



AGNICO EAGLE

MELIADINE GOLD PROJECT

ENVIRONMENTAL REPORT: JULY 2016

WATER LICENCE 2BB-MEL1424

PRESENTED TO THE NUNAVUT WATER BOARD

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This monthly report is delivered under water license 2BB-MEL1424, PART J, item 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, A8 or other Lakes	Active (Volume cubic metres)
MEL-5	Point of discharge for the Bermed Fuel Containment Facilities	Active
MEL-6	Effluent from the Landfarm Treatment Facility prior to release	New
MEL-7	Final Effluent Discharge from the BIODISK treatment system	Active
MEL-8	Point of discharge or runoff from the Non-Hazardous Waste Landfill	(New) 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 daily average consumption of fresh water for the site was 32.00 m³/day for the month of July; 0 m³/day for the drilling, 29.43 m³/day*** for the camp and 1.65 m³/day for the underground, as well 0.92 m³/day were used for construction.

No further water was used for P1 infrastructure construction.

*** The volume includes the indirect water use.

- 3. The Licensee shall measure and record the volume of all soil from all locations entering the Landfarm Treatment Facility.**

No new material added.

- 4. The Licensee shall assess and record the concentration of F1 – F4 fractions in petroleum hydrocarbon contaminated soil, according to the CCME Canada-Wide Standard for Petroleum Hydrocarbons (PHC) in Soil that is entering the Land Treatment Unit from all sources and excavations.**

No new material added.

- 5. The Licensee shall provide the GPS coordinates of all locations where sources of water are utilized for all purposes. In UTM nad 1983 zone 15.**

- Camp water source: East 541943.0 ; North 6989174.0
- Underground water source: East 540076.0 ; North 6987731.0

- 6. The Licensee shall provide the GPS coordinates (in decimal degrees) of all locations where wastes associated with camp operations and exploration activities are deposited.**

The landfill has not been constructed yet, so most of the waste continues to be managed in containers. These containers are transported by barge during the summer and disposed of in an approved southern facility.

7. Licensee shall sample at Monitoring Program Station MEL-7, monthly during wastewater effluent discharge. Samples shall be analyzed for the parameters listed under Part G Item 11.

Biochemical Oxygen Demand – BOD5
 Total Suspended Solids
 Oil and Grease (and visual)
 Fecal Coliforms
 pH

All sewage treatment units are running correctly; population has been between 137 and 212 persons.

No exceedances in the month of July.

Station: STP-FINAL		July			
DATE	Limits	7/4/2016	7/11/2016	7/18/2016	7/25/2016
Ammonia as N		0.03	0.2	0.4	0.4
Atypical		53000	29000	>2000	52,000
Biochemical Oxygen Demand	80	5	29.0	10.0	20.0
Fecal Coliforms	1000	8.0	<2	<2	4.0
Heterotrophic Plate Count (AAHB)		>300000	>300000	>300000	>300000
Kjeldahl nitrogen		14.9	21.4	33.8	42.5
Nitrate and Nitrite as N		26.8	3.03	11.30	24.4
Nitrate-N		25.8	1.3	9.5	22.9
Nitrite-N		1	1.8	1.8	1.46
Oil & Grease-(IR)	5	<1	<1	<1	<1
pH	6.0 - 9.5	6.87	7.33	7.54	7.52
Phosphorus (P)-Total		15.2	17.4	14.0	
Total Coliforms		<1000	<10000	***	<1000
Total Suspended Solids	100	3.0	11.0	7.0	8.0
Transmittance %		43	38.0	33.0	29.0

- 8. The Licensee shall, prior to the release of effluent from the Bermed Fuel Containment Facilities at Monitoring Program Station Mel-5 and the Landfarm Treatment Facility at Monitoring Program Station MEL-6 for the purpose of demonstrating compliance, sample for the parameters listed under Part D item 15.**

➤ No release in July.

- 9. The Licensee shall obtain representative samples of the water column below any ice where required under part F, Items 5 and 6. 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 was done in July on any lake.

