P.O. BOX 157
SANIKILUAQ, NUNAVUT
X0A 0W0

RBC ROYAL BANK
IQALUIT BRANCH
P.O. BOX 190
IQALUIT, NU X0A 0H0

46081

46081

DATE 11/13/2013
M M D D Y Y Y Y

PAY **Thirty and 00/100 Dollars

$ **30.00

TO THE ORDER OF
Reciever General of Canada
c/o Sarah Doak
60 Queen Street
Suite 1400
Ottawa, Ontario K1A 0K9
Canada

PER

⑈046081⑈ ⑆09851-003⑆ 100-305-2⑈

MUNICIPALITY OF SANIKILUAQ

Reciever General of Canada

CHEQUE 11/13/2013 46081

Check No: 46081

~~WATERDELIVERY~~ Water Licence CM	11/13/2013	30.00	0.00	30.00
		30.00	0.00	30.00

MUNICIPALITY OF SANIKILUAQ

Reciever General of Canada

Check No: 46081

11/13/2013 46081

WATERDELIVERY	11/13/2013	30.00	0.00	30.00
		30.00	0.00	30.00

P.O. Box 119
Gjoa Haven, NU X0B 1J0
Tel: (867) 360-6338
Fax: (867) 360-6369

kNK5 wmoEp5 vtmp5
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYIT
OFFICE DES EAUX DU NUNAVUT

APPLICATION FOR WATER LICENEC RENEWAL

Your application may be classified as a **renewal** only if all operations remain the same as previously licensed and only the term of the licence requires change. If your application contemplates:

- a change to the volume of water authorized for use;
- a new activity related to water use or waste disposal;
- a new component related to water use or waste disposal;
- a change in predicted environmental impacts(s); and/or
- a change to any term or condition of the original licence

your application is **NOT** classified as a renewal but rather an amendment and will require submission of an Application for Water Licence Amendment. Licensees applying for combined renewal / amendment are also referred to the Application for Water Licence Amendment.

The applicant is referred to the NWB's Guide 7: *Licensee Requirements Following the Issuance of a Water Licence* for more information about this application form.

EXISTING LICENCE NO: 3BM-SAN 1214

1. LICENSEE CONTACT INFORMATION:

Is the licensee the same as that referred to on the existing licence?

☒ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB. **A renewal will only be issued in the name of the current licensee in the absence of assignment of the licence.**

If the licensee is the same, but the name of the licensee has changed, attach a certificate of name change.

Name: Daryl Dibblee (Acting SAO)

Address: Hamlet of Sanikiluaq; Box 157, X0A 0W0

Phone: 867 266 7900
Fax: 867 266 7924
e-mail: sanisao@qiniq.com

2. LICENSEE REPRESENTATIVE CONTACT INFORMATION:– If different from Block 1.

Name: Daryl Dibblee (Acting SAO)

Address: Hamlet of Sanikiluaq, Box 157, X0A 0W0

Phone: 867 266 7900
Fax: 867 266 7924
e-mail: sanisao@qiniq.com

3. NAME OF PROJECT:

Is the name of the project the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the name of the project including the name of the location: Hamlet of Sanikiluaq

Water supply (WTFS), Wastewater Treatment (Natural sewage Lagoon) and waste management (land fill) are the three projects under the expired water license. A new sewage lagoon is under design stage. The site plan attached shows the relative locations of these facilities.

4. LOCATION OF UNDERTAKING:

Is the location of the undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

Project Extents

NW:	Latitude: (56 ° 32 ' 0 " N)	Longitude: (79 ° 14 ' 0 " W)
NE:	Latitude: (° ' " N)	Longitude: (° ' " W)
SE:	Latitude: (° ' " N)	Longitude: (° ' " W)
SW:	Latitude: (° ' " N)	Longitude: (° ' " W)

Camp Location(s): Not applicable.

Latitude: (° ' " N) Longitude: (° ' " W)

5. MAP

Are the locations of the main components of the undertaking the same as those considered in the existing licence?

☒ Yes ☐ No

Attach a topographical map, indicating the main components of the undertaking. Attached site plan of the new sewage lagoon.

- A Site Plan is attached showing all the existing Environmental Facilities and the proposed new Sewage lagoon location.

NTS Map Sheet No.: _____ Map Name: _____ Map Scale: _____

6. NATURE OF INTEREST IN THE LAND:

Is the nature of the interest in the land the same as that considered in the existing water licence?

X☐ Yes ☐ No

Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

Surface

☐ Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

X☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other _____
Date (expected date) of issuance: _____ Date of expiry: _____

Is the name of the entity(s) holding authorizations the same as that considered in the existing water licence?

X☐ Yes ☐ No

If No, a licence assignment must be completed and approved by the NWB.

Name of entity(s) holding authorizations:
_____

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION:

Is the undertaking located in the same land use planning area as that considered in the existing licence?

X☐ Yes ☐ No

Indicate the land use planning area in which the project is located.

☐ North Baffin	☐ Keewatin
X☐ South Baffin	☐ Sanikiluaq
☐ Akunniq	☐ West Kitikmeot

Was a land use plan conformity determination required from NPC prior to the issuance of the existing water licence?

☐ Yes X☐ No

If Yes, indicate date issued and attach copy. _____

Does the proposed renewal change the original NPC conformity determination or the need to obtain one?

☐ Yes ☐X No

If Yes, indicate date issued (or expected) and attach a copy. _____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION:

Was a screening determination required from NIRB prior to the issuance of the existing water licence?

☐ Yes ☐X No

If Yes, indicate date issued and attach copy. _____

Does the proposed renewal change the original NIRB screening determination or the need to obtain one?

☐ Yes ☐X No

If Yes, indicate date issued (or expected) and attach a copy. _____
If No, provide written confirmation from NIRB confirming that a screening determination is not required.

9. DESCRIPTION OF UNDERTAKING:

Is the description of the undertaking the same as that considered in the existing water licence?

X☐ Yes ☐ No

List and attach plans and drawings or project proposal.

- Yes, Please see details in the forwarding letter.

10. OPTIONS:

Are the alternative methods and locations that were considered to carry out the project the same as those considered in the existing water licence?

☒ Yes ☐ No

Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

- The new Sewage Lagoon is located next to the existing Lagoon as shown in the attached site Plan. The attached site Plan will show the relative locations of all the existing Environmental facilities under the License.

11. CLASSIFICATION OF PRIMARY UNDERTAKING:

Is the primary undertaking the same as that considered in the existing water licence?

☒ Yes ☐ No

Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial
☐ Agricultural
☐ Mining and Milling (includes exploration/drilling/exploration camps)
☐ Conservation
☒ Municipal
☐ Power
☐ Recreational
☐ Miscellaneous (describe below):

_____

See Schedule II of the *Northwest Territories Waters Regulations* for Description of Undertakings.

12. WATER USE:

Is the type(s) of water use(s) the same as that considered in the existing water licence?

