034	0.00%	0.00575	0.00573	0.35%	0.00652	0.00661	1.37%	0.005	0.005	0.00%
Thallium (Dissolved)	0.0001	<0.00001	<0.00001		<0.0001	<0.0001		<0.00001	<0.00001		<0.00001	<0.00001		<0.0001	<0.0001	
Tin (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	1.00E-05	0.000655	0.000615	6.30%	0.00028	0.00028	0.00%	0.000573	0.000562	1.94%	0.000648	0.00066	1.83%	0.00047	0.00048	2.11%
Vanadium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	0.003	<0.00033	0.0017		<0.003	<0.003		0.0026	0.0011		0.0023	0.003	**26.42%**	<0.003	<0.003	
Total Metals																
Aluminum (Total)	0.003	0.0032	0.0045		0.068	0.067	1.48%	0.0039	0.0052		0.0032	0.0032		0.047	0.057	19.23%
Antimony (Total)	0.0001	<0.0001	<0.0001		0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	5.00E-05	0.00448	0.0044	1.80%	0.00289	0.00281	2.81%	0.00381	0.00379	0.53%	0.0048	0.00475	1.05%	0.00345	0.00366	5.91%
Beryllium (Total)	0.0005	<0.00002	<0.00002		<0.0005	<0.0005		<0.00002	<0.00002		<0.00002	<0.00002		<0.0005	<0.0005	
Bismuth (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	0.05	8.61	8.41	2.35%	5.44	5.46	0.37%	7.49	7.4	1.21%	8.94	8.92	0.22%	7.26	7.3	0.55%
Chromium (Total)	0.0005	0.00011	0.00014	**24.00%**	<0.0005	<0.0005		<0.00002	<0.00002		<0.00002	<0.00002		<0.0005	<0.0005	
Cobalt (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0005	0.00068	0.0006		0.0006	0.0005		0.00107	0.00073		0.00059	0.00062		0.0006	0.0006	
Iron (Total)	0.03	<0.003	<0.003		0.08	0.08		<0.003	<0.003		<0.003	<0.003		0.04	0.04	
Lead (Total)	5.00E-05	0.00038	0.00039	2.60%	0.0001	0.00007		<0.00005	0.00009		<0.00005	<0.00005		0.00012	0.00006	
Lithium (Total)	0.001	<0.00005	<0.00005		<0.001	<0.001		<0.00005	<0.00005		<0.00005	<0.00005		<0.001	<0.001	
Magnesium (Total)	0.05	5.11	4.98	2.58%	3.22	3.2	0.62%	4.4	4.34	1.37%	5.23	5.23	0.00%	3.82	3.84	0.52%
Manganese (Total)	5.00E-05	0.000392	0.00048	**20.18%**	0.00291	0.00247	16.36%	0.000389	0.000363	6.91%	0.000284	0.0003	5.48%	0.00138	0.00133	3.69%
Mercury (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	5.00E-05	0.000139	0.00013		0.00027	0.00008		0.000128	0.000128		0.000151	0.000149		<0.00005	<0.00005	
Nickel (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	0.00165		<0.0005	<0.0005		<0.0005	<0.0005	
Potassium (Total)	0.2	0.573	0.575	0.35%	0.4	0.3		0.498	0.489	1.82%	0.6	0.603	0.50%	0.3	0.4	
Selenium (Total)	0.001	<0.00001	<0.00001		<0.001	<0.001		<0.00001	<0.00001		<0.00001	<0.00001		<0.001	<0.001	
Silicon (Total)	0.1	0.32	0.32	0.00%	0.4	0.4		0.35	0.35	0.00%	0.31	0.31	0.00%	0.5	0.6	18.18%
Silver (Total)	1.00E-05	<0.000001	<0.000001		<0.00001	<0.00001		<0.000001	<0.000001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Total)	0.05	1.26	1.26	0.00%	0.56	0.56	0.00%	1.11	1.1	0.90%	1.33	1.33	0.00%	0.61	0.64	4.80%
Strontium (Total)	0.0001	0.00661	0.00649	1.83%	0.0037	0.0036	2.74%	0.00578	0.00582	0.69%	0.00681	0.00696	2.18%	0.005	0.0051	1.98%
Thallium (Total)	0.0001	<0.000001	<0.000001		<0.0001	<0.0001		<0.000001	<0.000001		<0.000001	<0.000001		<0.0001	<0.0001	
Tin (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	1.00E-05	0.000671	0.000649	3.33%	0.00031	0.00031	0.00%	0.000576	0.000585	1.55%	0.000688	0.000677	1.61%	0.00047	0.00051	8.16%
Vanadium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	0.003	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Organics																
Carbon Organic (Dissolved)	0.5	1.1	1.2		1.2	1.2		0.9	1		1.2	1.3		0.8	0.8	
Carbon Organic (Total)	0.5	1.2	1.2		1.4	1.8		1.1	1.2		1.4	1.5		1.2	1.1	
Chlorophyll-a (mg/m^3)	0.2	<0.2	<0.2		<0.2	0.8		<0.2	<0.2		<0.2	<0.2		1.5	0.9	
Phenols		<0.001	<0.001					<0.001	<0.001		<0.001	<0.001				
Pheophytin-a (mg/m^3)	0.2	<0.2	<0.2		<0.2	<0.2		<0.2	<0.2		<0.2	<0.2		<0.2	<0.2	

Knight Piésold CONSULTING

TABLE C2.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC LAKE DUPLICATE SAMPLE SUMMARY

