

**MELIADINE
GOLD
PROJECT**



2011 Annual Report

Water Licence 2BB-MEL0914

**Prepared for the Nunavut Water Board
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Part B clause 7: The Licensee shall file an annual report on the appurtenant undertaking with the Board no later than March 31st of the year being reported which shall contain, but not limited to, the following information;

- a) monthly and annual quantities in cubic metres of all freshwater obtained from Pump lakes at monitoring stations MEL-1 and MEL-2;

	Domestic water; Meliadine Lake (m3/day)	Water for drilling use average (m3/day)	Total m3/day)	Total m3
Jan-11	3	0	3	93
Feb-11	9	33	41	633
Mar-11	13	97	110	3405
Apr-11	15	156	171	5128
May-11	22	206	227	7043
Jun-11	26	199	225	6271
Jul-11	20	222	242	7166
Aug-11	24	258	283	8764
Sep-11	25	240	265	7998
Oct-11	21	188	209	3670
Nov-11	20	0	20	610
Dec-11	3	0	3	85
			TOTAL	50865

- b) the monthly and annual quantities in cubic metres of Minewater pumped from the underground;

The water used underground was in recirculation. There was no reject in the environment and no quantity monitoring.

- c) an estimate of the current volume of waste rock and ore stockpiled on site;

No waste rock is stockpiled on site. A stockpile of approximately 33 683 tons of ore is on site.

- d) tabular summaries of all data generated under the monitoring program, part J;

Please see Appendix A for data tables of the 2011 monitoring. The location of sampling stations is shown on figure 1 in appendix A.

- e) a summary of modification and/or major maintenance work carried out on the water supply facilities, Bulk Fuel Storage Facility, Bermed fuel containment facilities and sewage disposal facility, including all associated structures, an outline of any work anticipated for the next year;

➤ Water supply facility

- ✓ *A new water supply/treatment facility was installed to serve the new dorms.*

➤ Fuel storage Facility

- ✓ *A lined bermed area was constructed in 2011. Having space for 10 – 113 000 litres fuel bladders.*

➤ Sewage disposal facility

- ✓ *During 2011, a new grease trap was installed for the kitchen to increase the grease collecting.*
- ✓ *For 2012, a second Biodisk will be installed to upgrade the capacity and the quality treatment.*

- f) a list of unauthorized discharges and follow-up action taken;

There were no unauthorized discharges in 2011.

- g) updates or revisions to the abandonment and restoration plan, site water management plan, waste rock and ore storage management plan, spill contingency plan and the operations and maintenance manual;

Agnico-Eagle is working on the update of all the plans. Updated versions will be available in 2012.

- h) an updated estimate of the current Meliadine Lake Gold Project restoration liability, as required under Part B, Item 3, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan;

No update.

- i) a brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector;

See Appendix B for the complete report.

The July 7th, 2011 INAC's inspector did an inspection of the Meliadine Site. Some situations were judged unacceptable by the inspector. Here are the Non-compliance of Act or licence noted with the correctives actions taken:

- *Minor hydrocarbon spills should be cleaned up as soon as possible and a general clean-up is required at various locations around the site. The drillers shack and storage area in particular need to be cleaned up and fuels, oils, and batteries must be properly contained.*
 - ✓ *Many efforts were done in 2011 to have a clean work site. All employees and contractors were conscientized to the environment importance.*
- *All fuel, oils and chemicals should be properly stored in secondary containment.*
 - ✓ *This problematic is corrected. Also, during 2011 Qikiqtaaluk Environmental Inc. came twice on Meliadine site to package correctly all hazardous material waste. The hazardous material waste will be sent to southern facility to be correctly treated.*
- *The grey water should be redirected to the biodisk unit and the grey water discharge area (sump) must be reclaimed by treating and backfilling.*
 - ✓ *In 2012, Agnico-Eagle will install a second biodisk and the greywater will be directed to the Sewage Disposal Facility.*

- j) a summary of drilling activities and progressive reclamation of drill sites;

	Number of drill holes	Metres drilled
Bulk sample	18	2680
Condemnation	72	14951
Geotech	10	3031
Other Explo	49	14379
Tiriganiaq	94	35523
Wesmeg	131	33939
Total	374	104503

Anecdotal observations of progressive reclamation at drill holes shows vegetation establishing itself over time. It is not new vegetation but earlier vegetation re-emerging. When drill cuttings are concentrated it takes longer than when the cuttings are more diffuse. This is understandable as concentrated drill cuttings may smother or inhibit the re-emergence of plants while diffuse cuttings do not.

- k) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

There were no reclamation activities related to licence 2BB-MEL0914 for 2011.

- l) a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;

No request received in 2011.

- m) a public consultation/participation report describing consultation with local organizations and residents of the nearby communities, if any were conducted;

Agnico-Eagle Mines Limited (AEM) had an active public consultation program in 2011. The consultation had several purposes:

- 1. To inform the public of the present advanced exploration program at the Meliadine site;*
- 2. To describe the proposed Meliadine Gold Mine and the opportunities it present to the Kivalliq region;*
- 3. To listen to the members of the Kivalliq communities on their environmental concerns resulting from the development and their expectations in regards to the opening of the Meliadine Gold Mine; and*
- 4. Regulatory consultation in regards to the Phase 1 All Weather Access Road (AWAR) and the forthcoming Environmental Impact Statement.*

Public and regulatory consultations are outlined in the following table.

Date	Organization Consulted and Place	Major Discussion Points
7 Feb 2011	Kivalliq Inuit Association, Rankin Inlet	All Weather Access Road (AWAR) – road route, work plan for the road, quarries on Inuit Owned Land, Water Compensation Agreement.
8 Feb 2011	Community & Government Services, Rankin Inlet	Location of the tank farm for the mine, right-of-way lease for the AWAR on municipal land, HTO Traditional Knowledge of overflow in the spring at Meliadine Bridge location.
3 Mar 2011	HTO, Rankin Inlet	Snow dams in the Char River near the bridge and the impact on the infrastructure, Meliadine spring overflow and back-up of water at breakup, effect of traffic on the bridge on fish movement in the Meliadine River, people are looking for employment with the road.
21 Mar 2011	HTO, Rankin Inlet	Meeting cancelled due to blizzard.
23 Mar 2011	Rankin Inlet Hamlet Council	Update of activities at the Meliadine site, ramp development, employment, training, opportunities for the Inuit and liaison committee. Time line for AWAR, width of road corridor (80 m), open access, clear span bridges, mitigation of dust, boat launch to Meliadine Lake and employment opportunities in building the AWAR.
6 Apr 2011	Aboriginal Affairs and Northern Development Canada, Iqaluit	Technical discussion on the RECLAIM model discussion and unit costs.
7 Apr 2011	Regulatory Agencies, Iqaluit	Update on the Meliadine Gold Project.
6 May 2011	Geovector, consultant to KIA (Conference call)	AWAR – quarry locations and need to check for ground ice, geochemistry of the waste rock and potential quarries, snow drifting along road, design of culverts, lessons learned from Meadowbank.
8 Jun 2011	Aboriginal Affairs and Northern Development Canada	Possible predevelopment, need for class A licence, need to submit a land use permit for crown land to be crossed by the AWAR.
13 Jun 2011	Fisheries and Oceans Canada, Edmonton	No Net Loss Plan for the Meliadine Gold Project, risk management. framework used by DFO and its application to lakes / ponds impacted by the Project.
14 Jun 2011	KIA, Mayor of Rankin Inlet	Possible predevelopment, Hamlet motion to approve AWAR, build only 1 lane at this time.
31 Aug 2011	Regulatory agencies, Iqaluit	Information session on mini-EIS for the Phase 1 AWAR.
14 Sep 2011	NIRB, Conference Call	Mini-EIS for the Phase 1 AWAR, Class B water licence for the Phase 1 AWAR, consultation with Lutsel K'e on caribou.
17-20 Oct 2011	Community consultation – Rankin Inlet, Chesterfield Inlet, Arviat, Baker Lake	Pre-EIS consultation with the Hamlet council and general public in each community on the Meliadine Gold Project, the impacts and opportunities arising from the development.
28 Oct 2011	NIRB, Conference Call	Information requested on the scoping sessions being planned by the NIRB.
31 Oct 2011	HTO, Rankin Inlet	Skidoo trail to sea ice at Itivia, Phase 1 AWAR, establishment of a community liaison committee in Rankin Inlet.
1-2 Nov 2011	Community consultation – Repulse Bay, Coral Harbour	Pre-EIS consultation with the Hamlet council and general public in each community on the Meliadine Gold Project, the impacts and opportunities arising from the development.
4 Nov 2011	NIRB & NWB, Conference Call	Phase 1 AWAR – next steps, information requests, amendment application to date with the NWB.
17-18 Nov 2011	Fisheries and Oceans Canada, Toronto	No Net Loss Plan for Meliadine Gold Project, methods used in calculating the loss of habitat.
15 Dec 2011	Transport Canada, Edmonton	Navigable Waters Protection permit for the Meliadine bridge, information session on the Meliadine Gold Project.

- n) any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.

No details were requested by the Board.

Part F clause 3:

Drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the annual report, including the location (GPS coordinates) and dates.

No drill holes had artesian flow. Some drill holes penetrated the permafrost layer, which on occasion resulted in flow part way up the drill stem but not to surface.

Part F, clause 4:

Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole to be included within the annual report.

The lower permafrost boundary varies from point-to-point. AEM's estimate for this boundary is from approximately 425 to 450 metres. The only way we are sure a hole penetrates the permafrost boundary is when the presence of water is detected.

Drill holes passing through the permafrost boundary are in the table below. These are angled drill holes exceeding 600 metres in length.

HOLE ID	LENGHT	NORTHING	EASTING	DATE ENDED
M11-1018A	709	6988878.56	538503.8	2011-04-10
M11-1049A	757	6988899.08	538369.9	2011-08-14
M11-1159	617	6988977.69	537600.2	2011-06-25
M11-1257	663	6988978.19	537630.1	2011-08-27
M11-1258	645	6989486.8	535300.2	2011-08-24
M11-1289	650.6	6988850.24	539506.4	2011-10-09
M11-1295	621	6989517.03	535244	2011-09-11
M11-1301	646	6988820.19	538500	2011-09-20
M11-1307	747	6988850.39	539506.5	2011-09-25

Part H, clause 3:

The licensee shall review the (Spill Contingency) plan referred to in this part as required by changes in operation and/or technology and modify the plan accordingly. Further revisions to the plan are to be submitted in the form of an addendum to be included with the annual report, unless otherwise by an inspector.

The spill management plan was updated November 2010 and forward to the NWB. An updated version will be available during 2012, Agnico-Eagle is working on that.

