MELIADINE GOLD PROJECT

MONTHLY ENVIRONMENTAL REPORT: AUGUST 2012

PRESENTED TO THE NUNAVUT WATER BOARD

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This monthly report is delivered under water license 2BB-MEL0914, PART J, items 13.

1. The Licensee shall maintain Monitoring Stations at the following locations:

Table 1: Monitoring stations

Monitoring Program Station Number	**Description**	**Status**
MEL-1	Raw water supply intake at Meliadine Lake	Active (volume cubic metres)
MEL-2	Raw water supply intake at Pump Lake	Active (volume cubic metres)
MEL-3	Immediately downstream of old grey water sump prior to effluent entering wetland area, when flow observed	Active
MEL-3a	Immediately downstream of upgraded sump prior to the effluent entering upgraded wetland area, when flow is observed	Active
MEL-4	At a point immediately upstream of the discharge from the wetland area / upgraded wetland area to Meliadine Lake	Active
MEL-5	Point of discharge for the Bermed Fuel Containment Facilities	Active
MEL-6	Point of discharge for the contaminated soil storage	Active
MEL-7	Final effluent discharge from the BIODISK treatment system	Active

2. The Licensee shall measure and record, in cubic metres, the daily quantities of water utilized for camp, drilling and other purposes from all sources.

The consumption of fresh water for the site was **201,9 m3/day** for the month of August 2012; 184,8 m^3/day for the drills and 17,1 m^3/day for the camp.

3. ***The Licensee shall provide the GPS co-ordinates of all locations where sources of water are utilized for all purposes.*** *In UTM nad 1983*

- Camp water source: East 541943,0 ; North 6989174,0

Table 2: Drilling sources of water August 2012

X_coord	Y_coord
540739	6988800
538634	6989011
538011	6988616
539013	6987038
540116	6987134
540270	6986190
541252	6987049
538830	6990516
540058	6989587
542229	6987491
543088	6987455
543776	6986134

4. ***Licensee shall sample at Monitoring Program Station MEL-3, MEL-3a, MEL-4 and MEL-7, monthly during Sewage treatment, effluent discharge and during periods of flow at the point of entry into Meliadine Lake. Samples shall be analyzed for the following parameters:***

Biochemical Oxygen Demand – BOD_5
Total Suspended Solids
Oil and Grease (and visual)
Fecal Coliforms
pH

See part 7 for the monitoring results.

5. ***The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station MEL-5 and the contaminated soil storage at MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D, item 17.***

   - No new discharge for the month of August.

6. ***The Licensee shall obtain representative samples of the water column below any ice where required under part F, item 7. Monitoring shall include but not limited to the following:***

   Total Suspended Solids
   pH
   Electrical Conductivity, and
   Total trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury.

   - No drilling on ice for the month of August.

7. Water quality monitoring

Station: STP-OUT		August			
DATE	Limits	07/08/2012	14/08/2012	21/08/2012	28/08/2012
Ammonia as N		25.8	16.5	8	16
Biochemical Oxygen Demand	80	31	14	24	25
Heterotrophic Plate Count (AAHB)			52000	>500000	96000
Nitrate-N		20.8	28	20	25
Nitrate and Nitrite as N		22.6	28	20	25
Nitrite-N		1.8	0	0	0
Oil & Grease-(IR)	5	<1	<3	14	5
Phosphorus (P)-Total		1.7	19	13	19
TKN		35	21	19	27
Total Suspended Solids	100	27	22	51	29
Transmitance %		20	21	17	25
pH	6.5-9	7.3	6.7	6.9	6.4
Fecal Coliforms	1000	<100	200	900	<100
Total Coliforms		<10000	7000	8000	9000
Atypical		900000	17000	74000	53000

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Waterbody			A7-8															
Year			2007		2008		2010				2011					2012		
Date Sampled	Units	CCME	18/07/2007	07/10/2011	21/06/2008	14/07/2008	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	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690	540748 -6986690
LAB			-	-	-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments																		
Water Temperature	oC		17.8	1.9	6.85	16,70	3	19.3	11.1	6.5	-	-	13.7	4.63	1.2	7.96	11.5	11.9
pH	pH units		8.12	8.02	-	6.53	7.5	8.1	7.33	7.76	-	-	7.24	7.21	7.17	12.3	7.82	7.77
Conductivity	(µS/cm)				74	109	-	-	-	-	-	-	0	165	188	177	201	215
Laboratory-Measured																		
Ion balance	%		90.5	97.5	-	106	Low EC	-	-	-	-	-	101	-	-	102	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	-	-	-	-	1	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	-	<0.05	<0.02	<0.05	<0.050	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.0002	-	<0.00002	<0.00002	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	0.0042	0.007	-	-	-	-	<0.010	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	<0.02	<0.002	<0.004	-	-	-	-	<0.010	-	<0.010	<0.010	<0.010	0.001	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	0.2	0.208	0.4	0.35	-	<1	<1	-	-	0.38	0.5	0.4	0.21	0.31	0.3
Total Suspended Solids	mg/L		-	3	3	3	-	6	2	2	-	<5.0	-	-	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		30	33	24.8	27	14.9	42	42	46	30.3	32.7	36.6	37.6	37.5	-	35	38
Bicarbonate (HCO3)	mg/L		37	40	24.8	33	18.1	42	42	46	37	39.8	44.7	45.9	45.8	-	43	46
Carbonate (CO3)	mg/L		<5.0	<5.0	<2.0	<5.0	<5.0	-	<2	<2	<0.60	<0.40	<0.60	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<2.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.60	<0.40	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	15.1	15.4	9.78	-	-	-	-	-	24.6	23.5	26.3	24.2	27.1	29.9
Magnesium (Mg)-Dissolved	mg/L		-	-	2.03	1.79	1.31	-	-	-	-	-	3.02	3.01	3.34	3.01	3.26	3.44
Potassium (K)-Dissolved	mg/L		-	-	2	0.93	0.63	-	-	-	-	-	1.41	1.28	1.54	1.52	1.48	1.61
Sodium (Na)-Dissolved	mg/L		-	-	2.5	2.61	1.9	-	-	-	-	-	4.95	4.35	5.37	4.75	5.44	5.32
Chloride	mg/L		12	17	16.9	17	13.2	31.9	-	33.6	8.95	28.8	32.1	30.9	31.9	34.2	38.7	40.6
Conductivity	umhos/cm		106	135	113	118	81.1	249	303	177	93.6	159	176	175	178	188	205	181
Fluoride	mg/L	0.12	-	-	<0.02	-	-	-	-	-	<0.10	<0.10	0.1	<0.10	<0.10	<0.10	-	-
Hardness (as CaCO3)	mg/L		41	52	46	49	29.8	79	64	79	30.6	64.9	68.8	79.6	75.8	72.6	94.2	88.3
Nitrate-N	mg/L	13	<0.1	<0.1	0.0168	<0.1	<0.050	0.02	0.02	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.1	<0.1	-	<0.1	<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.05	<0.05	<0.001	<0.05	<0.050	0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		3.2	4.1	2.78	2.1	1.36	7	-	4	2.07	3.15	3.48	4.27	4.88	4.47	5.24	5.24
TDS (Calculated)	mg/L		51	64	-	-	37.1	166	202	118	46.5	81	91.6	94.3	93.6	90.2	152	125
Aluminum (Al)-Total	mg/L	0.1	0.01	-	0.005	0.0023	<0.010	0.529*	0.021	0.04	0.0066	<0.0050	0.021	<0.020	<0.020	0.0077	0.0065	<0.0050
Antimony (Sb)-Total	mg/L		<0.0004	-	<0.0005	<0.00003	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.0023	-	0.00115	0.003	0.00108	0.0029	0.0022	<0.0005	0.00046	0.00235	0.0028	0.0026	0.0016	0.00136	0.00208	0.00187
Barium (Ba)-Total	mg/L		0.014	-	0.02	0.0143	0.0125	0.0197	0.016	0.0164	0.0117	0.0199	0.019	0.0207	0.0172	0.0234	0.0243	0.0218
Beryllium (Be)-Total	mg/L		<0.001	-	<0.001	<0.0002	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.05	-	<0.01	<0.002	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	0.000017	<0.00005	<0.000050	<0.00008	<0.00008	0.00015*	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000015	0.00001	<0.000010
Calcium (Ca)-Total	mg/L		-	-	-	-	10.8	25.3	21.3	25.3	10.3	21.7	22.8	26.1	25.1	24.4	31.3	29.6
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	-	0.0068	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.005	-	<0.001	0.00026	<0.0050	<0.0006	<0.0006	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.002	-	<0.0003	<0.0001	<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.001	-	0.001	0.0009	<0.0010	0.0011	0.0009	0.001	0.00074	0.00065	<0.0020	<0.0020	<0.0020	0.00062	0.00094	0.00073
Iron (Fe)-Total	mg/L	0.3	-	-	0.067	0.138	0.078	<0.01	<0.01	0.18	<0.10	0.12	0.11	0.17	<0.10	<0.10	0.1	-
Lead (Pb)-Total	mg/L	Equation	<0.0001	-	<0.0005	<0.0001	<0.00010	<0.0003	<0.0003	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010	0.000119	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		0.01	-	0.005	-	<0.010	<0.1	<0.1	<0.1	<0.0020	0.0051	0.012	0.0125	0.0077	0.0083	0.0092	0.009
Magnesium (Mg)-Total	mg/L		-	-	2.03	1.8	1.42	3.9	2.7	4	1.2	2.63	2.87	3.53	3.2	3.03	3.9	3.52
Manganese (Mn)-Total	mg/L		0.014	-	0.00646	0.0241	0.0292	0.0199	0.0056	0.0098	0.0145	0.0191	0.0164	0.0223	0.0089	0.013	0.0139	0.00814
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	<0.001	<0.00016	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	0.0002	0.00025	0.00025
Nickel (Ni)-Total	mg/L	Equation	0.002	-	0.001	0.00051	<0.0020	0.0012	0.0015	0.0038	<0.0020	<0.0020	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	2	0.95	0.71	0.89	0.84	2.1	1.08	1.14	1.25	1.52	1.31	1.31	1.61	1.51
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	-	-	0.00115	0.00124	0.00149	0.00159	0.00134	0.00141	0.00176	0.00165
Selenium (Se)-Total	mg/L	0.001	<0.0004	-	<0.001	<0.0002	<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	-	-	0.143	0.512	0.57	0.74	0.91	0.564	0.433	0.343
Silver (Ag)-Total	mg/L	0.0001	<0.0004	-	<0.00002	<0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	2.5	2.6	2.3	6.3	3.9	5.7	4.76	4.09	4.59	5.43	4.71	4.52	6.28	5.6
Strontium (Sr)-Total	mg/L		-	-	-	0.0837	-	0.15	0.14	0.15	0.0321	0.14	0.147	0.155	0.14	0.173	0.206	0.182
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0001	-	<0.0002	<0.00003	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.00005	-	<0.0005	-	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		0.001	-	0.01	-	<0.0010	0.02	<0.01	<0.01	0.00022	<0.00020	<0.0010	<0.0010	<0.0010	0.00056	0.00053	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	0.00047	0.00023	0.00017
Uranium (U)-Total	mg/L	0.015	<0.0001	-	<0.0002	<0.00005	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.001	-	<0.001	<0.00019	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.006	-	0.005	0.0028	<0.0040	<0.001	<0.001	0.009	<0.0050	<0.0050	<0.020	<0.020	<0.020	0.0031	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Ortho-Phosphate (PO4-P)	mg/L															-	-	-
Sodium Adsorption Ratio		0.03	-	<0.01	<0.001	<0.001	<0.010		0.05	<0.01	-	-	-	-	-	-	0.26	0.25
Turbidity	NTU		-	0.45	-	-	-	0.74	0.43	0.34	0.68	0.81	0.54	1.32	0.57	0.45	0.68	0.68
pH	pH units	6.5-9.0	7.7	7.7	7.11	7.6	7.4	7.17	7.78	7.53	7.73	7.88	7.95	7.83	7.81	-	7.85	7.77