☒ Yes ☐ No

Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

☒ To obtain water for municipal purposes
☐ To obtain water for industrial purposes
☐ To cross a watercourse
☐ To alter the flow of, or store water
☐ Other: _____
☐ To divert a watercourse
☐ To modify the bed or bank of a watercourse
☐ Flood control

13. QUANTITY OF WATER INVOLVED:

Is the source of water the same as that considered in the existing licence? ☒ Yes ☐ No

Name of water source(s): Sanikiluaq Lake

(show location(s) on map): The Location is shown in the attached site Plan.

Is the quality of the water source and its available capacity the same as that considered in the existing licence?

X☐ Yes ☐ No

Describe the quality of the water source(s) and the available capacity(s):

- The test results for 2012 are attached.

Is the overall estimated quantity of water to be used the same as that considered in the existing licence?

X☐ Yes ☐ No

Provide the overall estimated quantity of water to be used: 108.54 m^3/day

Are the quantity(s) of water to be used from each source the same as those considered in the existing licence?

X☐ Yes ☐ No

Provide the estimated quantity(s) of water to be used from each source: 108.54 m^3/day.

Are the quantity(s) of water to be used for each purpose the same as those considered in the existing licence?

X☐ Yes ☐ No

Provide the estimated quantities to be used for each purpose (camp, drilling, etc.): 108.54 m^3/day.

Note: Consumption volume in average is 90.45 m^3/day. Extraction volume is estimated 1.20 times of the consumption volume=108.54 m^3/day.

Are the method(s) of extraction the same as those considered in the existing licence? X☐ Yes ☐ No

Describe the method(s) of extraction: Extraction using submersible pumps

Are the quantity(s) of water returned to source(s) the same as those considered in the existing licence?

X☐ Yes ☐ No

Estimated quantity(s) of water returned to source(s): 108.54 m^3/day

Are the quality(s) of water(s) returned to source(s) the same as those considered in the existing licence?

☐X Yes ☐ No

Describe the quality(s) of water(s) returned to source(s):

- Shown in the Lab test results attached.

14. WASTE:

Are the type(s) of waste(s) to be generated and/ or deposited the same as those considered in the existing licence?

X☐ Yes ☐ No

Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

X☐ Sewage
X☐ Solid Waste
X☐ Hazardous
X☐ Bulky Items/Scrap Metal
X☐ Animal Waste
☐ Other (describe):_____

X☐ Waste oil
X☐ Greywater
X☐ Sludges
X☐ Contaminated soil and/or water

15. QUANTITY AND QUALITY OF WASTE INVOLVED:

Are the quantity(s) of the types of wastes involved the same as those considered in the existing licence?

X☐ Yes ☐ No

Are the composition(s) of the types of wastes involved the same as those considered in the existing licence?

X☐ Yes ☐ No

Are the method(s) of treatment for the types of waste involved the same as those considered in the existing licence?

X☐ Yes ☐ No

Are the method(s) of disposal for the types of waste involved the same as those considered in the existing licence?

X☐ Yes ☐ No

For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal. Not applicable

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method

16. OTHER AUTHORIZATIONS: N/A

In addition to the sub-surface and surface land use authorizations provided in Block 6, are the same authorizations required as considered in the existing licence?

☐ Yes X☐ No

For each provide the following:

Authorization: _____

Administering Agency: _____

Project Activity: _____

Date (expected date) of issuance: _____ Date of expiry: _____

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES:

Are predicted environmental impacts of the undertaking and proposed mitigation measures the same as those considered in the existing water licence?

X☐ Yes ☐ No

Describe direct, indirect, and cumulative impacts related to water and waste:

- These have impact to human life and Environment.

18. WATER RIGHTS OF EXISTING AND OTHER WATER USERS:

Are the effects of the undertaking on any known persons or property including those that hold licences for water use in precedence to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature, the same as those considered in the existing water licence?

X☐ Yes ☐ No

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

19. INUIT WATER RIGHTS:

Are the effects of the undertaking on the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL) the same as those considered in the existing water licence?

X☐ Yes ☐ No

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned

Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

20. CONSULTATION: - Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

- **Hamlet COUNCIL meeting notes are attached.**

21. SECURITY INFORMATION: Not applicable:

Is the financial security assessment the same as that considered in the existing water licence?

☐ Yes X☐ No

Is the estimate of the total financial security for final reclamation the same as that considered in the existing water licence?

☐ Yes X☐ No

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut*, Indian and Northern Affairs Canada, 2002.

22. FINANCIAL INFORMATION: Not applicable:

Is the statement of financial security the same as that considered in the existing water licence?

☐ Yes X☐ No

Provide an updated statement of financial security.

If the applicant is a business entity please answer the questions below:

Is the list of the officers of the company the same as those considered in the existing water licence?

☐ Yes X☐ No

Provide a list of the officers of the company.

Is the Certificate of Incorporation or evidence of registration of the company name the same?

☐ Yes X☐ No

Attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

23. STUDIES UNDERTAKEN TO DATE:

List and attach updated studies, reports, research etc.

- Spill Contingency for granular operation
- Geotechnical investigation report: It will be followed once completed.
- Design Brief of Water Truck fill station
- Technical assessment of the deficiencies of the WTFS
- As built drawings of WTFS

Provide a compliance assessment and status report including a response to any inspector's reports. The licensee must contact the NWB for licence specific direction in completing the assessment and report.

If in non-compliance, a licence may not be issued until compliance is achieved. If in non-compliance, attach plans/reports for consideration. Application will not be processed if significant issues of non-compliance exist.

- A Compliance Plan is attached.

24. PROPOSED TIME SCHEDULE

Is the time schedule for all phases of development (construction, operations, closure and post closure) the same as that considered in the existing licence?

X☐ Yes ☐ No

Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction
Proposed Start Date:_____ (month/year) Proposed Completion Date:_____ (month/year)

Operation
Proposed Start Date:_____ (month/year) Proposed Completion Date:_____ (month/year)

Closure
Proposed Start Date:_____ (month/year) Proposed Completion Date:_____ (month/year)

Post - Closure
Proposed Start Date:_____ (month/year) Proposed Completion Date:_____ (month/year)

For each applicable phase of development indicate which season(s) activities occur.

Construction
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Operation
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall ☐ All season

25. PROPOSED TERM OF LICENCE

On what date does the existing licence expire? March 1, 2014

Indicate the proposed term of the renewal (maximum of 25 years): 5 yrs, from March 1, 2014 to March 1, 2019.

Requested date of renewal issuance: March 01,2014 (month/year) Requested Expiry Date: March 01,2019 (month/year)

(The requested date of renewal issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING

Is the annual report template expected to be the same as that considered in the existing licence?

X☐ Yes ☐ No

If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

27. CHECKLIST

The following must be included with the application for renewal for the water licensing process to begin.

Completed Application for Water Licence Renewal form.

