



Nunavut - Community & Government Services
- Rankin Inlet
ATTN: SIMEONI TATTY / HUGH IKOE
PO Box 490
Rankin Inlet NU X0C 0G0

Date Received: 26-JUL-13
Report Date: 29-JUL-13 14:16 (MT)
Version: FINAL

Client Phone: 867-645-8166

Certificate of Analysis

Lab Work Order #: L1338611
Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:



Chantal Bouchard
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1338611-1 TRUCK 77 Sampled By: MIKE FONTAINE on 25-JUL-13 @ 10:55 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-2 TRUCK 48 Sampled By: MIKE FONTAINE on 25-JUL-13 @ 11:40 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-3 TRUCK 52 Sampled By: MIKE FONTAINE on 25-JUL-13 @ 11:45 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-4 TRUCK 46 Sampled By: MIKE FONTAINE on 25-JUL-13 @ 13:30 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-5 WATER TREATMENT PLANT - TREATED Sampled By: MIKE FONTAINE on 25-JUL-13 @ 13:05 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-6 WATER TREATMENT PLANT - RAW Sampled By: MIKE FONTAINE on 25-JUL-13 @ 13:05 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	1 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-7 MTC ELDERS CENTER Sampled By: MIKE FONTAINE on 25-JUL-13 @ 13:35 Matrix: water Total Coliform and E.coli Total Coliforms Escherichia Coli	0 0		0 0	MPN/100mL MPN/100mL		26-JUL-13 26-JUL-13	R2657425 R2657425
L1338611-8 MTC ELDERS CENTER Sampled By: MIKE FONTAINE on 25-JUL-13 @ 13:40 Matrix: water							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1338611-8	MTC ELDERS CENTER							
Sampled By:	MIKE FONTAINE on 25-JUL-13 @ 13:40							
Matrix:	water							
Total Coliform and E.coli								
Total Coliforms		0		0	MPN/100mL		26-JUL-13	R2657425
Escherichia Coli		0		0	MPN/100mL		26-JUL-13	R2657425

* 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 ww - 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.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of boun Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.



Report To		Re: L1338611-COFC		Service Requested (Rush for routine analysis subject to availability)			
Company: Nunavut Community & Gov't Services (W8133)		<input checked="" type="checkbox"/> PDF <input type="checkbox"/> Excel <input type="checkbox"/> Digital <input checked="" type="checkbox"/> Fax		<input checked="" type="radio"/> Regular (Standard Turnaround Times - Business Days)			
Contact: Simeoni Tatty/Hugh Ikoe		Email 1: statty@gov.nu.ca		<input type="radio"/> Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT			
Address: PO Box 490 Rankin Inlet, NU, X0C 0G0		Email 2:		<input type="radio"/> Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT			
Phone: 867-645-8166 Fax:		Email 3:		<input type="radio"/> Same Day or Weekend Emergency - Contact ALS to Confirm TAT			
Invoice To Rankin Inlet <input type="checkbox"/> Yes <input type="checkbox"/> No		Client / Project Information		Analysis Request			
Hardcopy of Invoice with Report? <input type="checkbox"/> Yes <input type="checkbox"/> No		Job #:		Please indicate below Filtered, Preserved or both (F, P, F/P)			
Company: (W8133) Gov of Nun		PO / AFE:		TC, EC-QT51-WP		Number of Containers	
Contact: Lexie Morling / Simeoni Tatty		LSD:					
Address: Rankin							
Phone: 645 8166		Quote #:					
Lab Work Order # (lab use only)		ALS Contact:		Sampler: Mike Fontaine			
Sample #	Sample Identification (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sample Type			
1	TRUCK 77	25/07/13	10:55	water			
2	TRUCK 48	25/07/13	11:40	water			
3	TRUCK 52	25/07/13	11:45	water			
4	TRUCK 46	25/07/13	13:30	water			
5	Water Treatment Plant	25/07/13	13:05	TREATED WATER			
6	" " "	25/07/13	13:05	RAW WATER			
7	HEALTH CENTRE	25/07/13	13:35	WATER			
8	MTC ELDERS CENTRE	25/07/13	13:40	WATER			
Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details							
ALL TREATED SAMPLES EXCEPT RAW WATER							
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 / 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:
			11	26/07/13	12:25pm	10 °C	
							Observations: Yes / No ? If Yes add SIF

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.

Environmental Health Officer
Bag 72, Rankin Inlet, NU, X0C 0G0
Phone: (867) 645-8273 Fax: (867) 645-8274



L1338611-COFC

Bacteriological Analysis of Drinking Water Sample Collection Information Form

Sample Collection Information

Community from which sample was collected:	Bayer Lake
Location of sample collection:	WTP
Date of sample collection:	25/07/13
Time of sample collection:	13:05
Name of person who collected sample:	H. IKOE
Telephone number of person who collected sample:	8677932744

For Laboratory Use Only

Date Received:	
Date Processed:	Processed by:
Results	
Total Coliform per 100ml:	<i>E. coli</i> per 100ml:
Date Read:	Read by:

- ☐ **No Significant Evidence of Bacteriological Contamination**
Sample collected is bacteriologically safe for human consumption.

☐ **Significant Evidence of Bacteriological Contamination**
Sample collected may be unsafe for human consumption as bacteriological contamination is present.
Resample as soon as possible.

☐ **Unsafe to Drink**
Sample collected is unsafe for human consumption as fecal contamination is present.
Resample as soon as possible.

The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.



The above results relate only to the sample tested. This water sample was only tested for the presence of both Total Coliform and *E. coli* bacterial indicators of contamination by using membrane filtration.