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Waterbody			A8										
Year			2007		2008	2009	2010		2011		2012		
Date Sampled	Units	CCME	18/07/2007	08/10/2007	15/07/2008	27/04/2009	20/06/2010	23/09/2010	2011/07/12	22/07/2011	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			0540681, 6986702	0540681, 6986702	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142	0540181, 6987142
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments													
Water Temperature	oC		17.6	0.5	14.14	0.10	2.8	6.7	-	20.4	7.55	12.8	14.4
pH	pH units		8.06	7.81	7.8	6.41	7.7	7.67	-	8.24	13.8	7.87	7.94
Conductivity	(µS/cm)		-	-	101	489	-	-	-	-	180	207	232
Laboratory-Measured													
Ion balance	%		91.2	96.7	107	102	-	-	-	-	99.6	-	-
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	1.5	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	-	<0.050	<0.050	0.212	<0.050	<0.05	<0.050	<0.05	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.0002	-	<0.00002	<0.00002	<0.00010	<0.00001	<0.000050	<0.00001	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	0.005	0.0073	-	-	0.01	-	0.0017	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	0.02	0.003	0.0065	-	-	-	-	0.0011	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	0.2	0.2	1.01	0.41	2	-	-	0.25	0.36	0.3
Total Suspended Solids	mg/L		-	3	17	5	-	1	<5.0	5	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		30	33	28	125	9.6	43	32.6	42	-	35	46
Bicarbonate (HCO3)	mg/L		37	40	34	153	11.7	43	39.8	42	-	42	56
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0	<2	<0.60	-	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0	<2	<0.40	<2	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	14.8	71.8	6.66	-	-	-	24	28.3	33.7
Magnesium (Mg)-Dissolved	mg/L		-	-	1.75	8.95	0.93	-	-	-	3.07	3.25	3.75
Potassium (K)-Dissolved	mg/L		-	-	0.87	4.07	<0.50	-	-	-	1.56	1.44	1.72
Sodium (Na)-Dissolved	mg/L		-	-	2.42	13	1.5	-	-	-	4.72	5.53	5.5
Chloride	mg/L		12	17	16	78.4	9.26	33.8	29.3	30.6	34.2	38.8	41.5
Conductivity	umhos/cm		106	134	117	514	55.4	195	160	248	188	205	190
Fluoride	mg/L	0.12	-	-	-	-	-	-	<0.10	-	<0.10	-	-
Hardness (as CaCO3)	mg/L		41	51	49	216	20.5	78	64.4	76	72.6	90.5	99.4
Nitrate-N	mg/L	13	0.1	0.1	0.1	0.052	<0.050	0.14	<0.050	0.01	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		<0.1	<0.1	<0.1	<0.071	<0.071	-	<0.071	-	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.050	<0.050	<0.050	<0.050	<0.01	<0.050	<0.01	<0.050	<0.050	<0.050
Sulfate	mg/L		3.2	4.1	2.1	9.82	1,14	3	3.3	8	4.71	5.24	5.42
TDS (Calculated)	mg/L		51	64	57	261	25.3	130	81.5	165	91.3	158	134
Aluminum (Al)-Total	mg/L	0.1	0.01	-	0.0018	0.005	<0.010	0.002	<0.0050	<0.002	0.0077	0.0093	<0.0050
Antimony (Sb)-Total	mg/L		<0.0004	-	<0.00003	<0.0002	<0.0040	<0.0001	<0.00020	<0.0001	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.0024	-	0.00003	0.0037	0.00074	0.0049	0.0019	0.0029	0.00136	0.00255	0.00213
Barium (Ba)-Total	mg/L		0.014	-	0.0128	0.077	0.0086	0.016	0.0203	0.0184	0.0234	0.0253	0.0239
Beryllium (Be)-Total	mg/L		0.001	-	0.0002	0.001	<0.0010	0.0006	<0.00020	<0.0005	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	0.001	-	-	<0.00020	-	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.05	-	<0.002	<0.05	<0.050	<0.01	<0.010	<0.01	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	<0.00005	<0.00001	<0.000050	0.00014	<0.000010	<0.00008	0.000015	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	-	-	7.2	25.2	21.4	24.2	24.4	30.1	33.3
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	-	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.005	-	<0.00006	<0.004	<0.0050	0.0053	<0.0010	<0.0006	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.002	-	0.00011	<0.0003	<0.0020	-	<0.00020	-	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.002	-	0.0017	0.0013	<0.0010	0.0008	0.0006	0.0006	0.00062	0.00101	0.00115
Iron (Fe)-Total	mg/L	0.3	0.16	-	0.072	-	0.052	0.18	0.11	<0.01	<0.10	0.17	<0.10
Lead (Pb)-Total	mg/L	Equation	0.0007	-	<0.00006	0.005	<0.00010	0.0027	<0.000090	0.0197	0.000119	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.01	-	-	0.0136	<0.010	<0.1	0.006	<0.1	0.0083	0.0091	0.0082
Magnesium (Mg)-Total	mg/L		-	-	-	-	0.96	3.8	2.68	3.9	3.03	3.73	3.94
Manganese (Mn)-Total	mg/L		0.012	-	0.0069	0.0855	0.0469	0.0106	0.0151	0.0157	0.013	0.0371	0.00647
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	0.00015	<0.0001	<0.0050	<0.0005	<0.00020	<0.0005	0.0002	0.00023	0.00022
Nickel (Ni)-Total	mg/L	Equation	<0.002	-	0.00042	0.0025	<0.0020	0.0035	<0.0020	0.0012	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	mg/L		-	-	-	-	<0.020	-	<0.20	-	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	-	-	0.46	2.2	1.16	0.89	1.31	1.56	1.62
Rubidium (Rb)-Total	mg/L		-	-	-	-	-		0.0013	-	0.00141	0.00172	0.00184
Selenium (Se)-Total	mg/L	0.001	<0.008	-	<0.0003	<0.0005	<0.00040	<0.001	<0.0010	<0.001	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L			-	-	-		-	0.358	-	0.564	0.419	0.655
Silver (Ag)-Total	mg/L	0.0001	<0.0004	-	<0.0001	<0.00002	<0.00010	<0.0005	<0.00010	<0.0005	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	-	-	1.7	5.5	4.1	5.9	4.52	6.03	5.89
Strontium (Sr)-Total	mg/L		-	-	0.082	0.408	-	0.15	0.149	0.14	0.173	0.198	0.186
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	<0.00020	-	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0001	-	<0.00003	<0.0002	<0.00010	-	<0.00010	-	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	-	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.05	-	-	<0.0005	<0.050	<0.001	<0.00020	<0.001	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.001	-	-	-	<0.0010	<0.01	<0.00020	0.01	0.00056	0.0005	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	<0.0010	-	0.00047	0.00018	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.0001	-	<0.00005	0.000061	<0.00010	<0.001	<0.00010	<0.001	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.001	-	0.00016	<0.001	<0.0010	<0.0005	<0.00020	<0.0005	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.009	-	0.0008	0.0104	<0.0040	0.006	<0.0050	<0.001	0.0031	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	-	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03									-	0.26	0.24
Ortho-Phosphate (PO4-P)	mg/L		-	<0.01	<0.001	<0.001	<0.010	<0.01	-	0.02	-	-	-
Turbidity	NTU		-	0.5	-	-	-	0.36	0.57	0.7	0.47	0.53	0.39
pH	pH units	6.5-9.0	7.8	7.7	7.7	7.76	7.18	7.42	7.87	7.04	-	7.83	7.98

Waterbody			A9										
Year			2007		2010				2011		2012		
Date Sampled	Units	CCME	2007/07/18	2007/10/07	20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142	540194-6988142
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments													
Water Temperature	oC		21.7	0.7	12.1	19.5	-	4.2	-	-	7.48	10.9	13
pH	pH units		8.6	7.79	8	8.39	7.66	7.68	-	-	18.2	7.81	7.71
Conductivity	(µS/cm)		-	-	-	-	-	-	-	-	483	726	972
Laboratory-Measured													
Ion balance	%		101	96.5	90.9	-	-	-	-	-	99.7	-	-
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	-	2.5	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	-	<0.050	<0.050	0.05	0.09	<0.05	<0.050	<0.050	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.0005	-	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	-	-	-	-	0.01	0.019	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	0.02	-	-	-	-	<0.010	-	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	0.3	0.84	-	1	<1	-	-	0.53	0.69	0.68
Total Suspended Solids	mg/L		-	3	-	4	12	3	-	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		52	60	34.6	58	65	83	35.9	61.7	-	46	57
Bicarbonate (HCO3)	mg/L		64	74	42.2	58	<2	83	43.8	75.2	-	56	69
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<2	-	<2	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	59.8	-	-	-	-	-	63.8	101	134
Magnesium (Mg)-Dissolved	mg/L		-	-	6.2	-	-	-	-	-	7.95	11	13.2
Potassium (K)-Dissolved	mg/L		-	-	2.64	-	-	-	-	-	2.7	3.51	4.83
Sodium (Na)-Dissolved	mg/L		-	-	7.9	-	-	-	-	-	10.5	18.3	19.7
Chloride	mg/L		182	282	123	193	-	175	52.3	113	111	180	234
Conductivity	umhos/cm		759	1100	502	852	857	600	251	501	508	721	762
Fluoride	mg/L	0.12	-	-	-	-	-	-	<0.10	<0.10	<0.10	-	-
Hardness (as CaCO3)	mg/L		300	422	175	299	212	303	109	213	192	304	381
Nitrate-N	mg/L	13	0.1	0.1	<0.050	0.02	0.09	0.15	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		0.1	0.1	<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.05	<0.05	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		13.3	21.6	6.6	14	-	10	5.89	15.8	25.1	30.2	31.2
TDS (Calculated)	mg/L		353	518	227	568	-	400	128	259	243	558	555
Aluminum (Al)-Total	mg/L	0.1	<0.01	-	<0.010	<0.002	0.024	<0.002	0.0294	0.0059	0.0066	0.0086	<0.0050
Antimony (Sb)-Total	mg/L		0.0004	-	0.00058	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.0041	-	0.00203	0.0041	0.0038	0.0079	0.00242	0.00405	0.00245	0.00344	0.00361
Barium (Ba)-Total	mg/L		0.099	-	0.0709	0.0785	0.0776	0.0783	0.0431	0.0706	0.0624	0.105	0.106
Beryllium (Be)-Total	mg/L		<0.001	-	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.05	-	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	<0.000050	<0.00008	<0.00008	0.00033	<0.000010	<0.000010	0.00002	0.000013	0.000013
Calcium (Ca)-Total	mg/L		-	-	66.9	97.6	72.6	99.3	36.8	71.8	69.3	101	129
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.005	-	<0.0050	<0.0006	<0.0006	0.0071	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.002	-	<0.0020	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.004	-	0.0012	0.0023	0.0025	0.002	0.00127	0.00234	0.00168	0.00224	0.00214
Iron (Fe)-Total	mg/L	0.3	0.179	-	0.144	<0.01	0.08	0.89	0.37	0.23	0.21	0.19	0.19
Lead (Pb)-Total	mg/L	Equation	0.0004	-	<0.00010	0.016	-	<0.0003	0.000103	<0.000090	0.000104	0.00235	0.000251
Lithium (Li)-Total	mg/L		0.04	-	0.03	<0.1	<0.1	<0.1	0.0111	0.0203	0.0248	0.042	0.0539
Magnesium (Mg)-Total	mg/L		-	-	6.75	13.4	7.5	13.5	4.28	8.28	7.54	12.5	14.1
Manganese (Mn)-Total	mg/L		0.013	-	0.0039	0.0069	0.0219	0.0076	0.0219	0.0153	0.00752	0.0143	0.00784
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	<0.0050	<0.0005	<0.0005	<0.0005	0.0002	0.00038	0.00036	0.00034	0.00052
Nickel (Ni)-Total	mg/L	Equation	<0.005	-	0.0029	0.0075	0.0069	0.0129	0.0026	0.0028	0.0025	0.0037	0.0044
Phosphorus (P)-Total	mg/L		-	-	<0.020	-	-	-	<0.20	<0.20	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	2.94	2.8	-	5.1	1.67	2.7	2.73	3.8	4.63
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	0.00167	0.00291	0.00258	0.00363	0.00449
Selenium (Se)-Total	mg/L	0.001	0.0022	-	<0.00040	0.001	-	0.006	<0.0010	0.0014	<0.0010	0.0017	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	1.14	0.541	0.176	1.11	1.39
Silver (Ag)-Total	mg/L	0.0001	<0.0004	-	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	9.1	20.6	-	16	5.12	9.79	9.34	20.4	21.3
Strontium (Sr)-Total	mg/L		-	-	-	0.64	-	0.82	0.267	0.542	0.488	0.758	1.06
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0001	-	<0.00010	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.05	-	<0.00010	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.001	-	<0.0010	0.06	0.03	0.04	0.00116	0.00045	0.00087	0.00125	0.0013
Tungsten (W)-Total	mg/L		<0.001	-	-	-	-	-	<0.0010	<0.0010	0.0002	0.00011	0.00012
Uranium (U)-Total	mg/L	0.015	<0.0001	-	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00010	<0.00010	0.00011
Vanadium (V)-Total	mg/L		<0.001	-	<0.0010	<0.0005	0.002	<0.0005	<0.00020	0.00022	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.008	-	<0.0040	<0.001	0.013	0.01	<0.0050	<0.0050	0.0032	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03									-	0.46	0.43
Ortho-Phosphate (PO4-P)	mg/L		-	<0.01	<0.010	0.003	-	<0.01	-	-	-	-	-
Turbidity	NTU		-	0.5	-	0.92	2.1	0.73	0.71	1.53	0.84	0.88	1.31
pH	pH units	6.5-9.0	7.9	7.8	7.79	7.73	-	7.9	7.63	8.1	-	7.93	7.95

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Waterbody			B2-1									
Year			2010		2011					2012		
Date Sampled	Units	CCME	22/07/2010	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			-	-	-	-	-	-	-	544790-6971714	544790-6971714	544790-6971714
LAB			-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments												
Water Temperature	oC		18.9	6.3	-	-	14.2	4.88	1	7.8	10.9	12.5
pH	pH units		7.69	7.8	-	-	7.31	7.15	7.35	7.4	8.6	8.02
Conductivity	(µS/cm)		-	-	-	-	0	94	107	83	91	114
Laboratory-Measured												
Ion balance	%		-	-	-	-	103	-	-	Low EC	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	1.3	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	0.05	0.09	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	0.012	0.012	0.017	0.012	<0.010	<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		-	3	-	-	0.21	0.4	0.37	<0.20	0.3	0.36
Total Suspended Solids	mg/L		3	2	-	<5.0	-	-	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		41	53	25.5	25.1	33.3	32.7	33.3	-	28	32
Bicarbonate (HCO3)	mg/L		41	53	31.1	30.7	40.7	39.9	40.7	-	35	40
Carbonate (CO3)	mg/L		-	<2	<0.60	<0.60	<0.60	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	-	-	14.2	13.2	15.2	9.7	13.2	12.9
Magnesium (Mg)-Dissolved	mg/L		-	-	-	-	1.54	1.53	1.61	1.12	1.4	1.34
Potassium (K)-Dissolved	mg/L		-	-	-	-	1.11	0.91	1.1	0.93	0.837	0.877
Sodium (Na)-Dissolved	mg/L		-	-	-	-	4.14	3.82	4.51	2.48	3.75	3.28
Chloride	mg/L		8.5	11.2	11.7	7.9	9.92	10.8	11	7.57	9.73	11.3
Conductivity	umhos/cm		144	123	97.8	79	105	105	110	75	98	102
Fluoride	mg/L	0.12	-	-	<0.10	<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	28.8	40.4	40.5
Nitrate-N	mg/L	13	0.02	0.45	<0.050	<0.050	<0.050	<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	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.01	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		7	11	3.93	2.39	3.18	3.73	5	2.53	3.82	4.26
TDS (Calculated)	mg/L		96	82	49.6	39.9	54	55	57.7	39	76	54
Aluminum (Al)-Total	mg/L	0.1	0.41	0.002	0.0965	0.0073	0.044	0.042	<0.020	0.0061	0.0089	<0.0050
Antimony (Sb)-Total	mg/L		<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.001	0.0056*	0.00037	0.00099	0.002	0.0014	<0.0010	0.00064	0.00109	0.00115
Barium (Ba)-Total	mg/L		0.0122	0.0104	0.0135	0.0108	0.0136	0.0137	0.0114	0.0107	0.0128	0.0125
Beryllium (Be)-Total	mg/L		<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000161	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		14.5	16.3	9.57	10.2	13.8	13.8	14.6	9.08	13.6	13.7
Cesium (Cs)-Total	mg/L		-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.0006	0.0059*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.0516	0.0011	0.00112	0.00066	<0.0020	<0.0020	0.0025	0.00094	0.00126	0.00115
Iron (Fe)-Total	mg/L	0.3	<0.01	0.19	0.15	0.11	0.48	0.26	<0.10	<0.10	0.1	0.13
Lead (Pb)-Total	mg/L	Equation	<0.0003	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010	0.000185	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.1	<0.1	<0.0020	<0.0020	0.0051	0.0025	0.0027	<0.0020	<0.0020	0.0022
Magnesium (Mg)-Total	mg/L		2.1	2.3	1.42	1.12	1.52	1.65	1.68	1.06	1.59	1.51
Manganese (Mn)-Total	mg/L		0.0201	0.0118	0.0111	0.0153	0.0604	0.0219	0.0116	0.0146	0.0117	0.0226
Molybdenum (Mo)-Total	mg/L	0.073	<0.0005	<0.0005	0.0002	0.00021	<0.00050	<0.00050	<0.00050	<0.00020	0.00026	0.00031
Nickel (Ni)-Total	mg/L	Equation	0.0014	0.0024	<0.0020	<0.0020	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		0.59	1.7	1.31	0.67	1.1	1.05	0.99	0.841	0.893	0.906
Rubidium (Rb)-Total	mg/L		-		0.00183	0.00078	0.00126	0.00114	0.00102	0.00082	0.001	0.00103
Selenium (Se)-Total	mg/L	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	0.464	0.157	0.4	0.41	0.31	0.239	0.303	0.297
Silver (Ag)-Total	mg/L	0.0001	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		5.6	6.2	6.33	2.49	4.12	4.35	4.4	2.37	4.13	4
Strontium (Sr)-Total	mg/L		0.06	0.07	0.0444	0.0472	0.0627	0.0614	0.0589	0.0465	0.0616	0.0605
Tellurium (Te)-Total	mg/L		-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		0.01	<0.01	0.00559	0.00033	0.0013	0.0029	<0.0010	0.00043	<0.00050	<0.00050
Tungsten (W)-Total	mg/L		-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.0005	<0.0005	0.00037	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	<0.001	0.005	<0.0050	<0.0050	<0.020	<0.020	<0.020	0.006	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03								-	0.26	0.23
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	0.38	0.68	1.05
pH	pH units	6.5-9.0	6.97	7.46	7.6	7.79	7.7	7.72	7.74	-	7.77	7.58