X☐ Yes ☐ No If no, date expected _____

Updated plans, including designs and reports (see Block 23).

X☐ Yes ☐ No If no, date expected _____

Updated security assessment (see Block 21).

☐ Yes X☐ No If no, date expected _____

Updated financial statement (see Block 22).

☐ Yes X☐ No If no, date expected _____

Compliance Assessment / Status Report (see Block 23).

X☐ Yes ☐ No If no, date expected _____

English Summary of Renewal Application.

X☐ Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Renewal Application.

X☐ Yes ☐ No If no, date expected _____

Application fee of $30.00 CDN (Payee Receiver General for Canada).

X☐ Yes ☐ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

☐ Yes X☐ No If no, date expected _____

28. SIGNATURE

I, Daryl Dobblee ,certify that the application requires no changes to water use or waste disposal as previously authorized and that the information given on this form is, to the best of my knowledge, correct and complete.

Signature

Nov. 13, 2013
Date

ANNUAL REPORT
FOR THE HAMLET OF SANIKILUAQ, 2012

YEAR BEING REPORTED: 2012

The following information is compiled pursuant to the requirements of Part B, Item 1 of Water License # 3 NWB -SAN 1214 issued to the Hamlet of Sanikiluaq.

i) - iii) tabular summaries of all data generated under the "Monitoring Program"; monthly and annual quantities in cubic metres of freshwater obtained from all sources; monthly and annual quantities in cubic metres of each and all wastes discharged;

Attached are quantities of water used as reported in our On Tap Water Delivery System and the estimated discharge of sewage waste based on quantities used.

Month Reported	Quantity of Water Obtained from all sources (litres)	Quantity of Sewage Waste Discharged (Estimated)
January 2012	2,462,223.40	Same
February 2012	2,456,945.50	Same
March 2012	2,678,975.90	Same
April 2012	2,502,260.50	Same
May 2012	2,761,450.40	Same
June 2012	2,702,899.70	Same
July 2012	2,578,328.88	Same
August 2012	2,667,042.30	Same
September 2012	2,590,431.60	Same
October 2012	2,971,867.90	Same
November 2012	2,749,486.00	Same
December 2012	2,496,365.20	Same
ANNUAL TOTAL	31,618,277.28	31,618,277.28

Note: There is no meter existing at the discharge pipe. Therefore the monthly discharge is considered as equal to the monthly water consumption.

iv. a summary of modifications and/or major maintenance work carried out on the Water Supply and Waste Disposal Facilities, including all associated structures and facilities;

Water Truck fill station has been rehabilitated and upgraded. Maintenance works will be carried out as needed basis. Design of Sewage Lagoon is in progress.

v. a list of unauthorized discharges and summary of follow-up action taken;

Nil

vi. a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

Once the new Sewage lagoon is built and commissioned, the existing ditch so called lagoon will be abandoned and restored.

vii. a summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;

The studies on solid waste management was completed. Waiting for the direction from CGS Capital Planning. Design of the Sewage Lagoon is in progress.

viii. any other details on water use or waste disposal requested by the Board by November 1st of the year being reported; and

Wastes management in the Community are the concerns of the Nunavut Water Board.

ix. updates or revisions to the approved Operation and Maintenance Plans.

O&M manual of the Truck fill station has been updated. The O&M manual of the new Sewage Lagoon will be prepared and made available once the new facility is built and commissioned.

ADDITIONAL INFORMATION THAT THE LICENSEE DEEMS USEFUL:

Improvement of the Solid waste management and Fencing.

FOLLOW-UP REGARDING INSPECTION/COMPLIANCE CONCERNS:

Hamlet is working with CGS for Water License Compliancy. Hamlet has started

extended sampling and testing program of Water, Wastewater and Leachate coming from the landfill site.


L1216768_COA.PDF


L1257223_COA.PDF


L1260495_SRC.pdf

Municipality of Sanikiluaq
ATTN: ANDRE LARABIE SAO
PO Box 157
Sanikiluaq NU X0A 0W0

Date Received: 28-SEP-12
Report Date: 17-OCT-12 19:47 (MT)
Version: FINAL

Client Phone: 867-266-7900

Certificate of Analysis

Lab Work Order #: **L1216768**
Project P.O. #: NOT SUBMITTED
Job Reference: HAMLET OF SANIKILUAQ WWTP
C of C Numbers:
Legal Site Desc:

Gail Hill
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1216768-1 SANIKILUAQ - SANI 2							
Sampled By: SEAN PHILLIPS on 26-SEP-12 @ 09:00							
Matrix: WASTEWATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
Toluene	<0.0010		0.0010	mg/L		06-OCT-12	R2448472
Ethyl benzene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
o-Xylene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
m+p-Xylenes	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
Xylenes	<0.0015		0.0015	mg/L		06-OCT-12	R2448472
F1 (C6-C10)	<0.10		0.10	mg/L		06-OCT-12	R2448472
Surrogate: 4-Bromofluorobenzene (SS)	92.3		70-130	%		06-OCT-12	R2448472
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-OCT-12	
F2-Naphth	<0.25		0.25	mg/L		10-OCT-12	
F3-PAH	<0.25		0.25	mg/L		10-OCT-12	
Total Hydrocarbons (C6-C50)	<0.44		0.44	mg/L		10-OCT-12	
F2-F4 PHC method							
F2 (C10-C16)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
F3 (C16-C34)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
F4 (C34-C50)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
Surrogate: 2-Bromobenzotrifluoride	94.8		65-135	%	29-SEP-12	29-SEP-12	R2446755
Miscellaneous Parameters							
Ammonia, Total (as N)	<0.010		0.010	mg/L		01-OCT-12	R2447410
Biochemical Oxygen Demand	<6.0		6.0	mg/L	29-SEP-12	04-OCT-12	R2448952
BOD Carbonaceous	<6.0		6.0	mg/L	29-SEP-12	04-OCT-12	R2448951
Fecal Coliforms	23		3	MPN/100mL		02-OCT-12	R2448486
Phenols (4AAP)	<0.0010		0.0010	mg/L	05-OCT-12	05-OCT-12	R2450272
Phosphorus (P)-Total	<0.010		0.010	mg/L		04-OCT-12	R2449172
Total Organic Carbon	3.6		1.0	mg/L		05-OCT-12	R2451620
Total Suspended Solids	<5.0		5.0	mg/L		01-OCT-12	R2447372
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Acenaphthene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Acenaphthylene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Anthracene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Acridine	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(a)anthracene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Chrysene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Fluoranthene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Fluorene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Naphthalene	<0.000050		0.000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Phenanthrene	<0.000050		0.000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Pyrene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Quinoline	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	03-OCT-12	09-OCT-12	R2452323
Surrogate: Acenaphthene d10	96.6		50-150	%	03-OCT-12	09-OCT-12	R2452323

