

Diavik Diamond Mines Inc.
P.O. Box 2498
5007 – 50th Avenue
Yellowknife, NT X1A 2P8
Canada
T (867) 669 6500
F (867) 669 9058

Violet Camsell-Blondin, Chair - Wek'eezhii Land and Water Board
Mark Cliffe-Phillips, Executive Director - Wek'eezhii Land and Water Board
#1, 4905 – 48th Street
Yellowknife, NT X1A 3S3
Canada

2 January 2012

Dear Ms. Camsell-Blondin

RE: Water License W2007L2-0003 Monthly SNP Report – November 2011

General

Station 1645-13 at the North Inlet Storage Facility was sampled bi-weekly during the month of November and results have been included in this report.

Sampling of the discharge from the North Inlet Water Treatment Plant (NIWTP) occurred every 6 days at stations 1645-18 and 1645-18B in the month of November. There was a DDMI internal error with a missed collection on November 8th, for 18/18B stations. Collection occurred on November 9th for these stations and the 6 day sampling frequency carried forward from this date.

1645-18 and 1645-18B Monthly toxicity sampling was collected on November 17th. Results are provided in this report. No concerns were identified with the monthly toxicity testing completed.

Sampling at station 1645-19 at the NIWTP diffusers was not completed in November due to unsafe ice conditions.

Stations 1645-75 and 1645-75B (underground water) were sampled biweekly in November and results have been included in this report.

Station 1645-50 (A418 pit water) was not sampled in November as the pit Sump was frozen.

Results

Water Sampling and Analysis Results

1. Rationales for non-sampling events of SNP stations are provided in the attached Table 1a. Table 1b outlines any SNP stations that are suspended, including rationale for their suspension.
2. Table 2a provides all the results for samples related to SNP sampling requirements during the month of November 2011. Table 2b would contain the Hydrolab biophysical profiles for 1645-19; this was not collected for the month of November.
3. Table 3 provides monthly total phosphorus loading to Lac de Gras from the water treatment plant.
4. Table 4a, Table 4b and associated Summary Charts provide measured concentrations and graphs for parameters regulated under the water license for SNP Stations 1645-18 and 1645-18B from November 2010 through November 2011.

Flow and Volume Measurements

1. Table 3 provides a breakdown of flow and volume measurements required under Part C and D of the water license. Seepage flow volumes reported from the flow meters for the seepage wells have been malfunctioning, therefore data is unavailable. Geotechnicians noted no unusual flow rates in the seepage wells in September.
2. Table 3 provides a breakdown of solid material moved for the month with quantities for A418 and A154 identified separately.
3. Table 3 provides flow volumes for water within the A154/A418 decline, as well as water use for the cement batch plant (reuse of treated NIWTP water). A total of 992,142 m³ of flow was recorded for underground during November, while a total of 2276 m³ was recorded for use at the batch and paste plants.
4. Table 3 provides flow volumes for water from the A154 and A418 open pits.
5. Volumes of water used for drills/other uses and dust control are outlined in Table 3. The volume of water moved from collection ponds to the PKC during November is also provided in Table 3.
6. North Inlet Elevation: 415.42 m above sea level near the end of the month.

C) Toxicity Results

Monthly *Daphnia 48-h Static Acute Test* Toxicity Results are attached for stations 1645-18 and 1645-18B.

Spill Summary

The November summary report contains both internal and external spills, as per the DIAND spill guidelines. This information is presented in Table 5.

Project Update

This section outlines the status of various infrastructure construction projects and other activities that are occurring at the Diavik mine.

If you require additional information or clarification, please feel free to contact the undersigned at (867) 766-5400 ext 5536.

Regards,



David Wells
Superintendent, Environment

- cc. Tracy Covey, DIAND Inspector
Jason Brennan, DIAND Inspector
Environmental Monitoring Advisory Board (EMAB)
Patrick Kramers, Environment Canada

Table 1a: Rationale for Non-Sampling Events November 2011

Date	Stations Sampled	Stations Not Sampled	Missed Parameters	Rationale
November 1, 2011				
November 2, 2011	1645-18	1645-18B		Plant 2 down
November 3, 2011				
November 4, 2011				
November 5, 2011				
November 6, 2011	1645-18B			
November 7, 2011				
November 8, 2011		1645-18,1645-18B		Missed collection for 6 Day cycle(carried forward on the 9th of Nov)
November 9, 2011	1645-13, 1645-18, 1645-18B, 1645-75, 1645-75B	1645-50		No Water in Sump (frozen)
November 10, 2011				
November 11, 2011				
November 12, 2011				
November 13, 2011				
November 14, 2011				
November 15, 2011		1645-18*, 1645-18B*, 1645-19A**, 1645-19B2**, 1645-19C**		* Plant Down, ** Thin ice in diffuser area, not safe for sample collection
November 16, 2011	1645-18, 1645-18B(Monthly)		Monthly Toxicity*, Ultra low Hg**	*Sample hold time limitation, logistics would not allow delivery w/in hold time window, ** Samples broken in transit to laboratory
November 17, 2011	1645-18, 1645-18B Monthly Tox.			
November 18, 2011				
November 19, 2011				
November 20, 2011				
November 21, 2011	1645-18, 1645-18B			
November 22, 2011				
November 23, 2011	1645-13, 1645-75, 1645-75B	1645-50		No Water in Sump (frozen)
November 24, 2011				
November 25, 2011				
November 26, 2011				
November 27, 2011	1645-18, 1645-18B			
November 28, 2011				
November 29, 2011				
November 30, 2011				

Table 1b: SNP Stations Suspended for November 2011

SNP Stations	Rational	Comments
1645-19A,1645-19B2, 1645-19C	Thin Ice in Sample Location	Thin ice in the sample location was a safety concern throughout the month of November. Samples were unable to be collected, sampling is to resume in December 2011.

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-13	2011.11.09	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	55.4	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Aluminum (Al) - Dissolved	128	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Aluminum (Al) - Total	369	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Ammonia (N)	0.34	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Antimony (Sb) - Dissolved	0.44	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Antimony (Sb) - Total	0.44	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Arsenic (As) - Dissolved	4.53	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Arsenic (As) - Total	4.87	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Barium (Ba) - Dissolved	44.5	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Barium (Ba) - Total	56.8	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Bicarbonate (HCO3)	67.6	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Bismuth (Bi) - Total	0.010	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Cadmium (Cd) - Dissolved	0.015	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Cadmium (Cd) - Total	0.015	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Calcium (Ca) - Dissolved	26.7	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Calcium (Ca) - Total	27.8	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Chloride (Cl) - Dissolved	74	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Chromium (Cr) - Dissolved	0.4	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Chromium (Cr) - Total	1.4	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Cobalt (Co) - Dissolved	0.429	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Cobalt (Co) - Total	0.706	ug/L
SNP-A	1645-13	2011.11.09	GW	DDMI-FIELD	Conductivity	789.6	us/cm
SNP-A	1645-13	2011.11.09	GW	Maxxam	Copper (Cu) - Dissolved	0.38	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Copper (Cu) - Total	0.82	ug/L
SNP-A	1645-13	2011.11.09	GW	DDMI-LAB	Dissolved Oxygen	11.2	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Fluoride (F)	0.150	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Hardness (as CaCO3) - Total	130	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Iron (Fe) - Dissolved	12	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Iron (Fe) - Total	334	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Lead (Pb) - Dissolved	0.319	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Lead (Pb) - Total	0.507	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Lithium (Li) - Dissolved	18.3	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Lithium (Li) - Total	19.4	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Magnesium (Mg) - Dissolved	14.2	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Magnesium (Mg) - Total	14.7	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Manganese (Mn) - Dissolved	42.0	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Manganese (Mn) - Total	55.8	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Dissolved	39.2	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Total	38.6	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Nickel (Ni) - Dissolved	7.31	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Nickel (Ni) - Total	10.7	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Nitrate (N)	4.35	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Nitrate plus Nitrite (N)	4.69	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Nitrite (N)	0.333	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Orthophosphate (PO4-P)	0.132	mg/L
SNP-A	1645-13	2011.11.09	GW	DDMI-FIELD	pH	6.66	pH Units
SNP-A	1645-13	2011.11.09	GW	DDMI-LAB	pH	8.49	pH Units
SNP-A	1645-13	2011.11.09	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.194	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Phosphorus (P) - Total	0.240	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Potassium (K) - Dissolved	10.3	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Potassium (K) - Total	10.9	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Selenium (Se) - Dissolved	0.22	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Selenium (Se) - Total	0.25	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Silicon (Si) - Dissolved	3580	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Silicon (Si) - Total	3950	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Silver (Ag) - Total	0.005	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Sodium (Na) - Dissolved	42.6	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Sodium (Na) - Total	42.9	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Strontium (Sr) - Dissolved	535	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Strontium (Sr) - Total	565	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Sulphate (SO4) - Dissolved	63.0	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Sulphur (S) - Dissolved	23	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Sulphur (S) - Total	24	mg/L
SNP-A	1645-13	2011.11.09	GW	DDMI-FIELD	Temperature of Water	5.1	°C
SNP-A	1645-13	2011.11.09	GW	Maxxam	Thallium (Tl) - Dissolved	0.004	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Thallium (Tl) - Total	0.008	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-13	2011.11.09	GW	Maxxam	Tin (Sn) - Dissolved	0.03	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Titanium (Ti) - Total	11.4	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Total Dissolved Solids (TDS)	306	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.74	mg/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Total Organic Carbon (TOC)	2.30	mg/L
SNP-A	1645-13	2011.11.09	GW	DDMI-LAB	Total Suspended Solids (TSS)	10	mg/L
SNP-A	1645-13	2011.11.09	GW	DDMI-LAB	Turbidity	12.5	NTU
SNP-A	1645-13	2011.11.09	GW	Maxxam	Uranium (U) - Dissolved	28.2	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Uranium (U) - Total	29.0	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Vanadium (V) - Dissolved	0.5	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Vanadium (V) - Total	0.9	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Zinc (Zn) - Dissolved	1.9	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Zinc (Zn) - Total	2.1	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-13	2011.11.09	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	56.4	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Aluminum (Al) - Total	297	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Ammonia (N)	0.47	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Antimony (Sb) - Total	0.33	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Arsenic (As) - Total	5.13	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Barium (Ba) - Total	53.9	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Bicarbonate (HCO3)	68.8	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Bismuth (Bi) - Total	0.012	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Cadmium (Cd) - Total	0.006	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Calcium (Ca) - Total	25.6	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Chloride (Cl) - Dissolved	77	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Chromium (Cr) - Total	1.3	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Cobalt (Co) - Total	0.599	ug/L
SNP-A	1645-13	2011.11.23	GW	DDMI-FIELD	Conductivity	549.3	us/cm
SNP-A	1645-13	2011.11.23	GW	Maxxam	Copper (Cu) - Total	0.70	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Fluoride (F)	0.130	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Hardness (as CaCO3) - Total	114	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Iron (Fe) - Total	331	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Lead (Pb) - Total	0.558	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Lithium (Li) - Total	18.0	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Magnesium (Mg) - Total	12.3	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Manganese (Mn) - Total	58.1	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Molybdenum (Mo) - Total	29.8	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Nickel (Ni) - Total	8.64	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Nitrate (N)	3.11	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Nitrate plus Nitrite (N)	3.39	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Nitrite (N)	0.281	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Orthophosphate (PO4-P)	0.225	mg/L
SNP-A	1645-13	2011.11.23	GW	DDMI-FIELD	pH	8.09	pH Units
SNP-A	1645-13	2011.11.23	GW	DDMI-LAB	pH	8.1	pH Units
SNP-A	1645-13	2011.11.23	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.240	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Phosphorus (P) - Total	0.303	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Potassium (K) - Total	8.30	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Selenium (Se) - Total	0.21	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Silicon (Si) - Total	4830	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Silver (Ag) - Total	0.007	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Sodium (Na) - Total	41.1	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Strontium (Sr) - Total	519	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Sulphate (SO4) - Dissolved	47.4	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Sulphur (S) - Total	16	mg/L
SNP-A	1645-13	2011.11.23	GW	DDMI-FIELD	Temperature of Water	4.6	°C
SNP-A	1645-13	2011.11.23	GW	Maxxam	Thallium (Tl) - Total	0.008	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Titanium (Ti) - Total	12.3	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Total Dissolved Solids (TDS)	260	mg/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.08	mg/L
SNP-A	1645-13	2011.11.23	GW	DDMI-LAB	Total Suspended Solids (TSS)	10	mg/L
SNP-A	1645-13	2011.11.23	GW	DDMI-LAB	Turbidity	11.6	NTU
SNP-A	1645-13	2011.11.23	GW	Maxxam	Uranium (U) - Total	21.6	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Vanadium (V) - Total	1.0	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Zinc (Zn) - Total	2.1	ug/L
SNP-A	1645-13	2011.11.23	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-15	2011.11.30	PIMS	Percent Solids	Percent Solids	26.7	%
SNP-A	1645-18	2011.11.02	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	41.9	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Aluminum (Al) - Total	407	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Ammonia (N)	0.72	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Antimony (Sb) - Total	0.51	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Arsenic (As) - Total	1.03	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Barium (Ba) - Total	49.9	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Bicarbonate (HCO3)	51.1	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Cadmium (Cd) - Total	0.009	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Calcium (Ca) - Total	25.6	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Chloride (Cl) - Dissolved	87	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Cobalt (Co) - Total	0.483	ug/L
SNP-A	1645-18	2011.11.02	GW	DDMI-FIELD	Conductivity	595.4	us/cm
SNP-A	1645-18	2011.11.02	GW	Maxxam	Copper (Cu) - Total	0.37	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Fluoride (F)	0.086	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Hardness (as CaCO3) - Total	125	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Iron (Fe) - Total	23	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Lead (Pb) - Total	0.045	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Lithium (Li) - Total	19.5	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Magnesium (Mg) - Total	14.9	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Manganese (Mn) - Total	48.7	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Molybdenum (Mo) - Total	42.7	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Nickel (Ni) - Total	7.60	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Nitrate (N)	3.68	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Nitrate plus Nitrite (N)	3.89	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Nitrite (N)	0.205	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Orthophosphate (PO4-P)	0.0151	mg/L
SNP-A	1645-18	2011.11.02	GW	DDMI-FIELD	pH	7.3	pH Units
SNP-A	1645-18	2011.11.02	GW	DDMI-LAB	pH	7.14	pH Units
SNP-A	1645-18	2011.11.02	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0256	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Phosphorus (P) - Total	0.0309	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Potassium (K) - Total	12.0	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Selenium (Se) - Total	0.23	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Silicon (Si) - Total	2680	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Sodium (Na) - Total	40.0	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Strontium (Sr) - Total	552	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Sulphate (SO4) - Dissolved	91.7	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Sulphur (S) - Total	30	mg/L
SNP-A	1645-18	2011.11.02	GW	DDMI-FIELD	Temperature of Water	4.3	°C
SNP-A	1645-18	2011.11.02	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Titanium (Ti) - Total	0.6	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Total Dissolved Solids (TDS)	298	mg/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	2.21	mg/L
SNP-A	1645-18	2011.11.02	GW	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18	2011.11.02	GW	DDMI-LAB	Turbidity	1.42	NTU
SNP-A	1645-18	2011.11.02	GW	Maxxam	Uranium (U) - Total	8.57	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Vanadium (V) - Total	0.3	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Zinc (Zn) - Total	0.9	ug/L