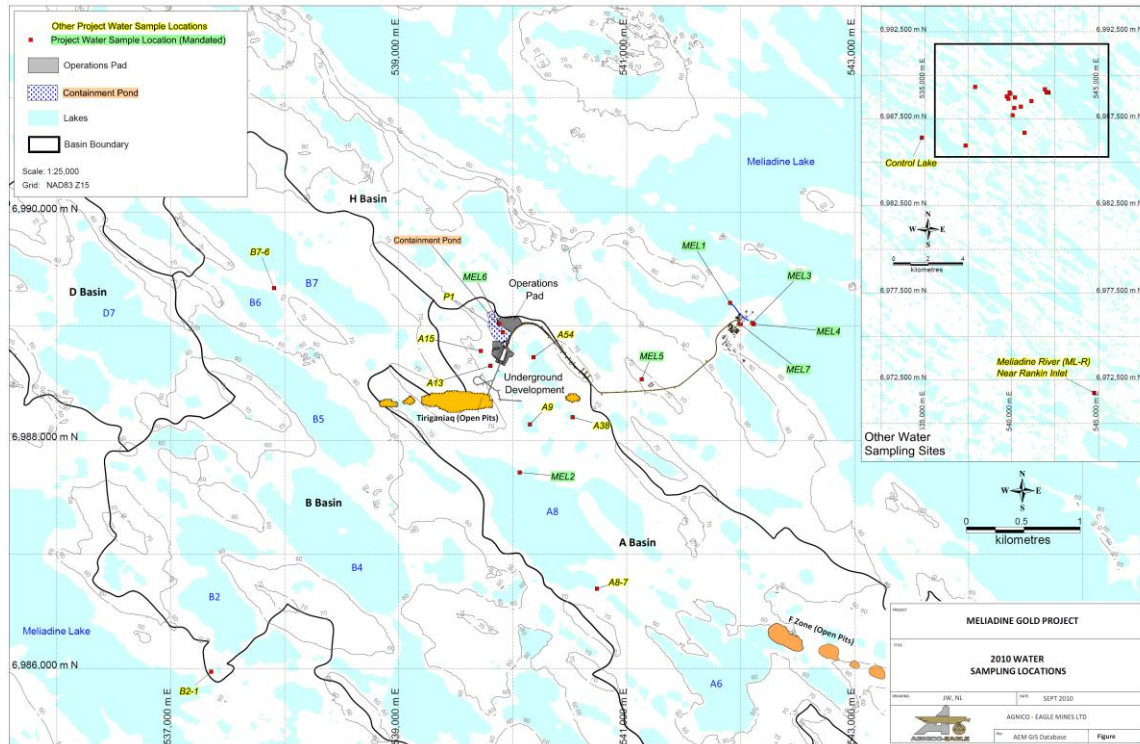
Part I, clause 4:

The licensee shall review the (Abandonment and restoration) plan referred to in this part as required by changes in operation and/or technology and modify the plan accordingly. Revision to the plans are to be submitted in the form of an addendum to be included with the annual report.

The Abandonment and restoration plan was updated November 2010 and forwarded to the NWB. An updated version will be available during 2012, Agnico-Eagle is working on that.

Appendix A

Figure 1. water sampling locations
and
Water quality data tables



Waterbody	Units	CCME	2010				A8-7		2011		
Year											
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/23	2011/07/12	2011/08/28	2011/09/11	2011/10/09
GPS Coordinates			540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690
Source							ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments											
Water Temperature	oC		3	19.3	11.1	6.5			13.7	4.63	1.2
pH	pH units		7.5	8.1	7.33	7.76			7.24	7.21	7.17
Conductivity	(µS/cm)		-	-	-	-			0	165	188
Laboratory-Measured											
Ion balance	%		Low EC	-	-	-	-	-	101	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	1	-	-	-
Ammonia as N	mg/L	2.33	<0.050	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	<0.010	0.012	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.35	-	<1	<1	-	-	0.38	0.5	0.4
Total Suspended Solids	mg/L		-	6	2	2	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		14.9	42	42	46	30.3	32.7	36.6	37.6	37.5
Bicarbonate (HCO3)	mg/L		18.1	42	42	46	37	39.8	44.7	45.9	45.8
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.40	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.60	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		9.78	-	-	-	-	-	24.6	23.5	26.3
Magnesium (Mg)-Dissolved	mg/L		1.31	-	-	-	-	-	3.02	3.01	3.34
Potassium (K)-Dissolved	mg/L		0.63	-	-	-	-	-	1.41	1.28	1.54
Sodium (Na)-Dissolved	mg/L		1.9	-	-	-	-	-	4.95	4.35	5.37
Chloride	mg/L		13.2	31.9	-	33.6	8.95	28.8	32.1	30.9	31.9
Conductivity	umhos/cm		81.1	249	303	177	93.6	159	176	175	178
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	0.1	<0.10	<0.10
Hardness (as CaCO3)	mg/L		29.8	79	64	79	30.6	64.9	68.8	79.6	75.8
Nitrate-N	mg/L	13	<0.050	0.02	0.02	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		1.36	7	-	4	2.07	3.15	3.48	4.27	4.88
TDS (Calculated)	mg/L		37.1	166	202	118	46.5	81	91.6	94.3	93.6
Aluminum (Al)-Total	mg/L	0.1	<0.010	0.529*	0.021	0.04	0.0066	<0.0050	0.021	<0.020	<0.020
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	0.00108	0.0029	0.0022	<0.0005	0.00046	0.00235	0.0028	0.0026	0.0016
Barium (Ba)-Total	mg/L		0.0125	0.0197	0.016	0.0164	0.0117	0.0199	0.019	0.0207	0.0172
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00015*	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		10.8	25.3	21.3	25.3	10.3	21.7	22.8	26.1	25.1
Cesium (Cs)-Total	mg/L		-	-	-	0.0068	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	<0.0010	0.0011	0.0009	0.001	0.00074	0.00065	<0.0020	<0.0020	<0.0020
Iron (Fe)-Total	mg/L	0.3	0.078	<0.01	<0.01	0.18	<0.10	0.12	0.11	0.17	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	<0.0003	<0.0003	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	<0.0020	0.0051	0.012	0.0125	0.0077
Magnesium (Mg)-Total	mg/L		1.42	3.9	2.7	4	1.2	2.63	2.87	3.53	3.2
Manganese (Mn)-Total	mg/L		0.0292	0.0199	0.0056	0.0098	0.0145	0.0191	0.0164	0.0223	0.0089
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	<0.0020	0.0012	0.0015	0.0038	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		0.71	0.89	0.84	2.1	1.08	1.14	1.25	1.52	1.31
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00115	0.00124	0.00149	0.00159	0.00134
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	0.143	0.512	0.57	0.74	0.91
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		2.3	6.3	3.9	5.7	4.76	4.09	4.59	5.43	4.71
Strontium (Sr)-Total	mg/L		-	0.15	0.14	0.15	0.0321	0.14	0.147	0.155	0.14
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	0.02	<0.01	<0.01	0.00022	<0.00020	<0.0010	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	<0.001	0.009	<0.0050	<0.0050	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010
Ortho-Phospahte (O-PO4)	mg/L		-	-	0.05	<0.01	-	-	-	-	-
Ortho-Phospahte (PO4)	mg/L		<0.010	-	-	-	-	-	-	-	-
Turbidity	NTU		-	0.74	0.43	0.34	0.68	0.81	0.54	1.32	0.57
pH	pH units	6.5-9.0	7.4	7.17	7.78	7.53	7.73	7.88	7.95	7.83	7.81

Waterbody	Units	CCME	A8			
Year			2010		2011	
Date Sampled			2010-08-xx	23/09/2010	2011/07/12	22/07/2011
GPS Coordinates			-	-		
Source					ALS LAB	ALS LAB
Field Measurments						
Water Temperature	oC		-	6.7		20.4
pH	pH units		-	7.67		8.24
Conductivity	(µS/cm)		-	-		-
Laboratory-Measured						
Ion balance	%		-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	1.5	-
Ammonia as N	mg/L	2.33	-	<0.05	<0.050	<0.05
Mercury (Hg)-Total	mg/L	0.000026	-	<0.00001	<0.000050	<0.00001
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	0.01	-
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-
Total Kjeldahl Nitrogen	mg/L		-	2	-	-
Total Suspended Solids	mg/L		-	1	<5.0	5
Alkalinity, Total (as CaCO3)	mg/L		-	43	32.6	42
Bicarbonate (HCO3)	mg/L		-	43	39.8	42
Carbonate (CO3)	mg/L		-	<2	<0.60	-
Hydroxide (OH)	mg/L		-	<2	<0.40	<2
Calcium (Ca)-Dissolved	mg/L		-	-	-	-
Magnesium (Mg)-Dissolved	mg/L		-	-	-	-
Potassium (K)-Dissolved	mg/L		-	-	-	-
Sodium (Na)-Dissolved	mg/L		-	-	-	-
Chloride	mg/L		-	33.8	29.3	30.6
Conductivity	umhos/cm		-	195	160	248
Fluoride	mg/L	0.12	-	-	<0.10	-
Hardness (as CaCO3)	mg/L		-	78	64.4	76
Nitrate-N	mg/L	13	-	0.14	<0.050	0.01
Nitrate and Nitrite as N	mg/L		-	-	<0.071	-
Nitrite-N	mg/L	0.197	-	<0.01	<0.050	<0.01
Sulfate	mg/L		-	3	3.3	8
TDS (Calculated)	mg/L		-	130	81.5	165
Aluminum (Al)-Total	mg/L	0.1	-	0.002	<0.0050	<0.002
Antimony (Sb)-Total	mg/L		-	<0.0001	<0.00020	<0.0001
Arsenic (As)-Total	mg/L	0.005	-	0.0049	0.0019	0.0029
Barium (Ba)-Total	mg/L		-	0.016	0.0203	0.0184
Beryllium (Be)-Total	mg/L		-	0.0006	<0.00020	<0.0005
Bismuth (Bi)-Total	mg/L		-	-	<0.00020	-
Boron (B)-Total	mg/L	1.5	-	<0.01	<0.010	<0.01
Cadmium (Cd)-Total	mg/L	Equation	-	0.00014*	<0.000010	<0.00008
Calcium (Ca)-Total	mg/L		-	25.2	21.4	24.2
Cesium (Cs)-Total	mg/L		-	-	<0.00010	-
Chromium (Cr)-Total	mg/L		-	0.0053*	<0.0010	<0.0006
Cobalt (Co)-Total	mg/L		-	-	<0.00020	-
Copper (Cu)-Total	mg/L	Equation	-	0.0008	0.0006	0.0006
Iron (Fe)-Total	mg/L	0.3	-	0.18	0.11	<0.01
Lead (Pb)-Total	mg/L	Equation	-	0.0027	<0.000090	0.0197
Lithium (Li)-Total	mg/L		-	<0.1	0.006	<0.1
Magnesium (Mg)-Total	mg/L		-	3.8	2.68	3.9
Manganese (Mn)-Total	mg/L		-	0.0106	0.0151	0.0157
Molybdenum (Mo)-Total	mg/L	0.073	-	<0.0005	<0.00020	<0.0005
Nickel (Ni)-Total	mg/L	Equation	-	0.0035	<0.0020	0.0012
Phosphorus (P)-Total	mg/L		-	-	<0.20	-
Potassium (K)-Total	mg/L		-	2.2	1.16	0.89
Rubidium (Rb)-Total	mg/L		-		0.0013	-
Selenium (Se)-Total	mg/L	0.001	-	<0.001	<0.0010	<0.001
Silicon (Si)-Total	mg/L		-	-	0.358	-
Silver (Ag)-Total	mg/L	0.0001	-	<0.0005	<0.00010	<0.0005
Sodium (Na)-Total	mg/L		-	5.5	4.1	5.9
Strontium (Sr)-Total	mg/L		-	0.15	0.149	0.14
Tellurium (Te)-Total	mg/L		-	-	<0.00020	-
Thallium (Tl)-Total	mg/L	0.0008	-	-	<0.00010	-
Thorium (Th)-Total	mg/L		-	-	<0.00010	-
Tin (Sn)-Total	mg/L		-	<0.001	<0.00020	<0.001
Titanium (Ti)-Total	mg/L		-	<0.01	<0.00020	0.01
Tungsten (W)-Total	mg/L		-	-	<0.0010	-
Uranium (U)-Total	mg/L	0.015	-	<0.001	<0.00010	<0.001
Vanadium (V)-Total	mg/L		-	<0.0005	<0.00020	<0.0005
Zinc (Zn)-Total	mg/L	0.03	-	0.006	<0.0050	<0.001
Zirconium (Zr)-Total	mg/L		-	-	<0.00040	-
Ortho-Phosphate (O-PO4)	mg/L			<0.01	-	0.02
Turbidity	NTU		-	0.36	0.57	0.7
pH	pH units	6.5-9.0	-	7.42	7.87	7.04