Print Mar/19/15 12:36:16

MARY LAKE

Station ID		BL0-05-B-D	Duplicate	RPD	BL0-05-B-S	Duplicate	RPD	BL0-05-D	Duplicate	RPD	BL0-05-S	Duplicate	RPD	BL0-05-S	Duplicate	RPD
Date Sampled		26/08/2014		(%)	26/08/2014		(%)	27/07/2014		(%)	02/05/2014		(%)	27/07/2014		(%)
Physical Tests	**MDL**															
Alkalinity (Total as CaCO3)	5	33	33	0.00%	33	33	0.00%	24	24		43	41	4.76%	33	34	2.99%
Conductivity (µS/cm)	5	71	71	0.00%	71	71	0.00%	52	53	1.90%				72	73	1.38%
Hardness as CaCO3 (Dissolved)	1	34	34	0.00%	34	34	0.00%	25	25	0.00%	42.6	42.8	0.47%	32	32	0.00%
Hardness as CaCO3 (Total)	1	34	35	2.90%	34	35	2.90%	24	25	4.08%	41.2	41.6	0.97%	34	33	2.99%
pH (pH units)	1	7.81	7.79	0.26%	7.86	7.82	0.51%	7.53	7.59	0.79%	6.83	6.84	0.15%	7.7	7.7	0.00%
Total Dissolved Solids	1	46	46	0.00%	46	46	0.00%	34	34	0.00%	58	58	0.00%	47	47	0.00%
Total Suspended Solids	2	<2	<2		<2	<2		<2	<2		<2	<2		<2	<2	
Turbidity (NTU)	0.1	1.6	1.4	13.33%	1.2	1.4	15.38%	3.5	2.6	**29.51%**	0.2	0.2		5.8	5.8	0.00%
Bromide (Dissolved)	0.25	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	1	2	2		2	2		1	1		3	3		1	1	
Sulphate (Dissolved)	1	1	1		1	1		1	1		2	2		2	2	
Nutrients																
Ammonia (Total)	0.02	0.16	0.15	6.45%	0.12	0.12	0.00%	0.03	0.06		0.05	0.05		0.12	0.05	
Nitrate (as N)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		0.19	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	0.1	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		0.19	<0.1		<0.1	<0.1	
Nitrite (as N)	0.005	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)																
Nitrogen Kjeldahl (Total)	0.1	0.5	<0.1		<0.1	<0.1		<0.1	0.14		0.18	<0.1		0.17	0.12	
Phosphorus (Nutrient) Dissolved																
Phosphorus (Nutrient) Total	0.003	0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		0.004	0.004	
Dissolved Metals																
Aluminum (Dissolved)	0.003	0.006	0.006		0.006	0.009		0.007	0.007		0.0018	0.0022		0.019	0.012	
Antimony (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	5.00E-05	0.00342	0.00334	2.37%	0.00327	0.00329	0.61%	0.00245	0.00239	2.48%	0.00454	0.00456	0.44%	0.00377	0.00376	0.27%
Beryllium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0001	<0.0001		<0.0005	<0.0005	
Bismuth (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	0.05	6.82	6.86	0.58%	6.85	6.83	0.29%	5.02	5.05	0.60%	8.73	8.79	0.68%	6.77	6.7	1.04%
Chromium (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0001	<0.0001		<0.0005	<0.0005	
Cobalt (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0005	0.0005	0.0005		0.0006	0.0006		<0.0005	<0.0005		0.00051	0.00066		0.001	0.0006	
Iron (Dissolved)	0.03	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03		<0.01	<0.01		<0.03	<0.03	
Lead (Dissolved)	5.00E-05	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.0005	0.00056		<0.001	<0.001	
Magnesium (Dissolved)	0.05	4.11	4.12	0.24%	4.1	4.09	0.24%	2.91	2.92	0.34%	5.05	5.06	0.20%	3.76	3.74	0.53%
Manganese (Dissolved)	5.00E-05	0.00024	0.00024		0.00024	0.00024		0.00099	0.00104	4.93%	0.000207	0.000227		0.00075	0.00074	1.34%
Mercury (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	5.00E-05	0.00007	0.00009		0.00005	<0.00005		<0.00005	<0.00005		0.000126	0.000166		<0.00005	<0.00005	
Nickel (Dissolved)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Potassium (Dissolved)	0.2	0.5	0.5		0.5	0.4		0.3	0.4		0.579	0.572	1.22%	0.5	0.5	
Selenium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.0001	<0.0001		<0.001	<0.001	
Silicon (Dissolved)	0.1	0.4	0.4		0.4	0.5		0.3	0.3		0.32	0.31	3.17%	0.6	0.5	18.18%
Silver (Dissolved)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Dissolved)	0.05	0.95	0.96	1.05%	0.96	0.95	1.05%	0.64	0.64	0.00%	1.27	1.16	9.05%	0.8	0.8	0.00%
Strontium (Dissolved)	0.0001	0.005	0.005	0.00%	0.0049	0.0051	4.00%	0.0034	0.0034	0.00%	0.00651	0.00672	3.17%	0.0054	0.0053	1.87%
Thallium (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.00001	<0.00001		<0.0001	<0.0001	
Tin (Dissolved)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	1.00E-05	0.00053	0.00053	0.00%	0.00051	0.00052	1.94%	0.00025	0.00028	11.32%	0.000666	0.00067	0.60%	0.00042	0.00041	2.41%
Vanadium (Dissolved)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	0.003	<0.003	<0.003		<0.003	<0.003		0.01	<0.003		0.0013	0.0024		<0.003	<0.003	
Total Metals																
Aluminum (Total)	0.003	0.061	0.037	**48.98%**	0.038	0.039	2.60%	0.12	0.103	15.25%	0.0031	0.0035		0.118	0.131	10.44%
Antimony (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	5.00E-05	0.00362	0.00356	1.67%	0.00361	0.00354	1.96%	0.00312	0.003	3.92%	0.00434	0.00454	4.50%	0.00458	0.00472	3.01%
Beryllium (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.00002	<0.00002		<0.0005	<0.0005	
Bismuth (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	0.05	7.03	7.03	0.00%	7	7.02	0.29%	5.08	5.12	0.78%	8.51	8.58	0.82%	6.88	6.85	0.44%
Chromium (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.00002	<0.00002		<0.0005	<0.0005	
Cobalt (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0005	0.0007	0.0006		0.0006	0.0006		0.0006	0.0007		0.00061	0.00064		0.0008	0.0008	
Iron (Total)	0.03	0.06	0.05		0.05	0.05		0.15	0.14		<0.003	<0.003		0.1	0.12	
Lead (Total)	5.00E-05	0.00007	0.00007		0.00007	0.00007		0.00013	0.00012		<0.00005	<0.00005		0.00015	0.00015	
Lithium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.00005	<0.00005		<0.001	<0.001	
Magnesium (Total)	0.05	4.12	4.16	0.97%	4.1	4.15	1.21%	3	3.02	0.66%	4.84	4.89	1.03%	3.97	3.96	0.25%
Manganese (Total)	5.00E-05	0.00184	0.00179	2.75%	0.00152	0.00165	8.20%	0.00376	0.00367	2.42%	0.000354	0.000405	13.44%	0.00195	0.00255	**26.67%**
Mercury (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	5.00E-05	0.00005	0.00006		0.00009	0.00007		<0.00005	<0.00005		0.000145	0.000139		<0.00005	<0.00005	
Nickel (Total)	0.0005	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		0.0005	0.0005	
Potassium (Total)	0.2	0.5	0.5		0.5	0.5		0.5	0.4		0.583	0.576	1.21%	0.5	0.5	
Selenium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.00001	<0.00001		<0.001	<0.001	
Silicon (Total)	0.1	0.5	0.5	0.00%	0.5	0.5	0.00%	0.5	0.5	0.00%	0.31	0.32	3.17%	0.7	0.8	13.33%
Silver (Total)	1.00E-05	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.000001	<0.000001		<0.00001	<0.00001	
Sodium (Total)	0.05	0.92	0.93	1.08%	0.91	0.91	0.00%	0.55	0.58	5.31%	1.28	1.27	0.78%	0.8	0.8	0.00%
Strontium (Total)	0.0001	0.0051	0.0051	0.00%	0.005	0.0049	2.02%	0.0035	0.0034	2.90%	0.00663	0.00683	2.97%	0.0056	0.0056	0.00%
Thallium (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.000001	<0.000001		<0.0001	<0.0001	
Tin (Total)	0.0001	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	0.01	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	1.00E-05	0.00055	0.00055	0.00%	0.00056	0.00055	1.80%	0.00032	0.00031	3.17%	0.000707	0.000666	5.97%	0.00046	0.00047	2.15%
Vanadium (Total)	0.001	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	0.003	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Organics																
Carbon Organic (Dissolved)	0.5	1.2	1.1		1.1	1.1		1.2	1.2		0.7	0.7		1	1.1	
Carbon Organic (Total)	0.5	1.4	1.4		1.4	1.4		1.2	1.4		0.9	0.8		1.1	1.1	
Chlorophyll-a (mg/m^3)	0.2	1.2	1.1	8.70%	<0.2	0.8		<0.2	0.4		<0.2	1.3		1.8	1.1	**48.28%**
Phenols											<0.001	<0.001				
Pheophytin-a (mg/m^3)	0.2	0.4	0.8		2.1	1.4	**40.00%**	<0.2	<0.2		<0.2	<0.2		<0.2	<0.2	