SNP-A	1645-18	2011.11.02	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	41.0	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Aluminum (Al) - Total	398	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Ammonia (N)	0.60	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Antimony (Sb) - Total	0.43	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Arsenic (As) - Total	1.00	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Barium (Ba) - Total	45.2	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Bicarbonate (HCO3)	50.0	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Cadmium (Cd) - Total	0.005	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Calcium (Ca) - Total	29.0	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Chloride (Cl) - Dissolved	78	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18	2011.11.09	GW	Maxxam	Cobalt (Co) - Total	0.427	ug/L
SNP-A	1645-18	2011.11.09	GW	DDMI-FIELD	Conductivity	639.1	us/cm
SNP-A	1645-18	2011.11.09	GW	Maxxam	Copper (Cu) - Total	0.44	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Fluoride (F)	0.100	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Hardness (as CaCO3) - Total	132	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Iron (Fe) - Total	27	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Lead (Pb) - Total	0.042	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Lithium (Li) - Total	18.3	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Magnesium (Mg) - Total	14.6	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Manganese (Mn) - Total	48.9	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Total	37.0	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Nickel (Ni) - Total	7.66	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Nitrate (N)	4.36	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Nitrate plus Nitrite (N)	4.57	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Nitrite (N)	0.205	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Orthophosphate (PO4-P)	0.0207	mg/L
SNP-A	1645-18	2011.11.09	GW	DDMI-FIELD	pH	7.37	pH Units
SNP-A	1645-18	2011.11.09	GW	DDMI-LAB	pH	7.49	pH Units
SNP-A	1645-18	2011.11.09	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0218	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Phosphorus (P) - Total	0.0229	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Potassium (K) - Total	10.8	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Selenium (Se) - Total	0.23	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Silicon (Si) - Total	3440	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Sodium (Na) - Total	43.8	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Strontium (Sr) - Total	548	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Sulphate (SO4) - Dissolved	80.8	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Sulphur (S) - Total	28	mg/L
SNP-A	1645-18	2011.11.09	GW	DDMI-FIELD	Temperature of Water	2.8	°C
SNP-A	1645-18	2011.11.09	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Titanium (Ti) - Total	0.6	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Total Dissolved Solids (TDS)	310	mg/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.31	mg/L
SNP-A	1645-18	2011.11.09	GW	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-18	2011.11.09	GW	DDMI-LAB	Turbidity	1.38	NTU
SNP-A	1645-18	2011.11.09	GW	Maxxam	Uranium (U) - Total	8.12	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Vanadium (V) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Zinc (Zn) - Total	0.8	ug/L
SNP-A	1645-18	2011.11.09	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	41.2	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Aluminum (Al) - Dissolved	62.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Aluminum (Al) - Total	369	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Ammonia (N)	0.64	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Antimony (Sb) - Dissolved	0.37	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Antimony (Sb) - Total	0.41	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Arsenic (As) - Dissolved	0.70	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Arsenic (As) - Total	1.06	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Barium (Ba) - Dissolved	44.7	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Barium (Ba) - Total	48.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Bicarbonate (HCO3)	50.3	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Cadmium (Cd) - Dissolved	0.006	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Cadmium (Cd) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Calcium (Ca) - Dissolved	25.7	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Calcium (Ca) - Total	29.5	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Chloride (Cl) - Dissolved	76	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Chromium (Cr) - Dissolved	0.3	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Cobalt (Co) - Dissolved	0.398	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Cobalt (Co) - Total	0.440	ug/L
SNP-A	1645-18	2011.11.16	GW	DDMI-FIELD	Conductivity	558.4	us/cm
SNP-A	1645-18	2011.11.16	GW	Maxxam	Copper (Cu) - Dissolved	0.35	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Copper (Cu) - Total	0.35	ug/L
SNP-A	1645-18	2011.11.16	GW	DDMI-LAB	Dissolved Oxygen	12.4	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Fluoride (F)	0.095	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Hardness (as CaCO3) - Total	131	mg/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18	2011.11.16	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Iron (Fe) - Dissolved	2	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Iron (Fe) - Total	24	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Lead (Pb) - Dissolved	0.016	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Lead (Pb) - Total	0.045	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Lithium (Li) - Dissolved	16.5	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Lithium (Li) - Total	17.3	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Magnesium (Mg) - Dissolved	13.3	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Magnesium (Mg) - Total	14.0	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Manganese (Mn) - Dissolved	47.1	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Manganese (Mn) - Total	49.7	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Mercury (Hg) - Dissolved	<0.01	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Mercury (Hg) - Total	<0.020	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Molybdenum (Mo) - Dissolved	34.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Molybdenum (Mo) - Total	33.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Nickel (Ni) - Dissolved	7.22	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Nickel (Ni) - Total	7.39	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Nitrate (N)	3.80	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Nitrate plus Nitrite (N)	4.01	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Nitrite (N)	0.220	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Orthophosphate (PO4-P)	<0.0050	mg/L
SNP-A	1645-18	2011.11.16	GW	DDMI-FIELD	pH	6.8	pH Units
SNP-A	1645-18	2011.11.16	GW	DDMI-LAB	pH	7.28	pH Units
SNP-A	1645-18	2011.11.16	DUP RDGS	DDMI-LAB	pH	7.29	pH Units
SNP-A	1645-18	2011.11.16	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0070	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Phosphorus (P) - Total	0.0289	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Potassium (K) - Dissolved	9.33	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Potassium (K) - Dissolved	9330	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Potassium (K) - Total	9.86	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Potassium (K) - Total	9860	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Selenium (Se) - Dissolved	0.17	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Selenium (Se) - Total	0.21	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Silicon (Si) - Dissolved	3540	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Silicon (Si) - Total	4370	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Sodium (Na) - Dissolved	42.2	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Sodium (Na) - Total	44.9	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Strontium (Sr) - Dissolved	510	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Strontium (Sr) - Total	537	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Sulphate (SO4) - Dissolved	70.9	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Sulphur (S) - Dissolved	25	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Sulphur (S) - Total	27	mg/L
SNP-A	1645-18	2011.11.16	GW	DDMI-FIELD	Temperature of Water	5	°C
SNP-A	1645-18	2011.11.16	GW	Maxxam	Thallium (Tl) - Dissolved	0.004	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Thallium (Tl) - Total	0.005	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Tin (Sn) - Dissolved	<0.01	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Titanium (Ti) - Total	<0.5	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Total Dissolved Solids (TDS)	280	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.67	mg/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Total Organic Carbon (TOC)	1.79	mg/L
SNP-A	1645-18	2011.11.16	GW	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18	2011.11.16	DUP RDGS	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18	2011.11.16	GW	DDMI-LAB	Turbidity	1.32	NTU
SNP-A	1645-18	2011.11.16	DUP RDGS	DDMI-LAB	Turbidity	1.33	NTU
SNP-A	1645-18	2011.11.16	GW	Maxxam	Uranium (U) - Dissolved	4.82	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Uranium (U) - Total	6.04	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Vanadium (V) - Dissolved	0.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Vanadium (V) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Zinc (Zn) - Dissolved	0.8	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Zinc (Zn) - Total	1.2	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-18	2011.11.16	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	43.9	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Aluminum (Al) - Total	285	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Ammonia (N)	0.62	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Antimony (Sb) - Total	0.34	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Arsenic (As) - Total	0.87	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Barium (Ba) - Total	47.5	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Bicarbonate (HCO3)	53.5	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18	2011.11.21	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Cadmium (Cd) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Calcium (Ca) - Total	26.2	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Chloride (Cl) - Dissolved	78	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Cobalt (Co) - Total	0.372	ug/L
SNP-A	1645-18	2011.11.21	GW	DDMI-FIELD	Conductivity	570.7	us/cm
SNP-A	1645-18	2011.11.21	GW	Maxxam	Copper (Cu) - Total	0.32	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Fluoride (F)	0.095	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Hardness (as CaCO3) - Total	116	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Iron (Fe) - Total	20	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Lead (Pb) - Total	0.035	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Lithium (Li) - Total	17.6	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Magnesium (Mg) - Total	12.4	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Manganese (Mn) - Total	51.4	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Molybdenum (Mo) - Total	29.5	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Nickel (Ni) - Total	6.49	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Nitrate (N)	3.10	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Nitrate plus Nitrite (N)	3.30	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Nitrite (N)	0.193	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Orthophosphate (PO4-P)	0.0065	mg/L
SNP-A	1645-18	2011.11.21	GW	DDMI-FIELD	pH	7.21	pH Units
SNP-A	1645-18	2011.11.21	GW	DDMI-LAB	pH	7.2	pH Units
SNP-A	1645-18	2011.11.21	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0072	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Phosphorus (P) - Total	0.0269	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Potassium (K) - Total	8.57	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Selenium (Se) - Total	0.18	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Silicon (Si) - Total	4180	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Sodium (Na) - Total	41.4	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Strontium (Sr) - Total	511	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Sulphate (SO4) - Dissolved	72.2	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Sulphur (S) - Total	21	mg/L
SNP-A	1645-18	2011.11.21	GW	DDMI-FIELD	Temperature of Water	3.8	°C
SNP-A	1645-18	2011.11.21	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Titanium (Ti) - Total	<0.5	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Total Dissolved Solids (TDS)	274	mg/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.35	mg/L
SNP-A	1645-18	2011.11.21	GW	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18	2011.11.21	GW	DDMI-LAB	Turbidity	1.38	NTU
SNP-A	1645-18	2011.11.21	GW	Maxxam	Uranium (U) - Total	5.48	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Zinc (Zn) - Total	0.6	ug/L
SNP-A	1645-18	2011.11.21	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	45.5	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Aluminum (Al) - Total	274	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Ammonia (N)	0.66	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Antimony (Sb) - Total	0.31	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Arsenic (As) - Total	0.86	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Barium (Ba) - Total	44.4	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Bicarbonate (HCO3)	55.6	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Cadmium (Cd) - Total	0.008	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Calcium (Ca) - Total	24.7	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Chloride (Cl) - Dissolved	81	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Cobalt (Co) - Total	0.345	ug/L
SNP-A	1645-18	2011.11.27	GW	DDMI-FIELD	Conductivity	719.3	us/cm
SNP-A	1645-18	2011.11.27	GW	Maxxam	Copper (Cu) - Total	0.32	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Fluoride (F)	0.086	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Hardness (as CaCO3) - Total	109	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Iron (Fe) - Total	18	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Lead (Pb) - Total	0.040	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Lithium (Li) - Total	16.8	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Magnesium (Mg) - Total	11.5	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Manganese (Mn) - Total	52.5	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18	2011.11.27	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Molybdenum (Mo) - Total	27.0	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Nickel (Ni) - Total	6.03	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Nitrate (N)	2.86	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Nitrate plus Nitrite (N)	3.02	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Nitrite (N)	0.163	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Orthophosphate (PO4-P)	0.0120	mg/L
SNP-A	1645-18	2011.11.27	GW	DDMI-FIELD	pH	7.31	pH Units
SNP-A	1645-18	2011.11.27	GW	DDMI-LAB	pH	7.25	pH Units
SNP-A	1645-18	2011.11.27	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0271	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Phosphorus (P) - Total	0.0278	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Potassium (K) - Total	7.73	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Selenium (Se) - Total	0.17	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Silicon (Si) - Total	4450	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Sodium (Na) - Total	40.7	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Strontium (Sr) - Total	507	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Sulphate (SO4) - Dissolved	58.8	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Sulphur (S) - Total	22	mg/L
SNP-A	1645-18	2011.11.27	GW	DDMI-FIELD	Temperature of Water	4.2	°C
SNP-A	1645-18	2011.11.27	GW	Maxxam	Thallium (Tl) - Total	0.003	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Tin (Sn) - Total	0.04	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Titanium (Ti) - Total	0.7	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Total Dissolved Solids (TDS)	274	mg/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	2.44	mg/L
SNP-A	1645-18	2011.11.27	GW	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-18	2011.11.27	GW	DDMI-LAB	Turbidity	1.01	NTU
SNP-A	1645-18	2011.11.27	GW	Maxxam	Uranium (U) - Total	4.40	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Vanadium (V) - Total	<0.2	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Zinc (Zn) - Total	0.6	ug/L
SNP-A	1645-18	2011.11.27	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Alkalinity (Total as CaCO3) -Total	42.8	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Alkalinity (Total as CaCO3) -Total	43.2	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Aluminum (Al) - Total	707	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Aluminum (Al) - Total	719	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Ammonia (N)	0.74	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Ammonia (N)	0.70	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Antimony (Sb) - Total	0.47	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Antimony (Sb) - Total	0.47	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Arsenic (As) - Total	1.56	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Arsenic (As) - Total	1.50	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Barium (Ba) - Total	50.6	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Barium (Ba) - Total	50.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Bicarbonate (HCO3)	52.2	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Bicarbonate (HCO3)	52.7	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Cadmium (Cd) - Total	0.009	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Cadmium (Cd) - Total	0.008	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Calcium (Ca) - Total	26.6	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Calcium (Ca) - Total	26.2	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Chloride (Cl) - Dissolved	88	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Chloride (Cl) - Dissolved	87	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Chromium (Cr) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Cobalt (Co) - Total	0.482	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Cobalt (Co) - Total	0.444	ug/L
SNP-A	1645-18B	2011.11.06	GW	DDMI-FIELD	Conductivity	750.8	us/cm
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Copper (Cu) - Total	1.47	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Copper (Cu) - Total	0.40	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Fluoride (F)	0.091	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Fluoride (F)	0.089	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Hardness (as CaCO3) - Total	127	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Hardness (as CaCO3) - Total	128	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Iron (Fe) - Total	46	ug/L

