



Nunavut - Community & Government Services  
- Rankin Inlet  
ATTN: Simeoni Tatty/Hugh Ikoe  
PO Box 490  
Rankin Inlet NU X0C 0G0

Date Received: 30-OCT-13  
Report Date: 31-OCT-13 14:24 (MT)  
Version: FINAL

Client Phone: 867-645-8166

## Certificate of Analysis

**Lab Work Order #:** L1385592  
**Project P.O. #:** NOT SUBMITTED  
**Job Reference:**  
**C of C Numbers:**  
**Legal Site Desc:**



Chantal Bouchard  
Account Manager

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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                |
|---|------------------------|------------|------------------------|--|-----------|------------------------|----------------------|
| L1385592-1 TRUCK NO. 77<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:15<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli     | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-2 TRUCK NO. 48<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:23<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli     | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-3 TRUCK NO. 46<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:29<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli     | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-4 TRUCK NO. 89<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:27<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli     | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-5 RAW WATER<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:32<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli        | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-6 TRUCK FILL NO. 1<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 11:35<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-7 HEALTH CENTRE<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 13:12<br>Matrix: Water<br><br><b>Total Coliform and E.coli</b><br>Total Coliforms<br>Escherichia Coli    | <br><br><br><br>0<br>0 |            | <br><br><br><br>0<br>0 | <br><br><br><br>MPN/100mL<br>MPN/100mL |           | 30-OCT-13<br>30-OCT-13 | R2729994<br>R2729994 |
| L1385592-8 MARTHA T. CENTRE<br>Sampled By: Mike Fontaine on 29-OCT-13 @ 14:10<br>Matrix: Water  |                        |            |                        |  |           |                        |                      |

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

| Sample Details/Parameters        |                                    | Result | Qualifier* | D.L. | Units     | Extracted | Analyzed  | Batch    |
|----------------------------------|------------------------------------|--------|------------|------|-----------|-----------|-----------|----------|
| L1385592-8                       | MARTHA T. CENTRE                   |        |            |      |           |           |           |          |
| Sampled By:                      | Mike Fontaine on 29-OCT-13 @ 14:10 |        |            |      |           |           |           |          |
| Matrix:                          | Water                              |        |            |      |           |           |           |          |
| <b>Total Coliform and E.coli</b> |                                    |        |            |      |           |           |           |          |
| Total Coliforms                  |                                    | 0      |            | 0    | MPN/100mL |           | 30-OCT-13 | R2729994 |
| Escherichia Coli                 |                                    | 0      |            | 0    | MPN/100mL |           | 30-OCT-13 | R2729994 |
|                                  |                                    |        |            |      |           |           |           |          |

\* 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.*

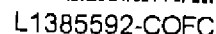
*D.L. - The reporting limit.*

*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.*



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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.



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

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## Bacteriological Analysis of Drinking Water Sample Collection Information Form

### Sample Collection Information

|  |                |
|--|----------------|
| Community from which sample was collected:       | Boken Lake, Nu |
| Location of sample collection:                   | Truck 46       |
| Date of sample collection:                       | 29-10-2013     |
| Time of sample collection:                       | 11:29          |
| Name of person who collected sample:             | A. Mavgetasid  |
| Telephone number of person who collected sample: | 867 793 2747   |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli per 100ml: |
| Date Read:                | Read by:           |



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#### 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.



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Environmental Health Officer  
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Phone: (867) 645-8273 Fax: (867) 645-8274

## Bacteriological Analysis of Drinking Sample Collection Information



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### Sample Collection Information

|  |               |
|--|---------------|
| Community from which sample was collected:       | Baker Lake Nu |
| Location of sample collection:                   | Truck 89      |
| Date of sample collection:                       | 29-10-2013    |
| Time of sample collection:                       | 11:27         |
| Name of person who collected sample:             | A. Mouglassid |
| Telephone number of person who collected sample: | 867 7932744   |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli 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.





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Environmental Health Officer  
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Phone: (867) 645-8273 Fax: (867) 645-8274

## Bacteriological Analysis of Drinking Sample Collection Information Form



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### Sample Collection Information

|  |                |
|--|----------------|
| Community from which sample was collected:       | Baker Lake, NU |
| Location of sample collection:                   | Raw water      |
| Date of sample collection:                       | 29-10-2013     |
| Time of sample collection:                       | 11:32          |
| Name of person who collected sample:             | A. Moughtassid |
| Telephone number of person who collected sample: | 867 793 2744   |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli 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.



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## Bacteriological Analysis of Drinking Water Sample Collection Information Form



### Sample Collection Information

|  |                |
|--|----------------|
| Community from which sample was collected:       | Baker Lake     |
| Location of sample collection:                   | Truck Fill N°1 |
| Date of sample collection:                       | 29-10-2013     |
| Time of sample collection:                       | 11:35          |
| Name of person who collected sample:             | A. Moustassid  |
| Telephone number of person who collected sample: | 867 793 2744   |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli per 100ml: |
| Date Read:                | Read by:           |

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#### No Significant Evidence of Bacteriological Contamination

Sample collected is bacteriologically safe for human consumption.

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#### 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.



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## Bacteriological Analysis of Drinking Water Sample Collection Information Form

### Sample Collection Information

|  |               |
|--|---------------|
| Community from which sample was collected:       | Baker Lake    |
| Location of sample collection:                   | Health Centre |
| Date of sample collection:                       | 29-10-13      |
| Time of sample collection:                       | 13:12         |
| Name of person who collected sample:             | A. Mougassid  |
| Telephone number of person who collected sample: | 867 793 2744  |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli per 100ml: |
| Date Read:                | Read by:           |

☐

#### No Significant Evidence of Bacteriological Contamination

Sample collected is bacteriologically safe for human consumption.

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#### 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.



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Phone: (867) 645-8273

Fax: (867) 645-8274



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## Bacteriological Analysis of Drinking Water Sample Collection Information Form

### Sample Collection Information

|  |                  |
|--|------------------|
| Community from which sample was collected:       | Baker Lake       |
| Location of sample collection:                   | Martha-T. Centre |
| Date of sample collection:                       | 24-10-13         |
| Time of sample collection:                       | 14:10            |
| Name of person who collected sample:             | A. Moughal       |
| Telephone number of person who collected sample: | 867 793-2744     |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli per 100ml: |
| Date Read:                | Read by: M/G       |

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#### No Significant Evidence of Bacteriological Contamination

Sample collected is bacteriologically safe for human consumption.

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#### 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.



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## Bacteriological Analysis of Drinking Water Sample Collection Information Form



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### Sample Collection Information

|  |                |
|--|----------------|
| Community from which sample was collected:       | Baker Lake     |
| Location of sample collection:                   | Truck 77       |
| Date of sample collection:                       | 29-10-2013     |
| Time of sample collection:                       | 11:15          |
| Name of person who collected sample:             | A. Noughtassid |
| Telephone number of person who collected sample: | 867 793 2344   |

### For Laboratory Use Only

|                           |                    |
|---------------------------|--------------------|
| Date Received:            |                    |
| Date Processed:           | Processed by:      |
| Results                   |                    |
| Total Coliform per 100ml: | E. coli per 100ml: |
| Date Read:                | Read by:           |

☐

#### No Significant Evidence of Bacteriological Contamination

Sample collected is bacteriologically safe for human consumption.

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#### Significant Evidence of Bacteriological Contamination

Sample collected may be unsafe for human consumption as bacteriological contamination is present.  
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Sample collected is unsafe for human consumption as fecal contamination is present.  
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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.