SHEARDOWN LAKE NW

Station ID	DD-HAB9-STN1-S	Duplicate	RPD	DL0-01-7-D	Duplicate	RPD	DL0-01-7-S	Duplicate	RPD
Date Sampled	25/07/2014		(%)	25/08/2014		(%)	25/08/2014		(%)
Physical Tests									
Alkalinity (Total as CaCO3)	52	52	0.00%	54	54	0.00%	54	55	1.83%
Conductivity (µS/cm)	115	116	0.87%	121	121	0.00%	121	121	0.00%
Hardness as CaCO3 (Dissolved)	57	57	0.00%	61	61	0.00%	61	61	0.00%
Hardness as CaCO3 (Total)	59	59	0.00%	60	60	0.00%	60	60	0.00%
pH (pH units)	7.83	7.84	0.13%	7.93	7.94	0.13%	7.93	7.94	0.13%
Total Dissolved Solids	75	75	0.00%	79	79	0.00%	79	79	0.00%
Total Suspended Solids	<2	<2		5	<2		<2	2	
Turbidity (NTU)	0.9	0.7	**25.00%**	0.4	0.5		0.4	0.5	
Bromide (Dissolved)	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	3	3		3	3		3	3	
Sulphate (Dissolved)	3	3		3	3		3	3	
Nutrients									
Ammonia (Total)	0.08	0.16		0.06	0.16		0.04	0.11	
Nitrate (as N)	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrite (as N)	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)									
Nitrogen Kjeldahl (Total)	0.16	0.21		<0.1	0.46		<0.1	<0.1	
Phosphorus (Nutrient) Dissolved									
Phosphorus (Nutrient) Total	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Dissolved Metals									
Aluminum (Dissolved)	<0.003	0.004		<0.003	<0.003		<0.003	0.004	
Antimony (Dissolved)	0.0001	0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	0.00439	0.00453	3.14%	0.00461	0.00464	0.65%	0.00449	0.0047	4.57%
Beryllium (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	11.4	11.4	0.00%	12.8	12.8	0.00%	12.8	12.8	0.00%
Chromium (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0008	0.0007		0.0009	0.0009		0.0009	0.0011	
Iron (Dissolved)	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03	
Lead (Dissolved)	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Dissolved)	6.83	6.84	0.15%	7.09	7.03	0.85%	7.07	7.07	0.00%
Manganese (Dissolved)	0.00086	0.00082	4.76%	0.00011	0.00012		0.00013	0.00014	
Mercury (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	0.00076	0.00066	14.08%	0.00066	0.00065	1.53%	0.00063	0.00063	0.00%
Nickel (Dissolved)	0.0005	0.0005		0.0007	0.0007		0.0007	0.0007	
Potassium (Dissolved)	0.8	0.8		0.8	0.8		0.7	0.8	
Selenium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Dissolved)	0.7	0.6	15.38%	0.6	0.7	15.38%	0.6	0.7	15.38%
Silver (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Dissolved)	0.95	0.95	0.00%	0.86	0.86	0.00%	0.86	0.87	1.16%
Strontium (Dissolved)	0.0072	0.0073	1.38%	0.0073	0.0073	0.00%	0.0072	0.0073	1.38%
Thallium (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	0.00081	0.00081	0.00%	0.00085	0.00085	0.00%	0.00085	0.00087	2.33%
Vanadium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Total Metals									
Aluminum (Total)	0.017	0.022	**25.64%**	0.011	0.011		0.01	0.012	
Antimony (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	0.00443	0.00503	12.68%	0.00464	0.00462	0.43%	0.00474	0.00474	0.00%
Beryllium (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	11.6	11.7	0.86%	12.6	12.5	0.80%	12.6	12.6	0.00%
Chromium (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0009	0.0009		0.0009	0.0009		0.0011	0.0011	
Iron (Total)	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03	
Lead (Total)	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Total)	7.23	7.25	0.28%	6.95	6.96	0.14%	6.96	7	0.57%
Manganese (Total)	0.0024	0.00617	**87.98%**	0.00141	0.00132	6.59%	0.00141	0.00129	8.89%
Mercury (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	0.00026	0.00025	3.92%	0.00066	0.00066	0.00%	0.00063	0.00063	0.00%
Nickel (Total)	0.0007	0.0007		0.0007	0.0007		0.0007	0.0007	
Potassium (Total)	0.9	1		0.8	0.7		0.8	0.7	
Selenium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Total)	0.6	0.6	0.00%	0.7	0.7	0.00%	0.7	0.7	0.00%
Silver (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Total)	0.95	0.96	1.05%	0.86	0.86	0.00%	0.89	0.9	1.12%
Strontium (Total)	0.007	0.0072	2.82%	0.0073	0.0073	0.00%	0.0072	0.0073	1.38%
Thallium (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	0.0008	0.00068	16.22%	0.00086	0.00087	1.16%	0.00085	0.00085	0.00%
Vanadium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	<0.003	0.003		<0.003	<0.003		<0.003	<0.003	
Organics									
Carbon Organic (Dissolved)	1.6	1.5		1.2	1.3		1.3	1.4	
Carbon Organic (Total)	1.7	1.9		1.4	1.5		1.6	1.5	
Chlorophyll-a (mg/m^3)	1.6	2.4	**40.00%**	<0.2	2.2		<0.2	1.7	
Phenols	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Pheophytin-a (mg/m^3)	<0.2	<0.2		2.2	<0.2		1.5	<0.2	