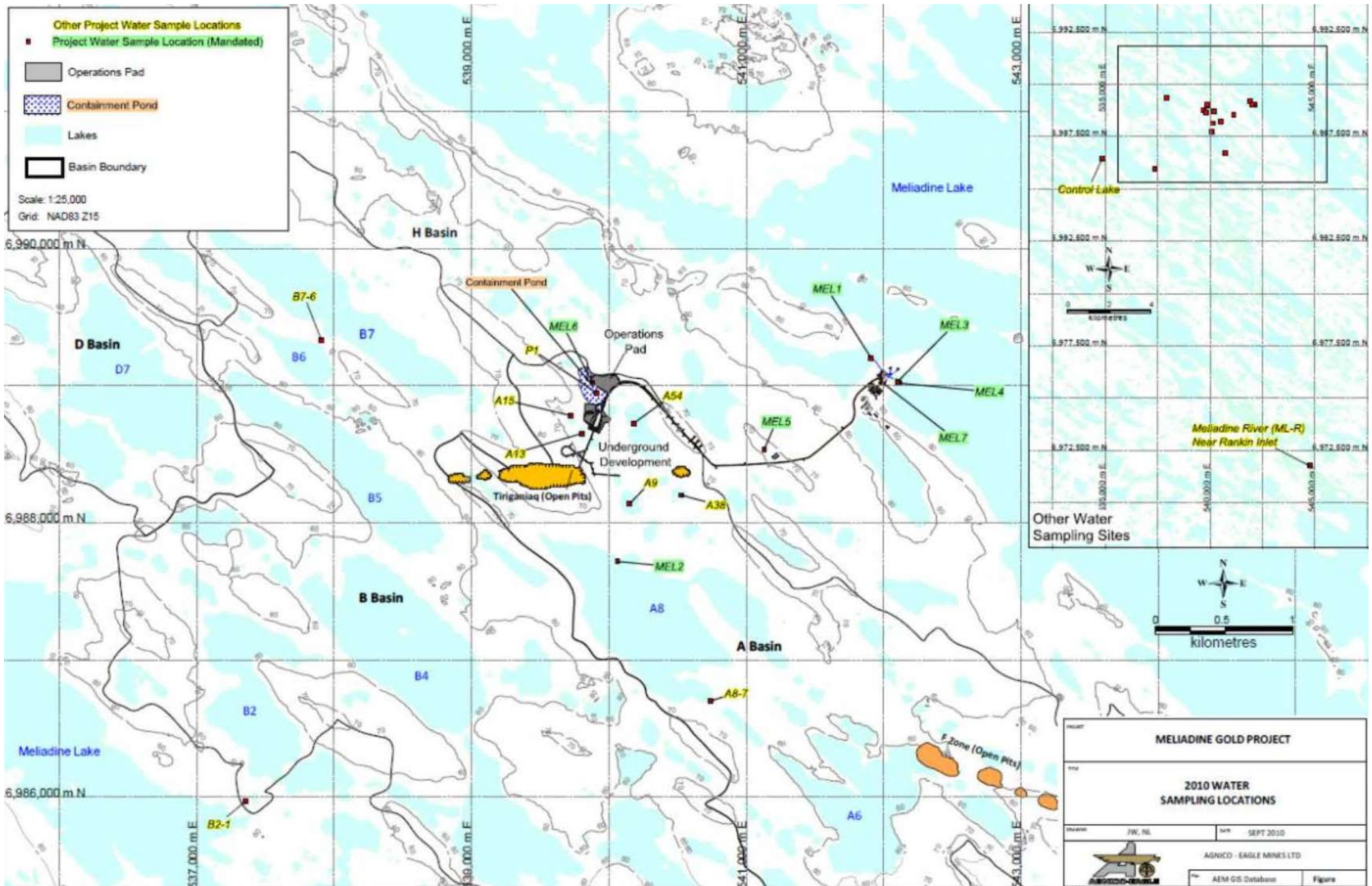
- 10. The inspector, Christine Wilson (INAC inspector), requested AEM to continue monitoring the ponded water at the rear of these facilities during times of flow with the same parameters as MEL-8 and the result must be included in the monthly monitoring report provided to the Nunavut Water Board ("the Board") and the Inspector.**

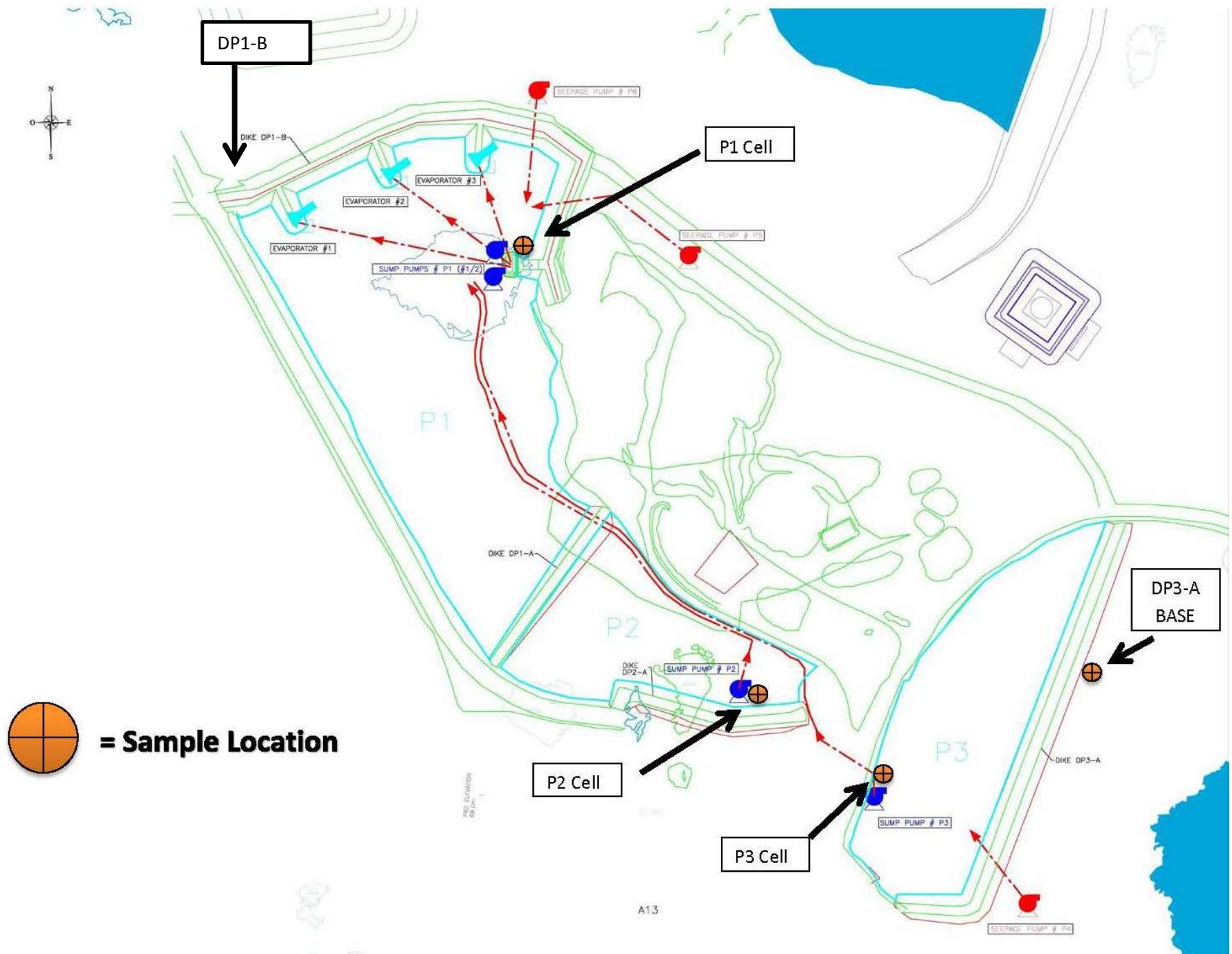
➤ No samples were collected for MEL-8 this month.