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1216768-1 SANIKILUAQ - SANI 2							
Sampled By: SEAN PHILLIPS on 28-SEP-12 @ 09:00							
Matrix: WASTEWATER							
Polyaromatic Hydrocarbons (PAHs)							
Surrogate: Acridine d9	95.4		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Chrysene d12	75.2		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Naphthalene d8	89.1		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Phenanthrene d10	96.3		50-150	%	03-OCT-12	09-OCT-12	R2452323
ROU4W total							
Alkalinity							
Alkalinity, Total (as CaCO3)	209		20	mg/L		29-SEP-12	R2446360
Bicarbonate (HCO3)	250		24	mg/L		29-SEP-12	R2446360
Carbonate (CO3)	<12		12	mg/L		29-SEP-12	R2446360
Hydroxide (OH)	<6.8		6.8	mg/L		29-SEP-12	R2446360
Chloride by Ion Chromatography							
Chloride	58.5		0.50	mg/L		29-SEP-12	R2448095
Conductivity							
Conductivity	573		20	umhos/cm		29-SEP-12	R2446360
Fluoride by Ion Chromatography							
Fluoride	<0.10		0.10	mg/L		29-SEP-12	R2448095
Hardness Calculated							
Hardness (as CaCO3)	256		0.30	mg/L		11-OCT-12	
Nitrate as N by Ion Chromatography							
Nitrate-N	0.166		0.050	mg/L		29-SEP-12	R2448095
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.166		0.071	mg/L		03-OCT-12	
Nitrite as N by Ion Chromatography							
Nitrite-N	<0.050		0.050	mg/L		29-SEP-12	R2448095
Sulfate by Ion Chromatography							
Sulfate	58.9		0.50	mg/L		29-SEP-12	R2448095
TDS calculated							
TDS (Calculated)	392		5.0	mg/L		11-OCT-12	
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.032		0.020	mg/L	09-OCT-12	10-OCT-12	R2453446
Antimony (Sb)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Arsenic (As)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Barium (Ba)-Total	0.0175		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Beryllium (Be)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Bismuth (Bi)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Boron (B)-Total	0.181		0.030	mg/L	09-OCT-12	10-OCT-12	R2453446
Cadmium (Cd)-Total	<0.00020		0.00020	mg/L	09-OCT-12	10-OCT-12	R2453446
Calcium (Ca)-Total	61.8		0.20	mg/L	09-OCT-12	10-OCT-12	R2453446
Cesium (Cs)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Chromium (Cr)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Cobalt (Co)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Copper (Cu)-Total	0.0059		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Iron (Fe)-Total	<0.10		0.10	mg/L	09-OCT-12	10-OCT-12	R2453446
Lead (Pb)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Lithium (Li)-Total	0.0036		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Magnesium (Mg)-Total	24.6		0.050	mg/L	09-OCT-12	10-OCT-12	R2453446
Manganese (Mn)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Molybdenum (Mo)-Total	0.00103		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Phosphorus (P)-Total	<0.50		0.50	mg/L	09-OCT-12	10-OCT-12	R2453446
Potassium (K)-Total	4.13		0.10	mg/L	09-OCT-12	10-OCT-12	R2453446
Rubidium (Rb)-Total	0.00172		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1216768-1 SANIKILUAQ - SANI 2							
Sampled By: SEAN PHILLIPS on 28-SEP-12 @ 09:00							
Matrix: WASTEWATER							
Total Metals by ICP-MS							
Selenium (Se)-Total	<0.0050		0.0050	mg/L	09-OCT-12	10-OCT-12	R2453446
Silicon (Si)-Total	1.91		0.30	mg/L	09-OCT-12	10-OCT-12	R2453446
Silver (Ag)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Sodium (Na)-Total	58.4		0.050	mg/L	09-OCT-12	10-OCT-12	R2453446
Strontium (Sr)-Total	0.179		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Tellurium (Te)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Thallium (Tl)-Total	<0.0050		0.0050	mg/L	09-OCT-12	10-OCT-12	R2453446
Thorium (Th)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Tin (Sn)-Total	<0.00060		0.00060	mg/L	09-OCT-12	10-OCT-12	R2453446
Titanium (Ti)-Total	0.0012		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Tungsten (W)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Uranium (U)-Total	0.00412		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Vanadium (V)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Zinc (Zn)-Total	<0.020		0.020	mg/L	09-OCT-12	10-OCT-12	R2453446
Zirconium (Zr)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Turbidity							
Turbidity	0.21		0.10	NTU		29-SEP-12	R2445980
pH							
pH	8.32		0.10	pH units		29-SEP-12	R2446360
L1216768-2 SANIKILUAQ - SANI 4							
Sampled By: SEAN PHILLIPS on 28-SEP-12 @ 09:00							
Matrix: WASTEWATER							
BTEX plus F1-F4							
BTX plus F1 by GCMS							
Benzene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
Toluene	<0.0010		0.0010	mg/L		06-OCT-12	R2448472
Ethyl benzene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
o-Xylene	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
m+p-Xylenes	<0.00050		0.00050	mg/L		06-OCT-12	R2448472
Xylenes	<0.0015		0.0015	mg/L		06-OCT-12	R2448472
F1 (C6-C10)	<0.10		0.10	mg/L		06-OCT-12	R2448472
Surrogate: 4-Bromofluorobenzene (SS)	105.5		70-130	%		06-OCT-12	R2448472
CCME Total Hydrocarbons							
F1-BTEX	<0.10		0.10	mg/L		10-OCT-12	
F2-Naphth	<0.25		0.25	mg/L		10-OCT-12	
F3-PAH	<0.25		0.25	mg/L		10-OCT-12	
Total Hydrocarbons (C6-C50)	<0.44		0.44	mg/L		10-OCT-12	
F2-F4 PHC method							
F2 (C10-C16)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
F3 (C16-C34)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
F4 (C34-C50)	<0.25		0.25	mg/L	29-SEP-12	29-SEP-12	R2446755
Surrogate: 2-Bromobenzotrifluoride	88.0		65-135	%	29-SEP-12	29-SEP-12	R2446755
Miscellaneous Parameters							
Ammonia, Total (as N)	<0.010		0.010	mg/L		01-OCT-12	R2447410
Biochemical Oxygen Demand	<6.0		6.0	mg/L	29-SEP-12	04-OCT-12	R2448952
BOD Carbonaceous	<6.0		6.0	mg/L	29-SEP-12	04-OCT-12	R2448951
Fecal Coliforms	<3		3	MPN/100mL		02-OCT-12	R2448486
Oil and Grease, Total	<2.0		2.0	mg/L	02-OCT-12	02-OCT-12	R2447533
Phenols (4AAP)	<0.0010		0.0010	mg/L	05-OCT-12	05-OCT-12	R2450272
Phosphorus (P)-Total	0.058		0.010	mg/L		04-OCT-12	R2449172