Waterbody	Units	CCME	A9					
Year			2010				2011	
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12
GPS Coordinates			540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments								
Water Temperature	oC		12.1	19.5	-	4.2		
pH	pH units		8	8.39	7.66	7.68		
Conductivity	(µS/cm)		-	-	-	-		
Laboratory-Measured								
Ion balance	%		90.9	-	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	2.5
Ammonia as N	mg/L	2.33	<0.050	0.05	0.09	<0.05	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.01	0.019
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-
Total Kjeldahl Nitrogen	mg/L		0.84	-	1	<1	-	-
Total Suspended Solids	mg/L		-	4	12	3	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		34.6	58	65	83	35.9	61.7
Bicarbonate (HCO3)	mg/L		42.2	58	<2	83	43.8	75.2
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	-	<2	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		59.8	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L		6.2	-	-	-	-	-
Potassium (K)-Dissolved	mg/L		2.64	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L		7.9	-	-	-	-	-
Chloride	mg/L		123	193	-	175	52.3	113
Conductivity	umhos/cm		502	852	857	600	251	501
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10
Hardness (as CaCO3)	mg/L		175	299	212	303	109	213
Nitrate-N	mg/L	13	<0.050	0.02	0.09	0.15	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050
Sulfate	mg/L		6.6	14	-	10	5.89	15.8
TDS (Calculated)	mg/L		227	568	-	400	128	259
Aluminum (Al)-Total	mg/L	0.1	<0.010	<0.002	0.024	<0.002	0.0294	0.0059
Antimony (Sb)-Total	mg/L		0.00058	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.00203	0.0041	0.0038	0.0079*	0.00242	0.00405
Barium (Ba)-Total	mg/L		0.0709	0.0785	0.0776	0.0783	0.0431	0.0706
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00033*	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		66.9	97.6	72.6	99.3	36.8	71.8
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0071*	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.0012	0.0023	0.0025	0.002	0.00127	0.00234
Iron (Fe)-Total	mg/L	0.3	0.144	<0.01	0.08	0.89*	0.37	0.23
Lead (Pb)-Total	mg/L	Equation	<0.00010	0.016	-	<0.0003	0.000103	<0.000090
Lithium (Li)-Total	mg/L		0.03	<0.1	<0.1	<0.1	0.0111	0.0203
Magnesium (Mg)-Total	mg/L		6.75	13.4	7.5	13.5	4.28	8.28
Manganese (Mn)-Total	mg/L		0.0039	0.0069	0.0219	0.0076	0.0219	0.0153
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	0.0002	0.00038
Nickel (Ni)-Total	mg/L	Equation	0.0029	0.0075	0.0069	0.0129	0.0026	0.0028
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20
Potassium (K)-Total	mg/L		2.94	2.8	-	5.1	1.67	2.7
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00167	0.00291
Selenium (Se)-Total	mg/L	0.001	<0.00040	0.001	-	0.006	<0.0010	0.0014
Silicon (Si)-Total	mg/L		-	-	-	-	1.14	0.541
Silver (Ag)-Total	mg/L	0.0001	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		9.1	20.6	-	16	5.12	9.79
Strontium (Sr)-Total	mg/L		-	0.64	-	0.82	0.267	0.542
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0010	0.06	0.03	0.04	0.00116	0.00045
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	0.002	<0.0005	<0.00020	0.00022
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.013	0.01	<0.0050	<0.0050
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.003	?	<0.01	-	-
Turbidity	NTU		-	0.92	2.1	0.73	0.71	1.53
pH	pH units	6.5-9.0	7.79	7.73	?	7.9	7.63	8.1

Waterbody	Units	CCME	2010				A13				2011			
Year			2010				2011				2011			
Date Sampled			20/06/2010	22/10/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12	2011/08/29	2011/09/11	2011/10/09			
GPS Coordinates			539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments														
Water Temperature	oC		13.4	19.2	9	4.2				7.8	5.12		0.3	
pH	pH units		7.7	8.42	7.59	7.69				8.28	7.3		7.2	
Conductivity	(µS/cm)		-	-	-	-				-	1576		1489	
Laboratory-Measured														
Ion balance	%		91.2	-	-	-	-	-	-	92.6	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	2.3	-	-	-	-	-	-
Ammonia as N	mg/L	2.33	<0.050	0.05	0.08	<0.05	<0.050	<0.050	<0.050	<0.050	0.123	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.011	0.014	0.011	0.011	0.011	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.7	-	<1	<1	-	-	1.07	0.66	0.38			
Total Suspended Solids	mg/L		-	4	3	<1	-	<5.0	-	-	<5.0			
Alkalinity, Total (as CaCO3)	mg/L		22.6	60	55	55	30.4	42.4	96	25.1	31.7			
Bicarbonate (HCO3)	mg/L		27.6	60	55	55	37.1	51.7	117	30.6	38.7			
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60			
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40			
Calcium (Ca)-Dissolved	mg/L		103	-	-	-	-	-	390	226	179			
Magnesium (Mg)-Dissolved	mg/L		6.57	-	-	-	-	-	46.5	21.8	21.6			
Potassium (K)-Dissolved	mg/L		4.97	-	-	-	-	-	11.1	7.78	4.9			
Sodium (Na)-Dissolved	mg/L		12.9	-	-	-	-	-	36.7	24.6	23.5			
Chloride	mg/L		228	197	-	230	42.2	85	367	511	364			
Conductivity	umhos/cm		835	947	953	676	212	369	2450	1560	1220			
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.50	<0.50	<0.10			
Hardness (as CaCO3)	mg/L		284	321	245	343	76.7	159	1070	712	571			
Nitrate-N	mg/L	13	<0.050	0.02	0.07	0.09	<0.050	<0.050	<0.25	<0.25	<0.050			
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.35	<0.35	<0.071			
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.25	<0.25	<0.050			
Sulfate	mg/L		4.73	14	-	20	5.96	6.13	25.4	63.4	56			
TDS (Calculated)	mg/L		374	-	635	450	101	186	1440	896	681			
Aluminum (Al)-Total	mg/L	0.1	0.048	<0.002	0.004	0.002	0.0216	0.0126	0.021	0.025	<0.020			
Antimony (Sb)-Total	mg/L		<0.0016	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010			
Arsenic (As)-Total	mg/L	0.005	0.032	0.0049	0.0017	<0.0005	0.00164	0.00293	0.0039	0.0027	0.0023			
Barium (Ba)-Total	mg/L		0.0751	0.0838	0.0873	0.0882	0.0297	0.0527	0.321	0.209	0.149			
Beryllium (Be)-Total	mg/L		<0.0040	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010			
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050			
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030			
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020			
Calcium (Ca)-Total	mg/L		107	105	82.8	110	25	53.9	359	240	198			
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050			
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	0.0006	0.0064*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020			
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	0.00086	<0.00050			
Copper (Cu)-Total	mg/L	Equation	<0.0040	0.0025	0.0017	0.0012	0.00124	0.00182	<0.0020	0.0025	<0.0020			
Iron (Fe)-Total	mg/L	0.3	0.507	<0.01	0.57*	1.5*	0.42	0.34	<0.10	0.82	0.48			
Lead (Pb)-Total	mg/L	Equation	0.00051	<0.0003	<0.0003	0.0033	<0.00090	0.00098	<0.0010	<0.0010	<0.0010			
Lithium (Li)-Total	mg/L		0.065	<0.1	<0.1	<0.1	0.0064	0.0136	0.182	0.101	0.0578			
Magnesium (Mg)-Total	mg/L		6.73	14.4	9.2	16.8	3.44	5.96	43.3	27.3	18.7			
Manganese (Mn)-Total	mg/L		0.111	0.0248	0.0217	0.0427	0.019	0.014	0.0123	0.0894	0.078			
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	0.00033	0.00031	<0.00050	<0.00050	<0.00050			
Nickel (Ni)-Total	mg/L	Equation	0.0051	0.0072	0.008	0.0139	0.0024	<0.0020	0.0029	0.0082	<0.0020			
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50			
Potassium (K)-Total	mg/L		5.12	3.7	2.8	5	1.23	1.97	10.4	8.04	5.29			
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00128	0.00188	0.00938	0.00644	0.00379			
Selenium (Se)-Total	mg/L	0.001	0.0052	0.0002	0.003	0.006	<0.0010	0.0011	<0.0050	0.0168	<0.0050			
Silicon (Si)-Total	mg/L		-	-	-	-	0.793	0.509	2.94	3.12	2.32			
Silver (Ag)-Total	mg/L	0.0001	<0.0020	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010			
Sodium (Na)-Total	mg/L		13.2	21.4	10.3	15.6	5.11	7.6	33.3	31	19.6			
Strontium (Sr)-Total	mg/L		-	0.88	-	0.83	0.16	0.353	2.32	1.91	1.12			
Tellurium (Te)-Total	mg/L		-	-	0.71	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010			
Thallium (Tl)-Total	mg/L	0.0008	<0.00040	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050			
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010			
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060			
Titanium (Ti)-Total	mg/L		<0.0024	0.08	0.04	0.05	0.00064	0.00052	0.0017	0.0016	0.0014			
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020			
Uranium (U)-Total	mg/L	0.015	<0.00040	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050			
Vanadium (V)-Total	mg/L		<0.0020	<0.0005	0.0006	<0.0005	<0.00020	0.0002	<0.0020	<0.0020	<0.0020			
Zinc (Zn)-Total	mg/L	0.03	<0.016	<0.001	0.005	0.022	<0.0050	<0.0050	<0.020	<0.020	<0.020			
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010			
Turbidity	NTU		-	1.2	0.4	5	1.56	1.26	3.64	3.05				
pH	pH units	6.5-9.0	7.51	7.52	7.68	7.61	7.82	7.97	7.8	7.54	7.71			
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.08	<0.01		-	-	-	-			
Total Oil and Grease	mg/L		-	-	-	-	<1.0	-	-	-	-			

Waterbody	Units	CCME	A15							
Year			2010				2011			
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12	2011/08/29	2011/09/11
GPS Coordinates			539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments										
Water Temperature	oC		14.2	19.2	8.8	3.4			7.2	3.93
pH	pH units		7.7	8.2	7.55	7.76			8.75	7.07
Conductivity	(µS/cm)		-	-	-	-			0	1302
Laboratory-Measured										
Ion balance	%		103	-	-	-	-	-	97.2	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	1.8	-	-
Ammonia as N	mg/L	2.33	<0.050	0.06	0.05	<0.05	0.056	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	<0.010	0.018	0.012	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.91	-	<1	<1	-	-	1.06	0.42
Total Suspended Solids	mg/L		-	10	10	3		<5.0	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		27.6	65	56	54	23.7	41.5	12.6	26.6
Bicarbonate (HCO3)	mg/L		33.7	65	56	54	28.9	50.6	15.4	32.4
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		71.7	-	-	-	-	-	577	196
Magnesium (Mg)-Dissolved	mg/L		8.73	-	-	-	-	-	48.3	21.1
Potassium (K)-Dissolved	mg/L		3.19	-	-	-	-	-	20.9	6.45
Sodium (Na)-Dissolved	mg/L		9.9	-	-	-	-	-	77.3	22.5
Chloride	mg/L		141	313	-	223	22.9	100	1250	409
Conductivity	umhos/cm		547	1372	961	702	128	416	3230	1310
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.50	<0.50
Hardness (as CaCO3)	mg/L		215	489	248	350	52.7	182	1400	613
Nitrate-N	mg/L	13	<0.050	0.01	0.05	0.02	<0.050	<0.050	<0.25	<0.25
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.35	<0.35
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	0.01	<0.050	<0.050	<0.25	<0.25
Sulfate	mg/L		7.7	9	-	25	1.56	5.84	106	66.2
TDS (Calculated)	mg/L		259	-	641	468	61.4	208	2090	753
Aluminum (Al)-Total	mg/L	0.1	0.015	0.006	0.065	0.008	0.0265	0.0333	0.032	0.028
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	0.00299	0.0054	0.0015	0.0068*	0.00101	0.00305	0.0036	0.0019
Barium (Ba)-Total	mg/L		0.0713	0.1248	0.0892	0.0805	0.0231	0.0548	0.403	0.17
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	0.011	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		74.4	165	84.4	110	17.4	62.5	494	203
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0070*	<0.0010	<0.0010	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	0.00027	<0.00020	<0.00050	0.00061
Copper (Cu)-Total	mg/L	Equation	0.0015	0.0026	0.0015	0.0011	0.00092	0.00178	0.0026	0.0022
Iron (Fe)-Total	mg/L	0.3	0.218	0.18	0.84*	1.8*	0.38	0.44	0.77	0.45
Lead (Pb)-Total	mg/L	Equation	0.00011	<0.0003	0.0036	0.0008	<0.000090	0.000096	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		0.026	<0.1	<0.1	<0.1	0.0034	0.0166	0.258	0.0718
Magnesium (Mg)-Total	mg/L		8.62	18.6	9.1	18.3	2.23	6.29	41.1	25.6
Manganese (Mn)-Total	mg/L		0.0679	0.0043	0.0291	0.0739	0.0596	0.00917	0.0525	0.036
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	0.0005	<0.0005	<0.0005	0.00022	0.00094	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	0.0051	0.0094	0.0071	0.0152	0.0026	0.0022	0.0045	0.0065
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50
Potassium (K)-Total	mg/L		3.26	4.3	2.1	5.1	0.801	1.96	17.4	6.68
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00101	0.00251	0.0167	0.00473
Selenium (Se)-Total	mg/L	0.001	0.00157	0.005	0.002	0.01	<0.0010	0.0017	<0.0050	0.013
Silicon (Si)-Total	mg/L		-	-	-	-	0.945	0.826	0.73	2.87
Silver (Ag)-Total	mg/L	0.0001	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		9.8	22.1	9.6	13.6	2.26	6.48	63.8	26.6
Strontium (Sr)-Total	mg/L		-	1.2	0.69	0.78	0.102	0.444	4.18	1.54
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	0.11	0.04	0.05	0.00065	0.00056	0.0013	0.0015
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		0.0016	<0.0005	<0.0005	<0.0005	<0.00020	0.00021	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.006	0.011	<0.0050	<0.0050	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010
Turbidity	NTU		-	3.8	6.9	1.7	1.2	2	10.1	0.67
pH	pH units	6.5-9.0	7.66	7.69	7.7	7.48	7.65	7.97	7.18	7.6
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.002	0.07	<0.01	-	-	-	-
Total Oil and Grease	mg/L		-	-	-	-	<1.0	-	-	-