As per Section 2 of INAC Water License Inspection Dated April 12, 2016:

III. Amend the 2BB-MEL1424 monitoring program to include, at a minimum, a regular compliance point at DP3-A and A54.

See maps below for sample locations. A54 is taken at the same location as in past years.





IV. Modify the monthly monitoring reports, starting April 2016, to include, at a minimum, an updates of the construction of the containment structures, waste water treatment options; modifications of the freshet action plan, sampling, and analysis of those results.

An update of the construction of the containment structures: during the month of July the completion of the P1 structures evaporators and associated works was complete. This deems the P1 System completed and an As-built report will be completed and submitted to the board in September.

Waste water treatment options: Pumping within the P system all P3 & P2 is being pumped to P1, Daily inspections were completed by environmental technicians, Evaporators commissioning completed and start up commenced.

Regular inspections take place to check on direction of evaporation curtain to ensure the evaporation curtain is remaining inside the P1 containment area.

Modifications of the freshet action plan: Currently no modifications to the freshet action plan are noted.

Sampling and analysis of those results: Below are the sampling results related to the P1 containment area for the month of July.

Seep: In the month of July a seep was noted at the toe of the DP1-B berm. Immediately a sump was dug to catch the seep and a pump was installed to pump the seep water back into the P1 containment.

P1 Cell

P1 cell								
Date		5-Jul-16		10-Jul-16		19-Jul-16		26-Jul-16
field pH						7.88		8.00
field cond.						7.88		8.6
field temp						16.1		14.2
Project		55547		55756				56513
Sample		P1-Cell		P1-Cell		P1-Cell		P1-Cell
Sampling location		Meliadine		P1-Cell		P1-Cell		P1-Cell
Water distribution system		PO# 494982						494982
Sampling date		5-Jul-2016		10-Jul-16		19 july 2016 15h54		26-Jul-16
Sampler name		Philip Roy				JM & AG		JM
Alkalinity mg CaCO3/L		82		91		100		104
Aluminium (Al) mg/L		0.102		0.052		0.055		0.033
Ammonia nitrogen (NH3-NH4) mg N/L		49.9		51.5		55		58.4
Antimony (Sb) mg/L		0.0011		0.0012		0.0011		0.001
Arsenic (As) mg/L		0.0471		0.0458		0.0027		0.0061
Barium (Ba) mg/L		0.3425		0.3848		0.4619		0.5096
Beryllium (Be) mg/L	<	0.0005	<	0.0005		0.0007	<	0.0005
Bicarbonate (HCO3) mg CaCO3/L		82		91		100		104
Boron (B) mg/L		0.67		1.06		0.97		0.98
Cadmium (Cd) mg/L		0.0002		0.00018		0.00019		0.00019
Dissolved Calcium (Ca) mg/L								
Calcium (Ca) mg/L		744		818		1048		1030
Carbonate (CO3) mg CaCO3/L	<	2	<	2	<	2	<	2
Chloride (Cl) mg/L		1924		2110		2714		3061
Dissolved Chloride (Cl) mg/L								
Chromium (Cr) mg/L		0.0015	<	0.0006		0.0053		0.0019
Conductivity µmhos/cm		5706		5896		5689		4748
Copper (Cu) mg/L		0.0065		0.0048		0.006		0.0062
Dissolved Aluminium (Al) mg/L	<	0.006	<	0.006	<	0.006	<	0.006
Dissolved Antimony (Sb) mg/L		0.0009		0.001		0.0005		0.0009
Dissolved Arsenic (As) mg/L		0.0353		0.0493		0.0029	<	0.0005
Dissolved Barium (Ba) mg/L		0.3304		0.3783		0.4086		0.4592
Dissolved Beryllium (Be) mg/L	<	0.0005	<	0.0005	<	0.0005	<	0.0005