Table 2a: Water Chemistry Results - November 2011

Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Iron (Fe) - Total	48	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Lead (Pb) - Total	0.082	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Lead (Pb) - Total	0.077	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Lithium (Li) - Total	19.3	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Lithium (Li) - Total	20.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Magnesium (Mg) - Total	15.0	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Magnesium (Mg) - Total	15.0	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Manganese (Mn) - Total	50.6	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Manganese (Mn) - Total	50.6	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Molybdenum (Mo) - Total	41.0	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Molybdenum (Mo) - Total	41.3	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Nickel (Ni) - Total	7.58	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Nickel (Ni) - Total	7.72	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Nitrate (N)	3.55	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Nitrate (N)	3.67	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Nitrate plus Nitrite (N)	3.87	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Nitrate plus Nitrite (N)	3.75	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Nitrite (N)	0.201	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Nitrite (N)	0.200	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Orthophosphate (PO4-P)	0.0223	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Orthophosphate (PO4-P)	0.0227	mg/L
SNP-A	1645-18B	2011.11.06	GW	DDMI-FIELD	pH	7.34	pH Units
SNP-A	1645-18B	2011.11.06	DUPW2	DDMI-LAB	pH	6.91	pH Units
SNP-A	1645-18B	2011.11.06	DUPW1	DDMI-LAB	pH	6.97	pH Units
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0430	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0427	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Phosphorus (P) - Total	0.0479	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Phosphorus (P) - Total	0.0483	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Potassium (K) - Total	11.8	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Potassium (K) - Total	11.6	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Selenium (Se) - Total	0.26	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Selenium (Se) - Total	0.23	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Silicon (Si) - Total	3000	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Silicon (Si) - Total	3070	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Silver (Ag) - Total	0.007	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Sodium (Na) - Total	42.0	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Sodium (Na) - Total	42.0	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Strontium (Sr) - Total	552	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Strontium (Sr) - Total	560	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Sulphate (SO4) - Dissolved	78.1	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Sulphate (SO4) - Dissolved	88.2	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Sulphur (S) - Total	30	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Sulphur (S) - Total	30	mg/L
SNP-A	1645-18B	2011.11.06	GW	DDMI-FIELD	Temperature of Water	3.4	°C
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Thallium (Tl) - Total	0.003	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Titanium (Ti) - Total	1.1	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Titanium (Ti) - Total	1.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Total Dissolved Solids (TDS)	294	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Total Dissolved Solids (TDS)	288	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.82	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	2.17	mg/L
SNP-A	1645-18B	2011.11.06	DUPW1	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	DDMI-LAB	Total Suspended Solids (TSS)	3	mg/L
SNP-A	1645-18B	2011.11.06	DUPW2	DDMI-LAB	Turbidity	2.52	NTU
SNP-A	1645-18B	2011.11.06	DUPW1	DDMI-LAB	Turbidity	2.62	NTU
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Uranium (U) - Total	12.1	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Uranium (U) - Total	12.2	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Zinc (Zn) - Total	1.0	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Zinc (Zn) - Total	0.8	ug/L
SNP-A	1645-18B	2011.11.06	DUPW2	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.06	DUPW1	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	45.9	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Aluminum (Al) - Total	571	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Ammonia (N)	0.63	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Antimony (Sb) - Total	0.43	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Arsenic (As) - Total	1.50	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Barium (Ba) - Total	45.3	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Bicarbonate (HCO3)	56.0	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Cadmium (Cd) - Total	0.014	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Calcium (Ca) - Total	27.3	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Chloride (Cl) - Dissolved	77	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Cobalt (Co) - Total	0.470	ug/L
SNP-A	1645-18B	2011.11.09	GW	DDMI-FIELD	Conductivity	628.1	us/cm
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Copper (Cu) - Total	0.49	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Fluoride (F)	0.110	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Hardness (as CaCO3) - Total	128	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Iron (Fe) - Total	38	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Lead (Pb) - Total	0.057	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Lithium (Li) - Total	17.7	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Magnesium (Mg) - Total	14.6	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Manganese (Mn) - Total	48.8	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Total	37.4	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Nickel (Ni) - Total	7.65	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Nitrate (N)	4.29	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Nitrate plus Nitrite (N)	4.50	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Nitrite (N)	0.202	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Orthophosphate (PO4-P)	0.0294	mg/L
SNP-A	1645-18B	2011.11.09	GW	DDMI-FIELD	pH	6.43	pH Units
SNP-A	1645-18B	2011.11.09	GW	DDMI-LAB	pH	7.25	pH Units
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0420	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Phosphorus (P) - Total	0.0446	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Potassium (K) - Total	10.7	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Selenium (Se) - Total	0.21	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Silicon (Si) - Total	3340	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Sodium (Na) - Total	43.9	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Strontium (Sr) - Total	530	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Sulphate (SO4) - Dissolved	78.5	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Sulphur (S) - Total	28	mg/L
SNP-A	1645-18B	2011.11.09	GW	DDMI-FIELD	Temperature of Water	2.7	°C
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Titanium (Ti) - Total	1.0	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Total Dissolved Solids (TDS)	302	mg/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.52	mg/L
SNP-A	1645-18B	2011.11.09	GW	DDMI-LAB	Total Suspended Solids (TSS)	2	mg/L
SNP-A	1645-18B	2011.11.09	GW	DDMI-LAB	Turbidity	2.19	NTU
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Uranium (U) - Total	13.8	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Zinc (Zn) - Total	0.6	ug/L
SNP-A	1645-18B	2011.11.09	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	46.4	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Aluminum (Al) - Dissolved	72.9	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Aluminum (Al) - Total	615	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Ammonia (N)	0.66	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Antimony (Sb) - Dissolved	0.39	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Antimony (Sb) - Total	0.39	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Arsenic (As) - Dissolved	0.74	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Arsenic (As) - Total	1.59	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Barium (Ba) - Dissolved	45.7	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Barium (Ba) - Total	48.7	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Bicarbonate (HCO3)	56.6	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Cadmium (Cd) - Dissolved	<0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Cadmium (Cd) - Total	0.008	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Calcium (Ca) - Dissolved	25.8	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Calcium (Ca) - Total	29.0	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Chloride (Cl) - Dissolved	87	mg/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Chromium (Cr) - Dissolved	0.3	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Chromium (Cr) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Cobalt (Co) - Dissolved	0.411	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Cobalt (Co) - Total	0.408	ug/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-FIELD	Conductivity	571	us/cm
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Copper (Cu) - Dissolved	0.35	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Copper (Cu) - Total	0.44	ug/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-LAB	Dissolved Oxygen	12.5	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Fluoride (F)	0.100	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Hardness (as CaCO3) - Total	129	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Iron (Fe) - Dissolved	4	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Iron (Fe) - Total	40	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Lead (Pb) - Dissolved	0.011	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Lead (Pb) - Total	0.076	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Lithium (Li) - Dissolved	16.3	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Lithium (Li) - Total	17.2	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Magnesium (Mg) - Dissolved	13.0	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Magnesium (Mg) - Total	13.7	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Manganese (Mn) - Dissolved	45.6	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Manganese (Mn) - Total	48.4	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Mercury (Hg) - Dissolved	<0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Molybdenum (Mo) - Dissolved	34.8	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Molybdenum (Mo) - Total	34.0	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Nickel (Ni) - Dissolved	7.53	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Nickel (Ni) - Total	7.31	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Nitrate (N)	3.79	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Nitrate plus Nitrite (N)	3.99	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Nitrite (N)	0.196	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Orthophosphate (PO4-P)	<0.0050	mg/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-FIELD	pH	6.92	pH Units
SNP-A	1645-18B	2011.11.16	GW	DDMI-LAB	pH	7.12	pH Units
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0100	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Phosphorus (P) - Total	0.0559	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Potassium (K) - Dissolved	9.07	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Potassium (K) - Dissolved	9070	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Potassium (K) - Total	9.60	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Potassium (K) - Total	9600	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Selenium (Se) - Dissolved	0.20	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Selenium (Se) - Total	0.19	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Silicon (Si) - Dissolved	3570	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Silicon (Si) - Total	4450	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Sodium (Na) - Dissolved	41.6	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Sodium (Na) - Total	43.9	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Strontium (Sr) - Dissolved	517	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Strontium (Sr) - Total	516	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Sulphate (SO4) - Dissolved	65.2	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Sulphur (S) - Dissolved	23	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Sulphur (S) - Total	26	mg/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-FIELD	Temperature of Water	2.6	°C
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Thallium (Tl) - Dissolved	0.004	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Thallium (Tl) - Total	0.005	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Tin (Sn) - Dissolved	<0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Tin (Sn) - Total	0.01	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Titanium (Ti) - Total	1.0	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Total Dissolved Solids (TDS)	276	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.79	mg/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Total Organic Carbon (TOC)	2.10	mg/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-18B	2011.11.16	GW	DDMI-LAB	Turbidity	2.39	NTU
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Uranium (U) - Dissolved	8.80	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Uranium (U) - Total	12.1	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Vanadium (V) - Dissolved	0.5	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Zinc (Zn) - Dissolved	0.4	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Zinc (Zn) - Total	0.9	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-18B	2011.11.16	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Alkalinity (Total as CaCO3) -Total	1.82	mg/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	45.5	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Aluminum (Al) - Total	514	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Aluminum (Al) - Total	1.7	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Ammonia (N)	0.034	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Ammonia (N)	0.64	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Antimony (Sb) - Total	<0.02	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Antimony (Sb) - Total	0.35	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Arsenic (As) - Total	1.40	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Arsenic (As) - Total	<0.02	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Barium (Ba) - Total	46.7	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Barium (Ba) - Total	<0.02	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Bicarbonate (HCO3)	55.5	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Bicarbonate (HCO3)	2.22	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Cadmium (Cd) - Total	0.008	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Cadmium (Cd) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Calcium (Ca) - Total	27.0	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Calcium (Ca) - Total	<0.01	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Chloride (Cl) - Dissolved	76	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Chloride (Cl) - Dissolved	<0.5	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Chromium (Cr) - Total	0.4	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Chromium (Cr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Cobalt (Co) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Cobalt (Co) - Total	0.378	ug/L
SNP-A	1645-18B	2011.11.21	GW	DDMI-FIELD	Conductivity	608.7	us/cm
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Copper (Cu) - Total	0.81	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Copper (Cu) - Total	0.14	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Fluoride (F)	0.100	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Fluoride (F)	<0.010	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Hardness (as CaCO3) - Total	118	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Hardness (as CaCO3) - Total	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Iron (Fe) - Total	40	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Iron (Fe) - Total	<1	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Lead (Pb) - Total	0.104	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Lead (Pb) - Total	0.006	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Lithium (Li) - Total	17.8	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Lithium (Li) - Total	<0.5	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Magnesium (Mg) - Total	12.2	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Magnesium (Mg) - Total	<0.01	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Manganese (Mn) - Total	51.5	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Manganese (Mn) - Total	<0.05	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Molybdenum (Mo) - Total	0.36	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Molybdenum (Mo) - Total	30.8	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Nickel (Ni) - Total	6.58	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Nickel (Ni) - Total	0.02	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Nitrate (N)	<0.020	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Nitrate (N)	3.27	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Nitrate plus Nitrite (N)	3.45	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Nitrate plus Nitrite (N)	<0.020	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Nitrite (N)	<0.005	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Nitrite (N)	0.183	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Orthophosphate (PO4-P)	0.0070	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Orthophosphate (PO4-P)	<0.0050	mg/L
SNP-A	1645-18B	2011.11.21	GW	DDMI-FIELD	pH	7.09	pH Units
SNP-A	1645-18B	2011.11.21	GW	DDMI-LAB	pH	7.08	pH Units
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0070	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Phosphorus (P) - Dissolved (TDP)	<0.0050	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Phosphorus (P) - Total	0.0553	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Phosphorus (P) - Total	<0.0050	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Potassium (K) - Total	8.37	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Potassium (K) - Total	<0.01	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Selenium (Se) - Total	<0.04	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Selenium (Se) - Total	0.17	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Silicon (Si) - Total	4390	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Silicon (Si) - Total	<100	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Sodium (Na) - Total	40.6	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Sodium (Na) - Total	<0.01	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Strontium (Sr) - Total	<0.05	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Strontium (Sr) - Total	515	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Sulphate (SO4) - Dissolved	66.2	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Sulphate (SO4) - Dissolved	<0.50	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Sulphur (S) - Total	22	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Sulphur (S) - Total	<2	mg/L
SNP-A	1645-18B	2011.11.21	GW	DDMI-FIELD	Temperature of Water	2.9	°C
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Thallium (Tl) - Total	<0.002	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Tin (Sn) - Total	0.11	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Titanium (Ti) - Total	1.1	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Titanium (Ti) - Total	<0.5	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Total Dissolved Solids (TDS)	272	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Total Dissolved Solids (TDS)	<10	mg/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	1.25	mg/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.128	mg/L
SNP-A	1645-18B	2011.11.21	GW	DDMI-LAB	Total Suspended Solids (TSS)	3	mg/L
SNP-A	1645-18B	2011.11.21	GW	DDMI-LAB	Turbidity	1.9	NTU
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Uranium (U) - Total	10.1	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Uranium (U) - Total	0.015	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Vanadium (V) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Vanadium (V) - Total	<0.2	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Zinc (Zn) - Total	0.9	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Zinc (Zn) - Total	0.2	ug/L
SNP-A	1645-18B	2011.11.21	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.21	TBW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	46.2	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Aluminum (Al) - Total	508	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Ammonia (N)	0.71	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Antimony (Sb) - Total	0.33	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Arsenic (As) - Total	1.33	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Barium (Ba) - Total	45.8	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Bicarbonate (HCO3)	56.4	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Cadmium (Cd) - Total	<0.005	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Calcium (Ca) - Total	27.5	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Chloride (Cl) - Dissolved	81	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Chromium (Cr) - Total	0.5	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Cobalt (Co) - Total	0.328	ug/L
SNP-A	1645-18B	2011.11.27	GW	DDMI-FIELD	Conductivity	749.1	us/cm
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Copper (Cu) - Total	0.31	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Fluoride (F)	0.088	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Hardness (as CaCO3) - Total	115	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Iron (Fe) - Total	40	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Lead (Pb) - Total	0.065	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Lithium (Li) - Total	17.0	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Magnesium (Mg) - Total	11.3	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Manganese (Mn) - Total	54.6	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Molybdenum (Mo) - Total	28.1	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Nickel (Ni) - Total	6.20	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Nitrate (N)	2.88	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Nitrate plus Nitrite (N)	3.03	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Nitrite (N)	0.153	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Orthophosphate (PO4-P)	0.0098	mg/L
SNP-A	1645-18B	2011.11.27	GW	DDMI-FIELD	pH	7.09	pH Units
SNP-A	1645-18B	2011.11.27	DLS	DDMI-LAB	pH	7	pH Units
SNP-A	1645-18B	2011.11.27	DLS	Maxxam	PH	7.64	pH Units
SNP-A	1645-18B	2011.11.27	GW	DDMI-LAB	pH	7.05	pH Units
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.0423	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Phosphorus (P) - Total	0.0592	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Potassium (K) - Total	7.74	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Selenium (Se) - Total	0.19	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Silicon (Si) - Total	4870	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Silver (Ag) - Total	0.006	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Sodium (Na) - Total	40.7	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Strontium (Sr) - Total	512	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Sulphate (SO4) - Dissolved	58.0	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Sulphur (S) - Total	21	mg/L
SNP-A	1645-18B	2011.11.27	GW	DDMI-FIELD	Temperature of Water	4.4	°C
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Thallium (Tl) - Total	0.004	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Titanium (Ti) - Total	1.3	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Total Dissolved Solids (TDS)	274	mg/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.94	mg/L
SNP-A	1645-18B	2011.11.27	GW	DDMI-LAB	Total Suspended Solids (TSS)	4	mg/L
SNP-A	1645-18B	2011.11.27	DLS	DDMI-LAB	Total Suspended Solids (TSS)	3	mg/L
SNP-A	1645-18B	2011.11.27	DLS	Maxxam	Total Suspended Solids (TSS)	4	mg/L
SNP-A	1645-18B	2011.11.27	DLS	DDMI-LAB	Turbidity	1.7	NTU
SNP-A	1645-18B	2011.11.27	DLS	Maxxam	Turbidity	1.23	NTU
SNP-A	1645-18B	2011.11.27	GW	DDMI-LAB	Turbidity	1.76	NTU
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Uranium (U) - Total	7.52	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Vanadium (V) - Total	<0.2	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Zinc (Zn) - Total	0.6	ug/L
SNP-A	1645-18B	2011.11.27	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Alkalinity (PP as CaCO3) -	14.2	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	89.8	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Aluminum (Al) - Dissolved	10.4	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Aluminum (Al) - Total	23500	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Ammonia (N)	2.6	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Antimony (Sb) - Dissolved	1.18	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Antimony (Sb) - Total	0.5	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Arsenic (As) - Dissolved	6.17	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Arsenic (As) - Total	9.5	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Barium (Ba) - Dissolved	39.8	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Barium (Ba) - Total	692	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Beryllium (Be) - Total	0.59	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Bicarbonate (HCO3)	75.0	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Bismuth (Bi) - Total	1.35	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Boron (B) - Total	<300	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Cadmium (Cd) - Dissolved	0.009	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Cadmium (Cd) - Total	0.56	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Calcium (Ca) - Dissolved	40.5	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Calcium (Ca) - Total	87.8	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Carbonate (CO3)	17.0	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Chloride (Cl) - Dissolved	75	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Chromium (Cr) - Dissolved	2.2	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Chromium (Cr) - Total	250	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Cobalt (Co) - Dissolved	0.198	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Cobalt (Co) - Total	44.8	ug/L
SNP-A	1645-75	2011.11.09	GW	DDMI-FIELD	Conductivity	581.1	us/cm
SNP-A	1645-75	2011.11.09	GW	Maxxam	Copper (Cu) - Dissolved	0.54	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Copper (Cu) - Total	56.3	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Fluoride (F)	0.150	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Hardness (as CaCO3) - Total	659	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Iron (Fe) - Dissolved	4	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Iron (Fe) - Total	44400	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Lead (Pb) - Dissolved	0.269	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Lead (Pb) - Total	59.1	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Lithium (Li) - Dissolved	24.1	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Lithium (Li) - Total	110	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Magnesium (Mg) - Dissolved	9.62	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Magnesium (Mg) - Total	107	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Manganese (Mn) - Dissolved	2.05	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Manganese (Mn) - Total	860	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Dissolved	34.7	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Total	16.6	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Nickel (Ni) - Dissolved	5.25	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Nickel (Ni) - Total	641	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Nitrate (N)	8.27	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Nitrate plus Nitrite (N)	9.10	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Nitrite (N)	0.83	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Oil and Grease	<1.0	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Orthophosphate (PO4-P)	0.265	mg/L
SNP-A	1645-75	2011.11.09	GW	DDMI-FIELD	pH	9.47	pH Units

