



Stantec

December 11, 2007
File: 110217663

Northeast Capital Industrial Association
#204, 9902 - 102 Street
Fort Saskatchewan, AB
T8L 2C3

Attention: Mr. David Onuczko

Dear Mr. Onuczko:

Reference: Spring, 2007 Groundwater Monitoring Field Program

Stantec Consulting Ltd. is pleased to present the analytical results of the Spring 2007 field program as part of the ongoing monitoring of the NCIA groundwater monitoring wells. The following sections detail our field program and analytical results for the 13 monitoring wells installed during the Regional Groundwater Quality Study of the Beverly Channel.

FIELD PROGRAM

Groundwater monitoring and sample collection was completed between July 11 to 13, 2007. Prior to sampling, water level measurements were obtained and all of the monitoring wells were purged to remove stagnant water. A minimum of 3 well volumes was purged from each monitoring well using a Rediflo stainless steel submersible pump. The Rediflo pump was subsequently used to obtain water samples for analysis. Field measurements of temperature, pH and conductivity were taken at the time of sampling using handheld pH and EC meters. Both meters were calibrated each day prior to sampling. A field blank was prepared in the field using distilled water provided by the lab. A duplicate sample from MW-09 was prepared in the field during the sampling event for Quality Control purposes. The duplicate sample was prepared by rinsing a clean 4 L plastic container with formation water, collecting the required sample volume, and splitting the sample into two aliquots.

All groundwater samples were submitted to ALS Laboratories (formerly Envirotest Laboratories) for analysis. Groundwater samples from the July, 2007 sampling event were analyzed for routine water quality parameters, major ions, hydrocarbon parameters and dissolved metals. All sample bottles were labeled at the time of sample collection with the site number, date of collection, and the analyses required. Sample bottles were placed into a cooler with ice packs and delivered to ALS Laboratories in Edmonton at the end of each sampling day.

Reference: Spring, 2007 Groundwater Monitoring Field Program

Field parameter measurements were within their respective historical ranges and no significant changes in water level elevations were noticed at any of the monitoring well locations during the Spring, 2007 field program.

ANALYTICAL RESULTS

Analytical results from the Spring, 2007 groundwater monitoring program have been received from ALS Laboratory Group. No significant changes were noted during the data review.

Table 1 (attached) presents a summary of the analytical results for the 13 monitoring wells sampled during the Spring, 2007 sampling event. The *Canadian Environmental Quality Guidelines – Freshwater Aquatic Life* (CCME, 2004) and the *Guidelines for Canadian Drinking Water Quality* (Health Canada, 2004) are included in the table for comparative purposes. Copies of the laboratory reports are also appended to this letter for your reference.

The reproducibility of the data was assessed by calculating the relative percent difference (RPD) between the sample and duplicate results. Duplicate results are considered acceptable when the RPD is below 20% or, when at least one of the duplicate results is less than or equal to five times the parameter detection limit, the absolute difference (AD) between the results is less than or equal to the detection limit. All of the duplicate results met these criteria for this sampling event.

Based on the analytical results presented in Table 1, several exceedances of the CCME (2004) and/or Health Canada (2004) guideline criteria were noted. Exceedances were similar to previous sampling events with total dissolved solids, iron and manganese concentrations above guideline levels in most of the monitoring wells.

Sodium concentrations were above guidelines in monitors MW-07 and MW-09, which had been observed during previous sampling events. Sulphate concentration also remained above the guideline level in MW-07. Chloride concentrations continue to increase at MW-04, from 137.0 mg/L in Spring, 2005 to 190.0 mg/L in July, 2007. Increasing trends in chloride concentrations have been reported since Spring, 2005 in this well. An investigation should be undertaken to determine the reason for increasing chloride concentrations in the vicinity of MW-04 well.

The following parameter increases were also noted:

- Increasing trends were noted in iron concentrations at MW-01, MW-03, MW-05, MW-06, MW-08, MW-10, MW-13; and
- Manganese also appeared to exhibit an increasing trend at MW-05.

With the exception of arsenic at MW-08, all samples analyzed reported concentrations of dissolved metals lower than respective method detection limits or within the above noted Guidelines. The arsenic concentration at MW-08 slightly exceeded the CCME (2004) guideline of 0.005 mg/L with a reported values of 0.0052 mg/L. Aluminum concentrations were below guideline levels for all monitors during the June, 2006 and 2007 sampling events after a number of exceedances were noted during the fall, 2005 event.

Petroleum hydrocarbon compounds were not detected in the network of regional monitoring wells. All other parameter concentrations were similar to previous sampling events.

Reference: Spring, 2007 Groundwater Monitoring Field Program

CLOSURE

Should you have any further questions or require clarification on any matter, please do not hesitate to contact me.

Best regards,

STANTEC CONSULTING LTD.