Dissolved Boron (B) mg/L		0.63		0.94		0.75		0.92
Dissolved Cadmium (Cd) mg/L	<	0.00002		0.0002		0.00014		0.0002
Dissolved Chromium (Cr) mg/L	<	0.0006	<	0.0006	<	0.0006	<	0.0006
Dissolved Copper (Cu) mg/L		0.0034		0.0045		0.0046		0.0062
Dissolved Iron (Fe) mg/L		0.08		0.14		0.11		0.12
Dissolved Lead (Pb) mg/L	<	0.0003	<	0.0003	<	0.0003	<	0.0003
Dissolved Lithium (Li) mg/L		1.38		1.4		1.59		1.62
Dissolved Manganese (Mn) mg/L		0.695		0.77		0.5052		0.6261
Dissolved Mercury (Hg) mg/L	<	0.0001		0.00049	<	0.0001		0.0003
Dissolved Molybdenum (Mo) mg/L		0.0012		0.0012		0.0017		0.0018
Dissolved Nickel (Ni) mg/L		0.0314		0.0586		0.0472		0.048
Dissolved organic carbon (D.O.C.) mg/L		13		13.3		6.3		3.6
Dissolved Selenium (Se) mg/L		0.053		0.069		0.076		0.081
Dissolved Solids mg/L		3804		3930		3792		3165
Dissolved Silver (Ag) mg/L								
Dissolved Strontium (Sr) mg/L		23.25		22.8		27.25		27.82
Dissolved thallium (Tl) mg/L	<	0.0008	<	0.0008	<	0.0008	<	0.0008
Dissolved Tin (Sn) mg/L	<	0.001	<	0.001	<	0.001	<	0.001
Dissolved titanium (Ti) mg/L		0.42		0.24		0.34		0.56
Dissolved Uranium (U) mg/L		0.001		0.002		0.002		0.003
Dissolved Vanadium mg/L	<	0.0005	<	0.0005	<	0.0005	<	0.0005
Dissolved Zinc mg/L		0.003		0.017		0.019		0.015
Dissolved Hardness mg/L								
Hardness mg CaCO3/L		2038		2277		2884		2949
Hydrocarbons (L) (Fraction F1 (C6-C10)) µg/L	<	0.3		lab broke bottles	<	0.3	<	0.3
Hydrocarbons (L) (Fraction F2 - F4))								
- Petroleum Hydrocarbons F2 (C10-C16) µg/L	<	100		lab broke bottles	<	100	<	100
- Petroleum Hydrocarbons F3 (C16-34) µg/L	<	200		lab broke bottles	<	200	<	200
- Petroleum Hydrocarbons F4 (C34-50) µg/L	<	200		lab broke bottles	<	200	<	200
Iron (Fe) mg/L		0.71		0.41		0.41		0.37
Kjeldahl nitrogen mg N/L		45.1		47		49.8		54.1
Lead (Pb) mg/L	<	0.0003	<	0.0003	<	0.0003	<	0.0003
Lithium (Li) mg/L		1.39		1.71		1.57		1.66
Dissolved Magnesium (Mg) mg/L								
Magnesium (Mg) mg/L		52.6		57		65.1		91.8
Manganese (Mn) mg/L		0.896		0.7892		0.6189		0.6955
Mercury (Hg) mg/L	<	0.0001		0.00085	<	0.0001		0.00046
Molybdenum (Mo) mg/L		0.0014		0.0013		0.0016		0.0019
Nickel (Ni) mg/L		0.0383		0.059		0.0494		0.0577
Nitrite-Nitrate mg N/L		47.6		48.7		60.7		62.7
Ortho-Phosphate (O-PO4) mg P/L		0.04		0.01		0.01		0.08
pH		7.98		7.64		7.7		7.74
pH terrain		7.98		7.66		7.88		8
Dissolved Potassium (K) mg/L								
Potassium (K) mg/L		70.3		58.6		62.1		83
Reactive Silica (Si) mg/L		4.4		4		2.7		1.1
Selenium (Se) mg/L		0.064		0.068		0.085		0.096
Dissolved Sodium (Na) mg/L								
Sodium (Na) mg/L		268		264		296		342
Silver (Ag) mg/L								
Strontium (Sr) mg/L		23.25		27		26.98		25.84
Sulfate (SO4) mg SO4/L		73.8		83.7		111		113
Dissolved Sulphate (SO4) mg/L								
Temperature °C		12.4		21.8		16.1		14.2
Thallium (Tl) mg/L	<	0.0008	<	0.0008	<	0.0008	<	0.0008
Tin (Sn) mg/L	<	0.001	<	0.001	<	0.001	<	0.001
Titanium (Ti) mg/L		0.57		0.27		0.43		0.64
Total organic carbon (T.O.C.) mg/L		16.5		19.9		11.5		12.8
Total Phosphorus (P) mg P/L		0.54		0.04		0.06		0.03
Total Suspended Solids mg/L		10		22		17		6
Turbidity UTN		10		4.11		3.73		2.79
Uranium (U) mg/L		0.001		0.001		0.002		0.003
Vanadium (V) mg/L	<	0.0005	<	0.0005	<	0.0005	<	0.0005
Zinc (Zn) mg/L		0.019		0.021		0.017		0.025