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75	2011.11.09	GW	DDMI-LAB	pH	9.27	pH Units
SNP-A	1645-75	2011.11.09	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	1.23	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Phosphorus (P) - Total	3.08	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Potassium (K) - Dissolved	13.6	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Potassium (K) - Total	27.5	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Selenium (Se) - Dissolved	0.23	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Selenium (Se) - Total	0.4	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Silicon (Si) - Dissolved	7080	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Silicon (Si) - Total	39300	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Silver (Ag) - Total	1.68	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Sodium (Na) - Dissolved	41.2	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Sodium (Na) - Total	44.5	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Strontium (Sr) - Dissolved	452	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Strontium (Sr) - Total	840	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Sulphate (SO4) - Dissolved	45.1	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Sulphur (S) - Dissolved	16	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Sulphur (S) - Total	16	mg/L
SNP-A	1645-75	2011.11.09	GW	DDMI-FIELD	Temperature of Water	8.1	°C
SNP-A	1645-75	2011.11.09	GW	Maxxam	Thallium (Tl) - Dissolved	0.013	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Thallium (Tl) - Total	0.76	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Tin (Sn) - Dissolved	0.02	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Tin (Sn) - Total	0.25	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Titanium (Ti) - Total	872	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Total Dissolved Solids (TDS)	308	mg/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	2.79	mg/L
SNP-A	1645-75	2011.11.09	GW	DDMI-LAB	Total Suspended Solids (TSS)	2189	mg/L
SNP-A	1645-75	2011.11.09	GW	DDMI-LAB	Turbidity	2770	NTU
SNP-A	1645-75	2011.11.09	GW	Maxxam	Uranium (U) - Dissolved	29.6	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Uranium (U) - Total	75.0	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Vanadium (V) - Dissolved	3.6	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Vanadium (V) - Total	57	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Zinc (Zn) - Dissolved	0.7	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Zinc (Zn) - Total	243	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-75	2011.11.09	GW	Maxxam	Zirconium (Zr) - Total	3.4	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Alkalinity (PP as CaCO3) -	20.6	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	96.3	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Aluminum (Al) - Dissolved	27.0	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Aluminum (Al) - Total	102000	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Ammonia (N)	4.8	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Antimony (Sb) - Dissolved	1.76	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Antimony (Sb) - Total	1	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Arsenic (As) - Dissolved	6.09	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Arsenic (As) - Total	16.5	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Barium (Ba) - Dissolved	25.9	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Barium (Ba) - Total	1520	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Beryllium (Be) - Total	1.4	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Bicarbonate (HCO3)	67.2	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Bismuth (Bi) - Total	1.9	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Boron (B) - Dissolved	75	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Boron (B) - Total	<1000	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Cadmium (Cd) - Dissolved	<0.005	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Cadmium (Cd) - Total	0.8	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Calcium (Ca) - Dissolved	37.2	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Calcium (Ca) - Total	150	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Carbonate (CO3)	24.7	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Chloride (Cl) - Dissolved	75	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Chromium (Cr) - Dissolved	12.7	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Chromium (Cr) - Total	546	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Cobalt (Co) - Dissolved	0.242	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Cobalt (Co) - Total	102	ug/L
SNP-A	1645-75	2011.11.23	GW	DDMI-FIELD	Conductivity	608.9	us/cm
SNP-A	1645-75	2011.11.23	GW	Maxxam	Copper (Cu) - Dissolved	0.92	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Copper (Cu) - Total	194	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Fluoride (F)	0.150	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Hardness (as CaCO3) - Total	1000	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Iron (Fe) - Dissolved	7	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Iron (Fe) - Total	157000	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Lead (Pb) - Dissolved	0.020	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Lead (Pb) - Total	135	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75	2011.11.23	GW	Maxxam	Lithium (Li) - Dissolved	25.7	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Lithium (Li) - Total	422	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Magnesium (Mg) - Dissolved	10.7	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Magnesium (Mg) - Total	153	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Manganese (Mn) - Dissolved	1.37	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Manganese (Mn) - Total	2310	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Mercury (Hg) - Dissolved	<0.01	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Mercury (Hg) - Total	<0.2	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Molybdenum (Mo) - Dissolved	38.0	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Molybdenum (Mo) - Total	35	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Nickel (Ni) - Dissolved	3.64	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Nickel (Ni) - Total	944	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Nitrate (N)	11.8	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Nitrate plus Nitrite (N)	13.0	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Nitrite (N)	1.20	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Oil and Grease	1.7	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Orthophosphate (PO4-P)	0.217	mg/L
SNP-A	1645-75	2011.11.23	GW	DDMI-FIELD	pH	9.8	pH Units
SNP-A	1645-75	2011.11.23	Lab Blank	DDMI-LAB	pH	5.93	pH Units
SNP-A	1645-75	2011.11.23	GW	DDMI-LAB	pH	9.63	pH Units
SNP-A	1645-75	2011.11.23	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.240	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Phosphorus (P) - Total	5.29	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Potassium (K) - Dissolved	12.4	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Potassium (K) - Total	74	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Selenium (Se) - Dissolved	0.27	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Selenium (Se) - Total	1.4	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Silicon (Si) - Dissolved	8650	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Silicon (Si) - Total	128000	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Silver (Ag) - Total	0.8	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Sodium (Na) - Dissolved	46.8	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Sodium (Na) - Total	51	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Strontium (Sr) - Dissolved	368	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Strontium (Sr) - Total	928	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Sulphate (SO4) - Dissolved	37.5	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Sulphur (S) - Dissolved	13	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Sulphur (S) - Total	<200	mg/L
SNP-A	1645-75	2011.11.23	GW	DDMI-FIELD	Temperature of Water	8	°C
SNP-A	1645-75	2011.11.23	GW	Maxxam	Thallium (Tl) - Dissolved	0.016	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Thallium (Tl) - Total	3.37	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Tin (Sn) - Dissolved	0.31	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Tin (Sn) - Total	8	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Titanium (Ti) - Total	9760	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Total Dissolved Solids (TDS)	314	mg/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	3.88	mg/L
SNP-A	1645-75	2011.11.23	Lab Blank	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-75	2011.11.23	GW	DDMI-LAB	Total Suspended Solids (TSS)	5249	mg/L
SNP-A	1645-75	2011.11.23	GW	DDMI-LAB	Turbidity	4160	NTU
SNP-A	1645-75	2011.11.23	Lab Blank	DDMI-LAB	Turbidity	0.22	NTU
SNP-A	1645-75	2011.11.23	GW	Maxxam	Uranium (U) - Dissolved	19.8	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Uranium (U) - Total	85.0	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Vanadium (V) - Dissolved	6.2	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Vanadium (V) - Total	254	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Zinc (Zn) - Dissolved	0.4	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Zinc (Zn) - Total	776	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-75	2011.11.23	GW	Maxxam	Zirconium (Zr) - Total	6	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	49.2	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Alkalinity (Total as CaCO3) -Total	0.67	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Aluminum (Al) - Dissolved	7.3	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Aluminum (Al) - Dissolved	<0.2	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Aluminum (Al) - Total	0.3	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Aluminum (Al) - Total	34.8	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Ammonia (N)	<0.0050	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Ammonia (N)	0.11	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Antimony (Sb) - Dissolved	0.02	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Antimony (Sb) - Dissolved	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Antimony (Sb) - Total	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Antimony (Sb) - Total	0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Arsenic (As) - Dissolved	5.75	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Arsenic (As) - Dissolved	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Arsenic (As) - Total	6.29	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Arsenic (As) - Total	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Barium (Ba) - Dissolved	45.0	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Barium (Ba) - Dissolved	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Barium (Ba) - Total	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Barium (Ba) - Total	53.4	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Bicarbonate (HCO3)	0.82	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Bicarbonate (HCO3)	60.0	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Cadmium (Cd) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Cadmium (Cd) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Cadmium (Cd) - Total	0.007	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Cadmium (Cd) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Calcium (Ca) - Dissolved	<0.01	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Calcium (Ca) - Dissolved	20.9	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Calcium (Ca) - Total	20.6	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Calcium (Ca) - Total	0.02	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Chloride (Cl) - Dissolved	<0.5	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Chloride (Cl) - Dissolved	79	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Chromium (Cr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Chromium (Cr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Chromium (Cr) - Total	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Chromium (Cr) - Total	1.4	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Cobalt (Co) - Dissolved	0.276	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Cobalt (Co) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Cobalt (Co) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Cobalt (Co) - Total	0.328	ug/L
SNP-A	1645-75B	2011.11.09	GW	DDMI-FIELD	Conductivity	586.4	us/cm
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Copper (Cu) - Dissolved	0.07	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Copper (Cu) - Dissolved	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Copper (Cu) - Total	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Copper (Cu) - Total	0.14	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Fluoride (F)	0.120	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Fluoride (F)	<0.010	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Hardness (as CaCO3) - Total	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Hardness (as CaCO3) - Total	82.9	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Iron (Fe) - Dissolved	39	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Iron (Fe) - Dissolved	<1	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Iron (Fe) - Total	<1	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Iron (Fe) - Total	396	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Lead (Pb) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Lead (Pb) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Lead (Pb) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Lead (Pb) - Total	0.046	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Lithium (Li) - Dissolved	14.3	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Lithium (Li) - Dissolved	<0.5	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Lithium (Li) - Total	<0.5	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Lithium (Li) - Total	15.0	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Magnesium (Mg) - Dissolved	7.71	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Magnesium (Mg) - Dissolved	<0.01	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Magnesium (Mg) - Total	<0.01	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Magnesium (Mg) - Total	7.64	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Manganese (Mn) - Dissolved	69.9	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Manganese (Mn) - Dissolved	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Manganese (Mn) - Total	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Manganese (Mn) - Total	73.8	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Dissolved	12.0	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Molybdenum (Mo) - Dissolved	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Molybdenum (Mo) - Total	0.11	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Molybdenum (Mo) - Total	11.6	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Nickel (Ni) - Dissolved	3.41	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Nickel (Ni) - Dissolved	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Nickel (Ni) - Total	<0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Nickel (Ni) - Total	4.40	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Nitrate (N)	0.178	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Nitrate (N)	0.030	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Nitrate plus Nitrite (N)	0.030	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Nitrate plus Nitrite (N)	0.191	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Nitrite (N)	0.012	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Nitrite (N)	<0.005	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Oil and Grease	<1.0	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Oil and Grease	<1.0	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Orthophosphate (PO4-P)	0.556	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Orthophosphate (PO4-P)	<0.0050	mg/L
SNP-A	1645-75B	2011.11.09	GW	DDMI-FIELD	pH	7.49	pH Units
SNP-A	1645-75B	2011.11.09	GW	DDMI-LAB	pH	7.71	pH Units
SNP-A	1645-75B	2011.11.09	FBW	DDMI-LAB	pH	8.78	pH Units
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Phosphorus (P) - Dissolved (TDP)	<0.0050	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.606	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Phosphorus (P) - Total	0.606	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Phosphorus (P) - Total	<0.0050	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Potassium (K) - Dissolved	2.41	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Potassium (K) - Dissolved	<0.01	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Potassium (K) - Total	<0.01	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Potassium (K) - Total	2.43	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Selenium (Se) - Dissolved	0.06	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Selenium (Se) - Dissolved	<0.04	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Selenium (Se) - Total	<0.04	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Selenium (Se) - Total	0.07	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Silicon (Si) - Dissolved	6390	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Silicon (Si) - Dissolved	<100	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Silicon (Si) - Total	<100	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Silicon (Si) - Total	6380	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Sodium (Na) - Dissolved	39.6	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Sodium (Na) - Dissolved	0.01	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Sodium (Na) - Total	39.2	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Sodium (Na) - Total	0.01	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Strontium (Sr) - Dissolved	<0.05	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Strontium (Sr) - Dissolved	481	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Strontium (Sr) - Total	493	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Strontium (Sr) - Total	0.05	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Sulphate (SO4) - Dissolved	<0.50	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Sulphate (SO4) - Dissolved	12.5	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Sulphur (S) - Dissolved	5	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Sulphur (S) - Dissolved	<2	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Sulphur (S) - Total	<2	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Sulphur (S) - Total	5	mg/L
SNP-A	1645-75B	2011.11.09	GW	DDMI-FIELD	Temperature of Water	7.1	°C
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Thallium (Tl) - Dissolved	<0.002	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Thallium (Tl) - Dissolved	<0.002	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Thallium (Tl) - Total	<0.002	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Thallium (Tl) - Total	<0.002	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Tin (Sn) - Dissolved	0.02	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Tin (Sn) - Dissolved	0.02	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Titanium (Ti) - Total	2.8	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Titanium (Ti) - Total	<0.5	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Total Dissolved Solids (TDS)	<10	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Total Dissolved Solids (TDS)	208	mg/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.188	mg/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	<0.020	mg/L
SNP-A	1645-75B	2011.11.09	GW	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-75B	2011.11.09	FBW	DDMI-LAB	Total Suspended Solids (TSS)	<2	mg/L
SNP-A	1645-75B	2011.11.09	GW	DDMI-LAB	Turbidity	1.87	NTU
SNP-A	1645-75B	2011.11.09	FBW	DDMI-LAB	Turbidity	1.02	NTU
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Uranium (U) - Dissolved	1.90	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Uranium (U) - Dissolved	<0.002	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Uranium (U) - Total	2.10	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Uranium (U) - Total	0.004	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Vanadium (V) - Dissolved	<0.2	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Vanadium (V) - Dissolved	<0.2	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Vanadium (V) - Total	<0.2	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Vanadium (V) - Total	<0.2	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Zinc (Zn) - Dissolved	0.4	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Zinc (Zn) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Zinc (Zn) - Total	1.6	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Zinc (Zn) - Total	0.2	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	FBW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-75B	2011.11.09	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Alkalinity (PP as CaCO3) -	<0.50	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Alkalinity (Total as CaCO3) -Total	49.8	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Aluminum (Al) - Dissolved	20.5	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Aluminum (Al) - Total	34.3	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Ammonia (N)	0.23	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Antimony (Sb) - Dissolved	0.02	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Antimony (Sb) - Total	0.03	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Arsenic (As) - Dissolved	5.25	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Arsenic (As) - Total	5.97	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Barium (Ba) - Dissolved	42.3	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Barium (Ba) - Total	52.2	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Beryllium (Be) - Dissolved	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Beryllium (Be) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Bicarbonate (HCO3)	60.8	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Bismuth (Bi) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Bismuth (Bi) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Boron (B) - Dissolved	<50	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Boron (B) - Total	<50	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Cadmium (Cd) - Dissolved	0.006	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Cadmium (Cd) - Total	0.006	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Calcium (Ca) - Dissolved	19.0	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Calcium (Ca) - Total	19.5	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Carbonate (CO3)	<0.50	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Chloride (Cl) - Dissolved	79	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Chromium (Cr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Chromium (Cr) - Total	0.6	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Cobalt (Co) - Dissolved	0.246	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Cobalt (Co) - Total	0.274	ug/L
SNP-A	1645-75B	2011.11.23	GW	DDMI-FIELD	Conductivity	408.7	us/cm
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Copper (Cu) - Dissolved	0.17	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Copper (Cu) - Total	0.16	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Fluoride (F)	0.110	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Hardness (as CaCO3) - Total	78.7	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Hydroxide (OH)	<0.50	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Iron (Fe) - Dissolved	83	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Iron (Fe) - Total	284	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Lead (Pb) - Dissolved	0.012	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Lead (Pb) - Total	0.057	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Lithium (Li) - Dissolved	13.8	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Lithium (Li) - Total	14.3	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Magnesium (Mg) - Dissolved	7.63	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Magnesium (Mg) - Total	7.31	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Manganese (Mn) - Dissolved	65.3	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Manganese (Mn) - Total	68.2	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Mercury (Hg) - Dissolved	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Mercury (Hg) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Molybdenum (Mo) - Dissolved	12.1	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Molybdenum (Mo) - Total	12.5	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Nickel (Ni) - Dissolved	3.02	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Nickel (Ni) - Total	3.27	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Nitrate (N)	0.239	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Nitrate plus Nitrite (N)	0.250	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Nitrite (N)	0.011	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Oil and Grease	<1.0	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Orthophosphate (PO4-P)	0.485	mg/L
SNP-A	1645-75B	2011.11.23	GW	DDMI-FIELD	pH	7.68	pH Units
SNP-A	1645-75B	2011.11.23	GW	DDMI-LAB	pH	7.71	pH Units
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Phosphorus (P) - Dissolved (TDP)	0.577	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Phosphorus (P) - Total	0.590	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Potassium (K) - Dissolved	2.25	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Potassium (K) - Total	2.37	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Selenium (Se) - Dissolved	0.09	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Selenium (Se) - Total	0.09	ug/L

Table 2a: Water Chemistry Results - November 2011



Project	Location	Date	Sample Type	Data Source	Analyte Name	Result	Unit
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Silicon (Si) - Dissolved	6050	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Silicon (Si) - Total	6190	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Silver (Ag) - Dissolved	<0.005	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Silver (Ag) - Total	<0.005	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Sodium (Na) - Dissolved	39.8	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Sodium (Na) - Total	37.9	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Strontium (Sr) - Dissolved	444	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Strontium (Sr) - Total	466	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Sulphate (SO4) - Dissolved	12.1	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Sulphur (S) - Dissolved	5	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Sulphur (S) - Total	4	mg/L
SNP-A	1645-75B	2011.11.23	GW	DDMI-FIELD	Temperature of Water	5.7	°C
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Thallium (Tl) - Dissolved	<0.002	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Thallium (Tl) - Total	<0.002	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Tin (Sn) - Dissolved	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Tin (Sn) - Total	<0.01	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Titanium (Ti) - Dissolved	<0.5	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Titanium (Ti) - Total	1.5	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Total Dissolved Solids (TDS)	212	mg/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Total Kjeldahl Nitrogen (TKN) - (Calc)	0.378	mg/L
SNP-A	1645-75B	2011.11.23	GW	DDMI-LAB	Total Suspended Solids (TSS)	4	mg/L
SNP-A	1645-75B	2011.11.23	GW	DDMI-LAB	Turbidity	1.43	NTU
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Uranium (U) - Dissolved	1.72	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Uranium (U) - Total	2.12	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Vanadium (V) - Dissolved	0.4	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Vanadium (V) - Total	0.3	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Zinc (Zn) - Dissolved	0.4	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Zinc (Zn) - Total	1.2	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Zirconium (Zr) - Dissolved	<0.1	ug/L
SNP-A	1645-75B	2011.11.23	GW	Maxxam	Zirconium (Zr) - Total	<0.1	ug/L

TNTC *Biological code : Too Numerous to count*
 B *Bottom of Profile*
 DIW *Depth Integrated sample*
 DIW1,2 *Duplicate Depth Integrated sample*
 DLS *Duplicate Lab Split*
 DUPW *Duplicate Grab Sample*
 DUPRdgs *Duplicate Readings*
 EBW *Equipment Blank*
 FBW *Field Blank*
 GW *Grab Sample*
 LAB BW *Lab Blank*
 M *Middle of Profile*
 QC *Error within instrument*
 T *Top of Profile*
 TBW *Travel Blank*
 QA *Analyte being re-tested*

Table 2b: Biophysical Hydrolab Profiles - November 2011

Project	Location	Depth (m)	Date	Method	Analyte	Result	Unit
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Due to unsafe ice conditions, no hydrolab profiles were collected for the month of November.

Table 3: Project Site Daily/Monthly SNP Volumes - November 2011

Date	Potable Water Used (South Camp&Misc)	Sludge Generated STP	Water Discharged (South) STP to PKC****	Phosphorus Loading	Water Discharged to Lac de Gras NIWTP	Phosphorus Loading	Under-ground Water sent to NI via A154 Pit	A418 Pit Water	A 154 Seepage Water	A418 Seepage Water	A154/418 Decline Water	Batch& Paste Plants (reuse of treated water from NIWTP)	Collection Ponds to Lac de Gras	Collection Ponds to PKC	Dust Management Plant Site	Dust Management Haul Roads	Raw water used for Other (Drills, Construction, etc.)	Total Reclaim Water	North Inlet Recycled Water	Process Plant Fresh Water	Process Plant Water Discharge to PKC 1645-15	Coarse Rejects to PKC	Fine Rejects to PKC
Method	Metered m ³	Measured m ³	Metered m ³	Calculated Kg	Metered m ³	Calculated Kg	Metered m ³	Metered m ³	Estimated m ³	Estimated m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Measured metric ton	Measured metric ton
Site Services			Mining Group									Processing Plant											
1-Nov-11	291	7.5	190	0.0000	22057	0.78	0	278	Data Unavailable		33257	10	0	422	0	0	0	11906	2374	1119	M o n t h l y T o t a l	M o n t h l y T o t a l	M o n t h l y T o t a l
2-Nov-11	257	8.0	214	0.0000	19,130	0.53	0	116	Data Unavailable		33346	104	0	285	0	0	0	11374	1414	1023			
3-Nov-11	265	7.0	193	0.0000	24,088	0.66	0	89	Data Unavailable		32383	47	0	684	0	0	0	10718	1275	1156			
4-Nov-11	287	8.0	180	0.0000	25,765	0.71	0	36	Data Unavailable		33752	14	0	0	0	0	0	11058	1215	1113			
5-Nov-11	242	7.5	160	0.0000	23,243	0.83	0	0	Data Unavailable		34541	134	0	782	0	0	0	8869	863	1214			
6-Nov-11	298	7.0	215	0.0000	31,224	1.56	0	0	Data Unavailable		32182	47	0	355	0	0	0	11042	941	1240			
7-Nov-11	282	7.0	173	0.0000	36,862	1.68	0	0	Data Unavailable		34273	68	0	303	0	0	0	10555	1029	1177			
8-Nov-11	256	11.3	201	0.0000	17,090	0.77	0	0	Data Unavailable		33349	71	0	307	0	0	0	11737	1344	1207			
9-Nov-11	307	3.8	224	0.0000	33,597	1.53	0	0	Data Unavailable		32170	41	0	198	0	0	0	10639	1581	1202			
10-Nov-11	310	7.0	187	0.0000	40,690	1.85	0	193	Data Unavailable		32968	65	0	0	0	0	0	10661	2769	1189			
11-Nov-11	273	7.0	181	0.0000	33,189	1.49	0	33	Data Unavailable		31900	43	0	0	0	0	0	8754	1562	587			
12-Nov-11	276	8.0	193	0.0000	21,936	0.96	0	0	Data Unavailable		33122	57	0	704	0	0	0	11871	2841	904			
13-Nov-11	288	8.5	203	0.0000	38521	1.75	0	0	Data Unavailable		34214	198	0	207	0	0	0	11409	1976	1097			
14-Nov-11	291	8.0	201	0.0000	33009	1.50	0	0	Data Unavailable		31968	62	0	220	0	0	0	10986	1242	1118			
15-Nov-11	291	7.0	202	0.0000	29539	1.33	0	0	Data Unavailable		33855	207	0	146	0	0	0	11079	2844	851			
16-Nov-11	281	8.0	203	0.0000	35038	1.57	0	0	Data Unavailable		32171	109	0	183	0	0	0	11282	1903	567			
17-Nov-11	304	8.0	220	0.0000	38954	1.74	0	0	Data Unavailable		33939	49	0	167	0	0	0	12589	1780	1052			
18-Nov-11	267	8.0	191	0.0000	35363	1.57	0	0	Data Unavailable		32901	53	0	176	0	0	0	12161	1786	1742			
19-Nov-11	284	7.5	189	0.0000	31339	1.39	0	0	Data Unavailable		33082	49	0	192	0	0	0	11397	1890	1076			
20-Nov-11	273	8.0	196	0.0000	32483	1.44	0	0	Data Unavailable		33363	71	0	111	0	0	0	12603	2087	1131			
21-Nov-11	296	7.5	194	0.0000	31430	1.39	0	0	Data Unavailable		33088	60	0	156	0	0	0	11914	2567	1195			
22-Nov-11	300	5.0	200	0.0000	34965	1.55	0	2	Data Unavailable		33702	132	0	94	0	0	0	11142	2907	1326			
23-Nov-11	300	8.0	222	0.0000	30893	1.36	0	0	Data Unavailable		33237	53	0	123	0	0	0	12367	3087	1260			
24-Nov-11	306	8.0	202	0.0000	29856	1.31	0	0	Data Unavailable		33167	42	0	140	0	0	0	11992	2737	1221			
25-Nov-11	266	7.0	171	0.0000	31199	1.38	0	0	Data Unavailable		32506	96	0	128	0	0	0	10759	2523	430			
26-Nov-11	265	7.5	169	0.0000	32135	1.42	0	0	Data Unavailable		33131	115	0	98	0	0	0	8697	2157	10			
27-Nov-11	280	7.0	207	0.0000	30338	1.35	0	0	Data Unavailable		33421	72	0	116	0	0	0	8421	2294	729			
28-Nov-11	301	7.0	202	0.0000	33525	1.48	0	0	Data Unavailable		32526	47	0	124	0	0	0	11087	2909	1137			
29-Nov-11	285	7.0	219	0.0000	31814	1.41	0	0	Data Unavailable		32234	93	0	94	0	0	0	10367	2267	679			
30-Nov-11	298	6.0	200	0.0000	32,225	1.43	0	0	Data Unavailable		32394	67	0	102	0	0	0	10957	2161	1022			
Total	8,520	222	5,902	0	921,492	40	0	747	0	0	992,142	2,276	0	6,616	0	0	0	330,394	60,324	30,772	379,291	30,095	138,200