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Table 1. Spring 2007 Analytical Results

Parameter	Detection Limit	CCME FAW ¹ Criteria	GCDWQ ² Criteria	MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07	MW-08	MW-09	MW-10	MW-11	MW-12	MW-13	MW-14 Duplicate of MW-9	QA/QC	Method	MW-15 Field Blank
Date				12-Jul-07	13-Jul-07	12-Jul-07	13-Jul-07	13-Jul-07	12-Jul-07	12-Jul-07	11-Jul-07	11-Jul-07	11-Jul-07	11-Jul-07	11-Jul-07	11-Jul-07	11-Jul-07			13-Jul-07
General and Bulk Parameters																				
Ion Balance (%)				98.6	98.7	102.	99.9	98.5	99.4	103.	100.	97.9	97.2	98.6	97.4	96.3	99.4	2	RPD	Low TDS
Total Dissolved Solids (mg/L)			≤500	433.	880.	578.	774.	563.	1200.	1870.	918.	1010.	814.	806.	609.	456.	1000.	1	RPD	<1.
Hardness (mg/L as CaCO ₃)				345.	609.	425.	564.	416.	620.	1010.	551.	351.	482.	544.	358.	202.	351.	0	RPD	<1.
pH	0.1		6.5 - 8.5	7.8	7.9	8.	7.9	8.1	7.9	7.6	7.9	8.1	8.	8.	8.	8.2	8.1	0	RPD	6.5
Electrical Conductivity (µS/cm)	0.2			718.	1360.	930.	1360.	931.	1760.	2290.	1390.	1530.	1270.	1280.	1020.	782.	1530.	0	RPD	1.7
Total Alkalinity (mg/L as CaCO ₃)	5			365.	516.	361.	368.	349.	522.	526.	478.	538.	533.	542.	550.	444.	528.	2	RPD	<5.
Dissolved Organic Carbon (mg/L)	1			3.	6.	3.	3.	4.	7.	6.	7.	7.	5.	8.	7.	5.	6.	15	RPD	5.
Routine and Major Ion Parameters																				
Chloride (mg/L)	1		≤250	3.	12.	36.	190.	25.	10.	12.	2.	6.	2.	8.	7.	2.	6.	0	RPD	<1.
Fluoride (mg/L)	0.05		1.5	0.13	0.09	0.11	0.14	0.11	0.17	0.09	0.08	0.21	0.12	0.09	0.08	0.13	0.21	0	AD	<0.05
Calcium (mg/L)	0.5			95.1	154.	108.	154.	110.	157.	257.	150.	94.9	132.	143.	95.4	53.	94.3	1	RPD	<0.5
Potassium (mg/L)	0.1			2.3	4.3	3.	10.4	7.3	4.8	4.6	5.	3.3	4.7	3.9	4.2	3.5	3.3	0	RPD	<0.5
Magnesium (mg/L)	0.1			26.1	54.4	37.7	43.6	34.3	55.3	89.8	42.9	27.6	36.9	45.3	29.2	16.9	27.8	1	RPD	<0.1
Sodium (mg/L)	1		≤200	33.	83.	55.	68.	42.	182.	248.	115.	231.	110.	88.	101.	105.	232.	0	RPD	<1.
Sulfate (mg/L)	0.5		≤500	54.6	263.	122.	84.5	135.	478.	940.	316.	322.	208.	193.	42.4	9.1	321.	0	RPD	<0.5
Iron (mg/L)	0.005	0.3	≤0.3	1.84	8.72	4.89	<0.005	4.	4.5	10.9	7.29	1.74	5.93	7.15	3.77	1.26	1.73	1	RPD	0.015
Manganese (mg/L)	0.001		≤0.05	0.664	0.841	0.249	0.009	0.682	1.28	1.78	0.454	0.785	0.656	0.632	0.422	0.252	0.782	0	RPD	<0.001
Nitrate and Nitrite (mg/L as N)	0.1			<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	AD	<0.1
Nitrate (mg/L as N)	0.1	13	45	<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	AD	<0.1
Nitrite (mg/L as N)	0.05	0.06		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0	AD	<0.05
Bicarbonate (mg/L)	5			445.	630.	440.	449.	426.	637.	641.	583.	656.	651.	662.	670.	541.	644.	2	RPD	<5.
Carbonate (mg/L)	5			<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	0	AD	<5.
Hydroxide (mg/L)	5			<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	0	AD	<5.
Ammonia (mg/L as N)	0.05			0.185	0.756	0.291	0.008	0.216	1.92	2.03	1.61	1.8	1.65	1.43	1.16	1.22	1.8	0	RPD	<0.005
Orthophosphate (mg/L as P)	0.01			0.005	0.002	0.005	<0.001	0.004	0.04	0.01	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0	AD	0.002
Hydrocarbon Parameters																				
Benzene (mg/L)	0.0005	0.37 - 0.002	0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0	AD	<0.0005
Toluene (mg/L)	0.0005	0.09	≤0.024	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0	AD	<0.0005
Ethylbenzene (mg/L)	0.0005		≤0.0024	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0	AD	<0.0005
Xylenes (mg/L)	0.0005		≤0.3	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0	AD	<0.0005
F1(mg/L)	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	AD	<0.1
F1-BTEX (mg/L)	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0	AD	<0.1
F2 (mg/L)	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0	AD	<0.05
Phenols (mg/L)	0.001			<0.001	0.002	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0	AD	<0.001
Dissolved Metals																				
Silver (mg/L)	0.0002	0.0001		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0	AD	<0.0002
Aluminum (mg/L)	0.01	0.005 - 0.1	0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	AD	<0.01
Arsenic (mg/L)	0.0004	0.005	0.025	0.0009	0.0036	0.0014	0.0008	0.0018	0.0042	0.0027	0.0052	0.002	0.0039	0.0023	0.0025	0.0014	0.002	0	AD	<0.0004
Boron (mg/L)	0.002		5	0.054	0.136	0.115	0.1	0.052	0.159	0.289	0.176	0.26	0.168	0.186	0.233	0.246	0.266	2	RPD	<0.002
Barium (mg/L)	0.0001		1	0.127	0.0749	0.0379	0.085	0.0455	0.043	0.0596	0.0519	0.0302	0.0291	0.0377	0.146	0.428	0.03	1	RPD	0.0003
Beryllium (mg/L)	0.0005			<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0	AD	<0.0005
Bismuth (mg/L)	0.00005			<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0	AD	<0.00005
Cadmium (mg/L)	0.0001	0.000017	0.005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0	AD	<0.0001
Cobalt (mg/L)	0.0001			0.0009	0.0032	0.0008	0.0001	0.0008	0.0009	0.0014	0.0005	0.0009	0.0004	0.0004	0.0012	0.0009	0.0008	12	RPD	<0.0001
Chromium (mg/L)	0.0004		0.05	0.0011	<0.0004	0.0012	0.0047	0.0005	0.0014	0.0011	0.0016	0.0016	0.0015	0.0016	0.0015	0.0016	0.0016	0	AD	<0.0004
Copper (mg/L)	0.0006	0.002-0.004	≤1.0	<0.0006	0.0007	<0.0006	<0.0006	0.0009	0.0014	0.0015	0.0012	0.0008	0.0008	<0.0006	<0.0006	<0.0006	<0.0006	0	AD	0.0007
Mercury (mg/L)	0.0001		0.001	<0.0001	<0.0001	0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0	AD	<0.0001
Molybdenum (mg/L)	0.0001	0.073		0.0009	0.0008	0.0029	0.0005	0.0006	0.0016	0.0012	0.0016	0.0017	0.0009	0.0007	0.0017	0.0023	0.0016	6	RPD	<0.0001
Nickel (mg/L)	0.0001	0.025 - 0.15		0.003	0.0055	<0.0001	0.0042	0.0034	0.006	0.0056	0.0031	0.003	0.003	0.0027	0.0033	0.0022	0.0029	3	RPD	<0.0001
Lead (mg/L)	0.0001	0.001-0.007	0.01	<0.0001	<0.0001	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0	AD	<0.0001
Antimony (mg/L)	0.0004		0.006	0.0004	0.0005	0.0004	<0.0004	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0004	0.0005	0.0004	0.0004	0	AD	0.0004
Selenium (mg/L)	0.0004	0.001	0.006	0.0005	<0.0004	<0.0002	0.0006	0.0005	<0.0004	0.0008	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	0	AD	<0.0004
Tin (mg/L)	0.0002			<0.0002	<0.0002	0.882	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0	AD	0.006
Strontium (mg/L)	0.0001			0.558	1.46	0.001	0.59	0.684	1.42	2.49	1.59	0.961	1.55	1.35	0.972	0.58	0.954</			