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1216768-2 SANIKILUAQ - SANI 4							
Sampled By: SEAN PHILLIPS on 28-SEP-12 @ 09:00							
Matrix: WASTEWATER							
Total Organic Carbon	6.7		1.0	mg/L		05-OCT-12	R2451620
Total Suspended Solids	<5.0		5.0	mg/L		01-OCT-12	R2447372
Polyaromatic Hydrocarbons (PAHs)							
1-Methyl Naphthalene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
2-Methyl Naphthalene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Acenaphthene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Acenaphthylene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Anthracene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Acridine	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(a)anthracene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(a)pyrene	<0.0000050		0.0000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(b&j)fluoranthene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(g,h,i)perylene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Benzo(k)fluoranthene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Chrysene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Dibenzo(a,h)anthracene	<0.0000050		0.0000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Fluoranthene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Fluorene	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
Indeno(1,2,3-cd)pyrene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Naphthalene	<0.000050		0.000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Phenanthrene	<0.000050		0.000050	mg/L	03-OCT-12	09-OCT-12	R2452323
Pyrene	<0.000010		0.000010	mg/L	03-OCT-12	09-OCT-12	R2452323
Quinoline	<0.000020		0.000020	mg/L	03-OCT-12	09-OCT-12	R2452323
B(a)P Total Potency Equivalent	<0.000030		0.000030	mg/L	03-OCT-12	09-OCT-12	R2452323
Surrogate: Acenaphthene d10	96.1		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Acridine d9	94.2		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Chrysene d12	77.5		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Naphthalene d8	88.7		50-150	%	03-OCT-12	09-OCT-12	R2452323
Surrogate: Phenanthrene d10	95.5		50-150	%	03-OCT-12	09-OCT-12	R2452323
ROU4W total							
Alkalinity							
Alkalinity, Total (as CaCO3)	172		20	mg/L		29-SEP-12	R2446360
Bicarbonate (HCO3)	209		24	mg/L		29-SEP-12	R2446360
Carbonate (CO3)	<12		12	mg/L		29-SEP-12	R2446360
Hydroxide (OH)	<6.8		6.8	mg/L		29-SEP-12	R2446360
Chloride by Ion Chromatography							
Chloride	678		2.5	mg/L		29-SEP-12	R2448095
Conductivity							
Conductivity	2660		20	umhos/cm		29-SEP-12	R2446360
Fluoride by Ion Chromatography							
Fluoride	<0.50	DLM	0.50	mg/L		29-SEP-12	R2448095
Hardness Calculated							
Hardness (as CaCO3)	580		0.30	mg/L		17-OCT-12	
Nitrate as N by Ion Chromatography							
Nitrate-N	<0.25	DLM	0.25	mg/L		29-SEP-12	R2448095
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.35		0.35	mg/L		03-OCT-12	
Nitrite as N by Ion Chromatography							
Nitrite-N	<0.25	DLM	0.25	mg/L		29-SEP-12	R2448095
Sulfate by Ion Chromatography							
Sulfate	163		2.5	mg/L		29-SEP-12	R2448095
TDS calculated							
TDS (Calculated)	1460		5.0	mg/L		17-OCT-12	

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1216768-2 SANIKILUAQ - SANI 4							
Sampled By: SEAN PHILLIPS on 28-SEP-12 @ 09:00							
Matrix: WASTEWATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	<0.020		0.020	mg/L	09-OCT-12	10-OCT-12	R2453446
Antimony (Sb)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Arsenic (As)-Total	0.0013		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Barium (Ba)-Total	0.0171		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Beryllium (Be)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Bismuth (Bi)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Boron (B)-Total	0.186		0.030	mg/L	09-OCT-12	10-OCT-12	R2453446
Cadmium (Cd)-Total	<0.00020		0.00020	mg/L	09-OCT-12	10-OCT-12	R2453446
Calcium (Ca)-Total	125		0.20	mg/L	09-OCT-12	10-OCT-12	R2453446
Cesium (Cs)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Chromium (Cr)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Cobalt (Co)-Total	<0.00050		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Copper (Cu)-Total	0.0024		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Iron (Fe)-Total	<0.10		0.10	mg/L	09-OCT-12	10-OCT-12	R2453446
Lead (Pb)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Lithium (Li)-Total	0.0133		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Magnesium (Mg)-Total	65.2		0.050	mg/L	09-OCT-12	10-OCT-12	R2453446
Manganese (Mn)-Total	0.0069		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Molybdenum (Mo)-Total	0.00709		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Phosphorus (P)-Total	<0.50		0.50	mg/L	09-OCT-12	10-OCT-12	R2453446
Potassium (K)-Total	7.78		0.10	mg/L	09-OCT-12	10-OCT-12	R2453446
Rubidium (Rb)-Total	0.00181		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Selenium (Se)-Total	0.0051		0.0050	mg/L	09-OCT-12	10-OCT-12	R2453446
Silicon (Si)-Total	2.10		0.30	mg/L	09-OCT-12	10-OCT-12	R2453446
Silver (Ag)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Sodium (Na)-Total	318	DLA	0.50	mg/L	09-OCT-12	15-OCT-12	R2457073
Strontium (Sr)-Total	0.633		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Tellurium (Te)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Thallium (Tl)-Total	<0.0050		0.0050	mg/L	09-OCT-12	10-OCT-12	R2453446
Thorium (Th)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Tin (Sn)-Total	<0.00060		0.00060	mg/L	09-OCT-12	10-OCT-12	R2453446
Titanium (Ti)-Total	0.0030		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Tungsten (W)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Uranium (U)-Total	0.00478		0.00050	mg/L	09-OCT-12	10-OCT-12	R2453446
Vanadium (V)-Total	<0.0020		0.0020	mg/L	09-OCT-12	10-OCT-12	R2453446
Zinc (Zn)-Total	<0.020		0.020	mg/L	09-OCT-12	10-OCT-12	R2453446
Zirconium (Zr)-Total	<0.0010		0.0010	mg/L	09-OCT-12	10-OCT-12	R2453446
Turbidity							
Turbidity	0.23		0.10	NTU		29-SEP-12	R2445980
pH							
pH	8.19		0.10	pH units		29-SEP-12	R2446360

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

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
DLM	Detection Limit Adjusted For Sample Matrix Effects

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO3- and H2CO3 endpoints indicated electrometrically.

BOD-CBOD-WP	Water	Carbonaceous BOD	APHA 5210 B-5 day Incub.-O2 electrode

A sample of water is incubated for 5 days at 20 degrees Celcius. Comparison of dissolved oxygen content at beginning and end of incubation provides a measure of Biochemical oxygen demand. If carbonaceous BOD is requested, TCMP is added to the sample to chemically inhibit nitrogenous oxygen demand. If soluble BOD is requested, the sample is filtered prior to analysis.