Waterbody	Units	CCME	A38					
Year			2010				2011	
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12
GPS Coordinates			540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments								
Water Temperature	oC		9.1	19.2	9.4	4.4		
pH	pH units		7.9	8.69	7.69	7.58		
Conductivity	(µS/cm)		-	-	-	-		
Laboratory-Measured								
Ion balance	%		104	-	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	2.3
Ammonia as N	mg/L	2.33	0.2	0.06	0.05	<0.05	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.011	0.013
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-
Total Kjeldahl Nitrogen	mg/L		1.32	-	<1	<1	-	-
Total Suspended Solids	mg/L		-	5	1	2	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		50.7	60	79	97	54.9	71.8
Bicarbonate (HCO3)	mg/L		61.8	60	79	97	67	87.6
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		53.5	-	-	-	-	-
Magnesium (Mg)-Dissolved	mg/L		8.19	-	-	-	-	-
Potassium (K)-Dissolved	mg/L		4.11	-	-	-	-	-
Sodium (Na)-Dissolved	mg/L		18.3	-	-	-	-	-
Chloride	mg/L		89.6	175	-	185	68.5	158
Conductivity	umhos/cm		461	996	932	629	372	671
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10
Hardness (as CaCO3)	mg/L		167	278	210	286	133	252
Nitrate-N	mg/L	13	0.655	0.31	0.04	0.06	0.102	<0.050
Nitrate and Nitrite as N	mg/L		0.655	-	-	-	0.102	<0.071
Nitrite-N	mg/L	0.197	<0.050	0.02	-	<0.01	<0.050	<0.050
Sulfate	mg/L		25.3	48	-	35	18.3	33.9
TDS (Calculated)	mg/L		232	-	621	419	190	370
Aluminum (Al)-Total	mg/L	0.1	0.014	<0.002	0.015	0.002	0.0239	0.0068
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.00285	0.0046	0.0027	0.0114*	0.00274	0.0046
Barium (Ba)-Total	mg/L		0.0394	0.0611	0.0535	0.0572	0.0342	0.0618
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00021*	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		49.7	83.4	65.6	85.5	42.5	79.9
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.006	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.0013	0.0031	0.0021	0.0024	0.0011	0.00204
Iron (Fe)-Total	mg/L	0.3	0.063	<0.01	<0.01	0.80*	0.24	0.27
Lead (Pb)-Total	mg/L	Equation	<0.00010	0.0632	0.0098*	0.0014	0.00018	0.000148
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	0.0085	0.0173
Magnesium (Mg)-Total	mg/L		7.35	17	11.1	17.8	6.59	12.8
Manganese (Mn)-Total	mg/L		0.0058	0.0072	0.0082	0.0102	0.0123	0.00991
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.00005	0.00035	0.00053
Nickel (Ni)-Total	mg/L	Equation	0.0027	0.0068	0.0062	0.0129	0.0024	0.0029
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20
Potassium (K)-Total	mg/L		3.61	6.2	5.1	9.3	3.11	5.54
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00257	0.00434
Selenium (Se)-Total	mg/L	0.001	0.00084	<0.001	<0.001	<0.001	<0.0010	0.0015
Silicon (Si)-Total	mg/L		-	-	-	-	0.222	0.154
Silver (Ag)-Total	mg/L	0.0001	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		16.7	45.5	25.5	39.6	17.7	36.3
Strontium (Sr)-Total	mg/L		-	0.72	0.63	0.73	0.32	0.666
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0010	0.06	0.03	0.04	0.00079	0.00052
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010
Uranium (U)-Total	mg/L	0.015	0.00033	<0.001	<0.001	<0.001	0.00018	0.00033
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	0.00025
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.005	0.005	<0.0050	<0.0050
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.07	<0.01	-	-
Turbidity	NTU		-	1.1	0.92	0.69	1.15	1.3
pH	pH units	6.5-9.0	7.96	7.94	7.59	7.87	8.04	8.21

Waterbody	Units	CCME	P-1								
Year			2010				2011				
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	15/06/2011	12/07/2011	29/08/2011	11/09/2011	09/10/2011
GPS Coordinates			539901-6988966	539901-6988966	539901-6988966	539901-6988966	539901-6988966	539901-6988966	539901-6988966	539901-6988966	539901-6988966
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments											
Water Temperature	oC		11.6	18.2	9	4.2			8.3	3.43	0.3
pH	pH units		8	7.5	7.63	7.68			8.75	7.13	7.25
Conductivity	(µS/cm)		-	-	-	-			0	560	620
Laboratory-Measured											
Ion balance	%		93.1	-	-	-	-	-	101	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	3.5	-	-	-
Ammonia as N	mg/L	2.33	1.07	0.1	2.9	2	0.052	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.023	0.037	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	-	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		2.04	-	3	-	-	-	1.27	0.97	0.68
Total Suspended Solids	mg/L		-	4	1	1	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		51.2	142	136	168	27.5	127	128	133	120
Alkalinity Bicarbonate (HCO3)	mg/L		62.5	142	136	168	33.5	155	156	162	146
Alkalinity Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60
Alkalinity Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		33.3	-	-	-	-	-	72.6	83.5	78.2
Magnesium (Mg)-Dissolved	mg/L		4.17	-	-	-	-	-	11.1	11.2	11.7
Potassium (K)-Dissolved	mg/L		2.46	-	-	-	-	-	4.95	4.54	3.51
Sodium (Na)-Dissolved	mg/L		6.5	-	-	-	-	-	17.9	17.6	19.4
Chloride	mg/L		39.2	92.1	-	255	6.28	33.1	96.3	107	97.3
Conductivity	umhos/cm		290	737	1177	898	85.2	313	525	587	604
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		100	256	343	516	34.4	158	221	255	236
Nitrate-N	mg/L	13	1.54	0.02	6.5*	1	0.073	<0.050	<0.050	0.059	0.072
Nitrate and Nitrite as N	mg/L		1.54	-	-	-	0.073	<0.071	<0.071	<0.071	0.072
Nitrite-N	mg/L	0.197	<0.050	0.03	-	0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		17.6	21	-	68	3.72	4.09	4.86	12.8	41.8
TDS (Calculated)	mg/L		141	-	784	599	42.8	184	284	318	319
Aluminum (Al)-Total	mg/L	0.1	0.018	<0.002	0.006	<0.002	0.133	0.0149	0.021	0.022	<0.020
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	0.0067	0.0216	0.0023	0.0012	0.00379	0.00125	0.0041	0.0045	0.0027
Barium (Ba)-Total	mg/L		0.0234	0.0554	0.0841	0.126	0.0114	0.0544	0.0531	0.0606	0.0471
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	0.001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00028	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		32.2	82.7	120	172	11.3	53.8	70.8	82.4	75.4
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0103*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	0.00042	0.00119	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	0.0013	0.0011	0.0022	0.0043*	0.00202	0.00347	0.0023	0.0025	0.002
Iron (Fe)-Total	mg/L	0.3	0.064	<0.01	<0.01	1.3*	0.3	0.73	0.3	0.64	0.25
Lead (Pb)-Total	mg/L	Equation	0.00015	0.0003	0.0029	<0.0003	0.000904	0.000344	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	0.0046	0.0066	0.0052
Magnesium (Mg)-Total	mg/L		4.13	12	10.6	21.2	1.51	5.82	10.7	12	11.7
Manganese (Mn)-Total	mg/L		0.0246	0.26	0.0065	1.389	0.0435	0.452	0.0159	0.0367	0.0301
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	0.00031	0.00076	0.00079	0.00113	<0.00050
Nickel (Ni)-Total	mg/L	Equation	0.003	0.007	0.011	0.0386	<0.0020	0.0038	0.003	0.0043	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		2.48	4	6.2	11.1	1.02	2.85	4.99	4.68	3.53
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00125	0.00312	0.00394	0.0035	0.00245
Selenium (Se)-Total	mg/L	0.001	0.00061	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	1.1	0.202	<0.30	0.81	1.24
Silver (Ag)-Total	mg/L	0.0001	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		6.8	22.1	18.9	32.7	2.12	7.78	17.5	19	17.2
Strontium (Sr)-Total	mg/L		-	0.44	0.8	0.95	0.0635	0.311	0.49	0.555	0.418
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	0.05	0.02	0.1	0.00371	0.00055	<0.0010	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	0.0003	<0.001	<0.001	0.001	<0.00010	0.00018	0.00054	0.00062	0.00059
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	0.00036	0.00022	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.004	0.015	<0.0050	0.0118	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010
Turbidity	NTU		-	1.4	0.51	0.24	2.86	2.84	1.92	3.13	1.26
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.08	<0.01	-	-	-	-	-
Total Oil and Grease	mg/L		-	-	-	-	<1.0	-	-	-	-
pH	pH units	6.5-9.0	7.98	7.54	7.59	7.3	7.73	8.21	8.28	8.28	8.11