Environmental Division

ANALYTICAL REPORT

STANTEC CONSULTING LTD

ATTN: DAN YOSHISAKA

7 FL NORTH TOWER 10160 112 STREET

EDMONTON AB T5K 2L6

Reported On: 02-AUG-07 05:15 PM

Revision: 2

Lab Work Order #: **L529325**

Date Received: **12-JUL-07**

Project P.O. #:

Job Reference: 1102-17663 (NCIA)

Legal Site Desc:

CofC Numbers: c009995

Other Information:

Comments: ADDITIONAL 27-JUL-07 11:36
ADDITIONAL 23-JUL-07 14:43

RON MINKS
Director, Western Canada Operations

For any questions about this report please contact your Account Manager:

NHAN H NGUYEN

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-1 MW-1								
Sampled By: NOT PROVIDED on 12-JUL-07								
Matrix: GROUND WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Toluene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
EthylBenzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Xylenes	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1(C6-C10)	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1-BTEX	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	18-JUL-07	18-JUL-07	JLD	R550584
Surr: 2-Bromobenzotrifluoride	93		65-146	%	18-JUL-07	18-JUL-07	JLD	R550584
Ammonia-N	0.185		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	3		1	mg/L		19-JUL-07	ZOW	R550368
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Orthophosphate (PO4-P)	0.005		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		16-JUL-07	SHC	R549337
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	3		1	mg/L		19-JUL-07	BOC	R550280
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549188
Arsenic (As)	0.0009		0.0004	mg/L		17-JUL-07	CVM	R549188
Boron (B)	0.054		0.002	mg/L		17-JUL-07	CVM	R549188
Barium (Ba)	0.127		0.0001	mg/L		17-JUL-07	CVM	R549188
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549188
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Cobalt (Co)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549188
Chromium (Cr)	0.0011		0.0004	mg/L		17-JUL-07	CVM	R549188
Copper (Cu)	<0.0006		0.0006	mg/L		17-JUL-07	CVM	R549188
Molybdenum (Mo)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549188
Nickel (Ni)	0.0030	RRV	0.0001	mg/L		17-JUL-07	CVM	R549188
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Antimony (Sb)	0.0004		0.0004	mg/L		17-JUL-07	CVM	R549188
Selenium (Se)	0.0005	RRV	0.0004	mg/L		17-JUL-07	CVM	R549188
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Strontium (Sr)	0.558		0.0001	mg/L		17-JUL-07	CVM	R549188
Titanium (Ti)	0.0008		0.0003	mg/L		17-JUL-07	CVM	R549188
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Uranium (U)	0.0022		0.0001	mg/L		17-JUL-07	CVM	R549188
Vanadium (V)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Zinc (Zn)	<0.002		0.002	mg/L		17-JUL-07	CVM	R549188
Fluoride (F)	0.13		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	95.1		0.5	mg/L		15-JUL-07	EOC	R548557
Potassium (K)	2.3		0.5	mg/L		15-JUL-07	EOC	R548557
Magnesium (Mg)	26.1		0.1	mg/L		15-JUL-07	EOC	R548557
Sodium (Na)	33		1	mg/L		15-JUL-07	EOC	R548557
Sulfate (SO4)	54.6		0.5	mg/L		15-JUL-07	EOC	R548557
Ion Balance Calculation								
Ion Balance	98.6			%		19-JUL-07		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-1 MW-1 Sampled By: NOT PROVIDED on 12-JUL-07 Matrix: GROUND WATER								
Major Ions & Trace Dissolved Metals								
Ion Balance Calculation								
TDS (Calculated)	433			mg/L		19-JUL-07		
Hardness (as CaCO3)	345			mg/L		19-JUL-07		
Iron (Fe)-Dissolved	1.84		0.005	mg/L		14-JUL-07	HAS	R548469
Manganese (Mn)-Dissolved	0.664		0.001	mg/L		14-JUL-07	HAS	R548469
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrate-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrite-N	<0.05		0.05	mg/L		14-JUL-07	BLI	R548166
pH, Conductivity and Total Alkalinity								
pH	7.8		0.1	pH		14-JUL-07	JWU	R548688
Conductivity (EC)	718		0.2	uS/cm		14-JUL-07	JWU	R548688
Bicarbonate (HCO3)	445		5	mg/L		14-JUL-07	JWU	R548688
Carbonate (CO3)	<5		5	mg/L		14-JUL-07	JWU	R548688
Hydroxide (OH)	<5		5	mg/L		14-JUL-07	JWU	R548688