BOD-WP	Water	Biochemical Oxygen Demand (BOD)	APHA 5210 B

The sample is incubated for 5 days at 20 degrees Celcius. Comparison of dissolved oxygen content at the beginning and end of incubation provides a measure of biochemical oxygen demand. If carbonaceous BOD is requested, TCMP is added to the sample to chemically inhibit nitrogenous oxygen demand. If soluble BOD is requested, the sample is filtered prior to analysis. Surface waters have a DL of 1 mg/L. Effluents are diluted according to their history and will have a sample DL of 6 mg/L or greater, depending on the dilutions used.

BTEXS+F1-HSMS-WP	Water	BTX plus F1 by GCMS	EPA SW846 8260B REV 2 SEPT 1994

The water sample, with added reagents, is heated in a sealed vial to equilibrium. The headspace from the vial is transfered into a gas chromatograph. Target compound concentrations are measured using mass spectrometry detection.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.
TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CL-IC-WP	Water	Chloride by Ion Chromatography	EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	HARDNESS CALCULATED
ETL-SOLIDS-CALC-WP	Water	TDS calculated	CALCULATION
F-IC-WP	Water	Fluoride by Ion Chromatography	EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

F1-F4-CALC-WP	Water	CCME Total Hydrocarbons	CCME CWS-PHC DEC-2000 - PUB# 1310-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:
1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:
1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F2-F4-WS-WP	Water	F2-F4 PHC method	EPA 3510/8000

This is the determination of the Petroleum Hydrocarbon fractions in water (F2, F3 and F4). A water sample volume of 200 mL in a 250 mL glass amber bottle is shaken with 10 mL hexane for two hours on a wrist action shaker, and then sonicated for 5 minutes. After extraction, the solvent layer is drawn off and analyzed against C10, C16 and C34 standards on a gas chromatograph equipped with a flame ionization detector.

FC-MPN-WP	Water	Fecal Coliform	APHA 9221A-C

The Most Probable Number (MPN) method is based on the Multiple Tube Fermentation technique. The results of examination of replicate tubes and dilutions of a sample are reported after confirmations specific to total coliform, fecal coliform and E. coli are performed. Results are reported in MPN/100 mL for water and MPN/gram for food and solid samples.

IONBALANCE-OP05-WP	Water	Ion Balance Calculation No Reporting	APHA 1030E
MET-T-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-T

Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analyis of metals by inductively coupled-mass spectrometery.

NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F

Ammonia in water samples forms indophenol when reacted with hypochlorite and phenol. The intensity is amplified by the addition of sodium nitroprusside and measured colourmetrically.

NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-WP	Water	Nitrite as N by Ion Chromatography	EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

NO3-IC-WP	Water	Nitrate as N by Ion Chromatography	EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

OGG-TOT-WT	Water	Oil and Grease, Total	APHA 5520 B

Sample is extracted with hexane, extract is then evaporated and the residue is weighed to determine total oil and grease.

P-T-COL-WP	Water	Phosphorus, Total	APHA 4500 P PHOSPHORUS

This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorous is determined colourimetrically after persulphate digestion of the sample.

PAH,PANH-WP	Water	Polyaromatic Hydrocarbons (PAHs)	EPA SW 846/8270-GC/MS

Water is spiked with a surrogate spike mix and extracted using solvent extraction techniques. Analysis is performed by GC/MS in the selected ion monitoring (SIM) mode.

PH-WP	Water	pH	APHA 4500H

The pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.

PHENOLS-4AAP-WT	Water	Phenol (4AAP)	EPA 9066

An automated method is used to distill the sample. The distillate is then buffered to pH 9.4 which reacts with 4AAP and potassium ferricyanide to form a red complex which is measured colorimetrically.

SO4-IC-WP	Water	Sulfate by Ion Chromatography	EPA 300.1 (modified)

Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.

SOLIDS-TOTSUS-WP	Water	Total Suspended Solids	APHA 2540 D (modified)

Total suspended solids in aqueous matrices is determined gravimetrically after drying the residue at 103 105 C.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
TURBIDITY-WP	Water	Turbidity	APHA 2130B (modified)

Turbidity in aqueous matrices is determined by the nephelometric method.