P2 Cell

P2 Cell					
Date	5-Jul-16	10-Jul-16	19-Jul-16	26-Jul-16	
field pH	8.14		7.83	7.84	
field cond.	5.1		8.94	9.84	
field temp	14.5		7.83	14.9	
Project		55757		56514	
Sample	P2-Cell	P2-Cell	P2-Cell	P2-Cell	
Sampling location	P2-Cell	P2-Cell	P2-Cell	P2-Cell	
Water distribution system	PO# 494983	PO# 494982	PO# 494983	494982	
Sampling date	7/5/2016 0:00	7/10/2016 14:18	7/19/2016 15h38	7/26/2016 16:00	
Sampler name	JM & PR	Alexandre Gauthier	AG & PR	JM	
Alkalinity mg CaCO3/L	84	89	102	103	
Aluminium (Al) mg/L	0.027	0.026	0.038	0.056	
Ammonia nitrogen (NH3-NH4) mg N/L	52.7	65.4	121	75.3	
Antimony (Sb) mg/L	0.001	0.0012	0.0012	0.0012	
Arsenic (As) mg/L	0.0536	0.0629	0.0013	0.0051	
Barium (Ba) mg/L	0.3274	0.4215	0.5313	0.5549	
Beryllium (Be) mg/L	< 0.0005	< 0.0005	0.0012	< 0.0005	
Bicarbonate (HCO3) mg CaCO3/L	84	89	102	103	
Boron (B) mg/L	0.56	1.06	1	1.15	
Cadmium (Cd) mg/L	0.00025	0.00035	0.00033	0.00044	
Dissolved Calcium (Ca) mg/L					
Calcium (Ca) mg/L	807	1008	1224	1286	
Carbonate (CO3) mg CaCO3/L	< 2	< 2	< 2	< 2	
Chloride (Cl) mg/L	2238	2524	3115	3434	
Dissolved Chloride (Cl) mg/L					
Chromium (Cr) mg/L	0.0012	0.0008	0.0083	0.0037	
Conductivity umhos/cm	6098	6661	6057	4783	
Copper (Cu) mg/L	0.0059	0.0056	0.0069	0.007	
Dissolved Aluminium (Al) mg/L	< 0.006	0.013	< 0.006	< 0.006	
Dissolved Antimony (Sb) mg/L	0.0009	0.0009	0.0005	0.001	
Dissolved Arsenic (As) mg/L	0.0472	0.0637	< 0.0005	< 0.0005	
Dissolved Barium (Ba) mg/L	0.3448	0.3854	0.4478	0.4945	
Dissolved Beryllium (Be) mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Dissolved Boron (B) mg/L	0.58	0.73	0.94	1.11	
Dissolved Cadmium (Cd) mg/L	< 0.00002	0.00017	0.0003	0.00042	
Dissolved Chromium (Cr) mg/L	< 0.0006	< 0.0006	0.0018	0.0006	
Dissolved Copper (Cu) mg/L	0.0056	0.0058	0.0049	0.0067	
Dissolved Iron (Fe) mg/L	0.08	0.14	0.12	0.12	
Dissolved Lead (Pb) mg/L	< 0.0003	< 0.0003	0.0003	0.0018	
Dissolved Lithium (Li) mg/L	1.26	1.52	1.69	1.87	
Dissolved Manganese (Mn) mg/L	0.8089	0.3505	0.8956	0.9465	
Dissolved Mercury (Hg) mg/L	< 0.0001	0.00052	< 0.0001	0.0002	
Dissolved Molybdenum (Mo) mg/L	0.0015	0.0013	0.0013	0.0016	
Dissolved Nickel (Ni) mg/L	0.0407	0.0791	0.062	0.0616	
Dissolved organic carbon (D.O.C.) mg/L	15.2	14	6.9	5.4	
Dissolved Selenium (Se) mg/L	0.07	0.101	0.097	0.098	
Dissolved Solids mg/L	4065	4440	4038	3188	
Dissolved Silver (Ag) mg/L					
Dissolved Strontium (Sr) mg/L	23.36	27.17	33.86	32.48	
Dissolved thallium (Tl) mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	
Dissolved Tin (Sn) mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dissolved titanium (Ti) mg/L	0.54	0.29	0.43	0.44	
Dissolved Uranium (U) mg/L	0.001	0.001	0.002	0.003	
Dissolved Vanadium mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Dissolved Zinc mg/L	0.007	0.02	0.024	0.026	
Dissolved Hardness mg/L					
Hardness mg CaCO3/L	2207	2773	3354	3631	
Hydrocarbons (L) (Fraction F1 (C6-C10)) µg/L	< 0.3	< 0.3	< 0.3	< 0.3	
Hydrocarbons (L) (Fraction F2 - F4))					
- Petroleum Hydrocarbons F2 (C10-C16) µg/L	---	< 100	< 100	< 100	
- Petroleum Hydrocarbons F3 (C16-34) µg/L	---	< 200	< 200	< 200	
- Petroleum Hydrocarbons F4 (C34-50) µg/L	---	< 200	< 200	< 200	
Iron (Fe) mg/L	0.29	0.25	0.31	0.37	
Kjeldahl nitrogen mg N/L	47.7	56.2	73.9	57.5	
Lead (Pb) mg/L	< 0.0003	< 0.0003	< 0.0003	0.0012	
Lithium (Li) mg/L	1.36	1.82	2.11	1.95	
Dissolved Magnesium (Mg) mg/L					
Magnesium (Mg) mg/L	55.9	62.2	72.5	102	
Manganese (Mn) mg/L	0.8414	1.081	1.031	1.04	
Mercury (Hg) mg/L	< 0.0001	0.00077	< 0.0001	0.00058	
Molybdenum (Mo) mg/L	0.0016	0.0013	0.0013	0.0015	
Nickel (Ni) mg/L	0.0426	0.0778	0.0628	0.0742	
Nitrite-Nitrate mg N/L	55.2	63.5	71	74.3	
Ortho-Phosphate (O-PO4) mg P/L	0.03	0.01	0.01	0.01	
pH	7.64	7.7	7.71	7.72	
pH terrain	7.81	7.75	7.83	7.84	
Dissolved Potassium (K) mg/L					
Potassium (K) mg/L	73.3	69.3	75.3	90.1	
Reactive Silica (Si) mg/L	3.2	3.2	2.6	1.5	
Selenium (Se) mg/L	0.074	0.096	0.105	0.123	
Dissolved Sodium (Na) mg/L					
Sodium (Na) mg/L	274	286	323	385	
Silver (Ag) mg/L					
Strontium (Sr) mg/L	24.26	30.15	36.39	29.69	
Sulfate (SO4) mg SO4/L	82.3	84.8	109	118	
Dissolved Sulphate (SO4) mg/L)					
Temperature °C	13.2	21.1	16.4	14.9	
Thallium (Tl) mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	
Tin (Sn) mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Titanium (Ti) mg/L	0.55	0.3	0.53	0.73	
Total organic carbon (T.O.C.) mg/L	17.4	19.3	13	12.8	
Total Phosphorus (P) mg P/L	0.55	0.07	0.05	0.09	
Total Suspended Solids mg/L	9	7	4	6	
Turbidity UTN	5.35	5.63	3.13	4.03	
Uranium (U) mg/L	0.001	0.001	0.002	0.003	
Vanadium (V) mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Zinc (Zn) mg/L	0.014	0.033	0.023	0.055	