SHEARDOWN LAKE SE

Station ID	DL0-02-3-D	Duplicate	RPD	DL0-02-3-S	Duplicate	RPD	DL0-02-6-D	Duplicate	RPD	DL0-02-6-S	Duplicate	RPD
Date Sampled	24/07/2014		(%)	24/07/2014		(%)	24/08/2014		(%)	24/08/2014		(%)
Physical Tests												
Alkalinity (Total as CaCO3)	41	41	0.00%	40	40	0.00%	49	49	0.00%	48	48	0.00%
Conductivity (µS/cm)	90	90	0.00%	88	88	0.00%	107	106	0.94%	106	105	0.95%
Hardness as CaCO3 (Dissolved)	44	44	0.00%	43	43	0.00%	54	54	0.00%	54	54	0.00%
Hardness as CaCO3 (Total)	45	44	2.25%	43	42	2.35%	54	53	1.87%	52	53	1.90%
pH (pH units)	7.78	7.78	0.00%	7.8	7.82	0.26%	7.91	7.88	0.38%	7.88	7.86	0.25%
Total Dissolved Solids	58	58	0.00%	57	57	0.00%	70	69	1.44%	69	68	1.46%
Total Suspended Solids	<2	<2		<2	<2		<2	<2		<2	<2	
Turbidity (NTU)	2.7	2.7	0.00%	3.1	3.3	6.25%	1.4	1.1	**24.00%**	1.4	1.1	**24.00%**
Bromide (Dissolved)	<0.25	<0.25		<0.25	<0.25		<0.25	<0.25		<0.25	<0.25	
Chloride (Dissolved)	2	2		2	2		2	2		2	2	
Sulphate (Dissolved)	2	2		2	2		2	2		2	2	
Nutrients												
Ammonia (Total)	0.06	0.06		0.06	0.06		0.02	0.13		0.05	0.16	
Nitrate (as N)	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrate+Nitrite (Dissolved)	<0.1	<0.1		<0.1	<0.1		<0.1	<0.1		<0.1	<0.1	
Nitrite (as N)	<0.005	<0.005		<0.005	<0.005		<0.005	<0.005		<0.005	<0.005	
Nitrogen (Total)												
Nitrogen Kjeldahl (Total)	0.13	0.12		0.13	0.13		0.17	<0.1		0.38	0.18	
Phosphorus (Nutrient) Dissolved												
Phosphorus (Nutrient) Total	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Dissolved Metals												
Aluminum (Dissolved)	0.004	0.004		0.005	0.005		0.005	0.009		0.006	0.005	
Antimony (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Dissolved)	0.00352	0.00344	2.30%	0.00345	0.00341	1.17%	0.00475	0.00479	0.84%	0.00468	0.00477	1.90%
Beryllium (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Dissolved)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Dissolved)	8.92	8.96	0.45%	8.65	8.74	1.04%	11.6	11.6	0.00%	11.5	11.4	0.87%
Chromium (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Dissolved)	0.0006	0.0007		0.0006	0.0006		0.0007	0.0007		0.0007	0.0007	
Iron (Dissolved)	<0.03	<0.03		<0.03	<0.03		<0.03	<0.03		<0.03	<0.03	
Lead (Dissolved)	<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005		<0.00005	<0.00005	
Lithium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Dissolved)	5.31	5.32	0.19%	5.18	5.19	0.19%	6.18	6.21	0.48%	6.13	6.09	0.65%
Manganese (Dissolved)	0.00047	0.00041	13.64%	0.00074	0.00076	2.67%	0.00023	0.00023		0.00021	0.00021	
Mercury (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Dissolved)	0.0002	0.00019		0.00021	0.00022		0.00042	0.0004	4.88%	0.00041	0.0004	2.47%
Nickel (Dissolved)	<0.0005	<0.0005		<0.0005	<0.0005		0.0005	0.0005		0.0005	0.0005	
Potassium (Dissolved)	0.7	0.6		0.6	0.6		0.7	0.6		0.7	0.6	
Selenium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Dissolved)	0.5	0.5	0.00%	0.5	0.5	0.00%	0.6	0.6	0.00%	0.5	0.6	18.18%
Silver (Dissolved)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Dissolved)	0.74	0.74	0.00%	0.72	0.74	2.74%	0.71	0.73	2.78%	0.71	0.69	2.86%
Strontium (Dissolved)	0.0051	0.0052	1.94%	0.005	0.0051	1.98%	0.0076	0.0077	1.31%	0.0075	0.0076	1.32%
Thallium (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Dissolved)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Dissolved)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Dissolved)	0.00054	0.00055	1.83%	0.00055	0.00054	1.83%	0.0007	0.00069	1.44%	0.0007	0.00068	2.90%
Vanadium (Dissolved)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Dissolved)	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Total Metals												
Aluminum (Total)	0.115	0.133	14.52%	0.1	0.113	12.21%	0.049	0.046	6.32%	0.058	0.051	12.84%
Antimony (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Arsenic (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Barium (Total)	0.00423	0.00418	1.19%	0.00401	0.00409	1.98%	0.00498	0.00489	1.82%	0.00483	0.00483	0.00%
Beryllium (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Bismuth (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Boron (Total)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Cadmium (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Calcium (Total)	9	8.83	1.91%	8.66	8.58	0.93%	11.3	11.2	0.89%	11	11.2	1.80%
Chromium (Total)	<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005		<0.0005	<0.0005	
Cobalt (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Copper (Total)	0.0009	0.0009		0.0008	0.0009		0.0008	0.0008		0.0008	0.0008	
Iron (Total)	0.15	0.16		0.13	0.14		0.04	0.04		0.05	0.05	
Lead (Total)	0.00019	0.00015		0.00013	0.00014		0.00005	0.00005		0.00005	0.00006	
Lithium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Magnesium (Total)	5.38	5.28	1.88%	5.16	5.12	0.78%	6.13	6.08	0.82%	5.9	6.01	1.85%
Manganese (Total)	0.00433	0.00369	15.96%	0.00354	0.00281	**22.99%**	0.00253	0.00255	0.79%	0.00275	0.0026	5.61%
Mercury (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Molybdenum (Total)	0.00012	0.0002		0.0001	0.0001		0.00038	0.00038	0.00%	0.0004	0.00036	10.53%
Nickel (Total)	0.0007	0.0006		0.0006	0.0006		0.0006	0.0006		0.0006	0.0006	
Potassium (Total)	0.6	0.7		0.7	0.7		0.6	0.7		0.6	0.6	
Selenium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Silicon (Total)	0.7	0.7	0.00%	0.6	0.7	15.38%	0.8	0.8	0.00%	0.8	0.8	0.00%
Silver (Total)	<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001		<0.00001	<0.00001	
Sodium (Total)	0.75	0.72	4.08%	0.71	0.71	0.00%	0.71	0.73	2.78%	0.68	0.7	2.90%
Strontium (Total)	0.0053	0.0053	0.00%	0.0051	0.0051	0.00%	0.0073	0.0072	1.38%	0.0072	0.0071	1.40%
Thallium (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Tin (Total)	<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001		<0.0001	<0.0001	
Titanium (Total)	<0.01	<0.01		<0.01	<0.01		<0.01	<0.01		<0.01	<0.01	
Uranium (Total)	0.0006	0.0006	0.00%	0.00057	0.00057	0.00%	0.00074	0.00072	2.74%	0.00071	0.00071	0.00%
Vanadium (Total)	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Zinc (Total)	<0.003	<0.003		<0.003	<0.003		<0.003	<0.003		<0.003	<0.003	
Organics												
Carbon Organic (Dissolved)	1.3	1.4		1.3	1.2		1.1	1.1		0.9	0.9	
Carbon Organic (Total)	1.5	1.8		1.5	1.9		1.3	1.3		1.3	1.3	
Chlorophyll-a (mg/m^3)	<0.2	<0.2		<0.2	<0.2		3.5	13.9	**119.54%**	<0.2	<0.2	
Phenols	<0.001	<0.001		<0.001	<0.001		<0.001	<0.001		<0.001	<0.001	
Pheophytin-a (mg/m^3)	<0.2	<0.2		<0.2	<0.2		<0.2	<0.2		6	24.1	**120.27%**