** 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
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

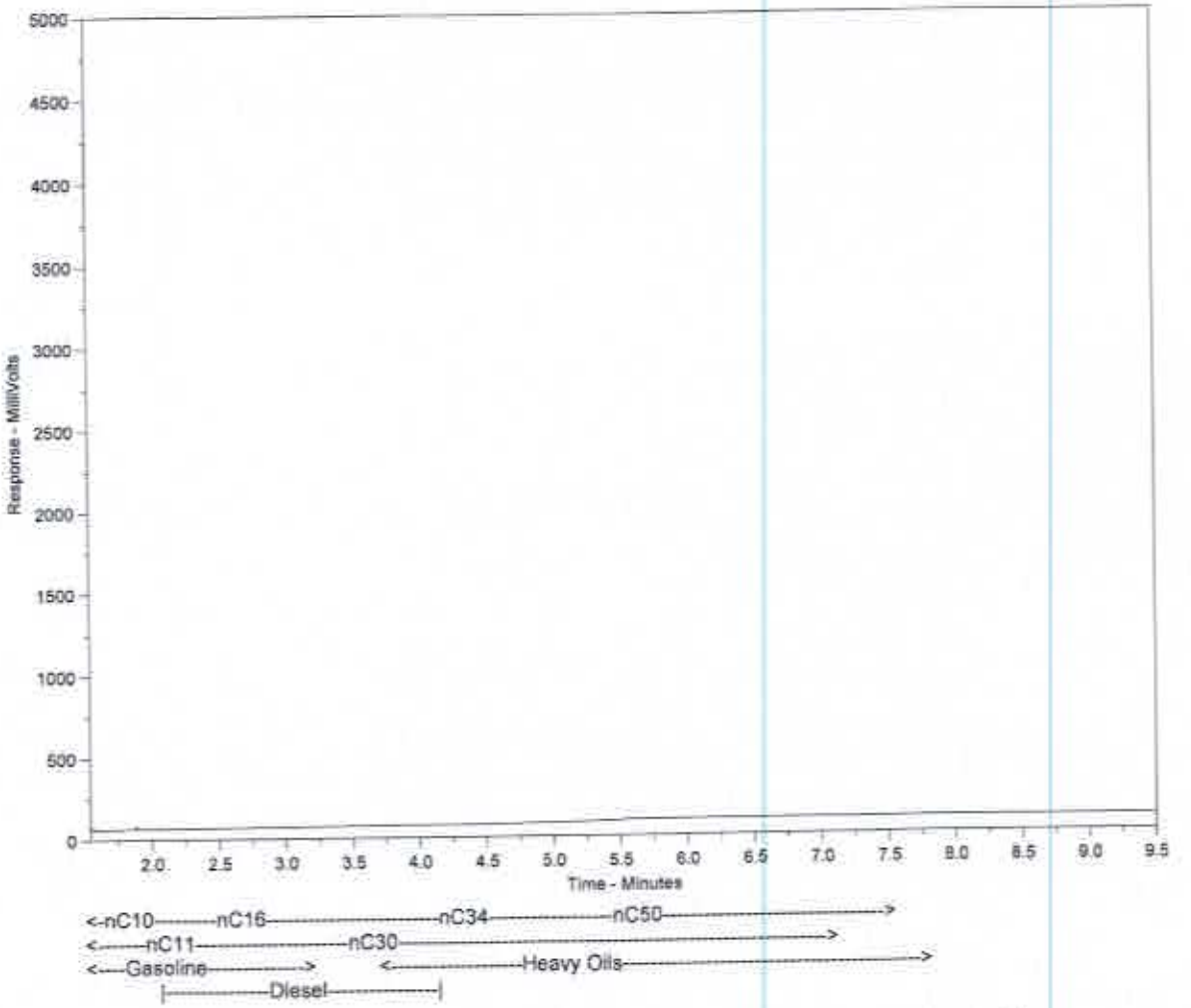
GLOSSARY OF REPORT TERMS

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.

Hydrocarbon Distribution Report

ALS Sample ID: L1216768-1
Client ID: SANIKILUAQ - SANI 2



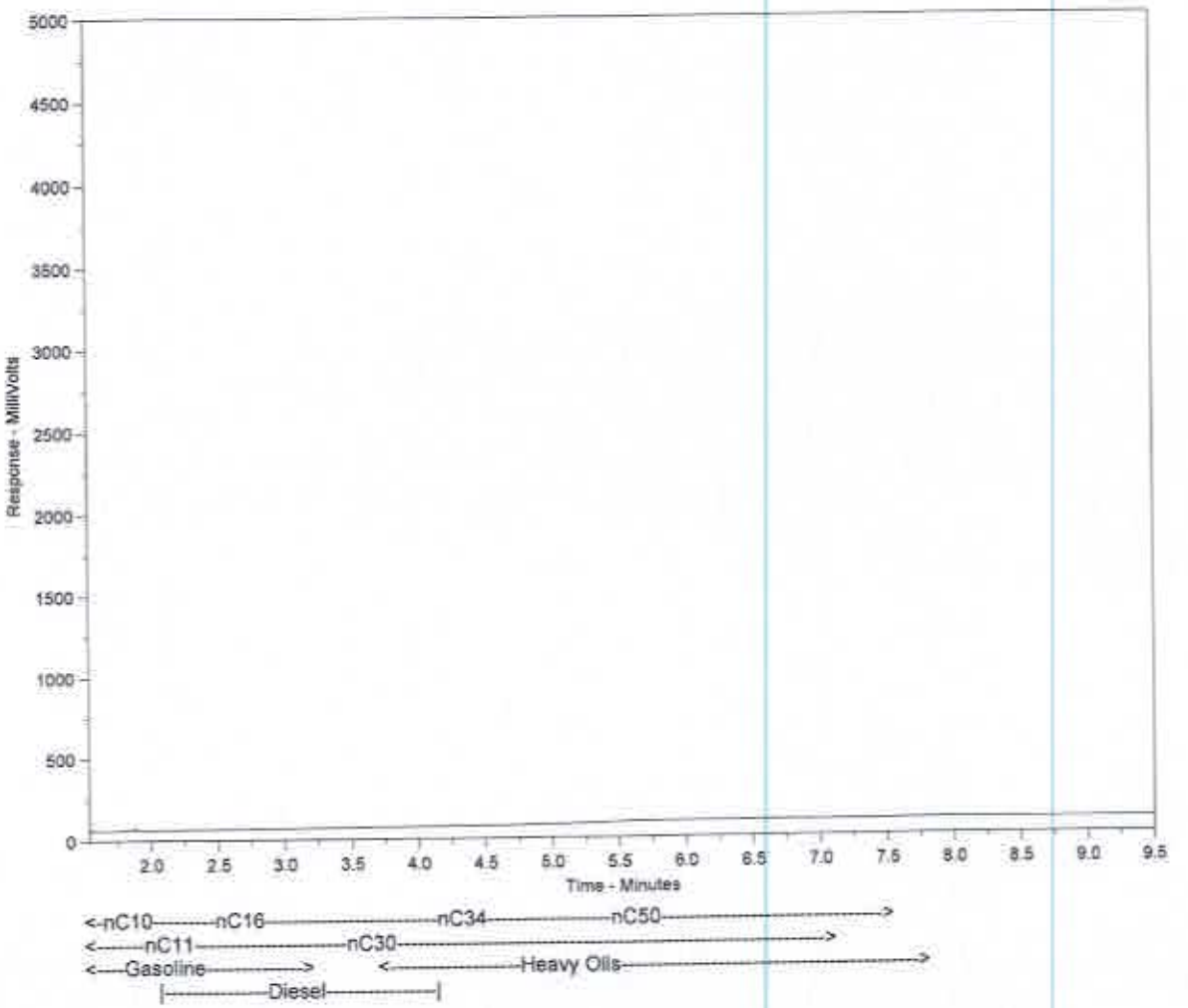
The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

Hydrocarbon Distribution Report

ALS Sample ID: L1216768-2
Client ID: SANIKILUAQ - SANI 4



The Canada Wide Standard Hydrocarbon Distribution Report is intended to assist you in characterizing hydrocarbon products that may be present in your sample. The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products as well as a number of specified n-alkane hydrocarbon marker compounds. Comparison of this report with those of reference standards may also assist in characterizing hydrocarbons present in the sample.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor, and the scale at left.

Note: This chromatogram was produced with a high temperature GC method that is specific to the Canada-Wide Standard method (December 2007 version). Note that retention times and distribution profiles from reports produced using different GC programs will differ.

ALS Environmental

L1216768-COFC

Form

COC # L1216768 Page ___ of ___

Report To					
Company:	Municipality of SANIKILUAQ	W10375	☐ Standard	☐ Other	
Contact:	ANDRE LARABIE SAO		☐ PDF	☐ Excel	☐ Digital ☐ Fax
Address:	Box 157		Email 1:	sanisao@qiniq.com	
	Sanikiluaq, NU, X0A 0W0		Email 2:	sanirec@qiniq.com	
Phone:	867-266-7900 Fax:		Email 3:	mlusty@gov.nu.ca	
Invoice To	Same as Report ? ☐ Yes ☐ No		Client / Project Information		
Hardcopy of Invoice with Report?	☐ Yes ☐ No		Job #:	SANIKILUAQ WWTP	
Company:			PO / AFE:		
Contact:			LSD:		
Address:					
Phone:	Fax:		Quote #:	[redacted]	
Lab Work Order # (lab use only)			ALS Contact:	Sampler:	

Service Requested (Rush for routine analysis subject to availability)

- (●) Regular (Standard Turnaround Times - Business Days)
- ( ) Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
- ( ) Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
- ( ) Same Day or Weekend Emergency - Contact ALS to Confirm TAT