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody			A13											
Year			2007		2010				2011					2012		
Date Sampled	Units	CCME	2007/08/12	2007/10/07	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	21/06/2012	28/07/2012	18/08/2012
GPS Coordinates			0539828, 6988676	0539828, 6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676	539828-6988676
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments																
Water Temperature	oC		10.4	0.3	13.4	19.2	9	4.2	-	-	7.8	5.12	0.3	8.6	15.4	16.9
pH	pH units		7.56	7.66	7.7	8.42	7.59	7.69	-	-	8.28	7.3	7.2	7.89	7.56	8.04
Conductivity	(µS/cm)		-	-	-	-	-	-	-	-	-	1576	1489	432	1583	2007
Laboratory-Measured																
Ion balance	%		103	94.1	91.2	-	-	-	-	-	92.6	-	-	94.4	-	-
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	-	2.3	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	0.06	0.31	<0.050	0.05	0.08	<0.05	<0.050	<0.050	<0.050	0.123	<0.050	0.042	<0.010	<0.010
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	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	0.02	0.02	-	-	-	-	0.011	0.014	0.011	0.011	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	<0.02	-	-	-	-	<0.010	-	<0.010	<0.010	<0.010	0.013	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.6	0.6	0.7	-	<1	<1	-	-	1.07	0.66	0.38	0.44	0.55	0.8
Total Suspended Solids	mg/L		4	3	-	4	3	<1	-	<5.0	-	-	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		30	51	22.6	60	55	55	30.4	42.4	96	25.1	31.7	36	41	55
Bicarbonate (HCO3)	mg/L		37	62	27.6	60	55	55	37.1	51.7	117	30.6	38.7	44	50	67
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	<12	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	<6.8	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	103	-	-	-	-	-	390	226	179	57.9	228	281
Magnesium (Mg)-Dissolved	mg/L		-	-	6.57	-	-	-	-	-	46.5	21.8	21.6	6.94	22.7	27
Potassium (K)-Dissolved	mg/L		-	-	4.97	-	-	-	-	-	11.1	7.78	4.9	2.88	8.04	9.9
Sodium (Na)-Dissolved	mg/L		-	-	12.9	-	-	-	-	-	36.7	24.6	23.5	12.3	46.6	54.1
Chloride	mg/L		716	372	228	197	-	230	42.2	85	877	511	364	109	440	558
Conductivity	umhos/cm		2370	1460	835	947	953	676	212	369	2450	1560	1220	482	1450	1230
Fluoride	mg/L	0.12	-	-	-	-	-	-	<0.10	<0.10	<0.50	<0.50	<0.10	-	-	-
Hardness (as CaCO3)	mg/L		1020	487	284	321	245	343	76.7	159	1070	712	571	160	653	790
Nitrate-N	mg/L	13	0.1	0.5	<0.050	0.02	0.07	0.09	<0.050	<0.050	<0.25	<0.25	<0.050	<0.050	<0.25	<0.25
Nitrate and Nitrite as N	mg/L		0.1	0.6	<0.071	-	-	-	<0.071	<0.071	<0.35	<0.35	<0.071	<0.071	<0.35	<0.35
Nitrite-N	mg/L	0.197	<0.05	0.08	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.25	<0.25	<0.050	<0.050	<0.25	<0.25
Sulfate	mg/L		14.3	77.2	4.73	14	-	20	5.96	6.13	25.4	63.4	56	24.8	73	62.8
TDS (Calculated)	mg/L		1170	719	374	-	635	450	101	186	1440	896	681	386	1140	943
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	0.0698	<0.050	0.0095
Antimony (Sb)-Total	mg/L		-	-	<0.0016	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020
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	0.00201	0.0031	0.00453
Barium (Ba)-Total	mg/L		-	-	0.0751	0.0838	0.0873	0.0882	0.0297	0.0527	0.321	0.209	0.149	0.0523	0.194	0.221
Beryllium (Be)-Total	mg/L		-	-	<0.0040	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.0020	<0.00020
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	0.016	<0.10	0.011
Cadmium (Cd)-Total	mg/L	Equation	-	-	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	<0.000010	<0.00010	0.000024
Calcium (Ca)-Total	mg/L		-	-	107	105	82.8	110	25	53.9	359	240	198	54	222	267
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.0010	<0.00010
Chromium (Cr)-Total	mg/L		-	-	<0.0050	<0.0006	0.0006	0.0064*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.010	<0.0010
Cobalt (Co)-Total	mg/L		-	-	<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	0.00086	<0.00050	0.00028	<0.0020	<0.00020
Copper (Cu)-Total	mg/L	Equation	-	-	<0.0040	0.0025	0.0017	0.0012	0.00124	0.00182	<0.0020	0.0025	<0.0020	0.00152	0.0024	0.00244
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	0.45	<1.0	0.35
Lead (Pb)-Total	mg/L	Equation	-	-	0.00051	<0.0003	<0.0003	0.0033	<0.000090	0.000098	<0.0010	<0.0010	<0.0010	0.000105	<0.00090	0.000166
Lithium (Li)-Total	mg/L		-	-	0.065	<0.1	<0.1	<0.1	0.0064	0.0136	0.182	0.101	0.0578	0.0232	0.092	0.122
Magnesium (Mg)-Total	mg/L		-	-	6.73	14.4	9.2	16.8	3.44	5.96	43.3	27.3	18.7	8.34	24.3	29.8
Manganese (Mn)-Total	mg/L		-	-	0.111	0.0248	0.0217	0.0427	0.019	0.014	0.0123	0.0894	0.078	0.0279	0.0155	0.00845
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	0.00064	<0.0020	0.00103
Nickel (Ni)-Total	mg/L	Equation	-	-	0.0051	0.0072	0.008	0.0139	0.0024	<0.0020	0.0029	0.0082	<0.0020	0.0042	<0.020	0.0063
Phosphorus (P)-Total	mg/L		-	-	<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50	<0.10	<1.0	<0.10
Potassium (K)-Total	mg/L		-	-	5.12	3.7	2.8	5	1.23	1.97	10.4	8.04	5.29	3.8	8	10.3
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	0.00128	0.00188	0.00938	0.00644	0.00379	0.00278	0.0067	0.00852
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	<0.0010	<0.010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-		-	-	0.793	0.509	2.94	3.12	2.32	0.7	1.56	1.62
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	<0.00010	<0.0010	<0.00010
Sodium (Na)-Total	mg/L		-	-	13.2	21.4	10.3	15.6	5.11	7.6	33.3	31	19.6	16.6	45.9	56.6
Strontium (Sr)-Total	mg/L		-	-	-	0.88	-	0.83	0.16	0.353	2.32	1.91	1.12	0.428	1.86	2.26
Tellurium (Te)-Total	mg/L		-	-	-	-	0.71	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	-	-	<0.00040	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.0010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.00010
Tin (Sn)-Total	mg/L		-	-	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.0020	<0.00020
Titanium (Ti)-Total	mg/L		-	-	<0.0024	0.08	0.04	0.05	0.00064	0.00052	0.0017	0.0016	0.0014	0.00334	<0.0050	0.0027
Tungsten (W)-Total	mg/L		-	-	-	-	-		<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	0.00047	<0.0010	0.00021
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	<0.00010	<0.0010	0.00023
Vanadium (V)-Total	mg/L		-	-	<0.0020	<0.0005	0.0006	<0.0005	<0.00020	0.0002	<0.0020	<0.0020	<0.0020	<0.00020	<0.0020	<0.00020
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	<0.0020	<0.020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.0040	<0.00040
Turbidity	NTU		1.9	3.6	-	1.2	0.4	5	1.56	1.26	1.45	3.64	3.05	3.19	2.17	2.33
pH	pH units	6.5-9.0	7.5	7.7	7.51	7.52	7.68	7.61	7.82	7.97	7.8	7.54	7.71	7.50	7.91	8
Ortho-Phosphate (PO4-P)	mg/L		<0.01	<0.01	<0.010	0.01	0.08	<0.01	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio			-	-	-	-	-	-	-	-	-	-	-	-	0.79	0.82

Waterbody			A15														
Year			2007		2010				2011					2012			
Date Sampled	Units	CCME	2007/08/12	2007/10/07	20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12	2011/08/29	2011/09/11	2011/10/09	21/06/2012	28/07/2012	18/08/2012	
GPS Coordinates			0539732, 6988798	0539732, 6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	539731.8-6988798	
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	
Field Measurments																	
Water Temperature	oC		23.8	1.9	14.2	19.2	8.8	3.4	-	-	7.2	3.93	0.3	1.3	15.6	17.4	
pH	pH units		8.29	7.04	7.7	8.2	7.55	7.76	-	-	8.75	7.07	7.15	7.41	7.17	7.84	
Conductivity	(µS/cm)		-	-	-	-	-	-	-	-	0	1302	1354	432	1771	2312	
Laboratory-Measured																	
Ion balance	%		100	92.9	103	-	-	-	-	-	97.2	-	-	94.9	-	-	
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	-	1.8	-	-	-	<6.0	<6.0	<6.0	
Ammonia as N	mg/L	2.33	-	<0.05	<0.050	0.06	0.05	<0.05	0.056	<0.050	<0.050	<0.050	<0.050	0.034	<0.010	<0.010	
Mercury (Hg)-Total	mg/L	0.000026	<0.0004	-	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020	
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	-	-	-	-	<0.010	0.018	0.012	<0.010	0.011	<0.010	<0.010	0.0033	
Phosphorus (P)-Total Reactive	mg/L		-	0.02	-	-	-	-	<0.010	-	<0.010	<0.010	<0.010	0.023	<0.010	<0.010	
Total Kjeldahl Nitrogen	mg/L		-	0.6	0.91	-	<1	<1	-	-	1.06	0.42	0.45	0.43	0.55	0.68	
Total Suspended Solids	mg/L		-	4	-	10	10	3	-	<5.0	-	-	<5.0	7	5	6	
Alkalinity, Total (as CaCO3)	mg/L		36	51	27.6	65	56	54	23.7	41.5	12.6	26.6	30.8	27	35	46	
Bicarbonate (HCO3)	mg/L		44	62	33.7	65	56	54	28.9	50.6	15.4	32.4	37.6	33	43	56	
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	<12	<12	<12	
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	<6.8	<6.8	<6.8	
Calcium (Ca)-Dissolved	mg/L		-	-	71.7	-	-	-	-	-	577	196	188	253	258	329	
Magnesium (Mg)-Dissolved	mg/L		-	-	8.73	-	-	-	-	-	48.3	21.1	21.1	20.7	25.1	28.1	
Potassium (K)-Dissolved	mg/L		-	-	3.19	-	-	-	-	-	20.9	6.45	5.25	13.1	8.69	9.82	
Sodium (Na)-Dissolved	mg/L		-	-	9.9	-	-	-	-	-	77.3	22.5	20.2	40.2	56.2	62.8	
Chloride	mg/L		210	267	141	313	-	223	22.9	100	1250	409	362	149	511	635	
Conductivity	umhos/cm		807	1020	547	1372	961	702	128	416	3230	1310	1220	676	1610	1340	
Fluoride	mg/L	0.12	-	-	-	-	-	-	<0.10	<0.10	<0.50	<0.50	<0.10	-	-	-	
Hardness (as CaCO3)	mg/L		317	384	215	489	248	350	52.7	182	1400	613	487	711	737	912	
Nitrate-N	mg/L	13	<0.1	<0.1	<0.050	0.01	0.05	0.02	<0.050	<0.050	<0.25	<0.25	<0.050	<0.25	<0.25	<0.25	
Nitrate and Nitrite as N	mg/L		<0.1	<0.1	<0.071	-	-	-	<0.071	<0.071	<0.35	<0.35	<0.071	<0.35	<0.35	<0.35	
Nitrite-N	mg/L	0.197	<0.05	<0.05	<0.050	<0.01	-	0.01	<0.050	<0.050	<0.25	<0.25	<0.050	<0.25	<0.25	<0.25	
Sulfate	mg/L		6.8	16.8	7.7	9	-	25	1.56	5.84	106	66.2	54.2	24.3	96.8	83.7	
TDS (Calculated)	mg/L		368	471	259	-	641	468	61.4	208	2090	753	640	1390	1230	793	
Aluminum (Al)-Total	mg/L	0.1	0.04	-	0.015	0.006	0.065	0.008	0.0265	0.0333	0.032	0.028	0.03	0.0613	<0.050	0.0073	
Antimony (Sb)-Total	mg/L		<0.0004	-	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020	
Arsenic (As)-Total	mg/L	0.005	0.0032	-	0.00299	0.0054	0.0015	0.0068*	0.00101	0.00305	0.0036	0.0019	0.0029	0.0134	0.0028	0.00437	
Barium (Ba)-Total	mg/L		0.123	-	0.0713	0.1248	0.0892	0.0805	0.0231	0.0548	0.403	0.17	0.152	0.224	0.221	0.254	
Beryllium (Be)-Total	mg/L		<0.001	-	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020	
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.0020	<0.00020	
Boron (B)-Total	mg/L	1.5	<0.050	-	<0.050	<0.01	<0.01	<0.01	<0.010	0.011	<0.030	<0.030	<0.030	0.047	<0.10	0.011	
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000049	<0.00010	0.000015	
Calcium (Ca)-Total	mg/L		-	-	74.4	165	84.4	110	17.4	62.5	494	203	166	251	250	313	
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.0010	<0.00010	
Chromium (Cr)-Total	mg/L		<0.005	-	<0.0050	<0.0006	<0.0006	0.0070*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.010	<0.0010	
Cobalt (Co)-Total	mg/L		<0.002	-	<0.0020	-	-	-	0.00027	<0.00020	<0.00050	0.00061	<0.00050	0.00096	<0.0020	<0.00020	
Copper (Cu)-Total	mg/L	Equation	0.003	-	0.0015	0.0026	0.0015	0.0011	0.00092	0.00178	0.0026	0.0022	<0.0020	0.00182	0.0021	0.002	
Iron (Fe)-Total	mg/L	0.3	0.695	-	0.218	0.18	0.84*	1.8*	0.38	0.44	0.77	0.45	0.86	1.77	<1.0	0.56	
Lead (Pb)-Total	mg/L	Equation	<0.0001	-	0.00011	<0.0003	0.0036	0.0008	<0.000090	0.000096	<0.0010	<0.0010	<0.0010	0.00179	<0.00090	<0.000090	
Lithium (Li)-Total	mg/L		0.03	-	0.026	<0.1	<0.1	<0.1	0.0034	0.0166	0.258	0.0718	0.052	0.216	0.101	0.142	
Magnesium (Mg)-Total	mg/L		-	-	8.62	18.6	9.1	18.3	2.23	6.29	41.1	25.6	17.8	20.1	27.2	32	
Manganese (Mn)-Total	mg/L		0.006	-	0.0679	0.0043	0.0291	0.0739	0.0596	0.00917	0.0525	0.036	0.0949	0.174	0.0086	0.0167	
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	<0.0050	0.0005	<0.0005	<0.0005	0.00022	0.00094	<0.00050	<0.00050	<0.00050	0.00234	<0.0020	0.00081	
Nickel (Ni)-Total	mg/L	Equation	0.006	-	0.0051	0.0094	0.0071	0.0152	0.0026	0.0022	0.0045	0.0065	<0.0020	0.0049	<0.020	0.0061	
Phosphorus (P)-Total	mg/L		-	-	<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50	<0.10	<1.0	<0.10	
Potassium (K)-Total	mg/L		-	-	3.26	4.3	2.1	5.1	0.801	1.96	17.4	6.68	4.55	12.4	8.73	10.7	
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	0.00101	0.00251	0.0167	0.00473	0.00343	0.0142	0.0075	0.00933	
Selenium (Se)-Total	mg/L	0.001	0.0012	-	0.00157	0.005	0.002	0.01	<0.0010	0.0017	<0.0050	0.013	<0.0050	<0.0010	<0.010	<0.0010	
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	0.945	0.826	0.73	2.87	2.77	0.903	1.67	1.39	
Silver (Ag)-Total	mg/L	0.0001	<0.0004	-	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.00010	
Sodium (Na)-Total	mg/L		-	-	9.8	22.1	9.6	13.6	2.26	6.48	63.8	26.6	17.1	38.8	56.2	65.1	
Strontium (Sr)-Total	mg/L		-	-	-	1.2	0.69	0.78	0.102	0.444	4.18	1.54	1.16	2.59	2.18	2.82	
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020	
Thallium (Tl)-Total	mg/L	0.0008	<0.0002	-	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.0010	<0.00010	
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.00010	
Tin (Sn)-Total	mg/L		<0.050	-	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.0020	<0.00020	
Titanium (Ti)-Total	mg/L		<0.001	-	<0.0010	0.11	0.04	0.05	0.00065	0.00056	0.0013	0.0015	0.0015	0.00221	<0.0050	0.00319	
Tungsten (W)-Total	mg/L		<0.0010	-	-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	0.00063	<0.0010	0.00013	
Uranium (U)-Total	mg/L	0.015	<0.0002	-	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.0010	0.00017	
Vanadium (V)-Total	mg/L		0.001	-	0.0016	<0.0005	<0.0005	<0.0005	<0.00020	0.00021	<0.0020	<0.0020	<0.0020	<0.00020	<0.0020	<0.00020	
Zinc (Zn)-Total	mg/L	0.03	<0.004	-	<0.0040	<0.001	0.006	0.011	<0.0050	<0.0050	<0.020	<0.020	<0.020	0.0066	<0.020	<0.0020	
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.0040	<0.00040	
Turbidity	NTU		-	1.6	-	3.8	6.9	1.7	1.2	2	10.1	0.67	3.13	12	3.49	3.6	
pH	pH units	6.5-9.0	7.7	7.5	7.66	7.69	7.7	7.48	7.65	7.97	7.18	7.6	7.66	7.48	7.83	7.89	
Ortho-Phosphate (PO4-P)	mg/L		-	<0.01	<0.010	0.002	0.07	<0.01	-	-	-	-	-	-	-	-	
Sodium Adsorption Ratio			-	-	-	-	-	-	-	-	-	-	-	-	0.89	83.7	
Total Oil and Grease	mg/L		-	<1.0	-	-	-	-	<1.0	-	-	-	-	-	-	-	