Waterbody	Units	CCME					B7-6				
Year			2010				2011				
Date Sampled			20/06/2010	22/07/2010	2010-08-xx	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011
GPS Coordinates											
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments											
Water Temperature	oC		5.4	18.7	-	6.2			13.3	2.86	0.6
pH	pH units		7.5	7.69	-	7.77			7.43	7.05	7
Conductivity	(µS/cm)		-	-	-	-			0	165	191
Laboratory-Measured											
Ion balance	%		99.8	-	-	-	-	-	92.2	-	
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	1.5	-	-	
Ammonia as N	mg/L	2.33	<0.050	<0.05	-	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	-	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.012	0.013	0.013	0.014	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.38	-	-	<1	-	-	0.57	0.51	0.41
Total Suspended Solids	mg/L		-	5	-	1	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		16.1	39	-	38	12.7	29.7	37.3	33.3	32.1
Bicarbonate (HCO3)	mg/L		19.6	39	-	38	15.5	36.2	45.5	40.6	39.2
Carbonate (CO3)	mg/L		<5.0	-	-	<2	<0.60	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	-	<2	<0.40	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		13.2	-	-	-	-	-	27.1	25.4	26.3
Magnesium (Mg)-Dissolved	mg/L		1.22	-	-	-	-	-	2.39	2.4	2.35
Potassium (K)-Dissolved	mg/L		0.71	-	-	-	-	-	1.48	1.53	1.4
Sodium (Na)-Dissolved	mg/L		1.8	-	-	-	-	-	3.84	3.41	3.78
Chloride	mg/L		18	32.9	-	44.7	8.23	30.9	38.3	34	35.6
Conductivity	umhos/cm		103	247	-	211	55.6	160	196	176	182
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		38	78	-	86	19.8	64.9	83.5	81.2	74.7
Nitrate-N	mg/L	13	<0.050	0.03	-	0.18	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		1.36	8	-	4	0.81	2.62	2.93	3.26	4.48
TDS (Calculated)	mg/L		46	-	-	141	26	80.2	98.4	93.8	92.6
Aluminum (Al)-Total	mg/L	0.1	<0.010	<0.002	-	0.061	0.0248	<0.0050	0.045	<0.020	<0.020
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	-	0.0022	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	0.00072	0.0019	-	0.0074*	0.00099	0.00156	0.0021	0.0018	<0.0010
Barium (Ba)-Total	mg/L		0.0154	0.0227	-	0.022	0.0116	0.0244	0.024	0.0268	0.0194
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	-	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	-	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	-	0.00017	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		14.4	26.6	-	29.7	6.64	22.6	29	27.9	26
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	-	0.0047	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	0.00031	<0.00020	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	<0.0010	0.0007	-	0.001	0.0008	0.00068	<0.0020	<0.0020	<0.0020
Iron (Fe)-Total	mg/L	0.3	0.09	<0.01	-	0.26	0.26	0.13	0.26	0.29	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	0.0363	-	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	-	<0.1	0.002	0.0078	0.0187	0.0164	0.0095
Magnesium (Mg)-Total	mg/L		1.34	2.9	-	3.1	0.794	2.08	2.69	2.8	2.39
Manganese (Mn)-Total	mg/L		0.024	0.0277	-	0.0048	0.101	0.0143	0.0178	0.0152	0.0038
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	-	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	<0.0020	0.0014	-	0.0042	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		0.85	0.91	-	2.2	0.582	1.14	1.71	1.71	1.28
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00058	0.00132	0.00178	0.00182	0.00127
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	-	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	0.343	0.371	<0.30	0.38	0.38
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	-	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		2.2	4.5	-	4.4	1.32	3.02	4.13	4.14	3.58
Strontium (Sr)-Total	mg/L		-	0.18	-	0.22	0.0463	0.183	0.205	0.195	0.172
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	-	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	0.01	-	0.01	0.00062	<0.00020	0.0016	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	-	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	-	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	-	0.01	<0.0050	<0.0050	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.02	-	<0.01	-	-	-	-	-
Turbidity	NTU		-	0.61	-	0.42	0.94	0.81	0.72	1.44	0.58
pH	pH units	6.5-9.0	7.4	6.49	-	7.39	7.2	7.85	7.91	7.72	7.75

Waterbody	Units	CCME	B2-1							
Year			2010			2011				
Date Sampled			22/07/2010	2010-08-xx	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011
GPS Coordinates			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Source										
Field Measurements										
Water Temperature	oC		18.9	-	6.3			14.2	4.88	1
pH	pH units		7.69	-	7.8			7.31	7.15	7.35
Conductivity	(µS/cm)		-	-	-			0	94	107
Laboratory-Measured										
Ion balance	%		-	-	-	-	-	103	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	1.3	-	-	-
Ammonia as N	mg/L	2.33	0.05	-	0.09	<0.050	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00001	-	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	0.012	0.012	0.017	0.012	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	<0.010	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	-	3	-	-	0.21	0.4	0.37
Total Suspended Solids	mg/L		3	-	2	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		41	-	53	25.5	25.1	33.3	32.7	33.3
Bicarbonate (HCO3)	mg/L		41	-	53	31.1	30.7	40.7	39.9	40.7
Carbonate (CO3)	mg/L		-	-	<2	<0.60	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<2	-	<2	<0.40	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		-	-	-	-	-	14.2	13.2	15.2
Magnesium (Mg)-Dissolved	mg/L		-	-	-	-	-	1.54	1.53	1.61
Potassium (K)-Dissolved	mg/L		-	-	-	-	-	1.11	0.91	1.1
Sodium (Na)-Dissolved	mg/L		-	-	-	-	-	4.14	3.82	4.51
Chloride	mg/L		8.5	-	11.2	11.7	7.9	9.92	10.8	11
Conductivity	umhos/cm		144	-	123	97.8	79	105	105	110
Fluoride	mg/L	0.12	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		45	-	50	29.8	30.1	40.6	41.3	43.4
Nitrate-N	mg/L	13	0.02	-	0.45	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		7	-	11	3.93	2.39	3.18	3.73	5
TDS (Calculated)	mg/L		96	-	82	49.6	39.9	54	55	57.7
Aluminum (Al)-Total	mg/L	0.1	0.41	-	0.002	0.0965	0.0073	0.044	0.042	<0.020
Antimony (Sb)-Total	mg/L		<0.0001	-	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	0.001	-	0.0056*	0.00037	0.00099	0.002	0.0014	<0.0010
Barium (Ba)-Total	mg/L		0.0122	-	0.0104	0.0135	0.0108	0.0136	0.0137	0.0114
Beryllium (Be)-Total	mg/L		<0.0005	-	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.01	-	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.00008	-	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		14.5	-	16.3	9.57	10.2	13.8	13.8	14.6
Cesium (Cs)-Total	mg/L		-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0006	-	0.0059*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	0.0516	-	0.0011	0.00112	0.00066	<0.0020	<0.0020	0.0025
Iron (Fe)-Total	mg/L	0.3	<0.01	-	0.19	0.15	0.11	0.48	0.26	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.0003	-	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.1	-	<0.1	<0.0020	<0.0020	0.0051	0.0025	0.0027
Magnesium (Mg)-Total	mg/L		2.1	-	2.3	1.42	1.12	1.52	1.65	1.68
Manganese (Mn)-Total	mg/L		0.0201	-	0.0118	0.0111	0.0153	0.0604	0.0219	0.0116
Molybdenum (Mo)-Total	mg/L	0.073	<0.0005	-	<0.0005	0.0002	0.00021	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	0.0014	-	0.0024	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		0.59	-	1.7	1.31	0.67	1.1	1.05	0.99
Rubidium (Rb)-Total	mg/L		-	-		0.00183	0.00078	0.00126	0.00114	0.00102
Selenium (Se)-Total	mg/L	0.001	<0.001	-	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	0.464	0.157	0.4	0.41	0.31
Silver (Ag)-Total	mg/L	0.0001	<0.0005	-	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		5.6	-	6.2	6.33	2.49	4.12	4.35	4.4
Strontium (Sr)-Total	mg/L		0.06	-	0.07	0.0444	0.0472	0.0627	0.0614	0.0589
Tellurium (Te)-Total	mg/L		-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.001	-	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		0.01	-	<0.01	0.00559	0.00033	0.0013	0.0029	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.001	-	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0005	-	<0.0005	0.00037	<0.00020	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.001	-	0.005	<0.0050	<0.0050	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010
Ortho-Phosphate (O-PO4)	mg/L		0.01	-	<0.01	-	-	-	-	-
Turbidity	NTU		0.59	-	0.45	1.57	0.67	1.94	0.87	0.72
pH	pH units	6.5-9.0	6.97	-	7.46	7.6	7.79	7.7	7.72	7.74

Waterbody	Units	CCME	MELIADINE RIVER								
Year			2010				2011				
Date Sampled			21/06/2010	22/07/2010	26/08/2010	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011
GPS Coordinates			544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712	544778.3-6971712
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurements											
Water Temperature	oC		-	-	11.4	5.4			14.2	3.53	0.8
pH	pH units		-	-	6.9	7.94			7.77	7.56	7.17
Conductivity	(µS/cm)		-	-	-	-			0	69	149
Laboratory-Measured											
Ion balance	%		Low EC	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	<1.0	-	-	-
Ammonia as N	mg/L	2.33	<0.05	0.08	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	0.00021	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.012	0.012	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.47	-	<1	1	-	-	<0.20	0.26	0.26
Total Suspended Solids	mg/L		-	3	<1	3	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		25.4	39	22	28	25.5	27	22.7	37.9	29.2
Bicarbonate (HCO3)	mg/L		31	39	22	28	31.1	33	27.7	46.2	35.6
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		8.96	-	-	-	-	-	9.2	17.3	12.8
Magnesium (Mg)-Dissolved	mg/L		1.33	-	-	-	-	-	1.46	3.24	2.35
Potassium (K)-Dissolved	mg/L		1.13	-	-	-	-	-	1.32	2.02	1.62
Sodium (Na)-Dissolved	mg/L		5	-	-	-	-	-	7.26	13.7	11.1
Chloride	mg/L		9.51	10.7	-	13.8	11.7	18.2	11.9	30.9	22.4
Conductivity	umhos/cm		88.5	89	152	101	97.8	120	94.3	195	144
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		27.9	29	21	28	29.8	34.8	26.6	61	42.9
Nitrate-N	mg/L	13	<0.050	0.04	0.41	0.14	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		3.44	2	-	2	3.93	4.99	3.57	14.4	8.36
TDS (Calculated)	mg/L		44.6	-	101	67	49.6	64	48.3	108	75.1
Aluminum (Al)-Total	mg/L	0.1	0.011	<0.002	0.015	<0.002	0.0965	0.0114	0.034	<0.020	<0.020
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	<0.00040	0.0009	<0.0005	0.0008	0.00037	0.00032	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L		0.0133	0.0087	0.0095	0.009	0.0135	0.0145	0.00885	0.0152	0.0113
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	0.0016	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	0.014	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		9.72	8.5	6.8	8.6	9.57	10.5	8.48	18.5	13.1
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0021*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	0.0011	0.0008	0.0011	0.0006	0.00112	0.00119	<0.0020	<0.0020	<0.0020
Iron (Fe)-Total	mg/L	0.3	0.057	<0.01	<0.01	0.07	0.15	<0.10	<0.10	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	<0.0003	0.0006	0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	0.005	<0.0020	0.0024
Magnesium (Mg)-Total	mg/L		1.44	1.8	1	1.8	1.42	2.09	1.32	3.58	2.45
Manganese (Mn)-Total	mg/L		0.0062	<0.0005	0.0021	0.0022	0.0111	0.00317	0.0037	0.0035	0.0028
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	0.0002	0.00033	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	<0.0020	<0.0005	0.0006	0.0014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		1.28	0.57	0.63	1.6	1.31	1.51	1.15	2.34	1.56
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00183	0.00199	0.00157	0.00228	0.00161
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	0.464	0.231	<0.30	0.92	0.48
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		5.7	8.6	4.4	7.8	6.33	10.5	6.41	15.7	9.73
Strontium (Sr)-Total	mg/L		-	<0.05	<0.05	<0.05	0.0444	0.055	0.037	0.0942	0.0607
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	<0.01	<0.01	<0.01	0.00559	0.00055	0.001	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	0.0005	<0.0005	0.00037	<0.00020	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.006	0.004	<0.0050	<0.0050	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	-	<0.0010	<0.0010	<0.0010
Ortho-Phosphate (O-PO4)	mg/L		<0.010	<0.010	0.02	<0.01	-	-	-	-	-
Turbidity	NTU		-	0.36	0.6	0.56	1.57	0.51	0.37	0.47	0.65
pH	pH units	6.5-9.0	7.67	6.77	7.62	7.14	7.6	7.83	7.75	7.81	7.73