Alkalinity, Total (as CaCO3)	365		5	mg/L		14-JUL-07	JWU	R548688
L529325-2 MW-3 Sampled By: NOT PROVIDED on 12-JUL-07 Matrix: GROUND WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Toluene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
EthylBenzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Xylenes	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1(C6-C10)	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1-BTEX	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	18-JUL-07	18-JUL-07	JLD	R550584
Surr: 2-Bromobenzotrifluoride	93		65-146	%	18-JUL-07	18-JUL-07	JLD	R550584
Dissolved Metals								
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549188
Arsenic (As)	0.0014		0.0004	mg/L		17-JUL-07	CVM	R549188
Boron (B)	0.115		0.002	mg/L		17-JUL-07	CVM	R549188
Barium (Ba)	0.0379		0.0001	mg/L		17-JUL-07	CVM	R549188
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549188
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Cobalt (Co)	0.0008		0.0001	mg/L		17-JUL-07	CVM	R549188
Chromium (Cr)	0.0012		0.0004	mg/L		17-JUL-07	CVM	R549188
Copper (Cu)	<0.0006		0.0006	mg/L		17-JUL-07	CVM	R549188
Molybdenum (Mo)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549188
Nickel (Ni)	0.0029		0.0001	mg/L		17-JUL-07	CVM	R549188
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549188
Selenium (Se)	0.0004		0.0004	mg/L		17-JUL-07	CVM	R549188
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Strontium (Sr)	0.882		0.0001	mg/L		17-JUL-07	CVM	R549188
Titanium (Ti)	0.0010		0.0003	mg/L		17-JUL-07	CVM	R549188
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-2 MW-3								
Sampled By: NOT PROVIDED on 12-JUL-07								
Matrix: GROUND WATER								
Dissolved Metals								
Dissolved Trace Metals (Low Level)								
Uranium (U)	0.0007		0.0001	mg/L		17-JUL-07	CVM	R549188
Vanadium (V)	0.0002		0.0001	mg/L		17-JUL-07	CVM	R549188
Zinc (Zn)	<0.002		0.002	mg/L		17-JUL-07	CVM	R549188
Iron (Fe)-Dissolved	4.89		0.005	mg/L		14-JUL-07	HAS	R548469
Manganese (Mn)-Dissolved	0.249		0.001	mg/L		14-JUL-07	HAS	R548469
Ammonia-N	0.291		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	3		1	mg/L		19-JUL-07	ZOW	R550368
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Orthophosphate (PO4-P)	0.005		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		16-JUL-07	SHC	R549337
Routine Water: Major Ions, Fluoride								
Chloride (Cl)	36		1	mg/L		24-JUL-07	LWW	R552437
Fluoride (F)	0.11		0.05	mg/L		23-JUL-07	CLT	R552193
ICP metals and SO4 for routine water								
Calcium (Ca)	108		0.5	mg/L		24-JUL-07	JWU	R552340
Potassium (K)	3.0		0.5	mg/L		24-JUL-07	JWU	R552340
Magnesium (Mg)	37.7		0.1	mg/L		24-JUL-07	JWU	R552340
Sodium (Na)	55		1	mg/L		24-JUL-07	JWU	R552340
Sulfate (SO4)	122		0.5	mg/L		24-JUL-07	JWU	R552340
Ion Balance Calculation								
Ion Balance	102			%		24-JUL-07		
TDS (Calculated)	578			mg/L		24-JUL-07		
Hardness (as CaCO3)	425			mg/L		24-JUL-07		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		24-JUL-07	BLI	R552356
Nitrate-N	<0.1		0.1	mg/L		24-JUL-07	BLI	R552356
Nitrite-N	<0.05		0.05	mg/L		24-JUL-07	BLI	R552356
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		23-JUL-07	CLT	R552193
Conductivity (EC)	930		0.2	uS/cm		23-JUL-07	CLT	R552193
Bicarbonate (HCO3)	440		5	mg/L		23-JUL-07	CLT	R552193
Carbonate (CO3)	<5		5	mg/L		23-JUL-07	CLT	R552193
Hydroxide (OH)	<5		5	mg/L		23-JUL-07	CLT	R552193
Alkalinity, Total (as CaCO3)	361		5	mg/L		23-JUL-07	CLT	R552193
L529325-3 MW-7								
Sampled By: NOT PROVIDED on 12-JUL-07								
Matrix: GROUND WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Toluene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
EthylBenzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Xylenes	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1(C6-C10)	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1-BTEX	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	18-JUL-07	18-JUL-07	JLD	R550584
Surr: 2-Bromobenzotrifluoride	83		65-146	%	18-JUL-07	18-JUL-07	JLD	R550584