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Waterbody			A38										
Year			2007		2010				2011		2012		
Date Sampled	Units	CCME	2007/07/18	2007/10/07	20/06/2010	22/07/2010	26/08/2010	23/09/2010	2011/06/22	2011/07/12	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254	540500-6988254
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments													
Water Temperature	oC		20.4	0.9	9.1	19.2	9.4	4.4	-	-	7.53	11.5	13.5
pH	pH units		8.49	7.68	7.9	8.69	7.69	7.58	-	-	15	7.73	7.38
Conductivity	(µS/cm)		-	-	-	-	-	-	-	-	715	793	905
Laboratory-Measured													
Ion balance	%		95.7	97.2	104	-	-	-	-	-	104	-	-
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	-	2.3	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	-	0.05	0.2	0.06	0.05	<0.05	<0.050	<0.050	0.097	0.011	0.019
Mercury (Hg)-Total	mg/L	0.000026	<0.0002	-	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	-	-	-	-	0.011	0.013	0.0029	<0.010	0.013
Phosphorus (P)-Total Reactive	mg/L		-	0.02	-	-	-	-	<0.010	-	<0.0010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	0.6	1.32	-	<1	<1	-	-	0.59	0.82	1.04
Total Suspended Solids	mg/L		-	6	-	5	1	2	-	<5.0	<5.0	5	<5.0
Alkalinity, Total (as CaCO3)	mg/L		76	76	50.7	60	79	97	54.9	71.8	-	62	69
Bicarbonate (HCO3)	mg/L		93	92	61.8	60	79	97	67	87.6	-	76	84
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	53.5	-	-	-	-	-	78.1	90.9	87.7
Magnesium (Mg)-Dissolved	mg/L		-	-	8.19	-	-	-	-	-	13.4	14.8	13.6
Potassium (K)-Dissolved	mg/L		-	-	4.11	-	-	-	-	-	6.25	6.88	6.66
Sodium (Na)-Dissolved	mg/L		-	-	18.3	-	-	-	-	-	40.4	40.4	44
Chloride	mg/L		86	118	89.6	175	-	185	68.5	158	162	185	208
Conductivity	umhos/cm		456	609	461	996	932	629	372	671	744	784	736
Fluoride	mg/L	0.12	-	-	-	-	-	-	<0.10	<0.10	<0.10	-	-
Hardness (as CaCO3)	mg/L		179	224	167	278	210	286	133	252	257	291	311
Nitrate-N	mg/L	13	0.1	0.1	0.655	0.31	0.04	0.06	0.102	<0.050	1.1	0.225	<0.050
Nitrate and Nitrite as N	mg/L		0.1	0.1	0.655	-	-	-	0.102	<0.071	1.1	0.225	<0.071
Nitrite-N	mg/L	0.197	<0.05	<0.05	<0.050	0.02	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		11.4	28.2	25.3	48	-	35	18.3	33.9	38.9	42.2	39.1
TDS (Calculated)	mg/L		221	294	232	-	621	419	190	370	378	552	537
Aluminum (Al)-Total	mg/L	0.1	0.02	-	0.014	<0.002	0.015	0.002	0.0239	0.0068	0.0058	0.0065	0.0067
Antimony (Sb)-Total	mg/L		<0.0004	-	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.0042	-	0.00285	0.0046	0.0027	0.0114*	0.00274	0.0046	0.00233	0.00341	0.00467
Barium (Ba)-Total	mg/L		0.042	-	0.0394	0.0611	0.0535	0.0572	0.0342	0.0618	0.059	0.0765	0.0723
Beryllium (Be)-Total	mg/L		<0.001	-	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.050	-	<0.050	<0.01	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	<0.000050	<0.00008	<0.00008	0.00021*	<0.000010	<0.000010	0.000013	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	49.7	83.4	65.6	85.5	42.5	79.9	81	88	97
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.005	-	<0.0050	<0.0006	<0.0006	0.006	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.002	-	<0.0020	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	0.00025
Copper (Cu)-Total	mg/L	Equation	0.003	-	0.0013	0.0031	0.0021	0.0024	0.0011	0.00204	0.0012	0.00182	0.00206
Iron (Fe)-Total	mg/L	0.3	0.17	-	0.063	<0.01	<0.01	0.80*	0.24	0.27	0.11	0.12	0.35
Lead (Pb)-Total	mg/L	Equation	0.0003	-	<0.00010	0.0632	0.0098*	0.0014	0.00018	0.000148	0.000153	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.02	-	<0.010	<0.1	<0.1	<0.1	0.0085	0.0173	0.0224	0.0264	0.0283
Magnesium (Mg)-Total	mg/L		-	-	7.35	17	11.1	17.8	6.59	12.8	12.4	16.9	16.6
Manganese (Mn)-Total	mg/L		0.009	-	0.0058	0.0072	0.0082	0.0102	0.0123	0.00991	0.00328	0.00692	0.0202
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	<0.0050	<0.0005	<0.0005	<0.00005	0.00035	0.00053	0.00058	0.0006	0.00063
Nickel (Ni)-Total	mg/L	Equation	0.004	-	0.0027	0.0068	0.0062	0.0129	0.0024	0.0029	<0.0020	0.0027	0.004
Phosphorus (P)-Total	mg/L		-	-	<0.020	-	-	-	<0.20	<0.20	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	3.61	6.2	5.1	9.3	3.11	5.54	5.82	7.48	7.85
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	0.00257	0.00434	0.00425	0.00542	0.00561
Selenium (Se)-Total	mg/L	0.001	0.007	-	0.00084	<0.001	<0.001	<0.001	<0.0010	0.0015	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	0.222	0.154	0.126	0.336	0.734
Silver (Ag)-Total	mg/L	0.0001	<0.004	-	<0.00050	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	16.7	45.5	25.5	39.6	17.7	36.3	36.4	40.3	43.4
Strontium (Sr)-Total	mg/L		-	-	-	0.72	0.63	0.73	0.32	0.666	0.707	0.757	0.881
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0001	-	<0.00010	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.05	-	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0010	-	<0.0010	0.06	0.03	0.04	0.00079	0.00052	0.00098	0.00109	0.00162
Tungsten (W)-Total	mg/L		<0.0010	-	-	-	-		<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	0.0002	-	0.00033	<0.001	<0.001	<0.001	0.00018	0.00033	0.0004	0.0003	0.0003
Vanadium (V)-Total	mg/L		<0.0010	-	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	0.00025	<0.00020	0.0002	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.012	-	<0.0040	<0.001	0.005	0.005	<0.0050	<0.0050	<0.0020	0.0023	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03									-	1.04	1.16
Ortho-Phosphate (PO4-P)	mg/L		-	<0.01	<0.010	0.01	0.07	<0.01	-	-	-	-	-
Turbidity	NTU		-	1.9	-	1.1	0.92	0.69	1.15	1.3	0.68	0.98	1.87
pH	pH units	6.5-9.0	8.2	7.8	7.96	7.94	7.59	7.87	8.04	8.21	-	8.08	7.97