Material Quantities			
Material Type	Quantities (thousand BCM)		Locations
	A154	A418	
Sediment	0.00	0.00	
Country Rock, Type 1	0.00	27.40	Various Construction Projects
Country Rock, Type 2	0.00	0	N. Country Rock Pile
Country Rock, Type 3	0.00	58.80	N. Country Rock Pile
Ice			
Kimberlite Ore Processed**	186,349		Processing Plant

Summary:	
Total Phosphorus Loading Kg =	39.7
Total Pit Water m ³ =	747
Total Seepage Water m ³ =	0
Total Recycled Water m ³ =	330,394
Grand Total Fresh Water Used m ³ =	39,292
Total Discharged to Lac de Gras m ³ =	928,107
Process Water Discharged to PKC m ³ **** =	379,291
Total Fine PK Discharged to the PKC (t) =	138,200
Total Course PK Hauled to the PKC (t) =	30,095

Note:
 ** Kimberlite Quantities are given in Metric Tonnes
 n/a = not in operation
 ***STP water is added within the processing plant fine PK and then metered to the PKC facility.
 **** STP water metered before entering the processing plant

Table 4a: Effluent Quality Criteria for 1645-18 -November 2010 to November 2011

Parameter	Aluminum, total	Ammonia as nitrogen, total	Arsenic, total	Cadmium, total	Chromium, total	Copper, total	Lead, total	Nickel, total	Nitrite as Nitrogen, total	pH of Water-Lab	Total Suspended Solids (TSS)	Turbidity-Lab	Zinc, total	
Grab Limit	3	12	0.1	0.003	0.04	0.04	0.02	0.1	2	6-8.4	25	15	0.02	
Date	Sample Type													
1-Nov-10	GW	0.415	0.111	0.0012	0.0002	0.0008	0.001	0.0001	0.00663	0.0566	7.06	2	1.37	0.004
7-Nov-10	GW	0.365	0.129	0.00075	0.0002	0.0008	0.001	0.0001	0.00659	0.0577	7.23	2	1.25	0.004
13-Nov-10	GW	0.462	0.137	0.00082	0.0002	0.0008	0.001	0.0001	0.00679	0.0583	7.78	2	1.27	0.004
19-Nov-10	GW	0.445	0.208	0.00079	0.0002	0.0008	0.001	0.0001	0.00671	0.0598	7.42	2	1.27	0.004
25-Nov-10	GW	0.377	0.198	0.00065	0.0002	0.0008	0.001	0.0001	0.00646	0.0552	7.39	2	1.1	0.004
29-Nov-10	GW	0.325	0.211	0.00064	0.0002	0.0008	0.001	0.0001	0.0068	0.0558	7.26	3	0.87	0.004
1-Dec-10	GW	0.616	0.209	0.00099	0.0002	0.0008	0.001	0.0001	0.00623	0.0566	7.14	3	0.97	0.004
7-Dec-10	GW	0.326	0.239	0.00055	0.0002	0.0008	0.001	0.0001	0.00567	0.0588	7.35	3	1.62	0.004
16-Dec-10	GW	0.221	0.251	0.00074	0.0002	0.0008	0.001	0.0001	0.00485	0.0543	7.56	2	0.51	0.004
19-Dec-10	GW	0.224	0.233	0.00075	0.0002	0.0008	0.001	0.0001	0.00477	0.0522	7.6	2	0.62	0.004
28-Dec-10	GW	0.265	0.266	0.00122	0.0002	0.0008	0.001	0.0001	0.00414	0.021	7.59	3	0.61	0.004
31-Dec-10	GW	0.297	0.261	0.00042	0.0002	0.00087	0.001	0.0001	0.00407	0.0285	7.48	2	0.87	0.004
6-Jan-11	GW	0.35	0.21	0.00093	0.00013	0.001	0.00037	0.00023	0.00392	0.03	7.6	3	0.68	0.0003
12-Jan-11	GW	0.509	0.32	0.00153	0.00013	0.001	0.00047	0.00031	0.00376	0.019	7.65	3	0.91	0.0005
18-Jan-11	GW	0.328	0.21	0.00113	0.00014	0.0006	0.00038	0.00073	0.00309	0.009	7.45	2	0.74	0.0005
24-Jan-11	GW	0.366	0.24	0.00126	0.00008	0.0008	0.00038	0.00019	0.00323	0.005	7.39	3	0.64	0.0004
30-Jan-11	GW	0.382	0.25	0.00118	0.00005	0.0007	0.00039	0.00023	0.003	0.007	7.58	2	0.66	0.0004
5-Feb-11	GW	0.312	0.21	0.00115	0.00015	0.0006	0.00036	0.00018	0.00288	0.005	7.53	2	0.43	0.0003
14-Feb-11	GW	0.274	0.37	0.00107	0.0001	0.0009	0.00034	0.00017	0.00268	0.005	7.36	2	0.67	0.0002
17-Feb-11	GW	0.315	0.32	0.00177	0.00015	0.0009	0.0004	0.00019	0.00274	0.005	7.78	2	0.58	0.0001
23-Feb-11	GW	0.285	0.42	0.00129	0.00011	0.0009	0.00035	0.00012	0.00302	0.005	7.57	2	0.38	0.0007
1-Mar-11	GW	0.301	0.36	0.00113	0.00005	0.0008	0.00033	0.00017	0.00274	0.01	7.32	2	1.08	0.0001
7-Mar-11	GW	0.342	0.41	0.00146	0.00019	0.001	0.00042	0.00022	0.00328	0.005	7.65	2	0.69	0.0004
13-Mar-11	GW	0.262	0.36	0.00134	0.00005	0.001	0.00044	0.00017	0.00377	0.005	7.29	2	0.43	0.0016
19-Mar-11	GW	0.291	0.36	0.00114	0.00007	0.001	0.0003	0.00011	0.00321	0.005	7.59	2	0.61	0.0006
25-Mar-11	GW	0.342	0.37	0.00122	0.00005	0.0011	0.00036	0.00017	0.00323	0.005	7.3	2	0.59	0.0003
31-Mar-11	GW	0.296	0.33	0.0015	0.00012	0.0012	0.00035	0.00015	0.00335	0.005	7.67	2	0.79	0.0002
6-Apr-11	GW	0.287	0.37	0.0015	0.00013	0.0013	0.00041	0.00018	0.00319	0.005	7.89	2	0.62	0.0002
12-Apr-11	GW	0.322	0.38	0.00171	0.00005	0.0014	0.00043	0.00019	0.00303	0.005	7.62	2	0.52	0.0015
18-Apr-11	GW	0.274	0.36	0.0014	0.00014	0.0014	0.00035	0.00009	0.00272	0.006	7.55	2	0.37	0.0003
24-Apr-11	GW	0.208	0.33	0.00148	0.00005	0.0014	0.00034	0.00008	0.00236	0.033	7.71	2	0.36	0.0001
30-Apr-11	GW	0.211	0.41	0.00152	0.00006	0.0015	0.00039	0.00009	0.00249	0.015	7.54	2	0.53	0.0007
6-May-11	GW	0.208	0.39	0.00167	0.00005	0.0019	0.00042	0.00014	0.00243	0.015	7.8	2	0.44	0.0008
12-May-11	GW	1.29	0.33	0.00248	0.00017	0.0015	0.00043	0.00082	0.00688	0.014	7.63	3	2.77	0.0006
18-May-11	GW	0.501	0.347	0.00161	0.00011	0.0011	0.00037	0.00031	0.00821	0.024	7.59	3	1.26	0.0004
24-May-11	GW	0.235	0.362	0.0014	0.00005	0.0011	0.00051	0.00027	0.00793	0.04	8.03	2	1.1	0.0004
30-May-11	GW	0.618	0.124	0.00121	0.00006	0.001	0.00053	0.00055	0.00777	0.034	7.34	2	2.3	0.0013
5-Jun-11	GW	0.205	0.06	0.0005	0.00005	0.0008	0.00046	0.00013	0.00668	0.039	7.85	2	0.66	0.0012
11-Jun-11	GW	0.221	0.072	0.0006	0.00007	0.0006	0.00042	0.00011	0.00683	0.026	7.33	3	0.86	0.0016
17-Jun-11	GW	0.197	0.21	0.00055	0.00011	0.0004	0.00022	0.00012	0.00733	0.052	7.1	2	0.61	0.0007
23-Jun-11	GW	0.14	0.1	0.00049	0.00012	0.0002	0.00019	0.00007	0.0104	0.051	7.48	15	0.84	0.001
29-Jun-11	GW	0.147	0.039	0.00054	0.00005	0.0003	0.00036	0.00001	0.00821	0.06	7.6	3	0.84	0.0034
5-Jul-11	GW	0.139	0.032	0.00057	0.00012	0.0003	0.00035	0.00009	0.00726	0.063	7.5	2	0.81	0.0004
11-Jul-11	GW	0.163	0.074	0.00079	0.00014	0.0003	0.00023	0.00011	0.00456	0.077	7.53	2	0.76	0.0013
17-Jul-11	GW	0.205	0.1	0.0007	0.00009	0.0003	0.00023	0.00007	0.0049	0.081	7.47	2	0.59	0.0004
23-Jul-11	GW	0.289	0.19	0.00143	0.00008	0.0004	0.00041	0.00009	0.00552	0.075	7.65	2	0.59	0.0005
31-Jul-11	GW	0.281	0.22	0.00103	0.00011	0.0003	0.0009	0.00012	0.00598	0.075	7.22	2	0.61	0.0018
4-Aug-11	GW	0.219	0.19	0.00097	0.00005	0.0002	0.00033	0.00011	0.00614	0.07	7.65	2	0.45	0.0007
10-Aug-11	GW	0.156	0.31	0.00083	0.00001	0.0002	0.00036	0.00009	0.00625	0.08	7.7	2	0.41	0.0004
16-Aug-11	GW	0.155	0.22	0.00098	0.00005	0.0002	0.00029	0.00008	0.00613	0.08	8.05	2	0.51	0.0004
22-Aug-11	GW	0.212	0.15	0.0012	0.00007	0.0003	0.0004	0.00020	0.00723	0.078	7.4	2	0.63	0.0007
28-Aug-11	GW	0.349	0.097	0.0014	0.00005	0.0002	0.00031	0.00006	0.00564	0.068	7.91	3	0.98	0.0002
3-Sep-11	DUPW1	0.287	0.091	0.00099	0.00013	0.0003	0.00037	0.00025	0.00592	0.075	7.64	2	0.65	0.0023
3-Sep-11	DUPW2	0.285	0.093	0.00098	0.00018	0.0004	0.00039	0.00019	0.00597	0.073	7.56	2	0.62	0.0016
9-Sep-11	GW	0.182	0.22	0.00086	0.00007	0.0003	0.00031	0.00009	0.00551	0.093	7.79	2	0.54	0.001
19-Sep-11	GW	0.18	0.28	0.00067	0.00005	0.0003	0.00032	0.00005	0.00482	0.126	7.3	2	0.43	0.0003
21-Sep-11	GW	0.188	0.31	0.00064	0.00015	0.0003	0.00036	0.00012	0.00457	0.133	7	2	0.86	0.0011
27-Sep-11	GW	0.214	0.27	0.00066	0.00007	0.0003	0.00055	0.00015	0.00521	0.134	7.34	2	0.65	0.0012
3-Oct-11	GW	0.277	0.35	0.00072	0.00007	0.0003	0.00051	0.00040	0.00513	0.137	7.2	2	0.87	0.0006
9-Oct-11	GW	0.34	0.67	0.00085	0.00009	0.0004	0.00064	0.00021	0.00704	0.179	7.19	2	0.94	0.0012
15-Oct-11	GW	0.339	0.71	0.00087	0.00005	0.0003	0.00046	0.00027	0.00892	0.203	7.12	2	0.95	0.0006
21-Oct-11	GW	0.407	0.58	0.00104	0.00005	0.0004	0.0005	0.00043	0.0093	0.192	7.24	2	1.09	0.0006
21-Oct-11	FBW	0.0076	0.03	0.00002	0.00005	0.0001	0.00013	0.00001	0.00002	0.000005	7.25	2	0.22	0.0006
29-Oct-11	GW	0.297	0.73	0.00116	0.00007	0.0003	0.00041	0.00033	0.00889	0.221	7.33	2	1.05	0.0006
2-Nov-11	GW	0.407	0.72	0.00103	0.00009	0.0004	0.00037	0.00005	0.0076	0.205	7.14	2	1.42	0.0009
9-Nov-11	GW	0.398	0.6	0.001	0.00005	0.0004	0.00044	0.00004	0.00766	0.205	7.49	2	1.38	0.0008
16-Nov-11	GW	0.369	0.64	0.00106	0.00005	0.0004	0.00035	0.00005	0.00739	0.22	7.28	2	1.32	0.0012
21-Nov-11	GW	0.285	0.62	0.00087	0.00005	0.0004	0.00032	0.00004	0.00649	0.193	7.2	2	1.38	0.0006
27-Nov-11	GW	0.274	0.66	0.00086	0.00008	0.0004	0.00032	0.00004	0.00603	0.163	7.25	2	1.01	0.0006

= Equals or Exceeds Effluent Discharge Criteria
 = Missed Analysis

Table 4c: Effluent Quality Criteria for 1645-18B - November 2010 to November 2011