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-3 MW-7								
Sampled By:	NOT PROVIDED on 12-JUL-07							
Matrix:	GROUND WATER							
Ammonia-N	2.03		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	6		1	mg/L		19-JUL-07	ZOW	R550368
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Orthophosphate (PO4-P)	0.010		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		16-JUL-07	SHC	R549337
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	12		1	mg/L		14-JUL-07	LWW	R548245
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549188
Arsenic (As)	0.0027		0.0004	mg/L		17-JUL-07	CVM	R549188
Boron (B)	0.289		0.002	mg/L		17-JUL-07	CVM	R549188
Barium (Ba)	0.0596		0.0001	mg/L		17-JUL-07	CVM	R549188
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549188
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Cobalt (Co)	0.0014		0.0001	mg/L		17-JUL-07	CVM	R549188
Chromium (Cr)	0.0011		0.0004	mg/L		17-JUL-07	CVM	R549188
Copper (Cu)	0.0015		0.0006	mg/L		17-JUL-07	CVM	R549188
Molybdenum (Mo)	0.0012		0.0001	mg/L		17-JUL-07	CVM	R549188
Nickel (Ni)	0.0056	RRV	0.0001	mg/L		17-JUL-07	CVM	R549188
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549188
Selenium (Se)	0.0008		0.0004	mg/L		17-JUL-07	CVM	R549188
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Strontium (Sr)	2.49		0.0001	mg/L		17-JUL-07	CVM	R549188
Titanium (Ti)	0.0011		0.0003	mg/L		17-JUL-07	CVM	R549188
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Uranium (U)	0.0016		0.0001	mg/L		17-JUL-07	CVM	R549188
Vanadium (V)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Zinc (Zn)	0.002		0.002	mg/L		17-JUL-07	CVM	R549188
Fluoride (F)	0.09		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	257		0.5	mg/L		19-JUL-07	JWU	R550341
Potassium (K)	4.6		0.5	mg/L		19-JUL-07	JWU	R550341
Magnesium (Mg)	89.8		0.1	mg/L		19-JUL-07	JWU	R550341
Sodium (Na)	248		1	mg/L		19-JUL-07	JWU	R550341
Sulfate (SO4)	940		0.5	mg/L		19-JUL-07	JWU	R550341
Ion Balance Calculation								
Ion Balance	103			%		19-JUL-07		
TDS (Calculated)	1870			mg/L		19-JUL-07		
Hardness (as CaCO3)	1010			mg/L		19-JUL-07		
Iron (Fe)-Dissolved	10.9		0.005	mg/L		14-JUL-07	HAS	R548469
Manganese (Mn)-Dissolved	1.78		0.001	mg/L		14-JUL-07	HAS	R548469
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrate-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrite-N	<0.05		0.05	mg/L		14-JUL-07	BLI	R548166
pH, Conductivity and Total Alkalinity								
pH	7.6		0.1	pH		14-JUL-07	JWU	R548688
Conductivity (EC)	2290		0.2	uS/cm		14-JUL-07	JWU	R548688
Bicarbonate (HCO3)	641		5	mg/L		14-JUL-07	JWU	R548688

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-3 MW-7 Sampled By: NOT PROVIDED on 12-JUL-07 Matrix: GROUND WATER Major Ions & Trace Dissolved Metals pH, Conductivity and Total Alkalinity								
Carbonate (CO3)	<5		5	mg/L		14-JUL-07	JWU	R548688
Hydroxide (OH)	<5		5	mg/L		14-JUL-07	JWU	R548688
Alkalinity, Total (as CaCO3)	526		5	mg/L		14-JUL-07	JWU	R548688
L529325-4 MW-6 Sampled By: NOT PROVIDED on 12-JUL-07 Matrix: GROUND WATER BTEX, F1 (C6-C10) and F2 (>C10-C16) BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Toluene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
EthylBenzene	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
Xylenes	<0.00050		0.0005	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1(C6-C10)	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F1-BTEX	<0.1		0.1	mg/L	17-JUL-07	17-JUL-07	NMT	R549600
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	18-JUL-07	18-JUL-07	JLD	R550584
Surr: 2-Bromobenzotrifluoride	92		65-146	%	18-JUL-07	18-JUL-07	JLD	R550584
Ammonia-N	1.92		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	7		1	mg/L		19-JUL-07	ZOW	R550368
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Orthophosphate (PO4-P)	0.040		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		16-JUL-07	SHC	R549337
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	10		1	mg/L		14-JUL-07	LWW	R548245
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549188
Arsenic (As)	0.0042		0.0004	mg/L		17-JUL-07	CVM	R549188
Boron (B)	0.159		0.002	mg/L		17-JUL-07	CVM	R549188
Barium (Ba)	0.0430		0.0001	mg/L		17-JUL-07	CVM	R549188
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549188
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Cobalt (Co)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549188
Chromium (Cr)	0.0014		0.0004	mg/L		17-JUL-07	CVM	R549188
Copper (Cu)	0.0014		0.0006	mg/L		17-JUL-07	CVM	R549188
Molybdenum (Mo)	0.0016		0.0001	mg/L		17-JUL-07	CVM	R549188
Nickel (Ni)	0.0060	RRV	0.0001	mg/L		17-JUL-07	CVM	R549188
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549188
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549188
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549188
Strontium (Sr)	1.42		0.0001	mg/L		17-JUL-07	CVM	R549188
Titanium (Ti)	0.0014		0.0003	mg/L		17-JUL-07	CVM	R549188
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549188
Uranium (U)	0.0016		0.0001	mg/L		17-JUL-07	CVM	R549188
Vanadium (V)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549188
Zinc (Zn)	0.003		0.002	mg/L		17-JUL-07	CVM	R549188
Fluoride (F)	0.17		0.05	mg/L		17-JUL-07	CLT	R549028