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Waterbody			A54														
Year			2007		2008	2010				2011					2012		
Date Sampled	Units	CCME	12/08/2007	2007/10/07	15/07/2008	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	21/06/2012	28/07/2012	18/08/2012
GPS Coordinates			0540135 - 6988794	0540135 - 6988794	0540180 - 6988827	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794	540135-6988794
LAB			-	-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS	ALS	ALS LAB
Field Measurments																	
Water Temperature	oC		11.2	0.3	13.8	10.4	18.1	9.8	4.1	-	-	9.5	4.92	0.4	9.6	14.6	14.2
pH	pH units		8.11	8.17	6.94	8	8.93	7.55	7.78	-	-	8.52	7.41	7.15	8.95	6.91	7.75
Conductivity	(µS/cm)		-	-	895	-	-	-	-	-	-	0	1202	1187	670	866	930
Laboratory-Measured																	
Ion balance	%		107	96.1	103	92.9	-	-	-	-	-	99.7	-	-	97.8	-	-
Biochemical Oxygen Demand	mg/L		-	2	-	-	-	-	-	-	1.9	-	-	-	<6.0	<0.6	<0.6
Ammonia as N	mg/L	2.33	<0.05	<0.05	1.11	0.739	<0.05	0.25	0.13	0.176	0.121	<0.050	0.264	0.67	0.87	0.023	0.011
Mercury (Hg)-Total	mg/L	0.000026	-	-	0.02	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	0.02	0.02	0.009	-	-	-	-	0.012	0.014	0.011	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	0.02	<0.004	-	-	-	-	<0.010	<5.0	<0.010	<0.010	<0.010	0.011	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.7	0.5	2.2	1.58	-	<1	<1	-	-	1.19	1.21	1.59	1.24	0.72	0.81
Total Suspended Solids	mg/L		4	3	5	-	8	1	2	-	-	-	-	<5.0	<5.0	5	<5.0
Alkalinity, Total (as CaCO3)	mg/L		49	68	47	49.4	56	56	60	51.4	53.8	48.8	68.1	64.1	58	54	50
Bicarbonate (HCO3)	mg/L		60	83	57	60.2	36	56	60	62.8	65.7	59.5	83	78.1	70	66	61
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	<12	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<5.0	10	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	<6.8	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	-	49.9	-	-	-	-	-	105	121	141	72.7	98.2	86
Magnesium (Mg)-Dissolved	mg/L		-	-	-	7.64	-	-	-	-	-	24.7	23	27.2	11.4	16.6	14.1
Potassium (K)-Dissolved	mg/L		-	-	-	3.8	-	-	-	-	-	11.2	11.2	11.9	5.33	8.25	7.69
Sodium (Na)-Dissolved	mg/L		-	-	-	17.9	-	-	-	-	-	70.6	70.6	82.6	30.8	46.8	47.1
Chloride	mg/L		134	151	214	94.6	174	-	235	75.9	209	305	335	394	149	203	220
Conductivity	umhos/cm		618	720	944	498	1005	1079	727	403	815	1070	1150	1380	676	849	762
Fluoride	mg/L	0.12	-	-	-	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.50	-	-	-
Hardness (as CaCO3)	mg/L		236	258	337	156	271	248	329	126	296	307	429	432	228	341	308
Nitrate-N	mg/L	13	<.01	<0.1	4.9	1.25	1.4	0.82	0.84	0.68	1.18	<0.050	0.809	2.92	1.27	1.52	0.609
Nitrate and Nitrite as N	mg/L		<0.1	<0.1	5.1	1.25	-	-	-	0.68	1.18	<0.071	0.809	2.92	1.27	1.52	0.609
Nitrite-N	mg/L	0.197	<0.05	<0.05	0.14	<0.050	0.05	-	0.01	<0.050	<0.050	<0.050	<0.050	<0.25	<0.050	<0.050	<0.050
Sulfate	mg/L		19.8	37.2	39.9	29.5	57	-	60	22.7	45.4	52.2	64	84.1	38.6	51.6	50
TDS (Calculated)	mg/L		291	348	469	239	670	719	485	200	456	599	691	778	532	672	582
Aluminum (Al)-Total	mg/L	0.1	-	-	0.0024	0.044	<0.002	<0.002	<0.002	0.126	0.0063	<0.020	<0.020	<0.020	0.017	<0.050	<0.0050
Antimony (Sb)-Total	mg/L		-	-	<0.0002	<0.00040	<0.0001	<0.0001	0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	0.00022	<0.0020	<0.00020
Arsenic (As)-Total	mg/L	0.005	-	-	0.0009	0.00323	0.0044	<0.0017	0.0035	0.00314	0.00356	0.0025	0.0034	0.0034	0.00335	0.0029	0.00259
Barium (Ba)-Total	mg/L		-	-	0.0618	0.0401	0.049	0.0533	0.0539	0.0341	0.0644	0.0659	0.0899	0.0877	0.055	0.0658	0.0626
Beryllium (Be)-Total	mg/L		-	-	<0.0002	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.0020	<0.00020
Boron (B)-Total	mg/L	1.5	-	-	<0.0006	<0.050	<0.01	<0.01	<0.01	<0.010	0.014	<0.030	<0.030	<0.030	0.019	<0.10	0.012
Cadmium (Cd)-Total	mg/L	Equation	-	-	<0.00005	<0.000050	<0.00008	<0.00008	0.00012	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000031	<0.00010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	-	50.7	79.3	77.4	95.8	39.9	91.5	106	126	133	72	105	95
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.0010	<0.00010
Chromium (Cr)-Total	mg/L		-	-	<0.00006	<0.0050	<0.0006	<0.0006	0.0091	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.010	<0.0010
Cobalt (Co)-Total	mg/L		-	-	<0.0001	<0.0020	-	-		0.00027	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.0020	<0.00020
Copper (Cu)-Total	mg/L	Equation	-	-	<0.0001	0.0014	0.0021	0.0015	0.002	0.00155	0.00148	<0.0020	<0.0020	<0.0020	0.00126	<0.0020	0.00103
Iron (Fe)-Total	mg/L	0.3	-	-	0.022	0.107	<0.01	<0.01	0.71*	0.32	0.2	<0.10	0.32	0.12	0.19	<1.0	<0.10
Lead (Pb)-Total	mg/L	Equation	-	-	0.00006	0.0002	<0.0003	<0.0003	0.0019	0.000533	0.000156	<0.0010	<0.0010	<0.0010	0.000495	<0.00090	<0.000090
Lithium (Li)-Total	mg/L		-	-	-	<0.010	<0.1	<0.1	<0.1	0.0083	0.0223	0.0263	0.0389	0.0324	0.023	0.026	0.0281
Magnesium (Mg)-Total	mg/L		-	-	-	7.76	17.7	13.2	22	6.46	16.5	20.8	27.8	24.2	11	18.9	17.4
Manganese (Mn)-Total	mg/L		-	-	0.0017	0.0039	0.0046	0.0097	0.0079	0.00878	0.0079	0.0119	0.0248	0.0084	0.00609	0.0056	0.00889
Molybdenum (Mo)-Total	mg/L	0.073	-	-	0.00049	<0.0050	<0.0005	<0.0005	<0.0005	0.00042	0.00064	0.00053	<0.00050	<0.00050	0.0008	<0.0020	0.00068
Nickel (Ni)-Total	mg/L	Equation	-	-	0.001	0.0033	0.0048	0.0064	0.0134	0.0033	0.003	<0.0020	0.0054	<0.0020	0.0031	<0.020	0.0033
Phosphorus (P)-Total	mg/L		-	-	-	<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50	<0.10	<1.0	<0.10
Potassium (K)-Total	mg/L		-	-	-	3.97	6.2	6.8	11.6	3.16	7.01	9.28	11.8	11	5.22	8.98	8.81
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	-	0.00291	0.00569	0.00616	0.0078	0.00745	0.00426	0.0065	0.00613
Selenium (Se)-Total	mg/L	0.001	-	-	<0.0001	0.00102	<0.001	<0.001	<0.001	<0.0010	0.0023	<0.0050	<0.0050	<0.0050	<0.0010	<0.010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	-	0.414	0.249	0.4	0.64	0.48	0.292	<0.50	0.411
Silver (Ag)-Total	mg/L	0.0001	-	-	<0.0001	<0.00050	<0.0005	<0.005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.00010
Sodium (Na)-Total	mg/L		-	-	-	18.2	51.3	34.6	52.5	21.6	54	57.9	83.1	80.7	32.1	48.9	49
Strontium (Sr)-Total	mg/L		-	-	0.83	-	0.73	0.78	0.85	0.295	0.789	0.876	1.19	1.14	0.622	0.957	0.926
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.0020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	-	-	<0.00003	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.0010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.0010	<0.00010
Tin (Sn)-Total	mg/L		-	-	-	<0.050	<0.001	<0.001	<0.001	0.00753	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.0020	<0.00020
Titanium (Ti)-Total	mg/L		-	-	-	<0.0010	0.05	0.03	0.05	0.00402	0.00055	<0.0010	<0.0010	0.0014	0.00158	<0.0050	0.00148
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	0.00017	<0.0010	<0.00010
Uranium (U)-Total	mg/L	0.015	-	-	0.00026	0.00041	<0.001	<0.001	<0.001	0.00027	0.00043	<0.00050	<0.00050	0.00072	0.00045	<0.0010	0.00035
Vanadium (V)-Total	mg/L		-	-	<0.00005	<0.0010	<0.0005	<0.0005	<0.0005	0.00025	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.0020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	-	-	<0.0008	<0.0040	<0.001	0.001	0.011	<0.0050	<0.0050	<0.020	<0.020	<0.020	0.0034	<0.020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.0040	<0.00040
Turbidity	NTU		<0.1	0.65	-	-	0.94	0.96	0.39	3.34	1.13	0.83	0.94	0.74	1.52	0.89	1.05
Ortho-Phosphate (PO4-P)	mg/L		<0.01	<0.01	<0.001	<0.010	0.01	0.09	<0.01		-	-	-	-	-	-	-
pH	pH units	6.5-9.0	7.8	7.9	8	7.97	8.24	7.72	7.72	8.06	8.11	7.99	7.97	8.04	7.90	8.04	8.02
Sodium Adsorption Ratio			-	-	-	-	-	-	-	-	-	-	-	-	-	1.15	1.24
Total Oil and Grease	mg/L		-	<1.0	0.6	-	-	-	-	<1.0	-	-	-	-	-	-	-

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Waterbody			P-1										
Year			2010				2011					2012		
Date Sampled	Units	CCME	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	21/06/2012	28/07/2012	18/08/2012
GPS Coordinates			539901-6988966	539901-6988966	539901-6988966	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	ALS	ALS LAB
Field Measurments														
Water Temperature	oC		11.6	18.2	9	4.2			8.3	3.43	0.3	8.0	14.4	14.8
pH	pH units		8	7.5	7.63	7.68			8.75	7.13	7.25	8.3	7.88	8.2
Conductivity	(µS/cm)		-	-	-				0	560	620	95	282	824
Laboratory-Measured														
Ion balance	%		93.1	-	-	-	-	-	101	-	-	101	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	3.5	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	1.07	0.1	2.9	2	0.052	<0.050	<0.050	<0.050	<0.050	0.011	0.012	<0.010
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	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	-	0.023	0.037	<0.010	<0.010	<0.010	0.021	0.014	0.01
Phosphorus (P)-Total Reactive	mg/L		-	-	-	-	-	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		2.04	-	3	-	-	-	1.27	0.97	0.68	0.41	0.99	1
Total Suspended Solids	mg/L		-	4	1	1	-	<5.0	-	-	<5.0	<5.0	5	<5.0
Alkalinity, Total (as CaCO3)	mg/L		51.2	142	136	168	27.5	127	128	133	120	30	98	119
Alkalinity Bicarbonate (HCO3)	mg/L		62.5	142	136	168	33.5	155	156	162	146	37	119	142
Alkalinity Carbonate (CO3)	mg/L		<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	<12	<12	<12
Alkalinity Hydroxide (OH)	mg/L		<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	<6.8	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		33.3	-	-	-	-	-	72.6	83.5	78.2	14.5	45.5	45.8
Magnesium (Mg)-Dissolved	mg/L		4.17	-	-	-	-	-	11.1	11.2	11.7	2.00	5.32	5.35
Potassium (K)-Dissolved	mg/L		2.46	-	-	-	-	-	4.95	4.54	3.51	1.30	2.64	2.89
Sodium (Na)-Dissolved	mg/L		6.5	-	-	-	-	-	17.9	17.6	19.4	2.97	7.86	7.08
Chloride	mg/L		39.2	92.1	-	255	6.28	33.1	96.3	107	97.3	9.08	25.5	31.1
Conductivity	umhos/cm		290	737	1177	898	85.2	313	525	587	604	108	274	232
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	38.5	133	155
Nitrate-N	mg/L	13	1.54	0.02	6.5*	1	0.073	<0.050	<0.050	0.059	0.072	0.218	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		1.54	-	-	-	0.073	<0.071	<0.071	<0.071	0.072	0.218	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	0.03	-	0.05	<0.050	<0.050	<0.050	<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	7.70	11.4	5.56
TDS (Calculated)	mg/L		141	-	784	599	42.8	184	284	318	319	76.0	214	181
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	0.0600	0.0063	<0.0050
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.0067	0.0216	0.0023	0.0012	0.00379	0.0125	0.0041	0.0045	0.0027	0.00746	0.00801	0.00688
Barium (Ba)-Total	mg/L		0.0234	0.0554	0.0841	0.126	0.0114	0.0544	0.0531	0.0606	0.0471	0.0129	0.0309	0.036
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	0.001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
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	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	<0.00008	0.00028	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		32.2	82.7	120	172	11.3	53.8	70.8	82.4	75.4	12.4	43.5	51.4
Cesium (Cs)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	<0.0006	0.0103*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.0020	-	-	-	0.00042	0.00119	<0.00050	<0.00050	<0.00050	<0.00020	0.00022	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.0013	0.0011	0.0022	0.0043*	0.00202	0.00347	0.0023	0.0025	0.002	0.00136	0.00224	0.00226
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	0.17	0.4	0.55
Lead (Pb)-Total	mg/L	Equation	0.00015	0.0003	0.0029	<0.0003	0.000904	0.000344	<0.0010	<0.0010	<0.0010	0.000657	0.000178	<0.000090
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	0.0046	0.0066	0.0052	<0.0020	<0.0020	0.0028
Magnesium (Mg)-Total	mg/L		4.13	12	10.6	21.2	1.51	5.82	10.7	12	11.7	1.85	5.84	6.56
Manganese (Mn)-Total	mg/L		0.0246	0.26	0.0065	1.389	0.0435	0.452	0.0159	0.0367	0.0301	0.0169	0.0232	0.0108
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	0.00054	0.00059	0.00056
Nickel (Ni)-Total	mg/L	Equation	0.003	0.007	0.011	0.0386	<0.0020	0.0038	0.003	0.0043	<0.0020	<0.0020	0.0036	0.0035
Phosphorus (P)-Total	mg/L		<0.020	-	-	-	<0.20	<0.20	<0.50	<0.50	<0.50	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		2.48	4	6.2	11.1	1.02	2.85	4.99	4.68	3.53	1.22	2.71	3.22
Rubidium (Rb)-Total	mg/L		-	-	-	-	0.00125	0.00312	0.00394	0.0035	0.00245	0.00122	0.00248	0.00297
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	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	1.1	0.202	<0.30	0.81	1.24	0.286	0.156	0.257
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	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		6.8	22.1	18.9	32.7	2.12	7.78	17.5	19	17.2	3.00	7.95	9.36
Strontium (Sr)-Total	mg/L		-	0.44	0.8	0.95	0.0635	0.311	0.49	0.555	0.418	0.0704	0.248	0.289
Tellurium (Te)-Total	mg/L		-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0010	0.05	0.02	0.1	0.00371	0.00055	<0.0010	<0.0010	<0.0010	0.00163	<0.00050	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
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	<0.00010	0.00016	0.00022
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.0005	0.00036	0.00022	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
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	0.0022	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Turbidity	NTU		-	1.4	0.51	0.24	2.86	2.84	1.92	3.13	1.26	2.4	2.04	1.69
Ortho-Phosphate (O-PO4)	mg/L		<0.010	0.01	0.08	<0.01	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio			-	-	-	-	-	-	-	-	-	-	0.29	0.26
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	7.41	8.27	8.31

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody			B7-6										
Year			2010			2011						2012	
Date Sampled	Units	CCME	20/06/2010	22/07/2010	23/09/2010	23/06/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			-	-	-	-	-	-	-	-	-	-	-
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	7.56	11.5	18.2
pH	pH units		7.5	7.69	7.77			7.43	7.05	7	11.3	8.11	8.16
Conductivity	(µS/cm)		-	-	-			0	165	191	141	175	184
Laboratory-Measured													
Ion balance	%		99.8	-	-	-	-	92.2	-		101	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	1.5	-	-		<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	<0.050	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	0.015	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.00010	<0.00001	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	-	-	0.012	0.013	0.013	0.014	<0.010	<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		0.38	-	<1	-	-	0.57	0.51	0.41	0.29	0.36	0.34
Total Suspended Solids	mg/L		-	5	1	-	<5.0	-	-	<5.0	<5.0	6	<5.0
Alkalinity, Total (as CaCO3)	mg/L		16.1	39	38	12.7	29.7	37.3	33.3	32.1	-	30	32
Bicarbonate (HCO3)	mg/L		19.6	39	38	15.5	36.2	45.5	40.6	39.2	-	37	40
Carbonate (CO3)	mg/L		<5.0	-	<2	<0.60	<0.60	<0.60	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		13.2	-	-	-	-	27.1	25.4	26.3	20.4	26	23.9
Magnesium (Mg)-Dissolved	mg/L		1.22	-	-	-	-	2.39	2.4	2.35	2.04	2.22	1.95
Potassium (K)-Dissolved	mg/L		0.71	-	-	-	-	1.48	1.53	1.4	1.31	1.27	1.23
Sodium (Na)-Dissolved	mg/L		1.8	-	-	-	-	3.84	3.41	3.78	3.03	3.47	2.69
Chloride	mg/L		18	32.9	44.7	8.23	30.9	38.3	34	35.6	26.5	32.4	34
Conductivity	umhos/cm		103	247	211	55.6	160	196	176	182	152	176	161
Fluoride	mg/L	0.12	-	-	-	<0.10	<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	59.3	79	76.2
Nitrate-N	mg/L	13	<0.050	0.03	0.18	<0.050	<0.050	<0.050	<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	<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	<0.050	<0.050	<0.050
Sulfate	mg/L		1.36	8	4	0.81	2.62	2.93	3.26	4.48	3.33	3.93	3.65
TDS (Calculated)	mg/L		46	-	141	26	80.2	98.4	93.8	92.6	72.5	106	126
Aluminum (Al)-Total	mg/L	0.1	<0.010	<0.002	0.061	0.0248	<0.0050	0.045	<0.020	<0.020	0.0054	<0.0050	<0.0050
Antimony (Sb)-Total	mg/L		<0.00040	<0.0001	0.0022	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.00072	0.0019	0.0074*	0.00099	0.00156	0.0021	0.0018	<0.0010	0.00083	0.00138	0.0013
Barium (Ba)-Total	mg/L		0.0154	0.0227	0.022	0.0116	0.0244	0.024	0.0268	0.0194	0.0229	0.0247	0.0223
Beryllium (Be)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.050	<0.01	<0.01	<0.010	<0.010	<0.030	<0.030	<0.030	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.000050	<0.00008	0.00017	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000019	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		14.4	26.6	29.7	6.64	22.6	29	27.9	26	21.3	27.4	26.8
Cesium (Cs)-Total	mg/L		-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.0050	<0.0006	0.0047	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.0020	-	-	0.00031	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	<0.0010	0.0007	0.001	0.0008	0.00068	<0.0020	<0.0020	<0.0020	0.00059	0.00094	0.00098
Iron (Fe)-Total	mg/L	0.3	0.09	<0.01	0.26	0.26	0.13	0.26	0.29	<0.10	0.11	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.00010	0.0363	<0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010	<0.000090	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.010	<0.1	<0.1	0.002	0.0078	0.0187	0.0164	0.0095	0.0077	0.01	0.0099
Magnesium (Mg)-Total	mg/L		1.34	2.9	3.1	0.794	2.08	2.69	2.8	2.39	2	2.59	2.22
Manganese (Mn)-Total	mg/L		0.024	0.0277	0.0048	0.101	0.0143	0.0178	0.0152	0.0038	0.0164	0.00908	0.0054
Molybdenum (Mo)-Total	mg/L	0.073	<0.0050	<0.0005	<0.0005	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	0.00023
Nickel (Ni)-Total	mg/L	Equation	<0.0020	0.0014	0.0042	<0.0020	<0.0020	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		0.85	0.91	2.2	0.582	1.14	1.71	1.71	1.28	1.1	1.38	1.31
Rubidium (Rb)-Total	mg/L		-	-	-	0.00058	0.00132	0.00178	0.00182	0.00127	0.00115	0.00151	0.00145
Selenium (Se)-Total	mg/L	0.001	<0.00040	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	0.343	0.371	<0.30	0.38	0.38	0.394	0.449	0.234
Silver (Ag)-Total	mg/L	0.0001	<0.00010	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		2.2	4.5	4.4	1.32	3.02	4.13	4.14	3.58	2.84	3.84	3.38
Strontium (Sr)-Total	mg/L		-	0.18	0.22	0.0463	0.183	0.205	0.195	0.172	0.162	0.203	0.188
Tellurium (Te)-Total	mg/L		-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.00010	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.050	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0010	0.01	0.01	0.00062	<0.00020	0.0016	<0.0010	<0.0010	0.00036	<0.00050	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	0.00011	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.00010	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.0010	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	<0.0040	<0.001	0.01	<0.0050	<0.0050	<0.020	<0.020	<0.020	<0.0020	0.0021	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03									-	0.18	0.14
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	0.42	0.72	0.65
pH	pH units	6.5-9.0	7.4	6.49	7.39	7.2	7.85	7.91	7.72	7.75	-	7.79	7.71

