



Environmental Division

PRELIMINARY RESULTS

TRUE NORTH GEMS INC.

ATTN: GREG DAVISON

Reported On: 22-AUG-06 07:56 AM

SUITE 500-602 WEST HASTINGS ST.

VANCOUVER BC V6B 1P2

Lab Work Order #: **L419096**

Date Received: **10-AUG-06**

Project P.O. #:

Job Reference:

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

APPROVED BY: _____

MARY-LYNN GROENENDYK

Project Manager

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 LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-1	WS-06-01								
Sampled By:	Luc/Richard on 06-AUG-06 @ 21:03								
Matrix:	Water								
General Water Quality Package									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		48		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
Anion Scan (IC)									
Chloride		4		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Bromide		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Phosphate-P (ortho)		<0.3		0.3	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		23		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		6		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		152		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Detailed Ion Balance Calculation									
Ion Balance		115			%		17-AUG-06		
Cation - Anion Balance		7.0			%		17-AUG-06		
Computed Conductivity		157			uS/cm		17-AUG-06		
Conductivity % Difference		3.5			%		17-AUG-06		
TDS (Calculated)		86			mg/L		17-AUG-06		
Anion Sum		1.4			me/L		17-AUG-06		
Cation Sum		1.6			me/L		17-AUG-06		
Saturation pH		8.29			pH		17-AUG-06		
Langelier Index		-0.2					17-AUG-06		
Hardness (as CaCO3)		75			mg/L		17-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		0.003		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		23.5		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		0.003		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		4.0		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.003		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.0		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-1 WS-06-01									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:03									
Matrix: Water									
General Water Quality Package									
Metal Scan-Total									
Sodium (Na)-Total		2.2		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.020		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Redox Potential									
Redox Potential		155		1	mV	11-AUG-06	11-AUG-06	KLH	R429274
Total Dissolved Solids									
Total Dissolved Solids		150		20	mg/L	14-AUG-06	15-AUG-06	LD	R430508
Total Phosphorus									
Phosphorus, Total		0.19		0.03	mg/L	11-AUG-06	11-AUG-06	SF	R430011
Turbidity									
Turbidity		0.30		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.07		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-2 WS-06-02									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:14									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		66		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		4		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		23		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		4		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		169		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		80		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		25.1		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-2 WS-06-02									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:14									
Matrix: Water									
Gen Chem Package 1									
Metal Scan-Total									
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		4.9		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.003		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.2		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		2.4		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.022		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		0.005		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.20		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.20		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-3 WS-06-03									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:24									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		65		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		3		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		2		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		4		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		132		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		70		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-3 WS-06-03									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:24									
Matrix: Water									
Gen Chem Package 1									
Metal Scan-Total									
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		19.1		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		5.7		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		2		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		0.5		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		<1		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.019		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.35		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.30		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-4 WS-06-04									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:38									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		74		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		3		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		10		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		6		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-4 WS-06-04									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:38									
Matrix: Water									
Gen Chem Package 1									
Conductivity									
Conductivity		148		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		80		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		25.4		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		4.1		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.011		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.0		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		2.7		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.024		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.40		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.25		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-5 WS-06-05									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:49									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		52		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		3		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-5	WS-06-05								
Sampled By: Luc/Richard on 06-AUG-06 @ 21:49									
Matrix: Water									
Gen Chem Package 1									
CL,F,NO2,NO3,SO4									
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		7		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		6		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		144		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		80		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		26.2		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		2.3		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.004		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		0.3		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		1.6		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.025		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.40		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.31		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-6	WS-06-06								
Sampled By: Luc/Richard on 06-AUG-06 @ 21:57									
Matrix: Water									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-6 WS-06-06									
Sampled By: Luc/Richard on 06-AUG-06 @ 21:57									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		67		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		3		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		27		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		11		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		191		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		100		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		32.9		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		3.8		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.001		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.7		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		2.1		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.035		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.90		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-6 WS-06-06 Sampled By: Luc/Richard on 06-AUG-06 @ 21:57 Matrix: Water Gen Chem Package 1 pH pH		7.87		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-7 WS-06-07 Sampled By: Luc/Richard on 06-AUG-06 @ 22:08 Matrix: Water Gen Chem Package 1 Alkalinity, Total (as CaCO3) Alkalinity, Total (as CaCO3)		77		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4 Chloride		7		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		19		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent Color, Apparent		10		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity Conductivity		191		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		90		10	mg/L		22-AUG-06		
Metal Scan-Total Aluminum (Al)-Total		0.04		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		29.6		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		5.1		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		0.5		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		4.5		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.029		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-7 WS-06-07									
Sampled By: Luc/Richard on 06-AUG-06 @ 22:08									
Matrix: Water									
Gen Chem Package 1									
Metal Scan-Total									
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.45		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.28		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-8 WS-06-08									
Sampled By: Luc/Richard on 06-AUG-06 @ 22:24									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		88		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		5		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		27		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		5		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		195		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		100		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		0.03		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		29.1		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		6.0		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.0		0.1	mg/L		17-AUG-06		R431241