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L529325-4 MW-6								
Sampled By: NOT PROVIDED on 12-JUL-07								
Matrix: GROUND WATER								
Major Ions & Trace Dissolved Metals								
ICP metals and SO4 for routine water								
Calcium (Ca)	157		0.5	mg/L		15-JUL-07	EOC	R548557
Potassium (K)	4.8		0.5	mg/L		15-JUL-07	EOC	R548557
Magnesium (Mg)	55.3		0.1	mg/L		15-JUL-07	EOC	R548557
Sodium (Na)	182		1	mg/L		15-JUL-07	EOC	R548557
Sulfate (SO4)	478		0.5	mg/L		15-JUL-07	EOC	R548557
Ion Balance Calculation								
Ion Balance	99.4			%		19-JUL-07		
TDS (Calculated)	1200			mg/L		19-JUL-07		
Hardness (as CaCO3)	620			mg/L		19-JUL-07		
Iron (Fe)-Dissolved	4.50		0.005	mg/L		14-JUL-07	HAS	R548469
Manganese (Mn)-Dissolved	1.28		0.001	mg/L		14-JUL-07	HAS	R548469
Nitrate+Nitrite-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrate-N	<0.1		0.1	mg/L		14-JUL-07	BLI	R548166
Nitrite-N	<0.05		0.05	mg/L		14-JUL-07	BLI	R548166
pH, Conductivity and Total Alkalinity								
pH	7.9		0.1	pH		17-JUL-07	CLT	R549028
Conductivity (EC)	1760		0.2	uS/cm		17-JUL-07	CLT	R549028
Bicarbonate (HCO3)	637		5	mg/L		17-JUL-07	CLT	R549028
Carbonate (CO3)	<5		5	mg/L		17-JUL-07	CLT	R549028
Hydroxide (OH)	<5		5	mg/L		17-JUL-07	CLT	R549028
Alkalinity, Total (as CaCO3)	522		5	mg/L		17-JUL-07	CLT	R549028
* Refer to Referenced Information for Qualifiers (if any) and Methodology.								

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHT	Some Routine Parameters - Exceeds Recommended Holding Time Prior To Analysis

Sample Parameter Qualifier key listed:

Qualifier	Description
RRV	Reported Result Verified By Repeat Analysis

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5030	EPA 5030/8015&8260-P&T GC-MS & FID
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-ROUTINE-ICP-ED	Water	ICP metals and SO4 for routine water		APHA 3120 B-ICP-OES
F-ED	Water	Fluoride (F)		APHA 4500 F-C-Electrode
F2-ED	Water	F2 (>C10-C16)		EPA 3510/8000-GC-FID
FE-DIS-ED	Water	Iron (Fe)-Dissolved		EPA 200.7
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MN-DIS-ED	Water	Manganese (Mn)-Dissolved		EPA 200.7
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3-H - COLORIMETRY
NH4-LOW-ED	Water	Ammonia-N		APHA 4500 NH3F-Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity		APHA 4500-H, 2510, 2320
PHENOLS-4AAP-ED	Water	Phenols (4AAP)		AB ENV.06537-COLORIMETRIC
PO4-LOW-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

c009995

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

Reference Information

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds. The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Environmental Division

ANALYTICAL REPORT

STANTEC CONSULTING LTD

ATTN: DAN YOSHISAKA

7 FL NORTH TOWER 10160 112 STREET

EDMONTON AB T5K 2L6

Reported On: 08-AUG-07 06:11 PM

Revision: 2

Lab Work Order #: **L528817**

Date Received: **11-JUL-07**

Project P.O. #:

Job Reference: 1102 17663

Legal Site Desc:

CofC Numbers: c009717

Other Information:

Comments: 08-AUG-07 REVISED RESULT FOR MW-10 FOR ALUMINUM.

RON MINKS
Director, Western Canada Operations

For any questions about this report please contact your Account Manager:

NHAN H NGUYEN

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ALS Canada Ltd. (formerly ETL Chemspec Analytical Ltd.)
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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-1 MW-8								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Toluene	<0.00050	RAMB	0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F1(C6-C10)	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F1-BTEX	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	104		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.61		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	7		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.003		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	2		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549068
Arsenic (As)	0.0052		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.176		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.0519		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0005		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0016		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	0.0012		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0016		0.0001	mg/L		17-JUL-07	CVM	R549068
Nickel (Ni)	0.0031	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	1.59		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0012		0.0003	mg/L		17-JUL-07	CVM	R549068
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0008		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0004	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	0.004		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.08		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	150		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	5.0		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	42.9		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	115		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	316		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	100			%		18-JUL-07		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-1 MW-8 Sampled By: NOT PROVIDED on 11-JUL-07 Matrix: WATER								
Major Ions & Trace Dissolved Metals								
Ion Balance Calculation								
TDS (Calculated)	918			mg/L		18-JUL-07		
Hardness (as CaCO3)	551			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	7.29		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.454		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	7.9		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1390		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	583		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	478		5	mg/L		12-JUL-07	CLT	R547674
L528817-2 MW-9 Sampled By: NOT PROVIDED on 11-JUL-07 Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Toluene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1(C6-C10)	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1-BTEX	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	84		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.80		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	7		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.002		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	6		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549068
Arsenic (As)	0.0020		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.260		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.0302		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0016		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	0.0008		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0017		0.0001	mg/L		17-JUL-07	CVM	R549068

