



Hamlet of Arviat
ATTN: ALEX ISHALOOK
PO Box 278
Arviat NU X0C 0E0

Date Received: 04-OCT-13
Report Date: 07-OCT-13 10:35 (MT)
Version: FINAL

Client Phone: 867-857-2860

Certificate of Analysis

Lab Work Order #: L1373238
Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Paul Nicolas
Account Manager

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1373238-1 WATER TRUCK #119 Sampled By: CLIENT on 03-OCT-13 @ 10:09 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-2 WATER TRUCK #153 Sampled By: CLIENT on 03-OCT-13 @ 09:22 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-3 WATER TRUCK #145 Sampled By: CLIENT on 03-OCT-13 @ 09:34 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-4 WATER TRUCK #128 Sampled By: CLIENT on 03-OCT-13 @ 09:46 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-5 WATER TRUCK #130 Sampled By: CLIENT on 03-OCT-13 @ 09:17 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-6 LEVI ANGMAK SCHOOL Sampled By: CLIENT on 03-OCT-13 @ 09:59 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-7 ARVIAT HEALTH CENTRE Sampled By: CLIENT on 03-OCT-13 @ 10:15 Matrix: Water Total Coliform and E.coli Total Coliforms Escherichia Coli	 0 0			 MPN/100mL MPN/100mL		04-OCT-13 04-OCT-13	R2709392 R2709392
L1373238-8 QITIQLIK MIDDLE SCHOOL Sampled By: CLIENT on 03-OCT-13 @ 10:20 Matrix: Water							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1373238-8	QITIQLIK MIDDLE SCHOOL							
Sampled By:	CLIENT on 03-OCT-13 @ 10:20							
Matrix:	Water							
Total Coliform and E.coli								
Total Coliforms		0		0	MPN/100mL		04-OCT-13	R2709392
Escherichia Coli		0		0	MPN/100mL		04-OCT-13	R2709392

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
TC,EC-QT51-WP	Water	Total Coliform and E.coli	APHA 9223
The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.			
TC,EC-QT51-WP	Water	Total Coliform and E.coli	APHA 9223 QT
The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.			

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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
WP	ALS ENVIRONMENTAL - WINNIPEG, MANITOBA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - 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.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

[illegible]

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Water test for Total Coliform and E-Coli

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date (dd-mm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:
<i>[Signature]</i>	oct 03/13	10:35 AM	<i>[Signature]</i>	20 OCT 13	12:15	15.2 °C			