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-8 WS-06-08									
Sampled By: Luc/Richard on 06-AUG-06 @ 22:24									
Matrix: Water									
Gen Chem Package 1									
Metal Scan-Total									
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		3.3		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.029		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.40		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.37		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-9 WS-06-09									
Sampled By: Luc/Richard on 06-AUG-06 @ 22:57									
Matrix: Water									
Gen Chem Package 1									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		120		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
CL,F,NO2,NO3,SO4									
Chloride		4		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		8		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		17		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		228		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Hardness (as CaCO3)		130		10	mg/L		22-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		0.08		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		33.8		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		0.26		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		12.0		0.5	mg/L		17-AUG-06		R431241

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-9 WS-06-09									
Sampled By: Luc/Richard on 06-AUG-06 @ 22:57									
Matrix: Water									
Gen Chem Package 1									
Metal Scan-Total									
Manganese (Mn)-Total		0.017		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		5.2		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		3.8		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.036		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		0.011		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		0.007		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Turbidity									
Turbidity		0.30		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.51		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
L419096-10 WS-06-010									
Sampled By: Luc/Richard on 06-AUG-06 @ 23:02									
Matrix: Water									
General Water Quality Package									
Alkalinity, Total (as CaCO3)									
Alkalinity, Total (as CaCO3)		62		10	mg/L	14-AUG-06	14-AUG-06	AF	R430113
Ammonia as N									
Ammonia as N		<0.05		0.05	mg/L	11-AUG-06	11-AUG-06	AF	R429465
Anion Scan (IC)									
Chloride		3		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Bromide		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Fluoride		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrite-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Nitrate-N		<0.1		0.1	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Phosphate-P (ortho)		<0.3		0.3	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Sulphate		29		2	mg/L	10-AUG-06	10-AUG-06	WK	R429249
Color, Apparent									
Color, Apparent		7		1	C.U.	11-AUG-06	11-AUG-06	BZ	R429227
Conductivity									
Conductivity		185		0.4	umhos/cm	11-AUG-06	11-AUG-06	AWJ	R429303
Detailed Ion Balance Calculation									
Ion Balance		125			%		18-AUG-06		
Cation - Anion Balance		10.9			%		18-AUG-06		
Computed Conductivity		201			uS/cm		18-AUG-06		
Conductivity % Difference		8.2			%		18-AUG-06		
TDS (Calculated)		110			mg/L		18-AUG-06		
Anion Sum		1.7			me/L		18-AUG-06		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L419096-10	WS-06-010								
Sampled By:	Luc/Richard on 06-AUG-06 @ 23:02								
Matrix:	Water								
General Water Quality Package									
Detailed Ion Balance Calculation									
Cation Sum		2.1			me/L		18-AUG-06		