Waterbody	Units	CCME	CONTROLE LAKE							
Year			2010				2011			
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011
GPS Coordinates			535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurements										
Water Temperature	oC		4.1	18.5	11	6.5			14.7	6.06
pH	pH units		7.4	8.08	7.02	7.8			7.69	7.15
Conductivity	(µS/cm)		-	-		-			0	74
Laboratory-Measured										
Ion balance	%		Low EC	-	-	-	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	1.1	-	-
Ammonia as N	mg/L	2.33	<0.050	0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.011	0.014	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	-	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.56	-	<1	<1	-	-	0.4	0.3
Total Suspended Solids	mg/L		-	3	2	1	-	<5.0	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		22.3	29	28	32	40	25.3	27.2	27.4
Bicarbonate (HCO3)	mg/L		27.2	29	28	32	48.8	30.8	33.2	33.4
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		7.01	-	-	-	-	-	10	10.1
Magnesium (Mg)-Dissolved	mg/L		0.89	-	-	-	-	-	1.12	1.11
Potassium (K)-Dissolved	mg/L		0.91	-	-	-	-	-	1.25	1.05
Sodium (Na)-Dissolved	mg/L		3	-	-	-	-	-	4.97	4.67
Chloride	mg/L		4.93	8	-	9.1	34.9	8.02	8.5	8.78
Conductivity	umhos/cm		59.7	103	161	88	200	78.2	85.2	86.3
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		21.2	27	24	30	75	27.1	28.8	30.5
Nitrate-N	mg/L	13	<0.050	0.01	0.05	0.05	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		0.97	5	-	3	3.56	1.89	1.96	2.04
TDS (Calculated)	mg/L		31.1	-	107	59	96.5	40.8	44.2	45
Aluminum (Al)-Total	mg/L	0.1	<0.010	0.086	0.018	0.008	0.0081	0.0069	0.026	<0.020
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	<0.00040	<0.0005	<0.0005	0.0055*	0.00158	0.00046	<0.0010	<0.0010
Barium (Ba)-Total	mg/L		0.0095	0.0074	0.0068	0.0071	0.026	0.00881	0.00764	0.00829
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00017*	<0.000010	<0.000010	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		6.98	9	8	9.9	24.8	9.07	9.74	10.3
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0056*	<0.0010	<0.0010	<0.0020	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	Equation	<0.0010	0.0007	0.0013	0.0011	0.0007	0.00082	<0.0020	<0.0020
Iron (Fe)-Total	mg/L	0.3	0.099	<0.01	<0.01	0.11	0.11	<0.10	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	0.0049	0.0052*	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.01	<0.1	0.0076	<0.0020	0.006	0.0022
Magnesium (Mg)-Total	mg/L		0.88	1.2	0.93	1.3	3.16	1.07	1.08	1.18
Manganese (Mn)-Total	mg/L		0.0151	<0.0005	0.0013	0.004	0.0396	0.00361	0.0103	0.0029
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	<0.0020	0.0005	0.0006	0.0015	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50
Potassium (K)-Total	mg/L		0.9	0.55	0.55	1.6	1.41	0.956	1.21	1.1
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00163	0.00097	0.00115	0.00126
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	1.17	0.077	<0.30	<0.30
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		2.9	5.5	3.7	5.4	4.65	4.67	4.91	5.17
Strontium (Sr)-Total	mg/L		-	<0.05	<0.05	<0.05	0.157	0.0281	0.0304	0.0323
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	<0.01	<0.01	<0.01	0.00021	0.00025	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.001	0.005	<0.0050	<0.0050	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.04	<0.01	-	-	-	-
Turbidity	NTU		-	0.4	0.71	0.39	0.63	0.6	0.63	0.36
pH	pH units	6.5-9.0	7.49	6.85	7.67	7.25	7.93	7.79	7.79	7.77

Waterbody	Units	CCME					MEL-1				
			2010				2011				
Date Sampled			20/06/2010	22/07/2010	27/08/2010	24/09/2010	28/06/2011	12/07/2011	29/08/2011	12/09/2011	11/10/2011
GPS Coordinates			541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	
Field Measurements											
Water Temperature	oC		4.2	15	10.2	5.4			11.4	5.3	0.9
pH	pH units		7.1	7.56	6.79	7.71			8.54	7.16	7.13
Conductivity	(µS/cm)		-	-	-	-			0	104	66
Laboratory-Measured											
Fecal Coliforms	MPN/100mL		-	-	-	-	-	-	<3	15	<3
Total Coliforms	mg/L		-	-	-	-	2	-	-	-	-
E. Coli	mg/L		-	-	-	-	<1	-	-	-	-
Total Oil and Grease	mg/L		-	-	-	-	<1.0	-	<1.0	<1.0	<1.0
Ion balance	%		Low EC	-	-	-	-	-	-	-	-
Biochemical Oxygen Demand	mg/L		-	-	<1	-	2	1.3	<1.0	6.6	<6.0
Ammonia as N	mg/L	2.33	<0.050	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	0.00023	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	-	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		<0.20	-	1	1	-	-	0.2	0.21	0.24
Total Suspended Solids	mg/L		-	3	1	3	-	<5.0	-	-	<5.0
Alkalinity, Total (as CaCO3)	mg/L		<5.0	36	19	23	20	17.7	18.4	22.4	19
Bicarbonate (HCO3)	mg/L		5.6	36	19	23	24.4	21.7	22.4	27.3	23.2
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60
Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40
Calcium (Ca)-Dissolved	mg/L		1.58	-	-	-	-	-	7.51	10.8	8.54
Potassium (Mg)-Dissolved	mg/L		0.23	-	-	-	-	-	1.12	1.41	1.25
Potassium (K)-Dissolved	mg/L		<0.50	-	-	-	-	-	0.96	0.98	1.02
Sodium (Na)-Dissolved	mg/L		<1.0	-	-	-	-	-	4.75	5.06	4.93
Chloride	mg/L		1.51	7.5	-	9	7.45	7.87	8.41	11.7	8.6
Conductivity	urnhos/cm		13.9	87	136	75	70.8	67.9	70	96.5	76.2
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness (as CaCO3)	mg/L		4.9	22	17	22	22.6	20.1	28.5	29.7	22.9
Nitrate-N	mg/L	13	<0.050	0.02	0.38	0.14	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		0.83	2	-	<1	2.77	3.04	3.26	11.4	4.17
TDS (Calculated)	mg/L		4.2	58	90	50	34.8	33.6	37	53.4	37.7
Aluminum (Al)-Total	mg/L	0.1	<0.010	<0.002	0.02	<0.002	0.0087	0.0063	0.054	<0.020	<0.020
Aluminum (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Arsenic (As)-Total	mg/L	0.005	<0.00040	0.0016	<0.0005	0.0024	0.00043	0.00037	<0.0010	<0.0010	<0.0010
Barium (Ba)-Total	mg/L		<0.0030	0.0068	0.0067	0.0056	0.00828	0.00769	0.00577	0.0101	0.00711
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Boron (B)-Total	mg/L	1.5	<0.05	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00016*	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020
Calcium (Ca)-Total	mg/L		1.92	6.6	5.5	7	7.2	6.31	9.36	9.69	7.21
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	<0.0006	<0.0010	<0.0010	<0.0020	<0.00050	<0.0020
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.0020	<0.00050
Copper (Cu)-Total	mg/L	Equation	<0.0010	0.0017	0.0009	0.0005	0.00094	0.00086	0.0026	<0.00050	<0.0020
Iron (Fe)-Total	mg/L	0.3	0.027	<0.01	<0.01	0.05	<0.10	<0.10	0.28	0.11	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	<0.0003	<0.0003	0.0226*	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	0.0061	<0.0020	<0.0020
Magnesium (Mg)-Total	mg/L		0.26	1.4	0.87	1.3	1.13	1.06	1.25	1.35	1.19
Manganese (Mn)-Total	mg/L		0.0073	0.001	0.0014	0.0024	0.00625	0.0079	0.0063	0.0097	0.0058
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050
Nickel (Ni)-Total	mg/L	Equation	<0.0020	0.0089	0.0006	0.0014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50
Potassium (K)-Total	mg/L		0.15	0.27	0.37	1.1	0.818	0.74	0.8	0.95	0.83
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00115	0.00119	0.00114	0.00134	0.00117
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	<0.001	<0.001	0.0014	<0.0010	<0.0050	<0.0050	<0.0050
Silicon (Si)-Total	mg/L		-	-	-	-	0.224	0.228	<0.30	0.39	<0.30
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Sodium (Na)-Total	mg/L		<1.0	5.9	3.3	4.8	3.41	3.95	3.95	4.86	4.32
Strontium (Sr)-Total	mg/L		-	<0.05	<0.05	<0.05	0.0392	0.0293	0.0274	0.0471	0.0324
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060
Titanium (Ti)-Total	mg/L		<0.0010	<0.01	<0.01	<0.01	0.00047	0.00037	<0.0010	<0.0010	<0.0010
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.002	0.002	<0.0050	<0.0050	<0.020	<0.020	<0.020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010
Ortho-Phosphate (O- PO4)	mg/L		<0.010	0.01	0.02	<0.01	-	-	-	-	-
Turbidity	NTU		-	0.25	0.41	0.29	0.6	0.54	0.32	0.36	1.01
pH	pH units	6.5-9.0	6.93	6.65	7.43	7.04	7.5	7.63	7.54	7.53	7.55