I:\1\02\00181\34\A\Report\Report 6 - 2014 CREMP Monitoring Results\Rev 0\Appendices\Appendix C - QAQC\[Appendices C1 and C2.xlsm]C2.1

NOTES:

1. UNITS ARE mg/L UNLESS OTHERWISE NOTED.
2. BOLD SHADED VALUES INDICATE THE RELATIVE PERCENT DIFFERENCE (RPD) EXCEEDS THE 20% DATA QUALITY OBJECTIVE FOR ANALYTICAL VALUES GREATER THAN FIVE TIMES THE METHOD DETECTION LIMIT (MDL).

0	19MAR'15	ISSUED WITH REPORT NB102-181/34-6	DKK	RAC
REV	DATE	DESCRIPTION	PREP'D	REV'D

Knight Piésold CONSULTING

TABLE C2.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC LAKE SAMPLES METALS SUMMARY

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Lake Name	Station ID	Sample Date	Analyte	MDL	Dissolved	Total	Percent Difference
Camp Lake	JL0-01-S	03/05/2014	Lithium (Li)	0.0005	0.00099	0.00088	11.76
Camp Lake	JL0-02-S	30/04/2014	Molybdenum (Mo)	0.00005	0.000298	0.000268	10.60
Camp Lake	JL0-02-S	30/04/2014	Strontium (Sr)	0.0004	0.0116	0.0108	7.14
Camp Lake	JL0-02-S	30/04/2014	Uranium (U)	0.00001	0.000775	0.000702	9.88
Camp Lake	JL0-07-D	30/04/2014	Lithium (Li)	0.0005	0.00092	0.00072	24.39
Camp Lake	JL0-07-D	30/04/2014	Molybdenum (Mo)	0.00005	0.000269	0.000193	**32.90**
Camp Lake	JL0-07-D	30/04/2014	Uranium (U)	0.00001	0.000715	0.000497	**35.97**
Camp Lake	JL0-07-S	30/04/2014	Barium (Ba)	0.00005	0.00681	0.00607	11.49
Camp Lake	JL0-07-S	30/04/2014	Lithium (Li)	0.0005	0.00088	0.00069	24.20
Camp Lake	JL0-07-S	30/04/2014	Potassium (K)	0.05	1.07	0.966	10.22
Camp Lake	JL0-07-S	30/04/2014	Sodium (Na)	0.0012	1.29	1.17	9.76
Camp Lake	JL0-07-S	30/04/2014	Strontium (Sr)	0.0004	0.0115	0.0109	5.36
Camp Lake	JL0-09-S	30/04/2014	Molybdenum (Mo)	0.00005	0.000278	0.000261	6.31
Camp Lake	JL0-09-S	30/04/2014	Strontium (Sr)	0.0004	0.0115	0.0101	12.96
Camp Lake	JL0-09-S	30/04/2014	Uranium (U)	0.00001	0.000751	0.000651	14.27
Camp Lake	JL0-01-D	23/08/2014	Tin (Sn)	0.0001	0.0023	<0.0001	**183.33**
Camp Lake	JL0-01-S	23/08/2014	Molybdenum (Mo)	0.00005	0.00026	0.00022	16.67
Camp Lake	JL0-07-S	23/08/2014	Molybdenum (Mo)	0.00005	0.00032	0.00029	9.84
Camp Lake	JL0-07-S	23/08/2014	Sodium (Na)	0.05	0.86	0.81	5.99
Camp Lake	JL0-09-D	23/08/2014	Lead (Pb)	0.00005	0.00064	<0.00005	**171.01**
Camp Lake	JL0-09-D	23/08/2014	Molybdenum (Mo)	0.00005	0.00041	0.00037	10.26
Camp Lake	JL0-09-S	23/08/2014	Manganese (Mn)	0.00005	0.00142	0.00014	**164.10**
Camp Lake	JL0-09-S	23/08/2014	Molybdenum (Mo)	0.00005	0.00056	0.00052	7.41
Camp Lake	JL0-09-S	23/08/2014	Silicon (Si)	0.1	0.5	0.4	22.22
Mary Lake	BL0-01-A-D	30/04/2014	Strontium (Sr)	0.0004	0.0146	0.0135	7.83
Mary Lake	BL0-01-A-D	30/04/2014	Uranium (U)	0.00001	0.00193	0.00182	5.87
Mary Lake	BL0-01-A-S	30/04/2014	Strontium (Sr)	0.0004	0.015	0.0139	7.61
Mary Lake	BL0-01-B-S	30/04/2014	Molybdenum (Mo)	0.00005	0.000284	0.000269	5.42
Mary Lake	BL0-01-D	30/04/2014	Strontium (Sr)	0.0004	0.0148	0.0137	7.72
Mary Lake	BL0-01-D	30/04/2014	Uranium (U)	0.00001	0.0026	0.0024	8.00
Mary Lake	BL0-03-D(Dup)	05/01/2014	Silicon (Si)	0.05	0.32	0.3	6.45
Mary Lake	BL0-04-D(Dup)	05/01/2014	Barium (Ba)	0.00005	0.00401	0.00379	5.64
Mary Lake	BL0-04-D	01/05/2014	Barium (Ba)	0.00005	0.00411	0.00381	7.58
Mary Lake	BL0-05-A-D	02/05/2014	Barium (Ba)	0.00005	0.00431	0.00409	5.24
Mary Lake	BL0-05-A-D	02/05/2014	Potassium (K)	0.05	0.553	0.525	5.19
Mary Lake	BL0-05-B-D	01/05/2014	Potassium (K)	0.05	0.688	0.591	15.17
Mary Lake	BL0-05-B-D	01/05/2014	Sodium (Na)	0.0012	1.48	1.34	9.93
Mary Lake	BL0-09-D	02/05/2014	Silicon (Si)	0.05	0.75	0.34	**75.23**
Mary Lake	BL0-01-A-D	26/07/2014	Sodium (Na)	0.05	0.6	0.53	12.39
Mary Lake	BL0-01-B-D	26/07/2014	Sodium (Na)	0.05	0.69	0.61	12.31
Mary Lake	BL0-01-D	26/07/2014	Sodium (Na)	0.05	0.59	0.49	18.52
Mary Lake	BL0-01-S	26/07/2014	Sodium (Na)	0.05	0.9	0.85	5.71
Mary Lake	BL0-03-D(Dup)	26/07/2014	Sodium (Na)	0.05	0.62	0.55	11.97
Mary Lake	BL0-03-D	26/07/2014	Sodium (Na)	0.05	0.62	0.54	13.79
Mary Lake	BL0-03-S(Dup)	26/07/2014	Sodium (Na)	0.05	0.64	0.56	13.33
Mary Lake	BL0-03-S	26/07/2014	Sodium (Na)	0.05	0.63	0.56	11.76
Mary Lake	BL0-04-S	27/07/2014	Sodium (Na)	0.05	0.62	0.58	6.67