P3 Cell

P3 cell					
Date	5-Jul-16	10-Jul-16	19-Jul-16	26-Jul-16	
field pH			7.82	7.73	
field cond.			8.63	10.08	
field temp			18.9	16.5	
Project	55549	55758	55549	56515	
Sample	P3-Cell	P3-Cell	P3-Cell	P3-Cell	
Sampling location	Meliadine	P3-Cell	Meliadine	P3-Cell	
Water distribution system	PO# 494982	PO# 494982	PO# 494982	494982	
Sampling date	5-Jul-16	10-Jul-16	19-Jul-16	26-Jul-16	
Sampler name	Philip Roy	Alexandre Gauthier	AG & JM	JM	
Alkalinity mg CaCO3/L	78	83	100	100	
Aluminium (Al) mg/L	0.021	< 0.006	0.029	0.129	
Ammonia nitrogen (NH3-NH4) mg N/L	46.6	54	64.3	72.5	
Antimony (Sb) mg/L	0.0011	0.0011	0.0011	0.0009	
Arsenic (As) mg/L	0.0575	0.0639	0.0085	0.0094	
Barium (Ba) mg/L	0.2868	0.3521	0.4948	0.5236	
Beryllium (Be) mg/L	< 0.0005	< 0.0005	0.0013	< 0.0005	
Bicarbonate (HCO3) mg CaCO3/L	78	83	100	100	
Boron (B) mg/L	0.56	0.86	0.77	0.87	
Cadmium (Cd) mg/L	0.00018	0.00022	0.0004	0.0005	
Dissolved Calcium (Ca) mg/L					
Calcium (Ca) mg/L	841	896	1232	1394	
Carbonate (CO3) mg CaCO3/L	< 2	< 2	< 2	< 2	
Chloride (Cl) mg/L	2048	2348	3044	3539	
Dissolved Chloride (Cl) mg/L					
Chromium (Cr) mg/L	0.0013	0.0014	0.0081	0.0042	
Conductivity µmhos/cm	5650	6238	5892	10080	
Copper (Cu) mg/L	0.0063	0.0065	0.0075	0.0079	
Dissolved Aluminium (Al) mg/L	< 0.006	< 0.006	< 0.006	< 0.006	
Dissolved Antimony (Sb) mg/L	0.0008	0.0009	0.0005	0.0007	
Dissolved Arsenic (As) mg/L	0.0408	0.064	0.007	< 0.0005	
Dissolved Barium (Ba) mg/L	0.2673	0.3851	0.4647	0.4464	
Dissolved Beryllium (Be) mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Dissolved Boron (B) mg/L	0.46	0.73	0.79	0.88	
Dissolved Cadmium (Cd) mg/L	< 0.00002	0.00017	0.0004	0.00048	
Dissolved Chromium (Cr) mg/L	< 0.0006	< 0.0006	0.0023	< 0.0006	
Dissolved Copper (Cu) mg/L	0.0054	0.0066	0.006	0.007	
Dissolved Iron (Fe) mg/L	0.06	0.13	0.16	0.11	
Dissolved Lead (Pb) mg/L	< 0.0003	< 0.0003	< 0.0003	< 0.0003	
Dissolved Lithium (Li) mg/L	1.06	1.32	1.53	1.96	
Dissolved Manganese (Mn) mg/L	0.3108	0.3538	0.9559	1.342	
Dissolved Mercury (Hg) mg/L	< 0.0001	0.00048	< 0.0001	0.00033	
Dissolved Molybdenum (Mo) mg/L	0.002	0.0027	0.0019	0.0018	
Dissolved Nickel (Ni) mg/L	0.0369	0.0812	0.0649	0.0673	
Dissolved organic carbon (D.O.C.) mg/L	13.6	9.9	5.4	2.4	
Dissolved Selenium (Se) mg/L	0.061	0.102	0.106	0.097	
Dissolved Solids mg/L	3766	4158	3928	3115	
Dissolved Silver (Ag) mg/L					
Dissolved Strontium (Sr) mg/L	20.58	23.72	26.92	33.19	
Dissolved thallium (Tl) mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	
Dissolved Tin (Sn) mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Dissolved titanium (Ti) mg/L	0.36	0.32	0.42	0.38	
Dissolved Uranium (U) mg/L	0.002	0.003	0.004	0.005	
Dissolved Vanadium mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Dissolved Zinc mg/L	< 0.001	0.021	0.017	0.02	
Dissolved Hardness mg/L					
Hardness mg CaCO3/L	2326	2507	3411	3896	
Hydrocarbons (L) (Fraction F1 (C6-C10)) µg/L	< 0.3	< 0.3	< 0.3	< 0.3	
Hydrocarbons (L) (Fraction F2- F4))					
- Petroleum Hydrocarbons F2 (C10-C16) µg/L	< 100	< 100	< 100	< 100	
- Petroleum Hydrocarbons F3 (C16- 34) µg/L	< 200	< 200	< 200	< 200	
- Petroleum Hydrocarbons F4 (C34-50) µg/L	< 200	< 200	< 200	< 200	
Iron (Fe) mg/L	0.23	0.17	0.29	0.46	
Kjeldahl nitrogen mg N/L	43.3	49.6	60.4	63.1	
Lead (Pb) mg/L	0.0019	< 0.0003	< 0.0003	< 0.0003	
Lithium (Li) mg/L	1.11	1.61	1.54	2.15	
Dissolved Magnesium (Mg) mg/L					
Magnesium (Mg) mg/L	55	65.5	81.5	101	
Manganese (Mn) mg/L	0.459	0.4679	0.9993	1.454	
Mercury (Hg) mg/L	< 0.0001	0.00082	< 0.0001	0.00078	
Molybdenum (Mo) mg/L	0.0025	0.0022	0.0018	0.002	
Nickel (Ni) mg/L	0.0426	0.0749	0.0678	0.0839	
Nitrite-Nitrate mg N/L	51	53.5	69.5	77.9	
Ortho-Phosphate (O-PO4) mg P/L	0.02	0.01	0.01	0.06	
pH	7.76	7.78	7.62	7.59	
pH terrain	8.16	7.83	7.82	7.73	
Dissolved Potassium (K) mg/L					
Potassium (K) mg/L	67.8	64.4	73.2	85.3	
Reactive Silica (Si) mg/L	2.6	1.8	2.5	2.3	
Selenium (Se) mg/L	0.069	0.089	0.102	0.123	
Dissolved Sodium (Na) mg/L					
Sodium (Na) mg/L	250	294	349	479	
Silver (Ag) mg/L					
Strontium (Sr) mg/L	22.11	27.3	26.81	32.28	
Sulfate (SO4) mg SO4/L	96.3	106	128	141	
Dissolved Sulphate (SO4) mg/L					
Temperature °C	13.5	21.9	18.9	16.5	
Thallium (Tl) mg/L	< 0.0008	< 0.0008	< 0.0008	< 0.0008	
Tin (Sn) mg/L	< 0.001	< 0.001	< 0.001	< 0.001	
Titanium (Ti) mg/L	0.34	0.32	0.39	0.46	
Total organic carbon (T.O.C.) mg/L	16.6	14.6	11.4	8	
Total Phosphorus (P) mg P/L	0.58	0.04	0.05	0.03	
Total Suspended Solids mg/L	6	5	4	7	
Turbidity UTN	3.56	3.23	3.51	5.19	
Uranium (U) mg/L	0.002	0.002	0.004	0.005	
Vanadium (V) mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	
Zinc (Zn) mg/L	0.001	0.024	0.019	0.034	