Waterbody			CONTROLE LAKE																
Year	Units	CCME	2007		2008	2009	2010				2011						2012		
Date Sampled			07/07/2007	07/10/2007	08/07/2008	09/04/2009	20/06/2010	22/07/2010	26/08/2010	23/09/2010	23/06/2011	11/07/2011	12/07/2011	28/08/2011	11/09/2011	09/10/2011	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			0535001 - 6986333	0535001 - 6986333	0534632 - 6986546	0534632 - 6986546	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	0534324, 6986637	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333	535000.8-6986333
LAB			-	-	-	-	-	-	-	-	ALS LAB	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments																			
Water Temperature	oC		16.4	0.2	14.12	1.05	4.1	18.5	11	6.5	-	16.7	-	14.7	6.06	1.9	7.84	11.7	13
pH	pH units		7.83	7.92	-	6.26	7.4	8.08	7.02	7.8	-	7.7	-	7.69	7.15	7.27	8.7	8.1	8.33
Conductivity	(µS/cm)		-	-	64	175	-	-		-	-	80	-	0	74	79	62	165	70
Laboratory-Measured																			
Ion balance	%		Low EC	Low EC	Low EC	103	Low EC	-	-	-	-	-	-	-	-	-	Low EC	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	-	<0.05	<0.05	0.075	<0.050	0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.0002	-	<0.00002	<0.00002	<0.00010	<0.00001	<0.00001	<0.00001	<0.000050	<0.00002	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	-	0.02	0.009	0.0057	-	-	-	-	0.011	0.0043	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		-	0.02	0.003	0.0056	-	-	-	-	<0.010	0.0025	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		-	0.3	0.3	0.73	0.56	-	<1	<1	-	0.25	-	0.4	0.3	0.37	0.22	0.28	0.25
Total Suspended Solids	mg/L		-	5	3	3	-	3	2	1	-	<3.0	<5.0	-	-	<5.0	<5.0	9	<5.0
Alkalinity, Total (as CaCO3)	mg/L		21	22	22	62.4	22.3	29	28	32	40	26.3	25.3	27.2	27.4	27.3	-	23	25
Bicarbonate (HCO3)	mg/L		26	27	26	76.2	27.2	29	28	32	48.8	32.1	30.8	33.2	33.4	33.3	-	28	31
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.5	<0.60	<0.60	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.5	<0.40	<0.40	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		-	-	7.02	23.6	7.01	-	-	-	-	8.51	-	10	10.1	9.76	8.85	8.78	8.18
Magnesium (Mg)-Dissolved	mg/L		-	-	0.765	2.46	0.89	-	-	-	-	1.13	-	1.12	1.11	1.03	1.12	0.996	0.844
Potassium (K)-Dissolved	mg/L		-	-	0.79	2.47	0.91	-	-	-	-	1.11	-	1.25	1.05	1.07	0.87	0.885	0.875
Sodium (Na)-Dissolved	mg/L		-	-	3.25	10.5	3	-	-	-	-	4.72	-	4.97	4.67	4.72	4.61	4.06	3.31
Chloride	mg/L		6	7	6	18.1	4.93	8	-	9.1	34.9	8.21	8.02	8.5	8.78	8.74	7.78	7.15	7.6
Conductivity	umhos/cm		60.3	76.5	68.2	193	59.7	103	161	88	200	81.4	78.2	85.2	85.6	86.3	79	75	75
Fluoride	mg/L	0.12	-	-	-	-	-	-	-	-	<0.10	-	<0.10	<0.10	<0.10	<0.10	<0.10	-	-
Hardness (as CaCO3)	mg/L		17	24	22	69.1	21.2	27	24	30	75	26.7	27.1	28.8	30.5	29.2	26.7	27.5	26
Nitrate-N	mg/L	13	0.1	0.1	0.1	0.05	<0.050	0.01	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		0.1	0.1	0.1	<0.071	<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.05	<0.05	<0.05	<0.05	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		3.9	3.6	2.2	4.71	0.97	5	-	3	3.56	1.76	1.89	1.96	2.04	2.3	2.48	2.09	2.07
TDS (Calculated)	mg/L		35	38	35	99.3	31.1	-	107	59	96.5	41.1	40.8	44.2	45	44.1	41.9	56	41
Aluminum (Al)-Total	mg/L	0.1	0.02	-	0.0036	<0.005	<0.010	0.086	0.018	0.008	0.0081	0.006	0.0069	0.026	<0.020	<0.020	<0.0050	0.0073	<0.0050
Antimony (Sb)-Total	mg/L		<0.0004	-	<0.00003	<0.0002	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	0.0001	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	<0.0004	-	0.00039	0.00116	<0.00040	<0.0005	<0.0005	0.0055*	0.00158	0.00059	0.00046	<0.0010	<0.0010	<0.0010	0.00041	0.00048	0.00051
Barium (Ba)-Total	mg/L		0.008	-	0.00691	0.0241	0.0095	0.0074	0.0068	0.0071	0.026	0.00782	0.00881	0.00764	0.00829	0.00788	0.0102	0.00837	0.00761
Beryllium (Be)-Total	mg/L		<0.001	-	<0.0002	<0.001	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	0.0005	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	0.0001	-	-	-	-	<0.00020	0.00005	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.05	-	<0.004	<0.05	<0.050	<0.01	<0.01	<0.01	<0.010	0.0052	<0.010	<0.030	<0.030	<0.030	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	<0.0002	-	<0.00005	<0.00001	<0.000050	<0.00008	<0.00008	0.00017*	<0.000010	0.00001	<0.000010	<0.00020	<0.00020	<0.00020	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	-	-	6.98	9	8	9.9	24.8	9.28	9.07	9.74	10.3	9.83	8.73	9.2	8.72
Cesium (Cs)-Total	mg/L		-	-	-	0.0216	-	-	-	-	<0.00010	-	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.005	-	<0.00006	0.0022	<0.0050	<0.0006	<0.0006	0.0056*	<0.0010	<0.0001	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.002	-	<0.0001	<0.0003	<0.0020	-	-	-	<0.00020	<0.0001	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.002	-	0.0008	0.0017	<0.0010	0.0007	0.0013	0.0011	0.0007	0.00094	0.00082	<0.0020	<0.0020	<0.0020	0.00077	0.00106	0.0008
Iron (Fe)-Total	mg/L	0.3	0.049	-	0.024	-	0.099	<0.01	<0.01	0.11	0.11	0.052	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.0004	-	<0.00005	<0.0005	<0.00010	0.0049	0.0052	<0.0003	<0.000090	<0.00005	<0.000090	<0.0010	<0.0010	<0.0010	0.000118	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.01	-	-	<0.005	<0.010	<0.1	<0.01	<0.1	0.0076	<0.005	<0.0020	0.006	0.0022	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	mg/L		-	-	-	-	0.88	1.2	0.93	1.3	3.16	1.17	1.07	1.08	1.18	1.14	1.03	1.1	1.02
Manganese (Mn)-Total	mg/L		0.007	-	0.003	0.0042	0.0151	<0.0005	0.0013	0.004	0.0396	0.00396	0.00361	0.0103	0.0029	0.003	0.0102	0.00572	0.005
Molybdenum (Mo)-Total	mg/L	0.073	<0.005	-	<0.00012	<0.001	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	0.000191	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	mg/L	Equation	<0.002	-	0.0004	0.0013	<0.0020	0.0005	0.0006	0.0015	<0.0020	0.00057	<0.0020	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	-	-	0.9	0.55	0.55	1.6	1.41	1.07	0.956	1.21	1.1	1	0.908	0.961	0.923
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	-	-	0.00163	-	0.00097	0.00115	0.00126	0.00104	0.00093	0.00106	0.00101
Selenium (Se)-Total	mg/L	0.001	<0.0009	-	<0.0001	<0.001	<0.00040	<0.001	<0.001	<0.001	<0.0010	0.0001	<0.0010	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	-	-	1.17	0.119	0.077	<0.30	<0.30	<0.30	0.139	0.163	0.148
Silver (Ag)-Total	mg/L	0.0001	<0.0004	-	<0.0001	<0.00002	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	0.00001	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	-	-	2.9	5.5	3.7	5.4	4.65	4.85	4.67	4.91	5.17	4.7	4.06	4.61	4.3
Strontium (Sr)-Total	mg/L		-	-	0.0245	0.0759	-	<0.05	<0.05	<0.05	0.157	0.0328	0.0281	0.0304	0.0323	0.0293	0.0298	0.0289	0.0281
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00020	-	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0001	-	<0.00003	<0.002	<0.00010	-	-	-	<0.00010	0.00005	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00010	-	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.05	-	-	<0.0005	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.0001	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L		<0.0001	-	-	-	<0.0010	<0.01	<0.01	<0.01	0.00021	0.0003	0.00025	<0.0010	<0.0010	<0.0010	<0.00020	<0.00050	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	-	-	<0.0010	-	<0.0010	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.0001	-	<0.00005	0.000021	<0.00010	<0.001	<0.001	<0.001	<0.00010	0.000024	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.001	-	0.00014	<0.001	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.0001	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	<0.01	-	0.0008	<0.005	<0.0040	<0.001	0.001	0.005	<0.0050	<0.003	<0.0050	<0.020	<0.020	<0.020	<0.0020	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	-	-	<0.00040	-	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03															-	0.35	0.29
Ortho-Phosphate (PO4-P)	mg/L		-	<0.01	<0.001	<0.001	<0.010	0.01	0.04	<0.01	-	<0.0010	-	-	-	-	-	-	-
Turbidity	NTU		-	1.16	-	-	-	0.4	0.71	0.39	0.63	-	0.6	0.63	0.36	0.49	0.49	0.36	0.76
pH	pH units	6.5-9.0	7.6	7.5	7.5	7.65	7.49	6.85	7.67	7.25	7.93	7.84	7.79	7.79	7.77	7.71	-	7.64	7.55