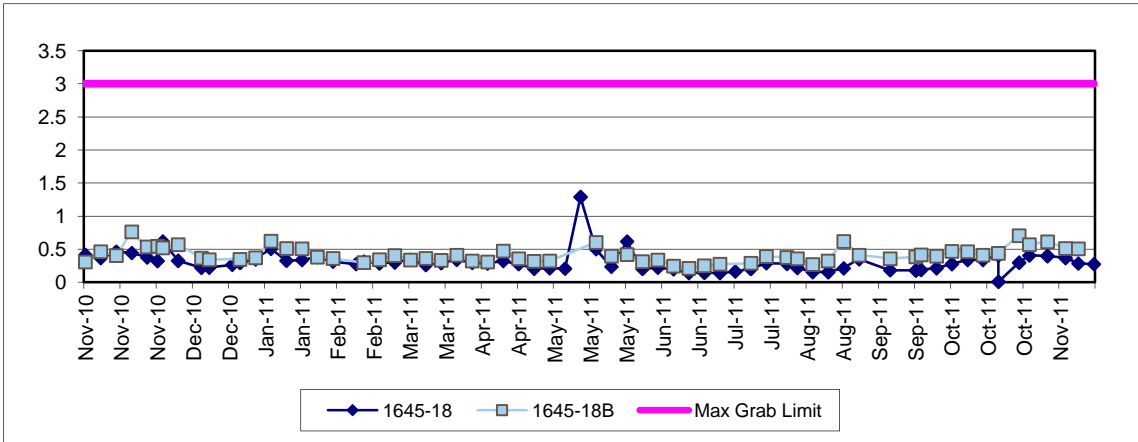
Parameter	Aluminum, total	Ammonia as nitrogen, total	Arsenic, total	Cadmium, total	Chromium, total	Copper, total	Lead, total	Nickel, total	Nitrite as Nitrogen, total	pH of Water-Lab	Total Suspended Solids (TSS)	Turbidity-Lab	Zinc, total	
Grab Limit	3	12	0.1	0.003	0.04	0.04	0.02	0.1	2	6-8.4	25	15	0.02	
Date	Sample Type													
1-Nov-10	GW	0.31	0.108	0.00105	0.00023	0.0008	0.001	0.0001	0.00697	0.0557	7.12	3	1.25	0.0069
7-Nov-10	GW	0.462	0.133	0.00073	0.0002	0.0008	0.001	0.0001	0.00616	0.0601	6.98	3	1.15	0.004
13-Nov-10	GW	0.405	0.141	0.0007	0.0002	0.0008	0.001	0.0001	0.00691	0.0592	7.5			0.004
19-Nov-10	GW	0.762	0.201	0.00111	0.0002	0.0008	0.001	0.0001	0.00657	0.0603	7.19	4	2.17	0.004
25-Nov-10	GW	0.534	0.199	0.00087	0.0002	0.0008	0.001	0.0001	0.00637	0.0568	7.02	5	1.59	0.004
29-Nov-10	GW	0.545	0.219	0.0009	0.0002	0.0008	0.001	0.0001	0.00658	0.0569	6.98	3	1.26	0.004
1-Dec-10	DUPW1	0.52	0.212	0.00089	0.0002	0.0008	0.001	0.0001	0.00602	0.0558	6.86	4	1.42	0.004
1-Dec-10	DUPW2	0.616	0.209	0.00099	0.0002	0.0008	0.001	0.0001	0.00623	0.0566	6.9	5	1.49	0.004
7-Dec-10	GW	0.57	0.241	0.00054	0.0002	0.0008	0.001	0.0001	0.00537	0.0606	7.09	3	1.53	0.004
16-Dec-10	GW	0.367	0.256	0.00046	0.0002	0.0008	0.001	0.0001	0.00481	0.0572	7.31	2	1	0.004
19-Dec-10	GW	0.344	0.245	0.00091	0.0002	0.0008	0.001	0.0001	0.00475	0.054	7.25	2	0.94	0.004
25-Dec-10	GW	0.519	0.305	0.00043	0.0002	0.00085	0.001	0.0001	0.00432	0.0482	7.37	3	1.32	0.004
31-Dec-10	GW	0.349	0.268	0.00041	0.0002	0.00087	0.001	0.0001	0.00402	0.0284	7.23	2	0.88	0.004
6-Jan-11	GW	0.37	0.23	0.00147	0.000012	0.0009	0.00044	0.000023	0.00386	0.032	7.53	2	0.62	0.001
12-Jan-11	GW	0.622	0.34	0.00203	0.000011	0.001	0.00046	0.000057	0.00384	0.021	7.39	4	1.22	0.004
18-Jan-11	DUPW1	0.512	0.23	0.00218	0.000011	0.0006	0.00043	0.000089	0.00316	0.01	7.41	5	1.18	0.002
18-Jan-11	DUPW2	0.515	0.22	0.00214	0.000044	0.0006	0.00042	0.000094	0.00317	0.011	7.4	4	1.18	0.004
24-Jan-11	GW	0.509	0.25	0.00195	0.000009	0.0008	0.0004	0.000031	0.00341	0.005	7.34	2	1	0.002
30-Jan-11	GW	0.382	0.26	0.00145	0.000005	0.0007	0.00039	0.000024	0.00315	0.006	7.42	3	0.64	0.0003
5-Feb-11	GW	0.36	0.22	0.00142	0.00001	0.0007	0.0004	0.000024	0.00297	0.005	7.38	2	0.92	0.0012
11-Feb-11	GW	0.454	0.34	0.00182	0.000007	0.0008	0.00041	0.000031	0.00284	0.005	7.71	2	0.76	0.0003
17-Feb-11	GW	0.297	0.2	0.00118	0.000007	0.0009	0.00032	0.000017	0.00268	0.005	7.66	2	0.53	0.0001
23-Feb-11	GW	0.341	0.44	0.00182	0.000013	0.0009	0.0004	0.000025	0.00304	0.005	7.51	2	0.5	0.0001
1-Mar-11	GW	0.407	0.36	0.00167	0.000018	0.0008	0.00037	0.000021	0.00287	0.011	7.32	2	1.03	0.0001
7-Mar-11	GW	0.337	0.4	0.00153	0.000005	0.0008	0.00038	0.000013	0.0032	0.005	7.65	2	0.5	0.0002
13-Mar-11	GW	0.362	0.38	0.00145	0.000012	0.001	0.00038	0.000017	0.00331	0.005	7.29	2	0.5	0.0008
19-Mar-11	GW	0.333	0.39	0.00145	0.000005	0.0011	0.00038	0.000021	0.00344	0.005	7.59	4	0.75	0.0008
25-Mar-11	GW	0.408	0.36	0.00175	0.000008	0.0011	0.00038	0.000019	0.00333	0.005	7.3	2	0.76	0.0003
31-Mar-11	GW	0.321	0.38	0.00161	0.000005	0.0011	0.00036	0.000019	0.00402	0.009	7.67	2	0.71	0.0003
6-Apr-11	DUPW1	0.31	0.41	0.00182	0.00001	0.0012	0.00041	0.000016	0.00316	0.005	7.51	2	0.66	0.0002
6-Apr-11	DUPW2	0.323	0.41	0.00171	0.000005	0.0012	0.00038	0.000018	0.00309	0.005	7.54	2	0.99	0.0002
12-Apr-11	GW	0.473	0.38	0.00258	0.000013	0.0014	0.0004	0.000034	0.00292	0.005	7.69	2	0.85	0.0006
18-Apr-11	GW	0.358	0.33	0.00214	0.000019	0.0014	0.00041	0.000024	0.00279	0.005	7.65	2	0.4	0.002
24-Apr-11	GW	0.318	0.36	0.00178	0.000007	0.0015	0.00034	0.000011	0.00232	0.016	7.55	2	0.52	0.0008
30-Apr-11	DUPW1	0.321	0.44	0.00189	0.000005	0.0015	0.00041	0.000015	0.0025	0.013	7.58	2	0.68	0.0005
30-Apr-11	DUPW2	0.329	0.43	0.0017	0.000005	0.0015	0.00039	0.000011	0.0024	0.009	7.54	2	0.63	0.0001
13-May-11	GW	0.622	0.345	0.00201	0.000005	0.0013	0.00052	0.000035	0.00709	0.018	7.47	2	1.39	0.002
18-May-11	GW	0.603	0.354	0.00212	0.000008	0.0011	0.0004	0.00003	0.00826	0.028	7.42	3	1.4	0.0007
24-May-11	GW	0.398	0.401	0.00156	0.000009	0.0012	0.00049	0.00003	0.00832	0.044	7.8	2	0.96	0.0004
30-May-11	GW	0.42	0.149	0.00109	0.000005	0.0016	0.0014	0.000094	0.00737	0.04	7.45	2	1.37	0.0012
5-Jun-11	GW	0.314	0.059	0.00064	0.000005	0.0008	0.00042	0.000008	0.00686	0.043	7.61	2	1.31	0.0006
11-Jun-11	GW	0.339	0.051	0.00072	0.00001	0.0007	0.00044	0.000008	0.00711	0.028	6.82	4	0.69	0.0007
17-Jun-11	GW	0.247	0.25	0.00063	0.000005	0.0004	0.00057	0.00002	0.00793	0.055	7.21	2	1.2	0.001
23-Jun-11	GW	0.214	0.1	0.00043	0.000005	0.0003	0.00033	0.000005	0.0103	0.052	7.48	14	0.84	0.0009
29-Jun-11	GW	0.249	0.033	0.00064	0.00001	0.0003	0.00037	0.000006	0.00846	0.005	7.53	2	0.98	0.0007
5-Jul-11	GW	0.273	0.034	0.00064	0.000005	0.0003	0.00036	0.00001	0.00734	0.066	7.17	2	1.14	0.0007
13-Jul-11	GW	0.239	0.021	0.00078	0.000005	0.0004	0.00022	0.000005	0.00474	0.075	7.59	2	0.57	0.0003
17-Jul-11	GW	0.289	0.091	0.00059	0.000005	0.0005	0.00024	0.000006	0.00467	0.085	7.2	2	0.57	0.0003
23-Jul-11	GW	0.392	0.17	0.00093	0.000009	0.0005	0.00039	0.000009	0.00535	0.078	7.32	2	0.51	0.0006
31-Jul-11	GW	0.376	0.21	0.0009	0.000009	0.0004	0.00041	0.000012	0.00559	0.079	7.21	2	1.14	0.0025
4-Aug-11	GW	0.359	0.19	0.00113	0.000014	0.0003	0.00037	0.00001	0.00631	0.074	7.39	2	0.56	0.001
10-Aug-11	GW	0.272	0.38	0.0011	0.000005	0.0003	0.00041	0.000009	0.00645	0.079	7.35	3	0.89	0.0003
16-Aug-11	GW	0.325	0.2	0.00122	0.000005	0.0002	0.00039	0.000013	0.00641	0.08	7.6	2	0.79	0.0005
22-Aug-11	GW	0.62	0.16	0.00189	0.000005	0.0003	0.00054	0.000063	0.00708	0.071	7.43	2	1.33	0.0009
23-Aug-11	DUPW1	0.534	0.082	0.00166	0.000021	0.0003	0.00045	0.000027	0.00678	0.067	7.58	2	1	0.0011
23-Aug-11	DUPW2	0.536	0.091	0.00172	0.000009	0.0003	0.00045	0.000027	0.00685	0.067	7.58	2	0.76	0.0005
28-Aug-11	GW	0.412	0.068	0.00084	0.000005	0.0002	0.00032	0.000007	0.0058	0.081	7.51	3	1.01	0.0002
9-Sep-11	GW	0.359	0.23	0.00079	0.000009	0.0003	0.00034	0.000012	0.00538	0.101	7.34	2	0.59	0.0008
9-Sep-11	FBW	0.0012	0.044	0.00003	0.000005	0.0001	0.00027	0.000024	0.0001	0.005	6.38	2	0.07	0.0011
19-Sep-11	GW	0.385	0.29	0.00075	0.000011	0.0003	0.00036	0.000012	0.00476	0.127	7.68	2	0.53	0.001
21-Sep-11	GW	0.415	0.34	0.00081	0.000012	0.0003	0.00038	0.00001	0.00451	0.136	7.17	2	1.08	0.0016
27-Sep-11	GW	0.394	0.26	0.00083	0.000005	0.0003	0.00047	0.00004	0.00503	0.131	7.36	2	0.8	0.0017
3-Oct-11	GW	0.47	0.36	0.00079	0.000005	0.0003	0.00044	0.000022	0.0052	0.135	7.27	2	1.45	0.0009
9-Oct-11	GW	0.463	0.72	0.00093	0.000009	0.0004	0.00055	0.000021	0.00697	0.171	7.3	2	0.73	0.0011
15-Oct-11	GW	0.409	0.71	0.00096	0.00001	0.0003	0.00056	0.000037	0.00899	0.18	6.99	2	0.99	0.0017
27-Oct-11	GW	0.44	0.57	0.00116	0.000005	0.0003	0.00054	0.000042	0.00938	0.186	7.13	2	1.25	0.0016
6-Nov-11	DUPW1	0.707	0.74	0.00156	0.000009	0.0005	0.00147	0.000082	0.00758	0.201	6.91	2	2.52	0.001
6-Nov-11	DUPW2	0.719	0.7	0.0015	0.000008	0.0004	0.0004	0.000077	0.00772	0.2	6.97	3	2.62	0.0008
9-Nov-11	GW	0.571	0.63	0.0015	0.000014	0.0004	0.00049	0.000057	0.00765	0.202	7.25	2	2.19	0.0006
16-Nov-11	GW	0.615	0.66	0.00159	0.000008	0.0005	0.00044	0.000076	0.00731	0.196	7.12	2	2.39	0.0009
21-Nov-11	GW	0.514	0.64	0.0014	0.000008	0.0004	0.00081	0.000104	0.00658	0.183	7.08	3	1.9	0.0009
27-Nov-11	GW	0.508	0.71	0.00133	0.000005	0.0005	0.00031	0.000065	0.0062	0.153	7.05	4	1.76	0.0006