DP3-A Base

Project		55551
Sample		DP3-A Base
Sampling location		Meliadine
Water distribution system		PO# 494982
Sampling date		5-Jul-16
Sampler name		Philip Roy
Alkalinity mg CaCO3/L		141
Aluminium (Al) mg/L		0.358
Ammonia nitrogen (NH3-NH4) mg N/L		631
Antimony (Sb) mg/L		0.0045
Arsenic (As) mg/L		0.8261
Barium (Ba) mg/L		0.9244
Beryllium (Be) mg/L		0.0009
Bicarbonate (HCO3) mg CaCO3/L		141
Boron (B) mg/L		6.9
Cadmium (Cd) mg/L		0.00219
Dissolved Calcium (Ca) mg/L		
Calcium (Ca) mg/L		9257
Carbonate (CO3) mg CaCO3/L	<	2
Chloride (Cl) mg/L		25665
Dissolved Chloride (Cl) mg/L		
Chromium (Cr) mg/L		0.0103
Conductivity µmhos/cm		20990
Copper (Cu) mg/L		0.0458
Dissolved Aluminium (Al) mg/L		0.015
Dissolved Antimony (Sb) mg/L		0.0043
Dissolved Arsenic (As) mg/L		0.6923
Dissolved Barium (Ba) mg/L		0.9194
Dissolved Beryllium (Be) mg/L	<	0.0005
Dissolved Boron (B) mg/L		6.04
Dissolved Cadmium (Cd) mg/L		0.00166
Dissolved Chromium (Cr) mg/L		0.0058
Dissolved Copper (Cu) mg/L		0.0359
Dissolved Iron (Fe) mg/L		2.09
Dissolved Lead (Pb) mg/L	<	0.0003
Dissolved Lithium (Li) mg/L		21.41
Dissolved Manganese (Mn) mg/L		5.554
Dissolved Mercury (Hg) mg/L	<	0.0001
Dissolved Molybdenum (Mo) mg/L		0.0064
Dissolved Nickel (Ni) mg/L		0.4859
Dissolved organic carbon (D.O.C.) mg/L		77.8
Dissolved Selenium (Se) mg/L		0.654
Dissolved Solids mg/L		13993
Dissolved Silver (Ag) mg/L		
Dissolved Strontium (Sr) mg/L		442
Dissolved thallium (Tl) mg/L		0.0043
Dissolved Tin (Sn) mg/L	<	0.001
Dissolved titanium (Ti) mg/L		1.55
Dissolved Uranium (U) mg/L		0.02
Dissolved Vanadium mg/L	<	0.0005
Dissolved Zinc mg/L		0.036
Dissolved Hardness mg/L		
Hardness mg CaCO3/L		25602
Hydrocarbons (L) (Fraction F1 (C6-C10)) µg/L	<	0.3
Hydrocarbons (L) (Fraction F2 - F4))		
- Petroleum Hydrocarbons F3 (C16-34) µg/L	<	200
- Petroleum Hydrocarbons F2 (C10-C16) µg/L	<	100
- Petroleum Hydrocarbons F4 (C34-50) µg/L	<	200
Iron (Fe) mg/L		7.77
Kjeldahl nitrogen mg N/L		5187
Lead (Pb) mg/L		0.0018
Lithium (Li) mg/L		22.84
Dissolved Magnesium (Mg) mg/L		
Magnesium (Mg) mg/L		604
Manganese (Mn) mg/L		5.152
Mercury (Hg) mg/L	<	0.0001
Molybdenum (Mo) mg/L		0.0065
NH3 (nonionized) AMMONIA mg N/L		-
Nickel (Ni) mg/L		0.5163
Nitrate (NO3) mg N/L		72.1
Nitrite-Nitrate mg N/L		669
Nitrite (NO2) mg N/L		11
Ortho-Phosphate (O-PO4) mg P/L		0.1
pH		6.78
pH field		6.91
Dissolved Potassium (K) mg/L		
Potassium (K) mg/L		691
Reactive Silica (Si) mg/L		13
Selenium (Se) mg/L		0.73
Dissolved Sodium (Na) mg/L		
Sodium (Na) mg/L		1876
Silver (Ag) mg/L		
Strontium (Sr) mg/L		453
Sulfate (SO4) mg SO4/L		505
Dissolved Sulphate (SO4) mg/L		
Temperature °C		13.7
Thallium (Tl) mg/L		0.0046
Tin (Sn) mg/L	<	0.001
Titanium (Ti) mg/L		3.28
Total organic carbon (T.O.C.) mg/L		77.8
Total Phosphorus (P) mg P/L		0.73
Total Suspended Solids mg/L		1376
Turbidity UTN		71.7
Uranium (U) mg/L		0.02
Vanadium (V) mg/L	<	0.0005
Zinc (Zn) mg/L		0.043