MELIADINE GOLD PROJECT

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody			MEL-1															
			2008	2009		2010				2011						2012		
Date Sampled	Units	CCME	16/07/2008	28/04/2009	28/07/2009	20/06/2010	22/07/2010	27/08/2010	24/09/2010	28/06/2011	12/07/2011	31/07/2011	29/08/2011	12/09/2011	11/10/2011	21/06/2012	25/07/2012	20/08/2012
GPS Coordinates			0542070 - 6989338	0542070 - 6989338	0542025 - 6989302	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	0542025, 6989302	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173	541934.2-6989173
LAB			-	-	-	-	-	-	-	ALS LAB	ALS LAB	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments																		
Water Temperature	oC		11.28	0.33	13.92	4.2	15	10.2	5.4	-	-	14.8	11.4	5.3	0.9	3	10.1	11.1
pH	pH units		7.17	6.87	6.97	7.1	7.56	6.79	7.71	-	-	7.3	8.54	7.16	7.13	7.82	8.11	8.56
Conductivity	(µS/cm)		49	90.6	62	-	-	-	-	-	-	66	0	104	66	40	61	57
Laboratory-Measured																		
Fecal Coliforms	MPN/100mL		-	-	-	-	-	-	-	-	-	-	<3	15	<3	<1	<1	<1
Total Coliforms	mg/L		-	-	-	-	-	-	-	2	-	-	-	-	-	<1	<1	3
E. Coli	mg/L		-	-	-	-	-	-	-	<1	-	-	-	-	-	<1	<1	<1
Total Oil and Grease	mg/L		<0.5	-	-	-	-	-	-	<1.0	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	-
Ion balance	%		Low EC	98.5	Low EC	Low EC	-	-	-	-	-	-	-	-	-	Low EC	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	<1	-	2	1.3	-	<1.0	6.6	<6.0	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	<0.050	<0.050	<0.050	<0.050	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.020	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.00002	<0.00002	<0.00002	<0.00010	<0.00001	0.00023	<0.00001	<0.000050	<0.000050	0.00002	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	0.004	0.0106	0.0047	-	-	-	-	<0.010	<0.010	0.0037	<0.010	<0.010	<0.010	<0.010	<0.010	-
Phosphorus (P)-Total Reactive	mg/L		0.002	0.0082	0.0027	-	-	-	-	-	-	0.0025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.2	0.36	0.36	<0.20	-	1	1	-	-	<0.20	0.2	0.21	0.24	0.2	<0.20	<0.20
Total Suspended Solids	mg/L		3	4	3	-	3	1	3	-	<5.0	<3.0	-	-	<5.0	9.0	<5.0	<5.0
Phosphorus (P)-Total	mg/L															-	-	0.0036
Alkalinity, Total (as CaCO3)	mg/L		12	26.2	12.7	<5.0	36	19	23	20	17.7	15.1	18.4	22.4	19	14.1	17.3	17.9
Bicarbonate (HCO3)	mg/L		14	32	15.5	5.6	36	19	23	24.4	21.7	18.4	22.4	27.3	23.2	17.2	21.1	21.8
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	<0.5	<0.60	<0.60	<0.60	<0.60	<1.2	<1.2
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.40	<0.5	<0.40	<0.40	<0.40	<0.34	<0.68	<0.68
Calcium (Ca)-Dissolved	mg/L		0.501	9.93	5.76	1.58	-	-	-	-	-	6.04	7.51	10.8	8.54	5.6	6.47	6.98
Magnesium (Mg)-Dissolved	mg/L		0.817	1.64	0.94	0.23	-	-	-	-	-	1.18	1.12	1.41	1.25	0.797	1.04	1.09
Potassium (K)-Dissolved	mg/L		0.75	1.48	0.71	<0.50	-	-	-	-	-	0.913	0.96	0.98	1.02	0.31	0.76	0.836
Sodium (Na)-Dissolved	mg/L		3.34	7	3.5	<1.0	-	-	-	-	-	4.28	4.75	5.06	4.93	2.3	4.02	3.92
Chloride	mg/L		6	12.6	7.55	1.51	7.5	-	9	7.45	7.87	7.74	8.41	11.7	8.6	5.25	7.79	7.67
Conductivity	umhos/cm		56.6	104	60.9	13.9	87	136	75	70.8	67.9	66.8	70	96.5	76.2	52	70	68
Fluoride	mg/L	0.12	-	-	-	-	-	-	-	<0.10	<0.10	-	<0.10	<0.10	<0.10	-	-	-
Hardness (as CaCO3)	mg/L		17	31.5	18.3	4.9	22	17	22	22.6	20.1	20.6	28.5	29.7	22.9	20.1	20.6	20.9
Nitrate-N	mg/L	13	0.1	0.05	0.05	<0.050	0.02	0.38	0.14	<0.050	<0.050	<0.050	<0.050	<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	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.050	<0.050	<0.050	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		2.8	5.17	2.75	0.83	2	-	<1	2.77	3.04	2.9	3.26	11.4	4.17	2.55	3.37	3.16
TDS (Calculated)	mg/L		27	53.5	28.8	42	58	90	50	34.8	33.6	32.2	37	53.4	37.7	28	44	39
Aluminum (Al)-Total	mg/L	0.1	0.0028	<0.005	<0.005	<0.010	<0.002	0.02	<0.002	0.0087	0.0063	0.003	0.054	<0.020	<0.020	0.0112	0.0116	0.0062
Antimony (Sb)-Total	mg/L		0.00003	0.00026	0.0005	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0001	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	0.00026	0.0005	0.0005	<0.00040	0.0016	<0.0005	0.0024	0.00043	0.00037	0.00034	<0.0010	<0.0010	<0.0010	0.00049	0.00037	0.00038
Barium (Ba)-Total	mg/L		0.00594	0.01013	0.02	<0.0030	0.0068	0.0067	0.0056	0.00828	0.00769	0.00708	0.00577	0.0101	0.00711	0.00752	0.00733	0.00725
Beryllium (Be)-Total	mg/L		<0.0002	<0.001	<0.001	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0005	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	<0.001	-	-	-	-	-	<0.00020	<0.00020	<0.00005	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	0.003	0.05	<0.0001	<0.05	<0.01	<0.01	<0.01	<0.010	<0.010	0.0031	<0.030	<0.030	<0.030	0.012	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	0.00005	<0.00001	<0.00001	<0.000050	<0.00008	<0.00008	0.00016	<0.000010	<0.000010	<0.00001	<0.00020	<0.00020	<0.00020	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	-	1.92	6.6	5.5	7	7.2	6.31	6.8	9.36	9.69	7.21	6.5	6.64	6.57
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	-	<0.00010	<0.00010	-	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		0.00006	<0.0001	<0.0001	<0.0050	<0.0006	<0.0006	<0.0006	<0.0010	<0.0010	<0.0001	<0.0020	<0.00050	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.001	0.003	0.003	<0.0020	-	-	-	<0.00020	<0.00020	<0.0001	<0.00050	<0.0020	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.0007	0.0017	0.001	<0.0010	0.0017	0.0009	0.0005	0.00094	0.00086	0.0008	0.0026	<0.00050	<0.0020	0.00081	0.00087	0.00083
Iron (Fe)-Total	mg/L	0.3	0.017	-	0.03	0.027	<0.01	<0.01	0.05	<0.10	<0.10	0.024	0.28	0.11	<0.10	<0.10	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	0.00005	0.0005	0.0005	<0.00010	<0.0003	<0.0003	0.0226	<0.000090	<0.000090	<0.00005	<0.0010	<0.0010	<0.0010	<0.000090	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		-	<0.005	<0.005	<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	<0.005	0.0061	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	mg/L		-	-	1.01	0.26	1.4	0.87	1.3	1.13	1.06	1.16	1.25	1.35	1.19	0.939	0.969	1.09
Manganese (Mn)-Total	mg/L		0.0021	0.0016	0.00286	0.0073	0.001	0.0014	0.0024	0.00625	0.0079	0.00426	0.0063	0.0097	0.0058	0.0136	0.00534	0.00505
Molybdenum (Mo)-Total	mg/L	0.073	0.00006	0.001	0.001	<0.0050	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	0.000073	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	mg/L	Equation	0.0053	<0.001	<0.001	<0.0020	0.0089	0.0006	0.0014	<0.0020	<0.0020	0.00067	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		-	-	-	0.15	0.27	0.37	1.1	0.818	0.74	0.901	0.8	0.95	0.83	0.707	0.762	0.776
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-		0.00115	0.00119	-	0.00114	0.00134	0.00117	0.00079	0.0011	0.00113
Selenium (Se)-Total	mg/L	0.001	<0.0001	<0.001	<0.001	<0.00040	<0.001	<0.001	<0.001	0.0014	<0.0010	<0.0001	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	-	0.224	0.228	0.233	<0.30	0.39	<0.30	0.281	<0.50	0.242
Silver (Ag)-Total	mg/L	0.0001	<0.0001	<0.00002	<0.00002	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.00001	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		-	-	-	<1.0	5.9	3.3	4.8	3.41	3.95	4.29	3.95	4.86	4.32	2.46	3.94	3.98
Strontium (Sr)-Total	mg/L		0.0243	0.0458	-	-	<0.05	<0.05	<0.05	0.0392	0.0293	0.031	0.0274	0.0471	0.0324	0.0296	0.0318	0.0307
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	-	<0.00020	<0.00020	-	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.00003	<0.0002	<0.0002	<0.00010	-	-	-	<0.00010	<0.00010	<0.00005	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	-	<0.00010	<0.00010	-	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		-	<0.0005	0.00075	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.0001	<0.00060	<0.00060	<0.00060	<0.00020	<0.0020	<0.00020
Titanium (Ti)-Total	mg/L		-	-	-	<0.0010	<0.01	<0.01	<0.01	0.00047	0.00037	<0.0003	<0.0010	<0.0010	<0.0010	0.00036	0.00076	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	-	<0.0010	<0.0010	-	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.00005	<0.0002	<0.0002	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	0.000015	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		0.00009	<0.001	<0.001	<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0001	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.0008	0.0054	0.005	<0.0040	<0.001	0.002	0.002	<0.0050	<0.0050	<0.003	<0.020	<0.020	<0.020	0.0046	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	-	<0.00040	<0.00040	-	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Oil & Grease	mg/L															-	-	<1.0
Ortho-Phosphate (PO4-P)	mg/L		<0.001	<0.001	<0.0001	<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	0.75	0.67	0.72
pH	pH units	6.5-9.0	7.4	7.46	7.41	6.93	6.65	7.43	7.04	7.5	7.63	7.66	7.54	7.53	7.55	7.26	7.58	7.37

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody			MELIADINE RIVER													
Year			2008		2010				2011					2012		
Date Sampled	Units	CCME	21/06/2008	19/07/2008	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	25/06/2012	29/07/2012	18/08/2012
GPS Coordinates			0530714, 6989630	0530712, 6989681	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	544778.3-6971712	544778.3-6971712	544778.3-6971712
LAB			-	-	-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB
Field Measurments																
Water Temperature	oC		5.63	12.7	-	-	11.4	5.4	-	-	14.2	3.53	0.8	687	10.3	8.6
pH	pH units		-	6.78	-	-	6.9	7.94	-	-	7.77	7.56	7.17	17.68	8016	7.77
Conductivity	(µS/cm)		42	63	-	-	-	-	-	-	0	69	149	62	77	78
Laboratory-Measured																
Ion balance	%		-	Low EC	Low EC	-	-	-	-	-	-	-	-	Low EC	-	-
Biochemical Oxygen Demand	mg/L		-	-	-	-	-	-	-	<1.0	-	-	-	<6.0	<6.0	<6.0
Ammonia as N	mg/L	2.33	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.010
Mercury (Hg)-Total	mg/L	0.000026	<0.00002	<0.00002	<0.00010	<0.00001	0.00021	<0.00001	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	0.0025	0.004	-	-	-	-	0.012	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Total Reactive	mg/L		<0.002	<0.002	-	-	-	-	<0.010	-	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Kjeldahl Nitrogen	mg/L		0.167	<0.2	0.47	-	<1	1	-	-	<0.20	0.26	0.26	<0.20	<0.20	<0.20
Total Suspended Solids	mg/L		<5.0	<5.0	-	3	<1	3	-	<5.0	-	-	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L		17.8	16	25.4	39	22	28	25.5	27	22.7	37.9	29.2	-	21	23
Bicarbonate (HCO3)	mg/L		17.8	19	31	39	22	28	31.1	33	27.7	46.2	35.6	-	25	28
Carbonate (CO3)	mg/L		<5.0	<5.0	<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	-	<12	<12
Hydroxide (OH)	mg/L		<5.0	<5.0	<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	-	<6.8	<6.8
Calcium (Ca)-Dissolved	mg/L		7.76	5.96	8.96	-	-	-	-	-	9.2	17.3	12.8	7.22	8.17	7.44
Magnesium (Mg)-Dissolved	mg/L		1.13	0.853	1.33	-	-	-	-	-	1.46	3.24	2.35	1.05	1.23	1.08
Potassium (K)-Dissolved	mg/L		2	0.75	1.13	-	-	-	-	-	1.32	2.02	1.62	0.77	0.971	0.928
Sodium (Na)-Dissolved	mg/L		3.9	3.2	5	-	-	-	-	-	7.26	13.7	11.1	4.09	5.5	4.22
Chloride	mg/L		6.91	5	9.51	10.7	-	13.8	11.7	18.2	11.9	30.9	22.4	6.89	10.1	9.95
Conductivity	umhos/cm		68.8	64.2	88.5	89	152	101	97.8	120	94.3	195	144	68	84	83
Fluoride	mg/L	0.12	0.021	-	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	-	-
Hardness (as CaCO3)	mg/L		24	20	27.9	29	21	28	29.8	34.8	26.6	61	42.9	22.4	27.5	26
Nitrate-N	mg/L	13	<0.005	0.1	<0.050	0.04	0.41	0.14	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrate and Nitrite as N	mg/L		-	0.1	<0.071	-	-	-	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrite-N	mg/L	0.197	<0.01	<0.050	<0.050	<0.01	-	<0.01	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Sulfate	mg/L		3.11	2.8	3.44	2	-	2	3.93	4.99	3.57	14.4	8.36	3.06	3.48	3.4
TDS (Calculated)	mg/L		-	30	44.6	-	101	67	49.6	64	48.3	108	75.1	37.5	60	47
Aluminum (Al)-Total	mg/L	0.1	<0.0005	0.0019	0.011	<0.002	0.015	<0.002	0.0965	0.0114	0.034	<0.020	<0.020	0.0129	0.0089	<0.0050
Antimony (Sb)-Total	mg/L		<0.0005	<0.00003	<0.00040	<0.0001	<0.0001	<0.0001	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	mg/L	0.005	<0.0005	<0.00003	<0.00040	0.0009	<0.0005	0.0008	0.00037	0.00032	<0.0010	<0.0010	<0.0010	0.00025	0.00026	0.00025
Barium (Ba)-Total	mg/L		0.02	0.00689	0.0133	0.0087	0.0095	0.009	0.0135	0.0145	0.00885	0.0152	0.0113	0.00955	0.0101	0.00962
Beryllium (Be)-Total	mg/L		<0.0010	<0.0002	<0.0010	<0.0005	<0.0005	0.0016	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Boron (B)-Total	mg/L	1.5	<0.1	<0.003	<0.050	<0.01	<0.01	<0.01	<0.010	0.014	<0.030	<0.030	<0.030	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation	0.000017	<0.00005	<0.000050	<0.00008	<0.00008	<0.00008	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	0.000016	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L		-	-	9.72	8.5	6.8	8.6	9.57	10.5	8.48	18.5	13.1	6.7	8.59	8.29
Cesium (Cs)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L		<0.001	<0.00006	<0.0050	<0.0006	<0.0006	0.0021*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L		<0.0003	<0.0001	<0.0020	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	mg/L	Equation	0.001	0.0007	0.0011	0.0008	0.0011	0.0006	0.00112	0.00119	<0.0020	<0.0020	<0.0020	0.00085	0.00124	0.00088
Iron (Fe)-Total	mg/L	0.3	<0.03	<0.01	0.057	<0.01	<0.01	0.07	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Lead (Pb)-Total	mg/L	Equation	<0.0005	<0.00005	<0.00010	<0.0003	0.0006	0.0003	<0.000090	<0.000090	<0.0010	<0.0010	<0.0010	<0.000090	<0.000090	<0.000090
Lithium (Li)-Total	mg/L		<0.0005	-	<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	0.005	<0.0020	0.0024	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	mg/L		1.12	0.865	1.44	1.8	1	1.8	1.42	2.09	1.32	3.58	2.45	1.01	1.48	1.3
Manganese (Mn)-Total	mg/L		0.00204	0.0018	0.0062	<0.0005	0.0021	0.0022	0.0111	0.00317	0.0037	0.0035	0.0028	0.00467	0.0042	0.00295
Molybdenum (Mo)-Total	mg/L	0.073	<0.001	<0.00006	<0.0050	<0.0005	<0.0005	<0.0005	0.0002	0.00033	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	mg/L	Equation	<0.001	<0.0003	<0.0020	<0.0005	0.0006	0.0014	<0.0020	<0.0020	<0.0020	<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	<0.10	<0.10	<0.10
Potassium (K)-Total	mg/L		2	0.76	1.28	0.57	0.63	1.6	1.31	1.51	1.15	2.34	1.56	0.862	1.07	1.03
Rubidium (Rb)-Total	mg/L		-	-	-	-	-	-	0.00183	0.00199	0.00157	0.00228	0.00161	0.00115	0.00151	0.00143
Selenium (Se)-Total	mg/L	0.001	<0.001	<0.0001	<0.00040	<0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L		-	-	-	-	-	-	0.464	0.231	<0.30	0.92	0.48	0.216	0.248	0.197
Silver (Ag)-Total	mg/L	0.0001	<0.0002	<0.0001	<0.00010	<0.0005	<0.0005	<0.0005	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L		3.9	3.22	5.7	8.6	4.4	7.8	6.33	10.5	6.41	15.7	9.73	3.63	6.34	5.71
Strontium (Sr)-Total	mg/L		-	0.028	-	<0.05	<0.05	<0.05	0.0444	0.055	0.037	0.0942	0.0607	0.0316	0.0388	0.0378
Tellurium (Te)-Total	mg/L		-	-	-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008	<0.0002	<0.00003	<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L		-	-	-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L		<0.0005	-	<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	0.0002
Titanium (Ti)-Total	mg/L		<0.0010	-	<0.0010	<0.01	<0.01	<0.01	0.00559	0.00055	0.001	<0.0010	<0.0010	0.00067	0.00059	<0.00050
Tungsten (W)-Total	mg/L		-	-	-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
Uranium (U)-Total	mg/L	0.015	<0.0002	<0.00005	<0.00010	<0.001	<0.001	<0.001	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L		<0.001	0.00011	<0.0010	<0.0005	0.0005	<0.0005	0.00037	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	mg/L	0.03	0.005	0.0008	<0.0040	<0.001	0.006	0.004	<0.0050	<0.0050	<0.020	<0.020	<0.020	<0.0020	<0.0020	<0.0020
Zirconium (Zr)-Total	mg/L		-	-	-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Sodium Adsorption Ratio		0.03												-	0.47	0.38
Ortho-Phosphate (PO4-P)	mg/L		<0.001	<0.001	<0.010	<0.010	0.02	<0.01	-	-	-	-	-	-	-	-
Turbidity	NTU		7.6	7.5	-	0.36	0.6	0.56	1.57	0.51	0.37	0.47	0.65	0.45	0.4	0.35
pH	pH units	6.5-9.0	9.47	8.57	7.67	6.77	7.62	7.14	7.6	7.83	7.75	7.81	7.73	-	7.63	7.49