Waterbody	Units	CCME	28B-MEL0914	MEL-4									
Year				2010				2011					
Date Sampled				20/06/2010	22/07/2010	27/08/2010	24/09/2010	28/06/2011	12/07/2011	29/08/2011	12/09/2011	11/10/2011	
GPS Coordinates				542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	
Source				ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	
Field Measurements													
Water Temperature	oC		10	4	15	11.1	6.5			11.4	6.32	0.8	
pH	pH units			6.8	7.79	6.9	7.45			9.32	7.58	7.2	
Conductivity	(µS/cm)			-	-	-	-			0	65	66	
Laboratory-Measured													
Fecal Coliforms	MPN/100mL		200		35	-	-	-	<1	210	150	93	
Total Coliforms	mg/L					-	-	-	-	-	-	-	
E. Coli	mg/L					-	-	-	-	-	-	-	
Total Oil and Grease	mg/L					<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	
Ion balance	%			Low EC	-	-	-	-	-	-	-	-	
Biochemical Oxygen Demand	mg/L		15	-	-	<1	5	2.7	1.3	1.9	7.2	<6.0	
Ammonia as N	mg/L	2.33		<0.050	<0.05	<0.05	<0.05	1.13	<0.050	<0.050	0.055	<0.050	
Mercury (Hg)-Total	mg/L	0.000026		<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Phosphorus (P)-Total	mg/L	0.004 - 0.01	1.000	-	-	-	-	0.618	0.012	0.018	<0.010	0.034	
Phosphorus (P)-Total Reactive	mg/L			-	-	-	-	-	-	<0.010	<0.010	<0.010	
Total Kjeldahl Nitrogen	mg/L			<0.20	-	<1	1	-	-	0.31	0.23	0.33	
Total Suspended Solids	mg/L		15	-	2	1	4	-	<5.0	-	-	12	
Alkalinity, Total (as CaCO3)	mg/L			<5.0	38	21	23	35.7	17.7	23	19.7	19.5	
Bicarbonate (HCO3)	mg/L			<5.0	38	21	23	43.6	21.6	27	24.1	23.8	
Carbonate (CO3)	mg/L			<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	
Hydroxide (OH)	mg/L			<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	
Calcium (Ca)-Dissolved	mg/L			1.16	-	-	-	-	-	8.08	7.45	7.54	
Magnesium (Mg)-Dissolved	mg/L			0.12	-	-	-	-	-	1.22	1.15	1.11	
Potassium (K)-Dissolved	mg/L			<0.50	-	-	-	-	-	0.9	0.86	0.89	
Sodium (Na)-Dissolved	mg/L			<1.0	-	-	-	-	-	6.05	4.51	4.61	
Chloride	mg/L			0.96	9.4	-	9.5	11.8	7.9	10.3	8.61	8.71	
Conductivity	umhos/cm			9.09	97	142	74	124	67.5	84.8	75.9	75.4	
Fluoride	mg/L	0.12		-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	
Hardness (as CaCO3)	mg/L			3.4	26	17	20	25	19	33.9	24.7	22.3	
Nitrate-N	mg/L	13		<0.050	0.02	0.03	0.02	<0.050	<0.050	<0.050	<0.050	<0.050	
Nitrate and Nitrite as N	mg/L			<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071	
Nitrite-N	mg/L	0.197		<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	
Sulfate	mg/L			0.7	3	-	4	4.92	3.09	3.37	3.47	3.55	
TDS (Calculated)	mg/L			2.9	64	95	49	55.6	33.1	43.7	39.7	37.2	
Aluminum (Al)-Total	mg/L	0.1		<0.010	<0.002	0.022	<0.002	0.0143	0.0059	0.024	<0.020	0.081	
Antimony (Sb)-Total	mg/L			<0.00040	<0.0001	<0.0001	0.0007	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Arsenic (As)-Total	mg/L	0.005		<0.00040	<0.0005	<0.0005	<0.0005	0.00069	0.00035	<0.0010	0.0018	<0.0010	
Barium (Ba)-Total	mg/L			<0.0030	0.0065	0.0064	0.0058	0.00874	0.00735	0.0103	0.0081	0.00758	
Beryllium (Be)-Total	mg/L			<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Total	mg/L			-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	
Boron (B)-Total	mg/L	1.5		<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	0.041	<0.030	<0.030	
Cadmium (Cd)-Total	mg/L	Equation		<0.000050	<0.00008	<0.00008	0.00017*	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	
Calcium (Ca)-Total	mg/L			1.33	7.6	5.4	6.4	7.92	11.2	7.81	7.02		
Cesium (Cs)-Total	mg/L			-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	
Chromium (Cr)-Total	mg/L			<0.0050	<0.0006	<0.0006	0.0030*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	
Cobalt (Co)-Total	mg/L			<0.0020	-	-	-	0.00024	<0.00020	0.00055	<0.00050	<0.00050	
Copper (Cu)-Total	mg/L	Equation		<0.0010	0.0007	0.0012	0.0005	0.00139	0.0008	<0.0020	<0.0020	<0.0020	
Iron (Fe)-Total	mg/L	0.3		<0.010	<0.01	<0.01	0.03	<0.10	<0.10	<0.10	<0.10	0.15	
Lead (Pb)-Total	mg/L	Equation		<0.00010	<0.0003	0.0388*	0.001	0.000147	<0.000090	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Total	mg/L			<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Magnesium (Mg)-Total	mg/L			0.13	1.6	0.85	1.2	1.26	1.01	1.45	1.27	1.15	
Manganese (Mn)-Total	mg/L			0.003	0.0021	0.0027	0.0028	0.0148	0.01	0.0319	0.0057	0.0092	
Molybdenum (Mo)-Total	mg/L	0.073		<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	
Nickel (Ni)-Total	mg/L	Equation		<0.0020	0.0012	0.003	0.001	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Phosphorus (P)-Total	mg/L			<0.020	-	-	-	0.4	<0.20	<0.50	<0.50	<0.50	
Potassium (K)-Total	mg/L			<0.10	0.33	0.43	1	1.89	0.706	0.93	0.99	0.8	
Rubidium (Rb)-Total	mg/L			-	-	-	-	0.00208	0.00117	0.00133	0.00123	0.00124	
Selenium (Se)-Total	mg/L	0.001		<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	
Silicon (Si)-Total	mg/L			-	-	-	-	0.333	0.232	0.47	<0.30	0.33	
Silver (Ag)-Total	mg/L	0.0001		<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	
Sodium (Na)-Total	mg/L			1.1	7.4	3.7	5	6.32	3.83	8.51	5.69	4.24	
Strontium (Sr)-Total	mg/L			-	<0.05	<0.05	<0.05	0.0395	0.0289	0.0552	0.0463	0.0319	
Tellurium (Te)-Total	mg/L			-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Total	mg/L	0.0008		<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	
Thorium (Th)-Total	mg/L			-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	
Tin (Sn)-Total	mg/L			<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	
Titanium (Ti)-Total	mg/L			<0.0010	<0.01	<0.01	<0.01	0.00031	0.00031	<0.0010	<0.0010	0.0056	
Tungsten (W)-Total	mg/L			-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	
Uranium (U)-Total	mg/L	0.015		<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	
Vanadium (V)-Total	mg/L			<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020	
Zinc (Zn)-Total	mg/L	0.03		<0.0040	<0.001	<0.001	<0.001	<0.0050	<0.0050	<0.020	<0.020	<0.020	
Zirconium (Zr)-Total	mg/L			-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	
Ortho-Phosphate (O-PO4)	mg/L			<0.010	0.02	0.05	<0.01	-	-	-	-	-	
Oil & Grease	mg/L			-	0.02	-	-	-	-	-	-	-	
Turbidity	NTU			-	0.3	0.31	0.31	1.05	0.55	0.53	0.36	3.04	
pH	pH units	6.5-9.1		6.75	6.7	7.45	7.05	7.72	7.59	8.33	7.61	7.59	

Waterbody	Units	CCME	2BB-MEL0914	MEL-7								
Year				2010			2011					
Date Sampled				22/07/2010	27/08/2010	24/09/2010	28/06/2011	12/07/2011	2011-08-xx	12/09/2011	11/10/2011	
GPS Coordinates				542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	
Source				ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	
Field Measurments												
Water Temperature	oC		10	-	-	-			-	6.35	0.9	
pH	pH units			-	6.96	6.64			-	7.58	7.5	
Conductivity	(µS/cm)			-	-	-			-	70	69	
Laboratory-Measured												
Fecal Coliforms	MPN/100mL		200	440	-	-	>110000	-	-	430	230	
Total Coliforms	mg/L			-	-	-	>110000	-	-	-	-	
E. Coli	mg/L			-	-	-	-	-	-	-	-	
Total Oil and Grease	mg/L			<1	<1	2	-	5.5	-	<1.0	<1.0	
Ion balance	%			-	-	-	-	-	-	-	-	
Biochemical Oxygen Demand	mg/L		15	8.9	7	22	-	60	-	<6.0	<6.0	
Ammonia as N	mg/L	2.33		-	-	-	-	-	-	<0.050	0.11	
Mercury (Hg)-Total	mg/L	0.000026		-	-	-	-	-	-	<0.000050	<0.000050	
Phosphorus (P)-Total	mg/L	0.004 - 0.01	1.000	-	-	-	-	-	-	<0.010	0.028	
Phosphorus (P)-Total Reactive	mg/L			-	-	-	-	-	-	<0.010	<0.010	
Total Kjeldahl Nitrogen	mg/L			-	-	-	-	-	-	0.25	0.36	
Total Suspended Solids	mg/L		15	8	9	-	-	90	-	-	29	
Alkalinity, Total (as CaCO3)	mg/L			-	-	-	-	-	-	19	19.7	
Bicarbonate (HCO3)	mg/L			-	-	-	-	-	-	23.2	24.1	
Carbonate (CO3)	mg/L			-	-	-	-	-	-	<0.60	<0.60	
Hydroxide (OH)	mg/L			-	-	-	-	-	-	<0.40	<0.40	
Calcium (Ca)-Dissolved	mg/L			-	-	-	-	-	-	7.01	7.9	
Magnesium (Mg)-Dissolved	mg/L			-	-	-	-	-	-	1.12	1.15	
Potassium (K)-Dissolved	mg/L			-	-	-	-	-	-	0.82	1	
Sodium (Na)-Dissolved	mg/L			-	-	-	-	-	-	4.35	4.94	
Chloride	mg/L			-	-	-	-	-	-	9.42	8.8	
Conductivity	umhos/cm			-	-	-	-	-	-	74.5	77	
Fluoride	mg/L	0.12		-	-	-	-	-	-	<0.10	<0.10	
Hardness (as CaCO3)	mg/L			-	-	-	-	-	-	24.4	23.9	
Nitrate-N	mg/L	13		-	-	-	-	-	-	<0.050	<0.050	
Nitrate and Nitrite as N	mg/L			-	-	-	-	-	-	<0.071	<0.071	
Nitrite-N	mg/L	0.197		-	-	-	-	-	-	<0.050	<0.050	
Sulfate	mg/L			-	-	-	-	-	-	4.68	3.86	
TDS (Calculated)	mg/L			-	-	-	-	-	-	40.4	38.7	
Aluminum (Al)-Total	mg/L	0.1		-	-	-	-	-	-	<0.020	0.134	
Antimony (Sb)-Total	mg/L			-	-	-	-	-	-	<0.0010	<0.0010	
Arsenic (As)-Total	mg/L	0.005		-	-	-	-	-	-	<0.0010	<0.0010	
Barium (Ba)-Total	mg/L			-	-	-	-	-	-	0.00814	0.00873	
Beryllium (Be)-Total	mg/L			-	-	-	-	-	-	<0.0010	<0.0010	
Bismuth (Bi)-Total	mg/L			-	-	-	-	-	-	<0.00050	<0.00050	
Boron (B)-Total	mg/L	1.5		-	-	-	-	-	-	<0.030	<0.030	
Cadmium (Cd)-Total	mg/L	Equation		-	-	-	-	-	-	<0.00020	<0.00020	
Calcium (Ca)-Total	mg/L			-	-	-	-	-	-	7.76	7.53	
Cesium (Cs)-Total	mg/L			-	-	-	-	-	-	<0.00050	<0.00050	
Chromium (Cr)-Total	mg/L			-	-	-	-	-	-	<0.0020	<0.0020	
Cobalt (Co)-Total	mg/L			-	-	-	-	-	-	<0.00050	<0.00050	
Copper (Cu)-Total	mg/L	Equation		-	-	-	-	-	-	<0.0020	<0.0020	
Iron (Fe)-Total	mg/L	0.3		-	-	-	-	-	-	<0.10	0.28	
Lead (Pb)-Total	mg/L	Equation		-	-	-	-	-	-	<0.0010	<0.0010	
Lithium (Li)-Total	mg/L			-	-	-	-	-	-	<0.0020	<0.0020	
Magnesium (Mg)-Total	mg/L			-	-	-	-	-	-	1.23	1.24	
Manganese (Mn)-Total	mg/L			-	-	-	-	-	-	0.0039	0.021	
Molybdenum (Mo)-Total	mg/L	0.073		-	-	-	-	-	-	<0.00050	<0.00050	
Nickel (Ni)-Total	mg/L	Equation		-	-	-	-	-	-	<0.0020	<0.0020	
Phosphorus (P)-Total	mg/L			-	-	-	-	-	-	<0.50	<0.50	
Potassium (K)-Total	mg/L			-	-	-	-	-	-	0.92	0.88	
Rubidium (Rb)-Total	mg/L			-	-	-	-	-	-	0.00137	0.00136	
Selenium (Se)-Total	mg/L	0.001		-	-	-	-	-	-	<0.0050	<0.0050	
Silicon (Si)-Total	mg/L			-	-	-	-	-	-	<0.30	0.4	
Silver (Ag)-Total	mg/L	0.0001		-	-	-	-	-	-	<0.0010	<0.0010	
Sodium (Na)-Total	mg/L			-	-	-	-	-	-	4.96	4.56	
Strontium (Sr)-Total	mg/L			-	-	-	-	-	-	0.0379	0.0341	
Tellurium (Te)-Total	mg/L			-	-	-	-	-	-	<0.0010	<0.0010	
Thallium (Tl)-Total	mg/L	0.0008		-	-	-	-	-	-	<0.0050	<0.0050	
Thorium (Th)-Total	mg/L			-	-	-	-	-	-	<0.0010	<0.0010	
Tin (Sn)-Total	mg/L			-	-	-	-	-	-	<0.00060	<0.00060	
Titanium (Ti)-Total	mg/L			-	-	-	-	-	-	<0.0010	0.0074	
Tungsten (W)-Total	mg/L			-	-	-	-	-	-	<0.0020	<0.0020	
Uranium (U)-Total	mg/L	0.015		-	-	-	-	-	-	<0.00050	<0.00050	
Vanadium (V)-Total	mg/L			-	-	-	-	-	-	<0.0020	<0.0020	
Zinc (Zn)-Total	mg/L	0.03		-	-	-	-	-	-	<0.020	<0.020	
Zirconium (Zr)-Total	mg/L			-	-	-	-	-	-	<0.0010	<0.0010	
Turbidity	NTU			-	-	-	-	-	-	0.49	3.01	
pH	pH units	6.5-9.0		-	-	6.73	-	-	-	7.59	7.59	