Saturation pH		8.08			pH		18-AUG-06		
Langelier Index		0.2					18-AUG-06		
Hardness (as CaCO3)		100			mg/L		18-AUG-06		
Metal Scan-Total									
Aluminum (Al)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Antimony (Sb)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Arsenic (As)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Barium (Ba)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Beryllium (Be)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Bismuth (Bi)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Boron (B)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Cadmium (Cd)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Calcium (Ca)-Total		30.8		0.5	mg/L		17-AUG-06		R431241
Chromium (Cr)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Cobalt (Co)-Total		<0.0005		0.0005	mg/L		17-AUG-06		R431241
Copper (Cu)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Iron (Fe)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Lead (Pb)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Magnesium (Mg)-Total		5.7		0.5	mg/L		17-AUG-06		R431241
Manganese (Mn)-Total		0.003		0.001	mg/L		17-AUG-06		R431241
Molybdenum (Mo)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Nickel (Ni)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Phosphorus (P)-Total		<0.05		0.05	mg/L		17-AUG-06		R431241
Potassium (K)-Total		<1		1	mg/L		17-AUG-06		R431241
Selenium (Se)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Silicon (Si)-Total		1.4		0.1	mg/L		17-AUG-06		R431241
Silver (Ag)-Total		<0.0001		0.0001	mg/L		17-AUG-06		R431241
Sodium (Na)-Total		2.1		0.5	mg/L		17-AUG-06		R431241
Strontium (Sr)-Total		0.026		0.001	mg/L		17-AUG-06		R431241
Thallium (Tl)-Total		<0.0003		0.0003	mg/L		17-AUG-06		R431241
Tin (Sn)-Total		<0.001		0.001	mg/L		17-AUG-06		R431241
Titanium (Ti)-Total		<0.002		0.002	mg/L		17-AUG-06		R431241
Tungsten (W)-Total		<0.01		0.01	mg/L		17-AUG-06		R431241
Uranium (U)-Total		<0.005		0.005	mg/L		17-AUG-06		R431241
Vanadium (V)-Total		0.002		0.001	mg/L		17-AUG-06		R431241
Zinc (Zn)-Total		<0.003		0.003	mg/L		17-AUG-06		R431241
Zirconium (Zr)-Total		<0.004		0.004	mg/L		17-AUG-06		R431241
Redox Potential									
Redox Potential		185		1	mV	11-AUG-06	11-AUG-06	KLH	R429274
Total Dissolved Solids									
Total Dissolved Solids		190		20	mg/L	14-AUG-06	15-AUG-06	LD	R430508
Total Phosphorus									
Phosphorus, Total		0.04		0.03	mg/L	11-AUG-06	11-AUG-06	SF	R430011
Turbidity									
Turbidity		0.30		0.1	NTU	10-AUG-06	10-AUG-06	AI	R429306
pH									
pH		8.24		0.01	pH units	11-AUG-06	11-AUG-06	AWJ	R429300
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ALK-WT	Water	Alkalinity, Total (as CaCO ₃)		APHA 2320B
ANIONS-WT	Water	Anion Scan (IC)		EPA 300.0 (IC)
ANIONS5-WT	Water	CL,F,NO ₂ ,NO ₃ ,SO ₄		EPA 300.0 (IC)
COLOUR-WT	Water	Color, Apparent		APHA 2120
EC-WT	Water	Conductivity		APHA 2510 B
ETL-HARDNESS-CALC-WT	Water	Hardness (as CaCO ₃)		APHA 2340 B
IONBALANCE-OP03-WT	Water	Detailed Ion Balance Calculation		APHA 1030E, 2330B, 2510A
MET-TOT-WT	Water	Metal Scan-Total		EPA 200.8
NH3-WT	Water	Ammonia as N		APHA 4500-NH ₃
P-TOTAL-WT	Water	Total Phosphorus		APHA 4500-P B E
PH-WT	Water	pH		APHA 4500 H-Electrode
REDOX-POTENTIAL-WT	Water	Redox Potential		APHA 2580
SOLIDS-TDS-WT	Water	Total Dissolved Solids		APHA 2540C
TURBIDITY-WT	Water	Turbidity		APHA 2130 B

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

Chain of Custody numbers:

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
WT	ALS LABORATORY GROUP - WATERLOO (SENTINEL), ONTARIO, CAN		

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.