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody	Units	CCME	2BB-MEL0914	MEL-3
Year				2010
Date Sampled				20/06/2010
GPS Coordinates				-
LAB				-
Field Measurments				
Water Temperature	oC		10	9.8
pH	pH units			7.1
Conductivity	(µS/cm)			-
Laboratory-Measured				
Fecal Coliforms	MPN/100mL		200	-
Total Coliforms	mg/L			-
E. Coli	mg/L			-
Total Oil and Grease	mg/L			<1.0
Ion balance	%			98.1
Biochemical Oxygen Demand	mg/L		15	-
Ammonia as N	mg/L	2.33		-
Mercury (Hg)-Total	mg/L	0.000026		<0.00010
Phosphorus (P)-Total	mg/L	0.004 - 0.01	1.000	-
Phosphorus (P)-Total Reactive	mg/L			-
Total Kjeldahl Nitrogen	mg/L			-
Total Suspended Solids	mg/L		15	-
Alkalinity, Total (as CaCO3)	mg/L			52
Bicarbonate (HCO3)	mg/L			63.5
Carbonate (CO3)	mg/L			<5.0
Hydroxide (OH)	mg/L			<5.0
Calcium (Ca)-Dissolved	mg/L			15.7
Magnesium (Mg)-Dissolved	mg/L			1.63
Potassium (K)-Dissolved	mg/L			2.69
Sodium (Na)-Dissolved	mg/L			21.5
Chloride	mg/L			21.4
Conductivity	umhos/cm			213
Fluoride	mg/L	0.12		-
Hardness (as CaCO3)	mg/L			45.9
Nitrate-N	mg/L	13		<0.050
Nitrate and Nitrite as N	mg/L			<0.071
Nitrite-N	mg/L	0.197		<0.050
Sulfate	mg/L			15.1
TDS (Calculated)	mg/L			109
Aluminum (Al)-Total	mg/L	0.1		0.034
Antimony (Sb)-Total	mg/L			0.00086
Arsenic (As)-Total	mg/L	0.005		0.00423
Barium (Ba)-Total	mg/L			0.0112
Beryllium (Be)-Total	mg/L			<0.0010
Bismuth (Bi)-Total	mg/L			-
Boron (B)-Total	mg/L	1.5		<0.050
Cadmium (Cd)-Total	mg/L	Equation		<0.000050
Calcium (Ca)-Total	mg/L			15.3
Cesium (Cs)-Total	mg/L			-
Chromium (Cr)-Total	mg/L			<0.0050
Cobalt (Co)-Total	mg/L			<0.0020
Copper (Cu)-Total	mg/L	Equation		0.0068
Iron (Fe)-Total	mg/L	0.3		0.179
Lead (Pb)-Total	mg/L	Equation		0.00288
Lithium (Li)-Total	mg/L			<0.010
Magnesium (Mg)-Total	mg/L			1.61
Manganese (Mn)-Total	mg/L			0.0762
Molybdenum (Mo)-Total	mg/L	0.073		<0.0050
Nickel (Ni)-Total	mg/L	Equation		0.0025
Phosphorus (P)-Total	mg/L			-
Potassium (K)-Total	mg/L			2.69
Rubidium (Rb)-Total	mg/L			-
Selenium (Se)-Total	mg/L	0.001		<0.00040
Silicon (Si)-Total	mg/L			-
Silver (Ag)-Total	mg/L	0.0001		<0.00010
Sodium (Na)-Total	mg/L			20.9
Strontium (Sr)-Total	mg/L			-
Tellurium (Te)-Total	mg/L			-
Thallium (Tl)-Total	mg/L	0.0008		<0.00010
Thorium (Th)-Total	mg/L			-
Tin (Sn)-Total	mg/L			<0.050
Titanium (Ti)-Total	mg/L			0.0026
Tungsten (W)-Total	mg/L			-
Uranium (U)-Total	mg/L	0.015		<0.00010
Vanadium (V)-Total	mg/L			<0.0010
Zinc (Zn)-Total	mg/L	0.03		0.0088
Zirconium (Zr)-Total	mg/L			-
Ortho-phosphate (PO4-P)	mg/L			0.414
Turbidity	NTU			-
pH	pH units	6.5-9.0		7.37

MONTHLY ENVIRONMENTAL REPORT AUGUST 2012

Waterbody				MEL-4										
Year				2010				2011					2012		
Date Sampled	Units	CCME	2BB-MEL0914	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	21/06/2012	25/07/2012	20/08/2012
GPS Coordinates				542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	542092-6989012	541934.2-6989173
LAB				-	-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS LAB	ALS	ALS	ALS LAB
Field Measurments															
Water Temperature	oC		10	4	15	11.1	6.5	-	-	11.4	6.32	0.8	1.3	10.3	10.1
pH	pH units			6.8	7.79	6.9	7.45	-	-	9.32	7.58	7.2	8.2	8.24	7.9
Conductivity	(µS/cm)			-	-	-	-	-	-	0	65	66	14	63	69
Laboratory-Measured															
Fecal Coliforms	MPN/100mL		200	-	35	-	-	-	<1	210	150	93	>200	>200	>200
Total Coliforms	mg/L			-		-	-	-	-	-	-	-	>200	>200	>200
E. Coli	mg/L			-		-	-	-	-	-	-	-	3	2	2
Total Oil and Grease	mg/L			-		<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Ion balance	%			Low EC	-	-	-	-	-	-	-	-	Low EC	-	-
Biochemical Oxygen Demand	mg/L		15	-	-	<1	5	2.7	1.3	1.9	7.2	<6.0	<6.0	<6.0	<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	0.136	0.032	0.103
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	<0.000020	<0.000020	<0.000020
Phosphorus (P)-Total	mg/L	0.004 - 0.01	1.000	-	-	-	-	0.618	0.012	0.018	<0.010	0.034	0.082	0.021	0.208
Phosphorus (P)-Total Reactive	mg/L			-	-	-	-	-	-	<0.010	<0.010	<0.010	0.060	0.013	0.103
Total Kjeldahl Nitrogen	mg/L			<0.20	-	<1	1	-	-	0.31	0.23	0.33	0.25	0.23	0.9
Total Suspended Solids	mg/L		15	-	2	1	4	-	<5.0	-	-	12	<5.0	<5.0	58
Phosphorus (P)-Total	mg/L												-	-	-
Alkalinity, Total (as CaCO3)	mg/L			<5.0	38	21	23	35.7	17.7	23	19.7	19.5	4.9	18.3	22
Bicarbonate (HCO3)	mg/L			<5.0	38	21	23	43.6	21.6	27	24.1	23.8	6	22.3	27
Carbonate (CO3)	mg/L			<5.0	-	<2	<2	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<1.2	<12
Hydroxide (OH)	mg/L			<5.0	<2	<2	<2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.34	<0.68	<6.8
Calcium (Ca)-Dissolved	mg/L			1.16	-	-	-	-	-	8.08	7.45	7.54	1.19	6.84	8.08
Magnesium (Mg)-Dissolved	mg/L			0.12	-	-	-	-	-	1.22	1.15	1.11	0.163	1.06	1.18
Potassium (K)-Dissolved	mg/L			<0.50	-	-	-	-	-	0.9	0.86	0.89	<0.10	0.824	1.27
Sodium (Na)-Dissolved	mg/L			<1.0	-	-	-	-	-	6.05	4.51	4.61	0.725	4.16	5.06
Chloride	mg/L			0.96	9.4	-	9.5	11.8	7.9	10.3	8.61	8.71	1.19	7.91	8.85
Conductivity	umhos/cm			9.09	97	142	74	124	67.5	84.8	75.9	75.4	<20	72	81
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	3.6	22	26
Nitrate-N	mg/L	13		<0.050	0.02	0.03	0.02	<0.050	<0.050	<0.050	<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	<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	<0.050	<0.050	<0.050
Sulfate	mg/L			0.7	3	-	4	4.92	3.09	3.37	3.47	3.55	0.63	3.41	3.51
TDS (Calculated)	mg/L			2.9	64	95	49	55.6	33.1	43.7	39.7	37.2	<5.0	43	54
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	0.0114	0.0088	0.0975
Antimony (Sb)-Total	mg/L			<0.00040	<0.0001	<0.0001	0.0007	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
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	0.00065	0.00057	0.00146
Barium (Ba)-Total	mg/L			<0.0030	0.0065	0.0064	0.0058	0.00874	0.00735	0.0103	0.0081	0.00758	0.00176	0.00883	0.0114
Beryllium (Be)-Total	mg/L			<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	mg/L			-	-	-	-	<0.00020	<0.00020	<0.00050	<0.00050	<0.00050	<0.00020	<0.00020	<0.00020
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	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	Equation		<0.000050	<0.00008	<0.00008	0.00017*	<0.000010	<0.000010	<0.00020	<0.00020	<0.00020	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Total	mg/L			1.33	7.6	5.4	6.4	7.92	5.97	11.2	7.81	7.02	1.61	6.99	8.31
Cesium (Cs)-Total	mg/L			-	-	-	-	<0.00010	<0.00010	<0.00050	<0.00050	<0.00050	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	mg/L			<0.0050	<0.0006	<0.0006	0.0030*	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	mg/L			<0.0020	-	-	-	0.00024	<0.00020	0.00055	<0.00050	<0.00050	0.00023	<0.00020	0.00034
Copper (Cu)-Total	mg/L	Equation		<0.0010	0.0007	0.0012	0.0005	0.00139	0.0008	<0.0020	<0.0020	<0.0020	0.00043	0.00097	0.00215
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	<0.10	<0.10	0.24
Lead (Pb)-Total	mg/L	Equation		<0.00010	<0.0003	0.0388*	0.001	0.000147	<0.000090	<0.0010	<0.0010	<0.0010	0.000138	<0.000090	0.000315
Lithium (Li)-Total	mg/L			<0.010	<0.1	<0.1	<0.1	<0.0020	<0.0020	<0.0020	<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	0.229	1.11	1.29
Manganese (Mn)-Total	mg/L			0.003	0.0021	0.0027	0.0028	0.0148	0.01	0.0319	0.0057	0.0092	0.0212	0.0122	0.0449
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	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	mg/L	Equation		<0.0020	0.0012	0.003	0.001	<0.0020	<0.0020	<0.0020	<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	0.12	<0.10	0.19
Potassium (K)-Total	mg/L			<0.10	0.33	0.43	1	1.89	0.706	0.93	0.99	0.8	0.413	0.893	1.21
Rubidium (Rb)-Total	mg/L			-	-	-	-	0.00208	0.00117	0.00133	0.00123	0.00124	0.00037	0.0012	0.00156
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	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L			-	-	-	-	0.333	0.232	0.47	<0.30	0.33	0.093	0.318	0.382
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	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	mg/L			1.1	7.4	3.7	5	6.32	3.83	8.51	5.69	4.24	1.06	4.24	5.17
Strontium (Sr)-Total	mg/L			-	<0.05	<0.05	<0.05	0.0395	0.0289	0.0552	0.0463	0.0319	0.00717	0.0352	0.0408
Tellurium (Te)-Total	mg/L			-	-	-	-	<0.00020	<0.00020	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	0.0008		<0.00010	-	-	-	<0.00010	<0.00010	<0.0050	<0.0050	<0.0050	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	mg/L			-	-	-	-	<0.00010	<0.00010	<0.0010	<0.0010	<0.0010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L			<0.050	<0.001	<0.001	<0.001	<0.00020	<0.00020	<0.00060	<0.00060	<0.00060	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	mg/L			<0.0010	<0.01	<0.01	<0.01	0.00031	0.00031	<0.0010	<0.0010	0.0056	<0.00020	<0.00050	0.00535
Tungsten (W)-Total	mg/L			-	-	-	-	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.00010	<0.00010	<0.00010
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	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	mg/L			<0.0010	<0.0005	<0.0005	<0.0005	<0.00020	<0.00020	<0.0020	<0.0020	<0.0020	<0.00020	<0.00020	0.0004
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	0.0028	<0.0020	0.0026
Zirconium (Zr)-Total	mg/L			-	-	-	-	<0.00040	<0.00040	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040
Ortho-Phosphate (O-PO4)	mg/L			<0.010	0.02	0.05	<0.01	-	-	-	-	-	-	-	-
Oil & Grease	mg/L			-	0.02	-	-	-	-	-	-	-	<0.10	-	<1.0
Turbidity	NTU			-	0.3	0.31	0.31	1.05	0.55	0.53	0.36	3.04	-	0.56	1.82
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	6.72	7.59	7.35

Waterbody	Units	2BB Limit	CCME	MEL-5
Date Sampled				28/05/2012
Localisation				Bladder Berm
LAB				ALS LAB
Laboratory-Measured				
Benzene	mg/L	0.37	0.0018	<0.00050
Toluene	mg/L	0.002	0.002	<0.0010
Ethyl benzene	mg/L	0.09	0.09	<0.00050
Xylenes	mg/L	-	-	<0.0015
Lead (Pb)-Total	mg/L	0.001	Equation*	0.000243
Oil and Grease, Total	mg/L	0.015	0.015	<2.0
Phenols (4AAP)	mg/L	0.02	Variable	0.004

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Waterbody	Units	CCME	2BB-MEL0914	MEL-7									
Year				2010			2011				2012		
Date Sampled				22/07/2010	27/08/2010	24/09/2010	28/06/2011	12/07/2011	12/09/2011	11/10/2011	20/06/2012	24/07/2012	21/08/2012
GPS Coordinates				542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	542001-6989066	541934.2-6989173
LAB				-	-	-	ALS LAB	ALS LAB	ALS LAB	ALS LAB	Mutlilab	Multilab	Multilab
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	230	500	900
Total Coliforms	mg/L			-	-	-	>110000	-	-	-			
E. Coli	mg/L			-	-	-	-	-	-	-			
Total Oil and Grease	mg/L			<1	<1	2	-	5.5	<1.0	<1.0	<1.0	<1.0	5
Ion balance	%			-	-	-	-	-	-	-			
Biochemical Oxygen Demand	mg/L		15	8.9	7	22	-	60	<6.0	<6.0	21.5	22	24
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	36	21	51
Phosphorus (P)-Total	mg/L												
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			
Oil & Grease	mg/L												
Turbidity	NTU			-	-	-	-	-	0.49	3.01			
pH	pH units	6.5-9.0		-	-	6.73	-	-	7.59	7.59	7.07	6.93	6.9