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-2 MW-9								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
Major Ions & Trace Dissolved Metals								
Dissolved Trace Metals (Low Level)								
Nickel (Ni)	0.0030		0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	0.961		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0009		0.0003	mg/L		17-JUL-07	CVM	R549068
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0014		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0005		0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	<0.002		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.21		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	94.9		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	3.3		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	27.6		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	231		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	322		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	97.9			%		18-JUL-07		
TDS (Calculated)	1010			mg/L		18-JUL-07		
Hardness (as CaCO3)	351			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	1.74		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.785		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1530		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	656		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	538		5	mg/L		12-JUL-07	CLT	R547674
L528817-3 MW-10								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Toluene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1(C6-C10)	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1-BTEX	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	103		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.65		0.005	mg/L		18-JUL-07	MCH/HZ	R549666

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-3 MW-10								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
Dissolved Organic Carbon	5		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.002		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	2		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		31-JUL-07	CRM	R554552
Arsenic (As)	0.0039		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.168		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.0291		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0004		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0015		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	0.0008		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549068
Nickel (Ni)	0.0030	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	1.55		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0007		0.0003	mg/L		17-JUL-07	CVM	R549068
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0013		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0004	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	0.015		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.12		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	132		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	4.7		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	36.9		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	110		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	208		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	97.2			%		18-JUL-07		
TDS (Calculated)	814			mg/L		18-JUL-07		
Hardness (as CaCO3)	482			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	5.93		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.656		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1270		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	651		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-4 MW-11 Sampled By: NOT PROVIDED on 11-JUL-07 Matrix: WATER								
Major Ions & Trace Dissolved Metals								
ICP metals and SO4 for routine water								
Calcium (Ca)	143		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	3.9		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	45.3		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	88		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	193		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	98.6			%		18-JUL-07		
TDS (Calculated)	806			mg/L		18-JUL-07		
Hardness (as CaCO3)	544			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	7.15		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.632		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1280		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	662		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	542		5	mg/L		12-JUL-07	CLT	R547674
L528817-5 MW-12 Sampled By: NOT PROVIDED on 11-JUL-07 Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Toluene	<0.00050	RAMB	0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F1(C6-C10)	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F1-BTEX	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	107		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.16		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	7		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.002		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	7		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549068
Arsenic (As)	0.0025		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.233		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.146		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-5 MW-12								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
Major Ions & Trace Dissolved Metals								
Dissolved Trace Metals (Low Level)								
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0012		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0015		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	<0.0006		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0017		0.0001	mg/L		17-JUL-07	CVM	R549068
Nickel (Ni)	0.0033	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0005		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	0.972		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0007		0.0003	mg/L		17-JUL-07	CVM	R549068
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0004	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	0.004		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.08		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	95.4		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	4.2		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	29.2		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	101		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	42.4		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	97.4			%		18-JUL-07		
TDS (Calculated)	609			mg/L		18-JUL-07		
Hardness (as CaCO3)	358			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	3.77		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.422		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.0		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1020		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	670		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	550		5	mg/L		12-JUL-07	CLT	R547674
L528817-6 MW-13								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Toluene	<0.00050	RAMB	0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F1(C6-C10)	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-6 MW-13								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
F1-BTEX	<0.1		0.1	mg/L	16-JUL-07	16-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	98		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.22		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	5		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.002		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	2		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549068
Arsenic (As)	0.0014		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.246		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.428		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0009		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0016		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	<0.0006		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0023		0.0001	mg/L		17-JUL-07	CVM	R549068
Nickel (Ni)	0.0022	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	0.580		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0006		0.0003	mg/L		17-JUL-07	CVM	R549068
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0008		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0004	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	<0.002		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.13		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	53.0		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	3.5		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	16.9		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	105		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	9.1		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	96.3			%		18-JUL-07		
TDS (Calculated)	456			mg/L		18-JUL-07		
Hardness (as CaCO3)	202			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	1.29		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.252		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-6 MW-13								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
Major Ions & Trace Dissolved Metals								
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.2		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	782		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	541		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	444		5	mg/L		12-JUL-07	CLT	R547674
L528817-7 MW-14								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
BTEX, F1 (C6-C10) and F2 (>C10-C16)								
BTEX and F1 (C6-C10)								
Benzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Toluene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
EthylBenzene	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
Xylenes	<0.00050		0.0005	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1 (C6-C10)	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F1-BTEX	<0.1		0.1	mg/L	15-JUL-07	15-JUL-07	NMT	R548676
F2 (>C10-C16)								
F2 (>C10-C16)	<0.05		0.05	mg/L	16-JUL-07	17-JUL-07	JLD	R550005
Surr: 2-Bromobenzotrifluoride	89		65-146	%	16-JUL-07	17-JUL-07	JLD	R550005
Ammonia-N	1.80		0.005	mg/L		18-JUL-07	MCH/HZ	R549666
Dissolved Organic Carbon	6		1	mg/L		17-JUL-07	ZOW	R549202
Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Orthophosphate (PO4-P)	0.002		0.001	mg/L		13-JUL-07	FYG	R548055
Phenols (4AAP)	<0.001		0.001	mg/L		12-JUL-07	SHC	R547453
Major Ions & Trace Dissolved Metals								
Chloride (Cl)	6		1	mg/L		13-JUL-07	RGM	R547860
Dissolved Trace Metals (Low Level)								
Silver (Ag)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Aluminum (Al)	<0.01		0.01	mg/L		17-JUL-07	CVM	R549068
Arsenic (As)	0.0020		0.0004	mg/L		17-JUL-07	CVM	R549068
Boron (B)	0.266		0.002	mg/L		17-JUL-07	CVM	R549068
Barium (Ba)	0.0300		0.0001	mg/L		17-JUL-07	CVM	R549068
Beryllium (Be)	<0.0005		0.0005	mg/L		17-JUL-07	CVM	R549068
Bismuth (Bi)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Cadmium (Cd)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Cobalt (Co)	0.0008		0.0001	mg/L		17-JUL-07	CVM	R549068
Chromium (Cr)	0.0016		0.0004	mg/L		17-JUL-07	CVM	R549068
Copper (Cu)	<0.0006		0.0006	mg/L		17-JUL-07	CVM	R549068
Molybdenum (Mo)	0.0016		0.0001	mg/L		17-JUL-07	CVM	R549068
Nickel (Ni)	0.0029	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Lead (Pb)	<0.0001		0.0001	mg/L		17-JUL-07	CVM	R549068
Antimony (Sb)	0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Selenium (Se)	<0.0004		0.0004	mg/L		17-JUL-07	CVM	R549068
Tin (Sn)	<0.0002		0.0002	mg/L		17-JUL-07	CVM	R549068
Strontium (Sr)	0.954		0.0001	mg/L		17-JUL-07	CVM	R549068
Titanium (Ti)	0.0008		0.0003	mg/L		17-JUL-07	CVM	R549068