= Equals or Exceeds Effluent Discharge Criteria

 = Missed Analysis

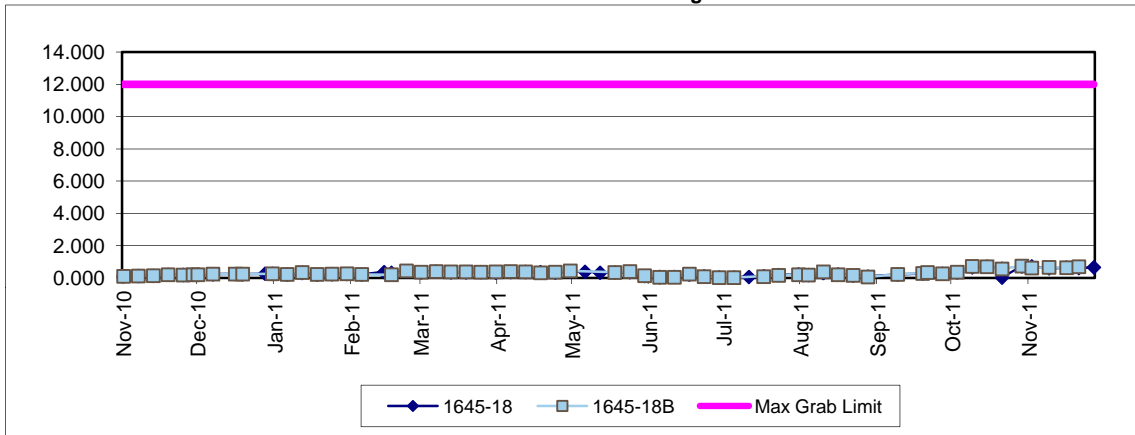
Aluminum in Water, total

Max Grab Limit = 3.0 mg/L



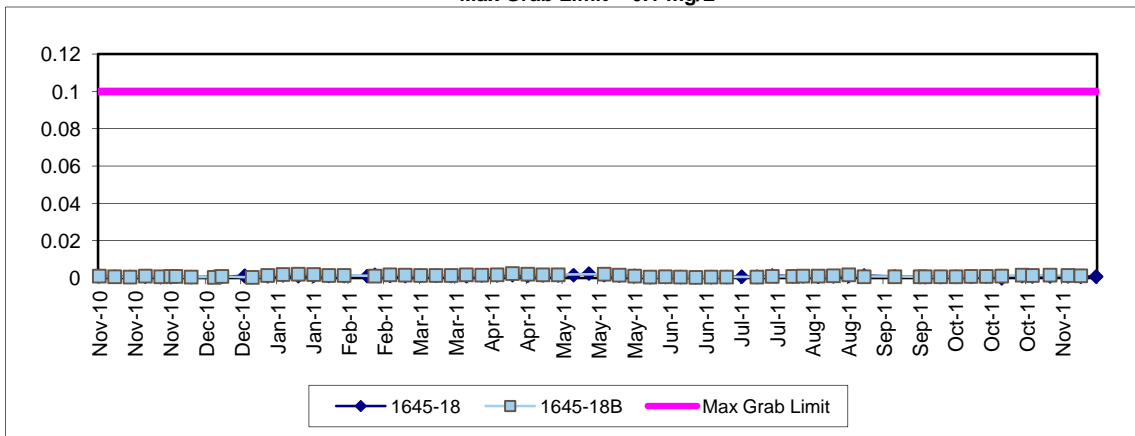
Ammonia as Nitrogen, total

Max Grab Limit = 12.0 mg/L



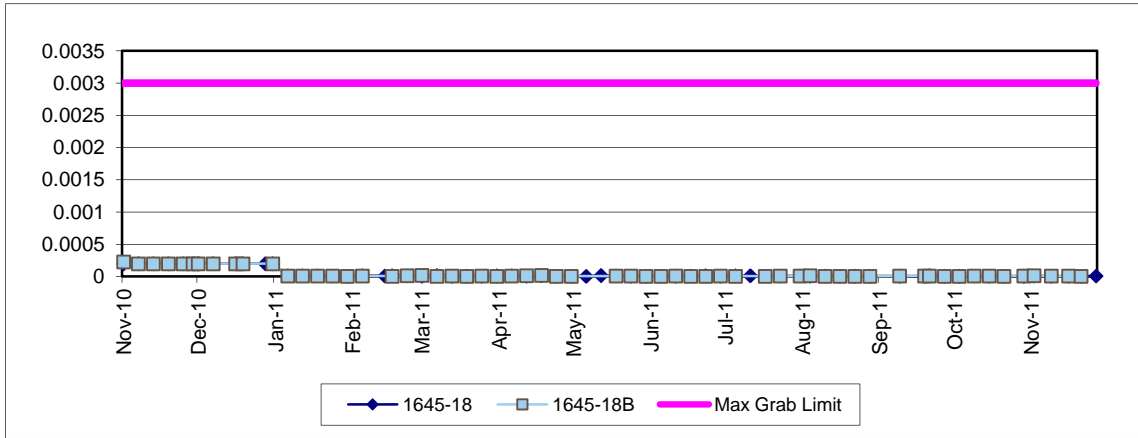
Arsenic in Water, total

Max Grab Limit = 0.1 mg/L



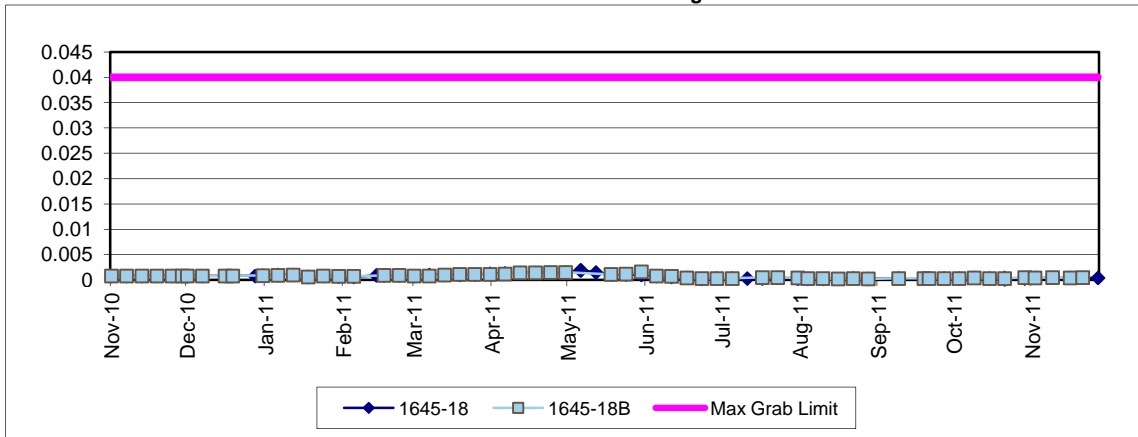
Cadmium in Water, total

Max Grab Limit = 0.003 mg/L



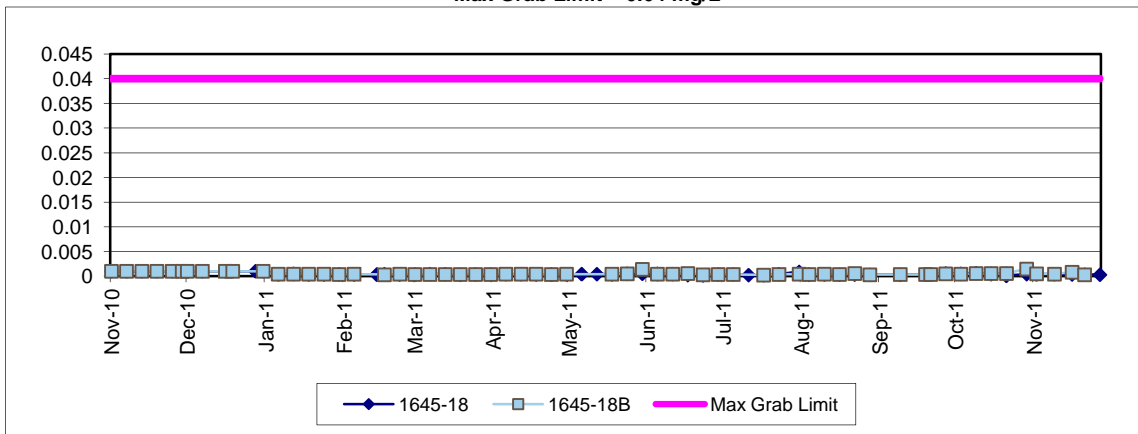
Chromium in Water, total

Max Grab Limit = 0.04 mg/L

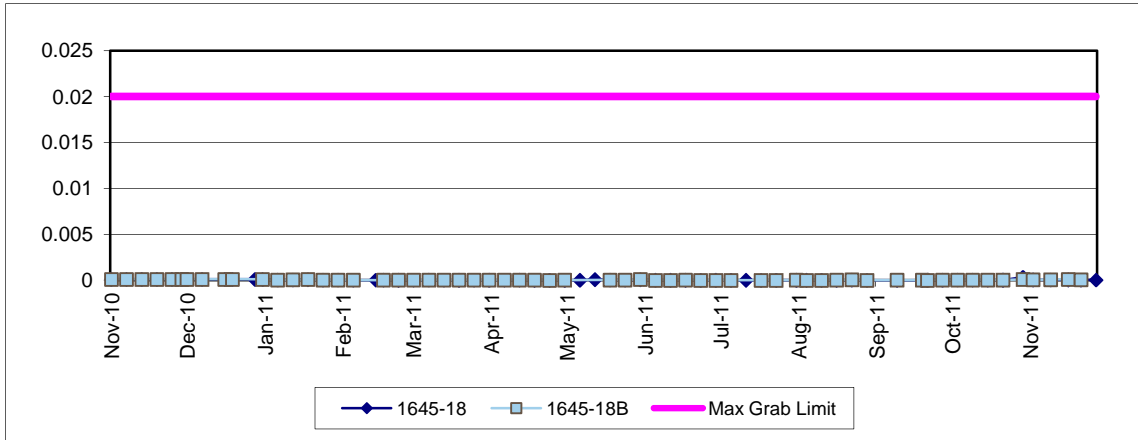


Copper in Water, total

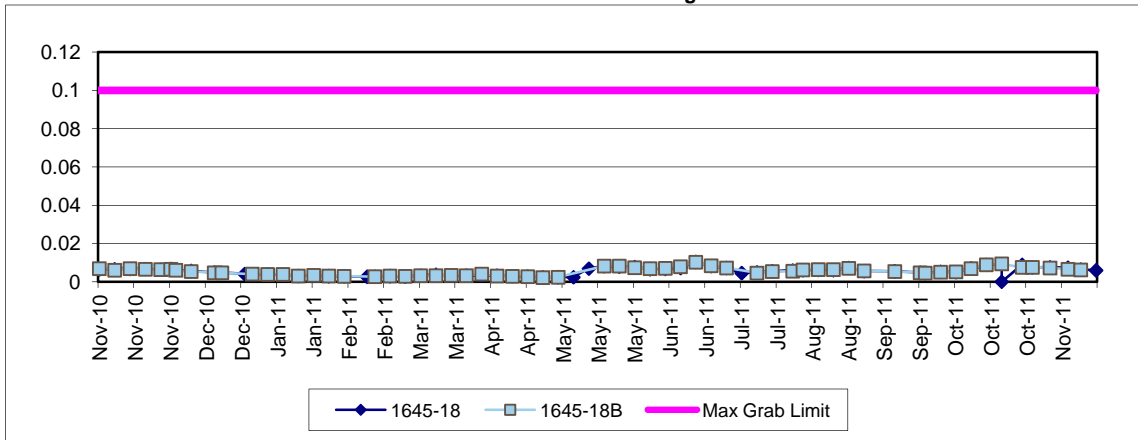
Max Grab Limit = 0.04 mg/L



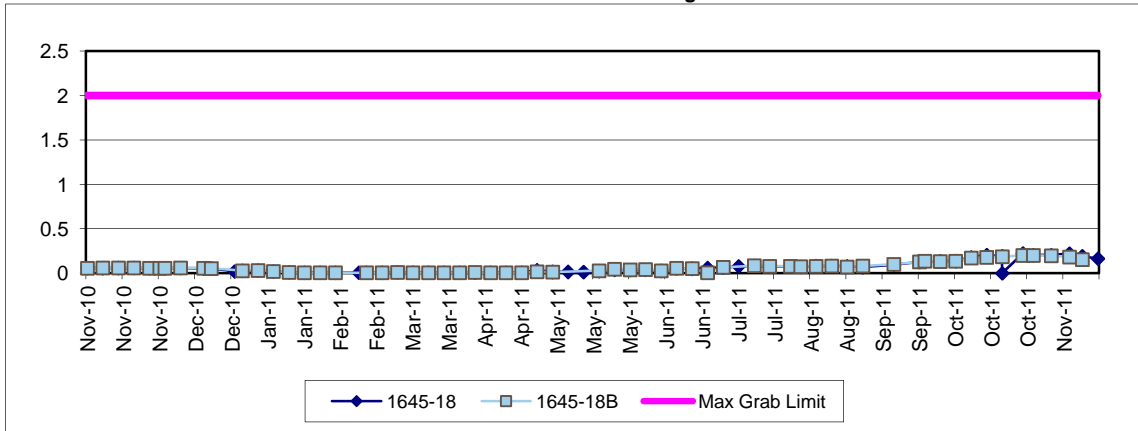
Lead in Water, total
Max Grab Limit = 0.02 mg/L



Nickel in Water, total
Max Grab Limit = 0.1 mg/L

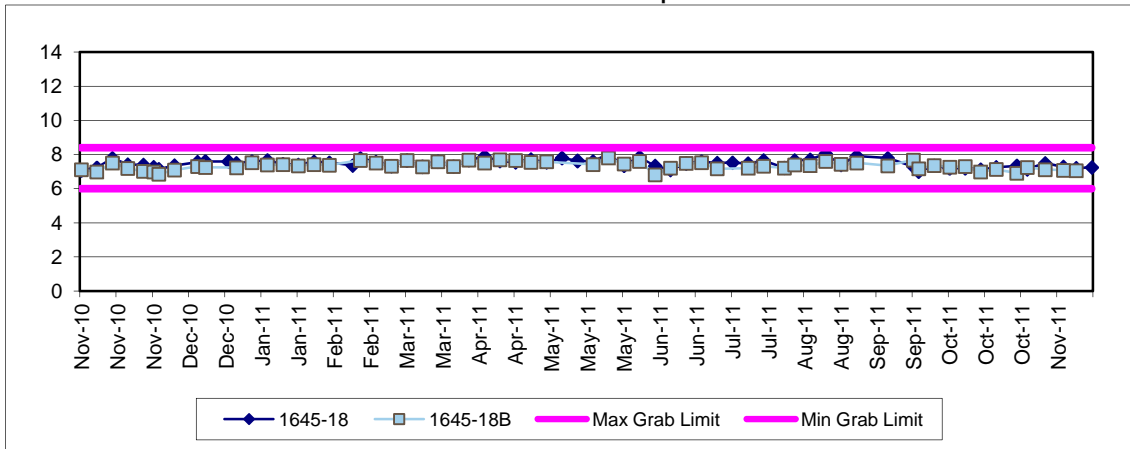


Nitrite as Nitrogen, total
Max Grab Limit = 2.0 mg/L



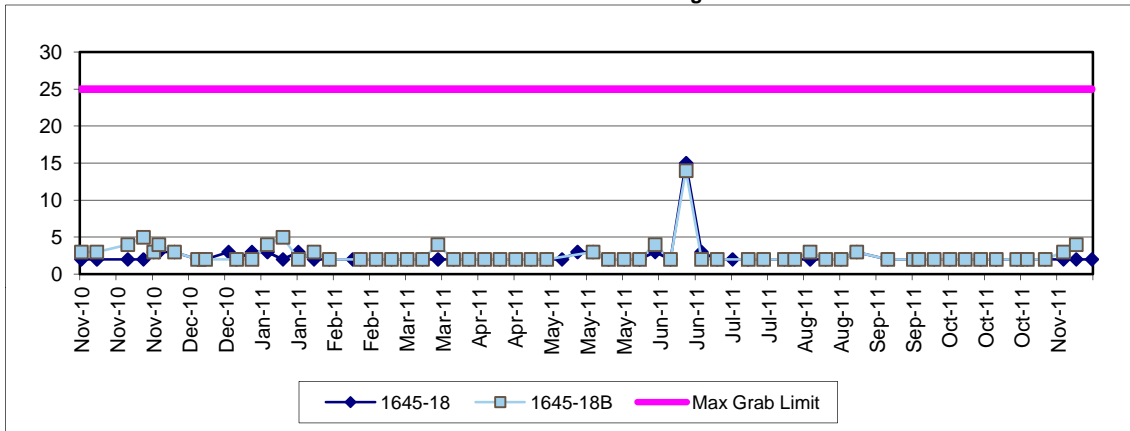
pH of Water - Lab

Grab Limits = 6.0 to 8.4 pH Units



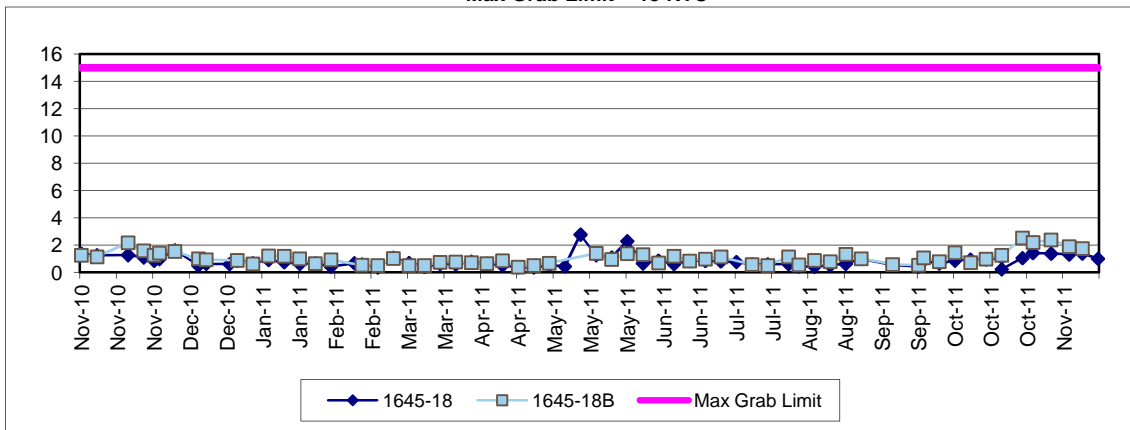
Total Suspended Solids

Max Grab Limit = 25.0 mg/L



Turbidity - Lab

Max Grab Limit = 15 NTU



Zinc in Water, total
Max Grab Limit = 0.02 mg/L

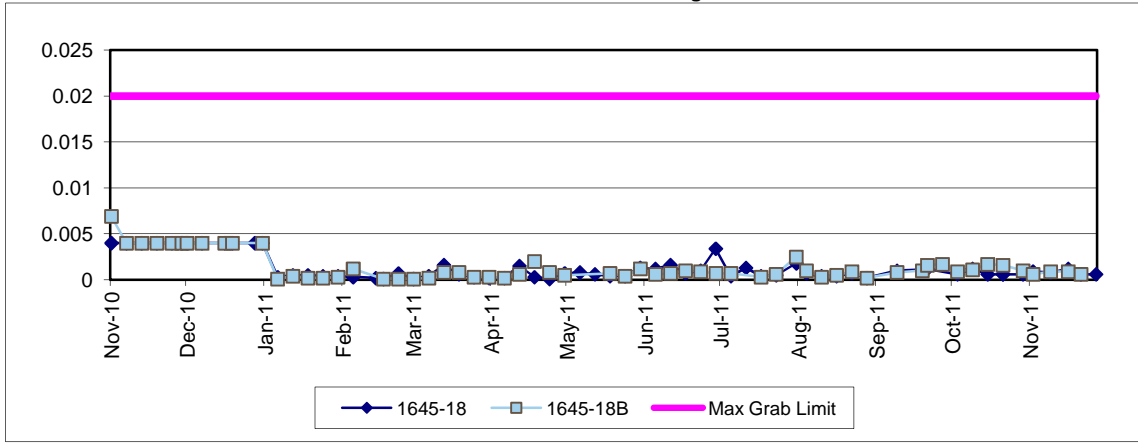


Table 5: Spill Summary - November 2011



Spill Number	Date of Spill	Department/Contractor	Equipment Type	Equipment Number	Cause of Spill	Spill Location	Easting	Northing	Fluid Type	Spill Volume (L)	Area of Spill (m ²)	Internal or Govt Record
30349	2011.11.05	DDMI - Sustaining Capital Projects	Light Vehicles	UG MUT5	Equipment Failure - Glycol	Parking Area	534136	7151210	Glycol	6	3	Internal
30462	2011.11.07	DDMI - FPSO - Paste Plant Operations	Other Misc	Storage Tanks	Pumping Delay	Paste Plant	534901	7152457	Sewage	2	1	Internal
31161	2011.11.15	DDMI - Asset Management - Mechanical	Heat Exchanger	N/A	Mechanical Failer of Heat Exchanger	Paste Plant	537406	7152416	Glycol	40	10	Internal
31324	2011.11.15	DDMI - FPSO - Paste Plant Operations	Dozers Hoes Packers and Graders	430E Backhoe	Equipment Failure - Oil	Paste Plant	534954	7152465	Oil - Hydraulic	3	1	Internal
32692	2011.11.30	DDMI - Mine Operations	Shovels	EXM 01	Equipment Failure - Hydraulic	Working Bench	534136	7151210	Oil - Hydraulic	300	10	External
32743	2011.11.30	DDMI - Mine Operations	Drills	L8	Maintenance/Repair Spillage - Hydraulic	West Perimeter Road	533646	7150485	Oil - Hydraulic	5	2	Internal
32756	2011.11.27	DDMI - Asset Management - Mine Maintenance	Unknown	N/A	Equipment Failure - Glycol	Truckshop Area	534170	7151283	Glycol	4	1	Internal
32768	2011.11.29	DDMI - FPSO - Ore Processing	Loaders and Forklifts		Equipment Failure - Glycol	PKC Pipeline	533382	7151559	Glycol	5	2	Internal

* N/A: spill under building in confined area or within a building

Project Activities at Diavik - November 2011

Pond 5 continues to be dewatered to the PKC to prevent seepage issues.

Pond 4 continues to be dewatered to Pond 3 to prevent seepage issues.

Repair of construction deficiencies at the new Mine Dry adjacent to South Camp continued in November.

Construction of the Underground Maintenance Shop continued in November.

Construction of the Fresh Air Raise #1 continued in November.

Construction of the Incinerator in WTA (waste transfer area) continued in November.

Construction of the Wind Farm continued in November.

Caribou monitoring was completed in November.

Monthly inspections of the Test Piles continued in November.

Inspections for A154 South SLR Mining were ongoing in November.

Resource drilling in the A418 pit was completed in November.



#4, 6125 12th Street SE Calgary, Alberta Canada T2H 2K1
 Tel (403) 253-7121 Fax (403) 252-9363 www.hydroqual.ca

Daphnia Test Summary

Client: Diavik Diamond Mines Inc. Client #: DIA102 Contact: Leslie Coe/ Kristin Moore

Fax #: 867-881-8355 Date: 2011/11/23

Reference #: 11-2188 Date Collected: 2011/11/17 Date Rec'd: 2011/11/21

HydroQual Contact: Elisabeth Henson or Evangeline Blais

	Sample Strength %	Cumulative Mortality % 24 hrs	48 hrs	Endpoint/Comments
Description: <u>1645-18</u>	Control	0	0	
Method: <u>Daphnia magna</u>	100	0	0	
Tester: <u>EP</u>				
Started: <u>2011/11/21</u>				
Ended: <u>2011/11/23</u>				

	Sample Strength %	Cumulative Immobility % 24 hrs	48 hrs	Endpoint/Comments
Description: _____	Control	0	0	
Method: _____	100	0	0	
Tester: _____				
Started: _____				
Ended: _____				

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Result Summary

Client: DIA102 Reference: 11-2188-01-DAS

Client: Diavik Diamond Mines Inc.; operation
Yellowknife

Sample: 1645-18

Collection: collected on 2011/11/17 at not given by JG

Receipt: received on 2011/11/21 at 1600 by J. Romero

Containers: received 1 x 20L pail at 12 °C, in good condition
with seals and no initials

Description: type: water, collection method: not given

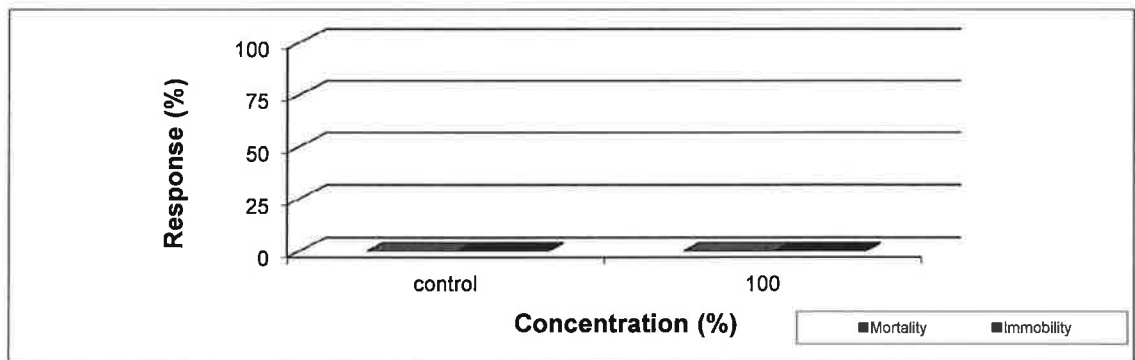
Test: started on 2011/11/21 ; ended on 2011/11/23

Contents	
Result Summary.....	1
Test Conditions.....	2
Test Data.....	4
Comments/Statistics..	5
QA/QC.....	6

Result:

Sample	Client Code	Average Mortality (%)	Average Immobility (%)	Comment
control 100	lab control 1645-18	0 0	0 0	not toxic as tested

Notes: sd, sample standard deviation; cv, coefficient of variation; nd, not done; na, not applicable;



The test data and results are authorized and verified correct.