Waterbody	Units	CCME	A54									
Year			2010				2011					
Date Sampled			20/06/2010	22/07/2010	26/08/2010	23/09/2010	22/06/2011	12/07/2011	29/08/2011	11/09/2011	09/10/2011	
GPS Coordinates			540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	
Source			ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	
Field Measurments												
Water Temperature	oC		10.4	18.1	9.8	4.1			9.5	4.92	0.4	
pH	pH units		8	8.93	7.55	7.78			8.52	7.41	7.15	
Conductivity	(µS/cm)		-	-	-	-			0	1202	1187	
Laboratory-Measured												
Ion balance	%		92.9	-	-	-	-	-	99.7	-	-	
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	1.9	-	-	-	
Ammonia as N	mg/L	2.33	0.739	<0.05	0.25	0.13	0.176	0.121	<0.050	0.264	0.67	
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.012	0.014	0.011	<0.010	<0.010	
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	<0.010	<5.0	<0.010	<0.010	<0.010	
Total Kjeldahl Nitrogen	mg/L		1.58	-	<1	<1	-	-	1.19	1.21	1.59	
Total Suspended Solids	mg/L		-	8	1	2	-	-	-	-	<5.0	
Alkalinity, Total (as CaCO3)	mg/L		49.4	56	56	60	51.4	53.8	48.8	68.1	64.1	
Bicarbonate (HCO3)	mg/L		60.2	36	56	60	62.8	65.7	59.5	83	78.1	
Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	
Hydroxide (OH)	mg/L		<5.0	10	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	
Calcium (Ca)-Dissolved	mg/L		49.9	-	-	-	-	-	105	121	141	
Magnesium (Mg)-Dissolved	mg/L		7.64	-	-	-	-	-	24.7	23	27.2	
Potassium (K)-Dissolved	mg/L		3.8	-	-	-	-	-	11.2	11.2	11.9	
Sodium (Na)-Dissolved	mg/L		17.9	-	-	-	-	-	70.6	70.6	82.6	
Chloride	mg/L		94.6	174	-	235	75.9	209	305	335	394	
Conductivity	umhos/cm		498	1005	1079	727	403	815	1070	1150	1380	
Fluoride	mg/L	0.12	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.50	
Hardness (as CaCO3)	mg/L		156	271	248	329	126	296	307	429	432	
Nitrate-N	mg/L	13	1.25	1.4	0.82	0.84	0.68	1.18	<0.050	0.809	2.92	
Nitrate and Nitrite as N	mg/L		1.25	-	-	-	0.68	1.18	<0.071	0.809	2.92	
Nitrite-N	mg/L	0.197	<0.050	0.05	-	0.01	<0.050	<0.050	<0.050	<0.050	<0.25	
Sulfate	mg/L		29.5	57	-	60	22.7	45.4	52.2	64	84.1	
TDS (Calculated)	mg/L		239	670	719	485	200	456	599	691	778	
Aluminium (Al)-Total	mg/L	0.1	0.044	<0.002	<0.002	<0.002	0.126	0.0063	<0.020	<0.020	<0.020	
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	<0.0001	0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Arsenic (As)-Total	mg/L	0.005	0.00323	0.0044	<0.0017	0.0035	0.00314	0.00356	0.0025	0.0034	0.0034	
Barium (Ba)-Total	mg/L		0.0401	0.049	0.0533	0.0539	0.0341	0.0644	0.0659	0.0899	0.0877	
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.01	<0.010	0.014	<0.030	<0.030	<0.030	
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00012	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	
Calcium (Ca)-Total	mg/L		50.7	79.3	77.4	95.8	39.9	91.5	106	126	133	
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0091	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	0.00027	<0.00020	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Total	mg/L	Equation	0.0014	0.0021	0.0015	0.002	0.00155	0.00148	<0.0020	<0.0020	<0.0020	
Iron (Fe)-Total	mg/L	0.3	0.107	<0.01	<0.01	0.71*	0.32	0.2	<0.10	0.32	0.12	
Lead (Pb)-Total	mg/L	Equation	0.0002	<0.0003	<0.0003	0.0019	0.000533	0.000156	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	0.0083	0.0223	0.0263	0.0389	0.0324	
Magnesium (Mg)-Total	mg/L		7.76	17.7	13.2	22	6.46	16.5	20.8	27.8	24.2	
Manganese (Mn)-Total	mg/L		0.0039	0.0046	0.0097	0.0079	0.00878	0.0079	0.0119	0.0248	0.0084	
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.0005	0.00042	0.00064	0.00053	<0.00050	<0.00050	
Nickel (Ni)-Total	mg/L	Equation	0.0033	0.0048	0.0064	0.0134	0.0033	0.003	<0.0020	0.0054	<0.0020	
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50	
Potassium (K)-Total	mg/L		3.97	6.2	6.8	11.6	3.16	7.01	9.28	11.8	11	
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00291	0.00569	0.00616	0.0078	0.00745	
Selenium (Se)-Total	mg/L	0.001	0.00102	<0.001	<0.001	<0.001	<0.0010	0.0023	<0.0050	<0.0050	<0.0050	
Silicon (Si)-Total	mg/L		-	-	-	-	0.414	0.249	0.4	0.64	0.48	
Silver (Ag)-Total	mg/L	0.0001	<0.00050	<0.0005	<0.005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	
Sodium (Na)-Total	mg/L		18.2	51.3	34.6	52.5	21.6	54	57.9	83.1	80.7	
Strontium (Sr)-Total	mg/L		-	0.73	0.78	0.85	0.295	0.789	0.876	1.19	1.14	
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	0.00753	<0.00020	<0.00060	<0.00060	<0.00060	
Titanium (Ti)-Total	mg/L		<0.0010	0.05	0.03	0.05	0.00402	0.00055	<0.0010	<0.0010	0.0014	
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	
Uranium (U)-Total	mg/L	0.015	0.00041	<0.001	<0.001	<0.001	0.00027	0.00043	<0.00050	<0.00050	0.00072	
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	0.00025	<0.00020	<0.0020	<0.0020	<0.0020	
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.001	0.011	<0.0050	<0.0050	<0.020	<0.020	<0.020	
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	
Turbidity	NTU		-	0.94	0.96	0.39	3.34	1.13	0.83	0.94	0.74	
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.09	<0.01		-	-	-	-	
pH	pH units	6.5-9.0	7.97	8.24	7.72	7.72	8.06	8.11	7.99	7.97	8.04	
Total Oil and Grease	mg/L		-	-	-	-	<1.0	-	-	-	-	

Appendix B

July 7th, 2011 INAC's inspector report



Indian and Northern
Affairs Canada

Affaires Indiennes
et du Nord Canada

WATER USE INSPECTION REPORT

Date: July 7, 2011	Licensee Rep. (Name/Title): John Witteman
Licensee: Agnico Eagle Mines Ltd. (Agnico)	Licence No.: 2BB-MEL0914

- As per the 2009 and 2010 inspections, upgrades to the walkways throughout the camp have been completed. Approximately 36000 m³ of gravel was used for the upgrades to limit the amount of erosion around the site.
- The unauthorized contaminated soil storage (landfarm) located behind the ore stockpile has been removed and no further action is necessary.
- 90,000 meters of core to be drilled this year compared to 35,000 meters taken last year.
- Another bulk sample (approx. 10,000 tonnes) is scheduled to be removed from the underground portal this year.
- There are 8 drills onsite, but only 6 were operating at the time of the inspection.

WATER SUPPLY

Source(s): Meliadine Lake	Quantity Used: 687 cubic meters (m ³)
Owner:/Operator: Agnico Eagle Mines Ltd.	

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Intake Facilities: A	Storage Structure: A	Treatment Systems: A	Chemical Storage: NI
Flow Meas. Device: A	Conveyance Lines: NI	Pumping Stations: A	Screen : NI

Comments: Water for the camp is treated with Chlorine and UV. The pumping and treatment stations appear to be well maintained and log records of treatment and usage are up to date and onsite. Total water usage up to July 7 is 687 m³ or approximately 16.2 m³ per day; the allowable water usage permitted in the licence is 290 m³ per day for camp and drills (Amendment #1).

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec./Ter.): Primary

Natural Water Body:	Continuous Discharge (land or water): Continuous	
Seasonal Discharge: NA	Wetlands Treatment: NA	Trench: NA

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Discharge Quality:	Decant Structure: U	Erosion:
Discharge Meas. Device:	Dyke Inspection:	Seepages:
Dams, Dykes: U	Freeboard:	Spills:
Construction:	O&M Plan:	A&R Plan:
Discharge:	Effluent Discharge Rate: Unknown	

Comments: Camp sewage is collected in primary tank and when it reaches a certain level the lift station pumps it to the Bio-disk (Little John). The sewage discharge gets treated with UV, but at the time of the inspection was not working. Chlorine was being used to treat the sewage effluent before being discharged to a containment structure filled with rock/sand/gravel to further treat the water. A ball float controls the discharge flow from this structure when it fills to a certain level. Sewage sludge is removed from the Bio-disk and used at drill sites for reclamation. Camp grey water still being discharged on the ground, but will be redirected to the Biodisk later this summer.

- The grey water discharge area is in poor shape with very little treatment (no sumps holding the water). As soon as the grey water pipes are directed to the biodisk, the discharge area should be reclaimed.
- A barrel with Aluminum Sulphate written on it was found in the grey water discharge area. This barrel must be removed and placed with the other chemicals preferably in secondary containment.

Solid Waste:

Owner/Operator: Agnico Eagle Ltd.

Landfill: N/A	Burn & Landfill: NA	Other:
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Comments: All food wastes and organics/paper products are incinerated onsite. All other wastes including wood, metals etc are stored until it can be transported back to Rankin Inlet to be disposed off in the landfill. The incinerator appeared to be working properly at the time of the inspection; ash from the incinerator is stored in drums onsite. A request for a landfill will be sent to the NWB for approval, but at the time of the inspection the request had not been sent.

- Materials (wood, metals, piping, wires etc) from the Meliadine East Project are stored to the East of the new accommodation trailers. A general clean up and organizing of this

area is needed.

- Ash from the incinerator is stored in drums onsite and will be either transported back to Rankin for disposal or deposited in the landfill if it is approved by the NWB.
- General clean up is required around the camp especially near the incinerator, drillers area, and east of the new accommodations.

FUEL STORAGE:

Waste Oil Storage:

Owner/Operator: Agnico Eagle Ltd.

Indicate: **A** - Acceptable **U** - Unacceptable **NA** - Not Applicable **NI** - Not Inspected

Berms & Liners: A	Water within Berms: U	Evidence of Leaks: A
Drainage Pipes: A	Pump Station & Catchments Berm: A	
Pipeline Condition: A	Condition of Tanks: A	

Comments: There are three 50,000 L and one 5000 L tanks that contain P50 fuel near that supply the generators. Three 50,000 L tanks are stored to the West of the camp and contain AV gas; however, there was only a small amount of AV gas onsite at the time of the inspection. A resupply of P50 (1 million Litres) and AV gas (250,000 Litres) is scheduled to be airlifted (helicopter) in the next few weeks.

- Fuel drums and oil located near both the old and new generators did not have secondary containment. Secondary containment is required.
- 21 drums of fuel stored near the helicopter landing pad should be placed in secondary containment.

SURVEILLANCE NETWORK PROGRAM (SNP)

Samples Collected	Owner /Operator: Agnico Eagle Ltd.	
Yes	INAC: 2 samples taken (MEL-1, MEL-4)	
Signs Posted	SNP: A	Warning: Posted
Records & Reporting: A		
Geotechnical Inspection: NI		

Comments: Two samples were taken during the inspection, one at the raw water intake (MEL-1) and another at the final sewage discharge point before entering into Meliadine Lake (MEL-4).

Non-Compliance of Act or Licence:

- Minor hydrocarbon spills should be cleaned up as soon as possible and a general clean up is required at various locations around the site. The drillers shack and storage area in particular need to be cleaned up and fuels, oils, and batteries must be properly stored and contained.
- All fuels, oils and chemicals should be properly stored in secondary containment.
- The grey water should be redirected to the biodisk unit and the grey water discharge area (sump) must be reclaimed by treating and backfilling.

Ian Rumbolt

Inspector's Name

Sent by E-mail

Inspector's Signature

Appendix C
2012 Work Plan