DP1-B Base

Project	55552	56516
Sample	DP1B-Base	DP1B-Base
Sampling location	Meliadine	DP1B-Base
Water distibution system	PO# 494982	494982
Sampling date	7/5/2016 0:00	26-Jul-16
Sampler name	Philip Roy	JM
Alkalinity mg CaCO3/L	139	102
Aluminium (Al) mg/L	0.093	0.056
Ammonia nitrogen (NH3-NH4) mg N/L	384	51.7
Antimony (Sb) mg/L	0.0017	0.0009
Arsenic (As) mg/L	0.6292	0.01
Barium (Ba) mg/L	2.973	0.4863
Beryllium (Be) mg/L	0.0013	0.0005
Bicarbonate (HCO3) mg CaCO3/L	139	102
Boron (B) mg/L	6.34	0.77
Cadmium (Cd) mg/L	0.00509	0.00021
Dissolved Calcium (Ca) mg/L		
Calcium (Ca) mg/L	6183	956
Carbonate (CO3) mg CaCO3/L	< 2	< 2
Chloride (Cl) mg/L	16800	2750
Dissolved Chloride (Cl) mg/L		
Chromium (Cr) mg/L	0.014	0.0042
Conductivity μmhos/cm	17680	4107
Copper (Cu) mg/L	0.034	0.006
Dissolved Aluminium (Al) mg/L	< 0.006	< 0.006
Dissolved Antimony (Sb) mg/L	0.0016	0.0008
Dissolved Arsenic (As) mg/L	0.4498	< 0.0005
Dissolved Barium (Ba) mg/L	2.885	0.4625
Dissolved Beryllium (Be) mg/L	< 0.0005	< 0.0005
Dissolved Boron (B) mg/L	4.97	0.78
Dissolved Cadmium (Cd) mg/L	0.00475	0.00019
Dissolved Chromium (Cr) mg/L	0.0054	0.0014
Dissolved Copper (Cu) mg/L	0.0274	0.0056
Dissolved Iron (Fe) mg/L	1.14	0.2
Dissolved Lead (Pb) mg/L	< 0.0003	< 0.0003
Dissolved Lithium (Li) mg/L	19.71	1.31
Dissolved Manganese (Mn) mg/L	7.896	0.662
Dissolved Mercury (Hg) mg/L	< 0.0001	0.00038
Dissolved Molybdenum (Mo) mg/L	0.0006	0.0014
Dissolved Nickel (Ni) mg/L	0.2698	0.0464
Dissolved organic carbon (D.O.C.) mg/L	39.6	3.7
Dissolved Selenium (Se) mg/L	0.33	0.076
Dissolved Solids mg/L	11786	2738
Dissolved Silver (Ag) mg/L		
Dissolved Strontium (Sr) mg/L	301	31.03
Dissolved thallium (Tl) mg/L	0.0078	< 0.0008
Dissolved Tin (Sn) mg/L	< 0.001	< 0.001
Dissolved titanium (Ti) mg/L	0.63	0.41
Dissolved Uranium (U) mg/L	0.005	0.002
Dissolved Vanadium mg/L	< 0.0005	< 0.0005
Dissolved Zinc mg/L	0.125	0.014
Dissolved Hardness mg/L		
Hardness mg CaCO3/L	17366	2702
Hydrocarbons (L) (Fraction F1 (C6-C10)) μg/L	< 0.3	< 0.3
Hydrocarbons (L) (Fraction F2 - F4))		
- Petroleum Hydrocarbons F3 (C16-34) μg/L	---	< 200
- Petroleum Hydrocarbons F2 (C10-C16) μg/L	---	< 100
- Petroleum Hydrocarbons F4 (C34-50) μg/L	---	< 200
Iron (Fe) mg/L	5.35	0.93
Kjeldahl nitrogen mg N/L	359	51.5
Lead (Pb) mg/L	0.007	< 0.0003
Lithium (Li) mg/L	22.52	2.14
Dissolved Magnesium (Mg) mg/L		
Magnesium (Mg) mg/L	468	76.5
Manganese (Mn) mg/L	7.782	0.646
Mercury (Hg) mg/L	< 0.0001	0.00073
Molybdenum (Mo) mg/L	0.0006	0.0013
Nickel (Ni) mg/L	0.3603	0.0523
Nitrite-Nitrate mg N/L	425	55.4
Ortho-Phosphate (O-PO4) mg P/L	0.06	0.09
pH	6.68	7.44
pH field	6.76	7.44
Dissolved Potassium (K) mg/L		
Potassium (K) mg/L	415	63.7
Reactive Silica (Si) mg/L	4.2	1.5
Selenium (Se) mg/L	0.406	0.082
Dissolved Sodium (Na) mg/L		
Sodium (Na) mg/L	1321	311
Silver (Ag) mg/L		
Strontium (Sr) mg/L	305	29.74
Sulfate (SO4) mg SO4/L	162	110
Dissolved Sulphate (SO4) mg/L		
Temperature °C	17.2	13.7
Thallium (Tl) mg/L	0.0079	< 0.0008
Tin (Sn) mg/L	< 0.001	< 0.001
Titanium (Ti) mg/L	0.8	0.4
Total organic carbon (T.O.C.) mg/L	39.6	10.2
Total Phosphorus (P) mg P/L	0.58	0.05
Total Suspended Solids mg/L	33	21
Turbidity UTN	15.9	5.66
Uranium (U) mg/L	0.005	0.002
Vanadium (V) mg/L	< 0.0005	< 0.0005
Zinc (Zn) mg/L	0.162	0.024