Langille - for

 Ecotoxicology Team Leader

Test Conditions

Client: DIA102 Reference: 11-2188-01-DAS

Method: Biological Test method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna*, 2000. Environ. Can., EPS 1/RM/14. Second Edition.

Test type: *Daphnia* 48-h Static Acute Test (WTR-ME-015)

Species: *Daphnia magna*

Age: < 24 hours old

Organism source: in-house culture

Stock mortality: 0%

Culture brood data: 11 days to first brood
19 neonates per average brood

Sample initial chemistry: pH: 6.6; EC: 510 ($\mu\text{S}/\text{cm}$ @ 25°C); DO: 8.4 (mg/L); temperature: 15 °C
hardness (mg CaCO₃/L): 105; colour: colourless; odour: odourless

Sample holding time: 4 days (must be \leq 5 days)

Sample storage: 4 \pm 2°C in darkness

Test vessel: 385 mL plastic vessels

Test volume: 150 mL

Sample pre-treatment: The sample was not filtered or pH adjusted prior to or during testing
The sample was pre-aerated for 20 minutes (rate of 37.5 \pm 12.5 mL/min.L⁻¹)
The hardness of the sample was not adjusted (mg CaCO₃/L) prior to or during testing

Loading density: One daphnid/15 mL (must \leq 1 organism/15 mL)

Control water: Dechlorinated City of Calgary water acclimated to test conditions
The hardness of the control/dilution water was 131 mg CaCO₃/L

Test concentrations: Undiluted sample plus a negative control

Test replicates: Three replicates per treatment, 10 daphnids per replicate

Feeding: None

Aeration: None

Measurements: pH, conductivity, dissolved oxygen and temperature at test initiation and termination

Lighting: Cool white fluorescent lights; 400-800 lux at surface

Photoperiod: 16h light:8h dark

Test temperature: 20 \pm 2°C

Note: Outlined sections are protocol deviations explained on the comment page

Test Conditions

Client: DIA102 Reference: 11-2188-01-DAS

Endpoint: Mortality, % mortality at 48-h
Immobility, % immobility at 48-h

Test validity: The control had 100% survival (must \geq 90%)
Control had 0% abnormal behaviour (must \leq 10%), e.g. immobility

Reference toxicant: 48-h test with NaCl initiated November 8, 2011; current results
(48-h LC50 and 95% confidence limits) = 0.75 (0.73-0.77) log (g/L NaCl)

Note: Outlined sections are protocol deviations explained on the comment page

Test Data

 Client: DIA102
 Reference: 11-2188-01-DAS

Test Log:

Date	Day	Time	Technician	Comment/Observation
2011/11/21	0	1630	E. Petho	test <i>Daphnia</i> appear normal
2011/11/22	1	1230	E. Petho	test <i>Daphnia</i> appear normal
2011/11/23	2	1600	H. Stewart	test <i>Daphnia</i> appear normal

Chemistry:

Conc (%)	control			100		
replicate	a	b	c	a	b	c

Day	pH (units)					
0	7.4	7.4	7.4	6.7	6.8	6.9
2	7.2	7.4	7.5	7.5	7.5	7.4

	Conductivity ($\mu\text{S/cm @ 25}^\circ\text{C}$)					
0	332	343	344	483	496	495
2	374	373	378	534	548	546

	Dissolved Oxygen (mg/L)					
0	7.3	7.3	7.3	7.4	7.4	7.3
2	7.3	7.2	7.2	7.1	7.1	7.0

	Temperature ($^\circ\text{C}$)					
0	20	20	20	20	20	20
2	21	21	22	22	22	22

Biology:

Conc (%)	control			100		
replicate	a	b	c	a	b	c

Day	Number Alive and Behavior (behavior is in brackets)					
1	10	10 (1F)	10	10 (1F)	10	10 (2F)
2	10	10	10	10	10	10

Notes: F, floating; I, immobile; B, stuck on bubble; D, caught in debris

	Mortality (%)					
2	0	0	0	0	0	0

	Immobility (%)					
2	0	0	0	0	0	0

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Comments/Statistics

Client: DIA102 Reference: 11-2188-01-DAS

Test Result Comments:

None

Data Analysis:

None

Protocol Deviations:

None

Quality Assurance Information

Test Method: *Daphnia* Static Acute Test (LC50, 5 treatments plus a control)
HydroQual Test Method: WTR-ME-016

Reference: Biological Test Method: Reference Method for Determining the Acute Lethality of Effluents to *Daphnia magna*, 1990. Environment Canada, EPS 1/RM/14. including May 1996 and December 2000 amendments.

Test Organism:

test species: *Daphnia magna*
culture source: in-house
original culture source: Environment Canada
days to first brood: 11
mean brood size: 19
ephippia in stock culture: no
age of test organisms: <24 hours old
culture mortality (%): 0%
dissolved oxygen: 40-100% saturation

Test Design:

vol. of test vessel (mL): 500
toxicant: sodium chloride
test volume (mL): 150
replicates per treatment: 1
neonates per replicate: 10
volume per neonate (mL): 15
samples pre-aerated: no
hardness adjustment: no
temperature (°C): 20
photoperiod: 16h light:8h dark
light level (water surface): 400-800 lux (cool white)
control/dilution water: dechlorinated tap water

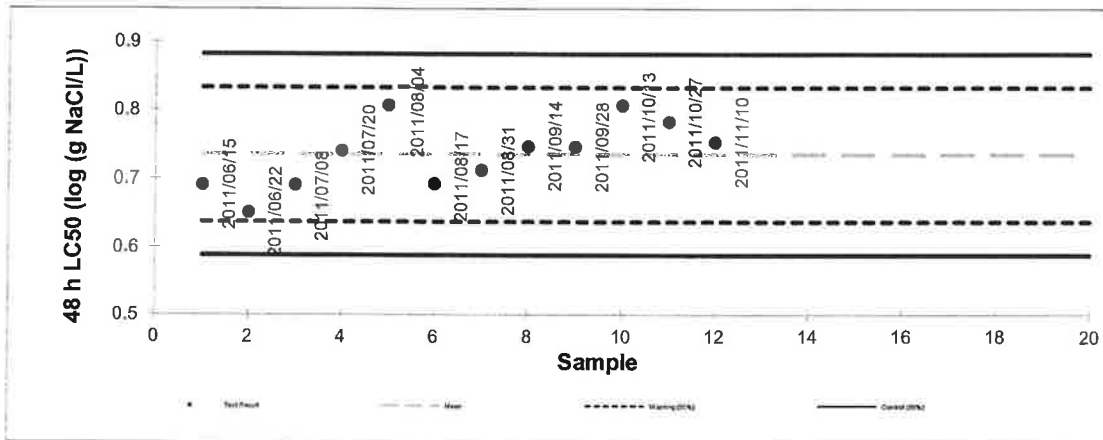
Current Test

toxicant Sodium chloride (NaCl)
started on 2011/11/08 ended on 2011/11/10
Result (LC50 @ 48h) 0.75 log (g NaCl/L); geometric mean
Confidence Limits (95%) lower 0.73 upper 0.77

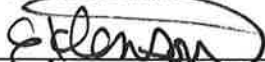
Historical Values

mean	0.73	sd	0.05	cv(%):	7
	lower	upper			
warning limits (±2 sd)	0.64	0.83	(95% confidence limits)		
control limits (±3 sd)	0.59	0.88	(99% confidence limits)		

notes: sd, standard deviation; cv, coefficient of variance
Comments:



The test data and results are authorized and verified correct.


Ecotoxicology Team Leader

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#4, 6125 12th Street SE Calgary, Alberta Canada T2H 2K1
 Tel (403) 253-7121 Fax (403) 252-9363 www.hydroqual.ca

Daphnia Test Summary

Client: Diavik Diamond Mines Inc. Client #: DIA102 Contact: Leslie Coe/ Kristin Moore

Fax #: 867-881-8355 Date: 2011/11/23

Reference #: 11-2189 Date Collected: 2011/11/17 Date Rec'd: 2011/11/21

HydroQual Contact: Elisabeth Henson or Evangeline Blais

	Sample Strength %	Cumulative Mortality %		Endpoint/Comments
		24 hrs	48 hrs	
Description: <u>1645-18B</u>	Control	0	0	After 48 hours, 1 Daphnid appeared to be floating in the 100% concentration.
Method: <u>Daphnia magna</u>	100	0	0	
Tester: <u>EP</u>				
Started: <u>2011/11/21</u>				
Ended: <u>2011/11/23</u>				

	Sample Strength %	Cumulative Immobility %		Endpoint/Comments
		24 hrs	48 hrs	
Description: _____	Control	0	0	
Method: _____	100	3%	0	
Tester: _____				
Started: _____				
Ended: _____				

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Result Summary

Client: DIA102
Reference: 11-2189-01-DAS

Client: Diavik Diamond Mines Inc.; operation
Yellowknife

Sample: 1645-18B

Collection: collected on 2011/11/17 at not given by JG

Receipt: received on 2011/11/21 at 1600 by J. Romero

Containers: received 1 x 20L pail at 12 °C, in good condition
with seals and no initials

Description: type: water, collection method: not given

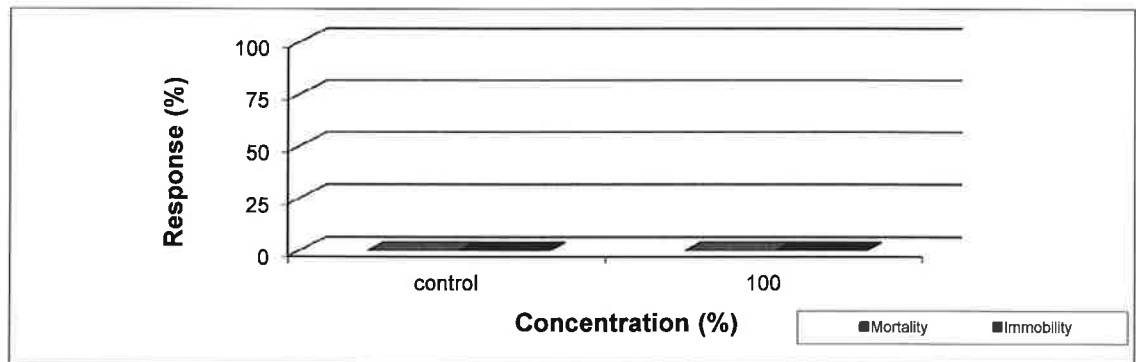
Test: started on 2011/11/21 ; ended on 2011/11/23

Contents	
Result Summary.....	1
Test Conditions.....	2
Test Data.....	4
Comments/Statistics..	5
QA/QC.....	6

Result:

Sample	Client Code	Average Mortality (%)	Average Immobility (%)	Comment
control	lab control	0	0	
100	1645-18B	0	0	not toxic as tested

Notes: sd, sample standard deviation; cv, coefficient of variation; nd, not done; na, not applicable;



The test data and results are authorized and verified correct.

J. Romero
Ecotoxicology Team Leader

Test Conditions

Client: DIA102
Reference: 11-2189-01-DAS

Method: Biological Test method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna*, 2000. Environ. Can., EPS 1/RM/14. Second Edition.

Test type: *Daphnia* 48-h Static Acute Test (WTR-ME-015)

Species: *Daphnia magna*

Age: < 24 hours old

Organism source: in-house culture

Stock mortality: 0%

Culture brood data: 11 days to first brood
19 neonates per average brood

Sample initial chemistry: pH: 6.6; EC: 503 ($\mu\text{S}/\text{cm}$ @ 25°C); DO: 8.3 (mg/L); temperature: 15 °C
hardness (mg CaCO₃/L): 98; colour: colourless; odour: odourless

Sample holding time: 4 days (must be \leq 5 days)

Sample storage: 4 \pm 2°C in darkness

Test vessel: 385 mL plastic vessels

Test volume: 150 mL

Sample pre-treatment: The sample was not filtered or pH adjusted prior to or during testing
The sample was pre-aerated for 20 minutes (rate of 37.5 \pm 12.5 mL/min.L⁻¹)
The hardness of the sample was not adjusted (mg CaCO₃/L) prior to or during testing

Loading density: One daphnid/15 mL (must \leq 1 organism/15 mL)

Control water: Dechlorinated City of Calgary water acclimated to test conditions
The hardness of the control/dilution water was 131 mg CaCO₃/L

Test concentrations: Undiluted sample plus a negative control

Test replicates: Three replicates per treatment, 10 daphnids per replicate

Feeding: None

Aeration: None

Measurements: pH, conductivity, dissolved oxygen and temperature at test initiation and termination

Lighting: Cool white fluorescent lights; 400-800 lux at surface

Photoperiod: 16h light:8h dark

Test temperature: 20 \pm 2°C

Note: Outlined sections are protocol deviations explained on the comment page

Test Conditions

Client: DIA102 Reference: 11-2189-01-DAS

Endpoint: Mortality, % mortality at 48-h
Immobility, % immobility at 48-h

Test validity: The control had 100% survival (must \geq 90%)
Control had 0% abnormal behaviour (must \leq 10%), e.g. immobility

Reference toxicant: 48-h test with NaCl initiated November 8, 2011; current results
(48-h LC50 and 95% confidence limits) = 0.75 (0.73-0.77) log (g/L NaCl)

Note: Outlined sections are protocol deviations explained on the comment page

Test Data

 Client: DIA102
 Reference: 11-2189-01-DAS

Test Log:

Date	Day	Time	Technician	Comment/Observation
2011/11/21	0	1630	E. Petho	test <i>Daphnia</i> appear normal
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Chemistry:

Conc (%)	control			100		
replicate	a	b	c	a	b	c

Day	pH (units)					
0	7.5	7.5	7.5	7.0	7.1	7.1
2	7.4	7.6	7.6	7.7	7.6	7.6

	Conductivity ($\mu\text{S}/\text{cm}$ @ 25°C)					
0	345	345	346	470	491	493
2	371	376	383	530	546	548

	Dissolved Oxygen (mg/L)					
0	7.3	7.3	7.3	7.3	7.2	7.2
2	7.2	7.2	7.2	7.1	7.1	7.0

	Temperature (°C)					
0	20	20	20	20	20	20
2	22	22	22	21	22	22

Biology:

Conc (%)	control			100		
replicate	a	b	c	a	b	c

Day	Number Alive and Behavior (behavior is in brackets)					
1	10	10	10	10	10	10 (1F, 1I)
2	10	10	10	10	10	10 (1F)

Notes: F, floating; I, immobile; B, stuck on bubble; D, caught in debris

	Mortality (%)					
2	0	0	0	0	0	0

	Immobility (%)					
2	0	0	0	0	0	0

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Comments/Statistics

Client: DIA102 Reference: 11-2189-01-DAS

Test Result Comments:

None

Data Analysis:

None

Protocol Deviations:

None

Quality Assurance Information

Test Method: *Daphnia* Static Acute Test (LC50, 5 treatments plus a control)
HydroQual Test Method: WTR-ME-016

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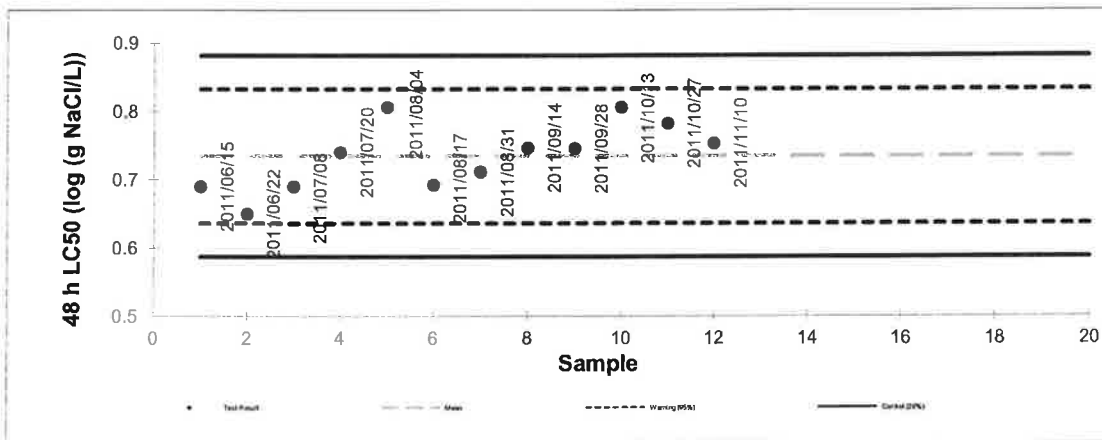
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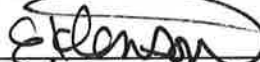
Historical Values

mean 0.73 sd 0.05 cv(%): 7
lower upper
warning limits (±2 sd) 0.64 0.83 (95% confidence limits)
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Comments:



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tel (403) 253-7121 fax (403) 252-9363 www.hydroqual.ca

DA Ref. Tox.v 3.0