Mary Lake	BL0-05-A-D	27/07/2014	Sodium (Na)	0.05	0.6	0.56	6.90
Mary Lake	BL0-05-A-S	27/07/2014	Sodium (Na)	0.05	0.72	0.68	5.71

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TABLE C2.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC LAKE SAMPLES METALS SUMMARY

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Lake Name	Station ID	Sample Date	Analyte	MDL	Dissolved	Total	Percent Difference
Mary Lake	BL0-05-B-D	27/07/2014	Sodium (Na)	0.05	0.6	0.53	12.39
Mary Lake	BL0-05-B-S	27/07/2014	Sodium (Na)	0.05	0.62	0.58	6.67
Mary Lake	BL0-05-B-S	27/07/2014	Strontium (Sr)	0.0001	0.004	0.0038	5.13
Mary Lake	BL0-05-D(Dup)	27/07/2014	Sodium (Na)	0.05	0.64	0.58	9.84
Mary Lake	BL0-05-D	27/07/2014	Sodium (Na)	0.05	0.64	0.55	15.13
Sheardown Lake NW	DD-HAB9-STN1-S	05/05/2014	Aluminum (Al)	0.001	0.007	<0.001	**150.00**
Sheardown Lake NW	DD-HAB9-STN1-S	05/05/2014	Barium (Ba)	0.00005	0.00614	0.00568	7.78
Sheardown Lake NW	DD-HAB9-STN1-S	05/05/2014	Magnesium (Mg)	0.1	9.4	8.91	5.35
Sheardown Lake NW	DD-HAB9-STN1-S	05/05/2014	Potassium (K)	0.05	1.09	1.02	6.64
Sheardown Lake NW	DD-HAB9-STN1-S	05/05/2014	Silicon (Si)	0.05	0.8	0.76	5.13
Sheardown Lake NW	DL0-01-1-D	05/05/2014	Copper (Cu)	0.0002	0.0011	0.00088	22.22
Sheardown Lake NW	DL0-01-1-S	05/05/2014	Lithium (Li)	0.0005	0.0007	0.00065	7.41
Sheardown Lake NW	DL0-01-2-D	04/05/2014	Lithium (Li)	0.0005	0.00101	0.0009	11.52
Sheardown Lake NW	DL0-01-2-S	04/05/2014	Lithium (Li)	0.0005	0.00101	0.00078	25.70
Sheardown Lake NW	DL0-01-2-S	04/05/2014	Potassium (K)	0.05	1.12	1.06	5.50
Sheardown Lake NW	DL0-01-4-S	04/05/2014	Lithium (Li)	0.0005	0.00095	0.00074	24.85
Sheardown Lake NW	DL0-01-7-D	04/05/2014	Lithium (Li)	0.0005	0.00091	0.00082	10.40
Sheardown Lake NW	DL0-01-7-D	04/05/2014	Potassium (K)	0.05	1.07	1.01	5.77
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Barium (Ba)	0.00005	0.00637	0.00598	6.32
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Lead (Pb)	0.00005	0.00863	0.00006	**197.24**
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Lithium (Li)	0.0005	0.00097	0.00075	25.58
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Magnesium (Mg)	0.1	9.54	9.06	5.16
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Potassium (K)	0.05	1.12	1.05	6.45
Sheardown Lake NW	DL0-01-7-S	04/05/2014	Silicon (Si)	0.05	0.79	0.74	6.54
Sheardown Lake NW	DD-HAB9-STN1-D	25/07/2014	Molybdenum (Mo)	0.00005	0.00056	0.00029	**63.53**
Sheardown Lake NW	DD-HAB9-STN1-D	25/07/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DD-HAB9-STN1-S(Dup)	25/07/2014	Molybdenum (Mo)	0.00005	0.00066	0.00025	**90.11**
Sheardown Lake NW	DD-HAB9-STN1-S(Dup)	25/07/2014	Uranium (U)	0.00001	0.00081	0.00068	17.45
Sheardown Lake NW	DD-HAB9-STN1-S	25/07/2014	Molybdenum (Mo)	0.00005	0.00076	0.00026	**98.04**
Sheardown Lake NW	DD-HAB9-STN1-S	25/07/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DL0-01-1-D	25/07/2014	Strontium (Sr)	0.0001	0.0069	0.0064	7.52
Sheardown Lake NW	DL0-01-1-S	25/07/2014	Strontium (Sr)	0.0001	0.0069	0.0065	5.97
Sheardown Lake NW	DL0-01-2-D	25/07/2014	Molybdenum (Mo)	0.00005	0.0004	0.00024	**50.00**
Sheardown Lake NW	DL0-01-2-S	25/07/2014	Molybdenum (Mo)	0.00005	0.00039	0.00027	**36.36**
Sheardown Lake NW	DL0-01-2-S	25/07/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DL0-01-4-D	25/07/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DL0-01-4-D	25/07/2014	Strontium (Sr)	0.0001	0.0072	0.0064	11.76
Sheardown Lake NW	DL0-01-4-S	25/07/2014	Molybdenum (Mo)	0.00005	0.00044	0.00031	**34.67**
Sheardown Lake NW	DL0-01-5-D	25/07/2014	Strontium (Sr)	0.0001	0.007	0.0065	7.41
Sheardown Lake NW	DL0-01-5-S	25/07/2014	Strontium (Sr)	0.0001	0.007	0.0065	7.41
Sheardown Lake NW	DL0-01-7-D	25/07/2014	Molybdenum (Mo)	0.00005	0.00042	0.0003	**33.33**
Sheardown Lake NW	DL0-01-7-S	25/07/2014	Molybdenum (Mo)	0.00005	0.00045	0.00028	**46.58**
Sheardown Lake NW	DL0-01-7-S	25/07/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DL0-01-7-S	25/07/2014	Strontium (Sr)	0.0001	0.0079	0.007	12.08
Sheardown Lake NW	DL0-01-1-S	25/08/2014	Silicon (Si)	0.1	0.7	0.6	15.38