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L528817-7 MW-14								
Sampled By: NOT PROVIDED on 11-JUL-07								
Matrix: WATER								
Major Ions & Trace Dissolved Metals								
Dissolved Trace Metals (Low Level)								
Thallium (Tl)	<0.00005		0.00005	mg/L		17-JUL-07	CVM	R549068
Uranium (U)	0.0013		0.0001	mg/L		17-JUL-07	CVM	R549068
Vanadium (V)	0.0005	RRV	0.0001	mg/L		17-JUL-07	CVM	R549068
Zinc (Zn)	0.003		0.002	mg/L		17-JUL-07	CVM	R549068
Fluoride (F)	0.21		0.05	mg/L		14-JUL-07	JWU	R548688
ICP metals and SO4 for routine water								
Calcium (Ca)	94.6		0.5	mg/L		13-JUL-07	CJN	R547690
Potassium (K)	3.3		0.5	mg/L		13-JUL-07	CJN	R547690
Magnesium (Mg)	27.8		0.1	mg/L		13-JUL-07	CJN	R547690
Sodium (Na)	232		1	mg/L		13-JUL-07	CJN	R547690
Sulfate (SO4)	321		0.5	mg/L		13-JUL-07	CJN	R547690
Ion Balance Calculation								
Ion Balance	99.4			%		18-JUL-07		
TDS (Calculated)	1000			mg/L		18-JUL-07		
Hardness (as CaCO3)	351			mg/L		18-JUL-07		
Iron (Fe)-Dissolved	1.73		0.005	mg/L		13-JUL-07	SYF	R548009
Manganese (Mn)-Dissolved	0.782		0.001	mg/L		13-JUL-07	SYF	R548009
Nitrate+Nitrite-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrate-N	<0.1		0.1	mg/L		13-JUL-07	BLI	R547894
Nitrite-N	<0.05		0.05	mg/L		13-JUL-07	BLI	R547894
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		12-JUL-07	CLT	R547674
Conductivity (EC)	1530		0.2	uS/cm		12-JUL-07	CLT	R547674
Bicarbonate (HCO3)	644		5	mg/L		12-JUL-07	CLT	R547674
Carbonate (CO3)	<5		5	mg/L		12-JUL-07	CLT	R547674
Hydroxide (OH)	<5		5	mg/L		12-JUL-07	CLT	R547674
Alkalinity, Total (as CaCO3)	528		5	mg/L		12-JUL-07	CLT	R547674

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
RAMB	Result Adjusted For Method Blank
RRV	Reported Result Verified By Repeat Analysis

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX,F1-ED	Water	BTEX and F1 (C6-C10)	EPA 5030	EPA 5030/8015&8260-P&T GC-MS & FID
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-ROUTINE-ICP-ED	Water	ICP metals and SO4 for routine water		APHA 3120 B-ICP-OES
F-ED	Water	Fluoride (F)		APHA 4500 F-C-Electrode
F2-ED	Water	F2 (>C10-C16)		EPA 3510/8000-GC-FID
FE-DIS-ED	Water	Iron (Fe)-Dissolved		EPA 200.7
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MN-DIS-ED	Water	Manganese (Mn)-Dissolved		EPA 200.7
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3-H - COLORIMETRY
NH4-LOW-ED	Water	Ammonia-N		APHA 4500 NH3F-Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity		APHA 4500-H, 2510, 2320
PHENOLS-4AAP-ED	Water	Phenols (4AAP)		AB ENV.06537-COLORIMETRIC
PO4-LOW-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

c009717

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

Reference Information

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading *D.L.*

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