Knight Piésold CONSULTING

TABLE C2.2

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC LAKE SAMPLES METALS SUMMARY

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Lake Name	Station ID	Sample Date	Analyte	MDL	Dissolved	Total	Percent Difference
Sheardown Lake NW	DL0-01-2-D	25/08/2014	Silicon (Si)	0.1	0.7	0.6	15.38
Sheardown Lake NW	DL0-01-2-D	25/08/2014	Sodium (Na)	0.05	0.9	0.84	6.90
Sheardown Lake NW	DL0-01-4-D	25/08/2014	Sodium (Na)	0.05	0.9	0.84	6.90
Sheardown Lake NW	DL0-01-4-S	25/08/2014	Molybdenum (Mo)	0.00005	0.00071	0.00065	8.82
Sheardown Lake NW	DL0-01-5-D	24/08/2014	Strontium (Sr)	0.0001	0.008	0.0076	5.13
Sheardown Lake NW	DL0-01-5-S	24/08/2014	Barium (Ba)	0.00005	0.00497	0.00472	5.16
Sheardown Lake NW	DL0-01-5-S	24/08/2014	Strontium (Sr)	0.0001	0.008	0.0076	5.13
Sheardown Lake SE	DL0-02-3-D	04/05/2014	Lithium (Li)	0.0005	0.00093	0.00086	7.82
Sheardown Lake SE	DL0-02-3-D	04/05/2014	Potassium (K)	0.05	1	0.948	5.34
Sheardown Lake SE	DL0-02-3-D	04/05/2014	Zinc (Zn)	0.00033	0.0035	<0.003	15.38
Sheardown Lake SE	DL0-02-3-S	04/05/2014	Lithium (Li)	0.0005	0.00092	0.00081	12.72
Sheardown Lake SE	DL0-02-4-D	03/05/2014	Lithium (Li)	0.0005	0.00082	0.00071	14.38
Sheardown Lake SE	DL0-02-6-D	04/05/2014	Potassium (K)	0.05	1.04	0.968	7.17
Sheardown Lake SE	DL0-02-6-D	04/05/2014	Sodium (Na)	0.0012	1.4	1.32	5.88
Sheardown Lake SE	DL0-02-6-S	04/05/2014	Lithium (Li)	0.0005	0.00093	0.00078	17.54
Sheardown Lake SE	DL0-02-7-D	04/05/2014	Potassium (K)	0.05	1.08	1	7.69
Sheardown Lake SE	DL0-02-7-S	04/05/2014	Lithium (Li)	0.0005	0.00101	0.00079	24.44
Sheardown Lake SE	DL0-02-7-S	04/05/2014	Potassium (K)	0.05	1.08	1	7.69
Sheardown Lake SE	DL0-02-7-S	04/05/2014	Sodium (Na)	0.0012	1.47	1.39	5.59
Sheardown Lake SE	DL0-02-8-S	03/05/2014	Barium (Ba)	0.00005	0.00751	0.00611	20.56
Sheardown Lake SE	DL0-02-8-S	03/05/2014	Potassium (K)	0.05	1.27	0.977	26.08
Sheardown Lake SE	DL0-02-8-S	03/05/2014	Sodium (Na)	0.0012	1.69	1.39	19.48
Sheardown Lake SE	DL0-02-4-D	24/07/2014	Molybdenum (Mo)	0.00005	0.00047	0.00013	**113.33**
Sheardown Lake SE	DL0-02-4-S	24/07/2014	Molybdenum (Mo)	0.00005	0.00062	0.00015	**122.08**
Sheardown Lake SE	DL0-02-6-D	24/07/2014	Molybdenum (Mo)	0.00005	0.00025	0.0002	22.22
Sheardown Lake SE	DL0-02-7-S	24/07/2014	Molybdenum (Mo)	0.00005	0.00026	0.00018	**36.36**
Sheardown Lake SE	DL0-02-8-D	24/07/2014	Molybdenum (Mo)	0.00005	0.00028	0.00016	**54.55**
Sheardown Lake SE	DL0-02-8-S	24/07/2014	Molybdenum (Mo)	0.00005	0.0003	0.00013	**79.07**
Sheardown Lake SE	DL0-02-3-D	24/08/2014	Molybdenum (Mo)	0.00005	0.00042	0.00037	12.66
Sheardown Lake SE	DL0-02-3-S	24/08/2014	Molybdenum (Mo)	0.00005	0.00045	0.00039	14.29
Sheardown Lake SE	DL0-02-6-D(Dup)	24/08/2014	Molybdenum (Mo)	0.00005	0.0004	0.00038	5.13
Sheardown Lake SE	DL0-02-6-D(Dup)	24/08/2014	Strontium (Sr)	0.0001	0.0077	0.0072	6.71
Sheardown Lake SE	DL0-02-6-D	24/08/2014	Molybdenum (Mo)	0.00005	0.00042	0.00038	10.00
Sheardown Lake SE	DL0-02-6-S(Dup)	24/08/2014	Molybdenum (Mo)	0.00005	0.0004	0.00036	10.53
Sheardown Lake SE	DL0-02-6-S(Dup)	24/08/2014	Strontium (Sr)	0.0001	0.0076	0.0071	6.80
Sheardown Lake SE	DL0-02-7-D	24/08/2014	Molybdenum (Mo)	0.00005	0.00042	0.00036	15.38
Sheardown Lake SE	DL0-02-7-D	24/08/2014	Sodium (Na)	0.05	0.74	0.69	6.99
Sheardown Lake SE	DL0-02-7-S	24/08/2014	Molybdenum (Mo)	0.00005	0.00042	0.00031	**30.14**
Sheardown Lake SE	DL0-02-8-D	24/08/2014	Molybdenum (Mo)	0.00005	0.00045	0.00042	6.90
Sheardown Lake SE	DL0-02-8-S	24/08/2014	Molybdenum (Mo)	0.00005	0.00049	0.00046	6.32

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NOTES:

1. UNITS ARE mg/L.
2. BOLD SHADED VALUES INDICATE PERCENT DIFFERENCE GREATER THAN 30%.

REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT NB102-181/34-6	DKK	RAC

APPENDIX C3

2014 SEDIMENT QUALITY QA/QC RESULTS

(Page C3-1)

Knight Piésold CONSULTING

TABLE C3.1

BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

2014 WATER AND SEDIMENT CREMP MONITORING REPORT
2014 QA/QC DUPLICATE SEDIMENT SAMPLE SUMMARY

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	Station ID	BL0-03	Duplicate	RPD	DL0-01-9	Duplicate	RPD	JL0-17	Duplicate	RPD
	Date Sampled	August-23-14	August-23-14	(%)	August-24-14	August-24-14	(%)	July-22-14	July-22-14	(%)
ANALYTE	**MDL**									
Moisture and Nutrients										
Moisture (%)	0.1	33.1	31.5	4.95	84.6	84	0.71	45.3	51.3	12.42
TKN	0.01	0.07	0.04	**54.55**	0.56	0.51	9.35	0.1	0.1	0.00
TOC	0.01	0.4	0.33	19.18	4.78	5.21	8.61	0.94	0.94	0.00
NO2	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
NO3	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
NO2+NO3	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
Metals										
Mercury	0.1	<0.1	<0.1	0.00	<0.1	<0.1	0.00	<0.1	<0.1	0.00
Silver	0.2	6	6	0.00	10	10	0.00	9	8	11.76
Aluminum	5	28	29	3.51	55	55	0.00	38	36	5.41
Arsenic	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
Boron	0.5	<0.5	<0.5	0.00	1.2	1.3	8.00	<0.5	<0.5	0.00
Barium	1	10	9	10.53	18	18	0.00	13	13	0.00
Beryllium	1	<0.5	<0.5	0.00	<0.5	<0.5	0.00	<0.5	<0.5	0.00
Calcium	100	<100	<100	0.00	200	300	40.00	200	200	0.00
Cadmium	0.5	33	34	2.99	81	77	5.06	49	45	8.51
Cobalt	1	7	7	0.00	13	13	0.00	13	13	0.00
Chromium	1	20200	19700	2.51	41500	42300	1.91	23400	22300	4.81
Copper	1	8580	8480	1.17	16000	16600	3.68	9820	9150	7.06
Iron	5	1	1	0.00	3	3	0.00	4	4	0.00
Potassium	100	2400	2200	8.70	4400	4600	4.44	2700	2600	3.77
Magnesium	100	6000	5700	5.13	11100	11100	0.00	8000	7800	2.53
Manganese	1	839	859	2.36	302	306	1.32	1150	1180	2.58
Molybdenum	1	<0.2	<0.2	0.00	0.2	0.2	0.00	<0.2	<0.2	0.00
Sodium	100	1900	1800	5.41	5300	4800	9.90	3000	3100	3.28
Nickel	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
Lead	1	42	41	2.41	88	91	3.35	61	62	1.63
Antimony	1	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
Selinium	1	25	25	0.00	81	81	0.00	49	49	0.00
Strontium	1	40	39	2.53	80	80	0.00	62	50	**21.43**
Thallium	1	<1	<1	0.00	4	5	**22.22**	1	1	0.00
Vanadium	2	<1	<1	0.00	<1	<1	0.00	<1	<1	0.00
Zinc	2	15	15	0.00	60	61	1.65	29	29	0.00
Particle Size Distribution										
Sand (%)	1	4	6	**40.00**	22	27	**20.41**	31	29	6.67
Silt (%)	1	8	8	0.00	30	36	18.18	8	6	**28.57**
Clay (%)	1	88	86	2.30	48	37	**25.88**	61	65	6.35

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NOTES:

1. UNITS ARE µg/g UNLESS OTHERWISE NOTED.
2. BOLD SHADED VALUES INDICATE PERCENT DIFFERENCE GREATER THAN 20% AND WERE AT LEAST ONE CONCENTRATION IS >5X METHOD DETECTION LIMIT (MDL).

REV	DATE	DESCRIPTION	PREP'D	REV'D
0	19MAR'15	ISSUED WITH REPORT NB102-181/34-6	DKK	RAC