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	BOD-WP	BOD-CBOD-WP	TOC (C-TOT-ORG-WP)	Fecal Coliform (FC-MPN-WP	Ammonia (NH3-COL-WP)	Total Oil & Grease (OGG-TO	Phosphorous, Total	Routine Chem + Metal Scan	TSS (Solids-TOTSUS-WP	Phenols-4AAP-WT	BTX,F1-F4-WP	PAH,PANH-WP	Number of Containers
	Sanikiluaq - Sani 2	28-Sept-12	9:00AM	WW	✓	✓	✓	✓	✓	✓ two bottles	✓	✓	✓	✓	✓	✓	
	Sanikiluaq - Sani 4	28-Sept-12	9:00AM	WW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

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

Bottles Required - 500 ml BOD, 100 ml amber TOC, 125 ml Sterile Bacti, 250 ml Nutrient, 1 L Amber W/M OGG, 1 L Routine, 250 ml Metals, 250ml Phenols

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-mmm-yy):	Time (hh-mm):	Received by:	Date: Sept 28/12	Time: 7:45	Temperature: 13° °C	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF

GENF 18.01 Front

Municipality of Sanikiluaq
ATTN: MOSES NOVALINGA
PO Box 157
Sanikiluaq NU X0A 0W0

Date Received: 11-JAN-13
Report Date: 14-JAN-13 08:03 (MT)
Version: FINAL

Client Phone: 867-266-7900

Certificate of Analysis

Lab Work Order #: L1257223
Project P.O. #: NOT SUBMITTED
Job Reference: SANIKILUAQ WTP
C of C Numbers:
Legal Site Desc:

Paul Nicolas
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1257223-1 1 - TRUCK NOZZLE							
Sampled By: MOSES on 11-JAN-13 @ 09:30							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		12-JAN-13	R2508487
Escherichia Coli	0		0	MPN/100mL		12-JAN-13	R2508487
L1257223-2 2 - PAATSALIK SCHOOL							
Sampled By: MOSES on 11-JAN-13 @ 09:20							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		12-JAN-13	R2508487
Escherichia Coli	0		0	MPN/100mL		12-JAN-13	R2508487
L1257223-3 3 - NUIJAK SCHOOL							
Sampled By: MOSES on 11-JAN-13 @ 09:10							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		12-JAN-13	R2508487
Escherichia Coli	0		0	MPN/100mL		12-JAN-13	R2508487
L1257223-4 4 - HEALTH CENTER							
Sampled By: MOSES on 11-JAN-13 @ 08:45							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		12-JAN-13	R2508487
Escherichia Coli	0		0	MPN/100mL		12-JAN-13	R2508487
L1257223-5 5 - HAMLET OFFICE							
Sampled By: MOSES on 11-JAN-13 @ 09:40							
Matrix: WATER							
Total Coliform and E.coli							
Total Coliforms	0		0	MPN/100mL		12-JAN-13	R2508487
Escherichia Coli	0		0	MPN/100mL		12-JAN-13	R2508487

* 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 positve 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 positve 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.

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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.

ALS Environmental

L1257223-COFC

COC # _____

Page ___ of ___

Report To		Report Format / Distribution				
Company:	Municipality of SANIKILUAQ (W10375)	☑ Standard	☐ Other			
Contact:	MOSES NOVALINGA	☑ PDF	☐ Excel	☐ Digital	☑ Fax	
Address:	Box 157	Email 1:	sanisao@qiniq.com			
	Sanikiluaq, NU, X0A 0W0	Email 2:	sanirec@qiniq.com			
Phone:	867-266-7900 Fax: 867-266-7924	Email 3:	cvanlankveld1@gov.nu.ca			
Invoice To	Same as Report ? ☐ Yes ☐ No	Client / Project Information				
Hardcopy of Invoice with Report?	☐ Yes ☐ No	Job #:	SANIKILUAQ WTP - DRINKING WATER			
Company:	(W10375)	PO / AFE:				
Contact:		LSD:				
Address:						
Phone:	Fax:	Quote #:				
Lab Work Order # (lab use only)		ALS Contact:		Sampler:	MOSES	

Service Requested (Rush for routine analysis subject to availability)

- (•) Regular (Standard Turnaround Times - Business Days)
- ( ) Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
- ( ) Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
- ( ) Same Day or Weekend Emergency - Contact ALS to Confirm TAT

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	TC,EC-QT51-WP	ROU4W+MET-T-WP (chem)	COLOUR-TRUE-WP	Number of Containers
	1) TRUCK NOZZLE	11-01-13	9:30 AM	HO-42				
	2) PAATSALIK SCHOOL	11-01-13	9:20 AM	LAUNDRY RM				
	3) NUIJAK SCHOOL	11-01-13	9:10 AM	STAFF RM				
	4) HEALTH CENTRE	11-01-13	8:45 AM	HOLDING ROOM				
	5) HAMLET OFFICE	11-01-13	9:40 AM	HALLWAY				

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

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-mmm-yy)	Time (hh:mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
				11JAN13	16:45	°C				

GENF 18.01 Front

Sample Receipt Confirmation

Report Distribution:

Company Name: Municipality of Sanikiluaq
Contact: MOSES NOVALINGA
Address: PO Box 157,
Sanikiluaq, NU, X0A 0W0
Phone: 867-266-7900
Fax: 867-266-7924
Email: sanisao@qiniq.com
broy@gov.nu.ca
cvanlankveld1@gov.nu.ca
sanilands@qiniq.com
sanisrec@qiniq.com
Report Name: STANDARD
Digital Type: --
Digital Email: --
Distribution: Hard Copy: N Email: Y Fax: Y

Invoice Distribution:

Acct Name: Municipality of Sanikiluaq
Contact: Accounts Payable
Address: PO Box 157,
Sanikiluaq, NU, X0A 0W0
Phone: 867-266-7900
Fax: 867-266-7924
Invoice Email: sanisao@qiniq.com
Project #: N/A
Account #: W10375

Client Information:

Job Reference #: SANIKILUAQ WTP - DRINKING WATER
Project PO #:
Legal Site Description: N/A
Quote #: N/A

Date Sampled: 21-JAN-13
Date Received: 22-JAN-13
Sampled By: Moses
Chain Of Custody: --

Workorder Summary:

Lab Work Order #: L1260495
Estimated completion date: 25-JAN-13
5 Samples received at ALS In WINNIPEG

Client Job #: SANIKILUAQ WTP - DRINKING WATER
Account Manager: Paul Nicolas
Estimated sample disposal date: 24-FEB-13

Lab Sample ID	Client Sample ID	Date Sampled	Date Received	Sample Due Date	Priority Flag	Sample Type
L1260495-1	TRUCK NOZZLE	21-JAN-13 11:45	22-JAN-13 12:00	25-JAN-13		Water
L1260495-2	PAATSAALIK SCHOOL	21-JAN-13 11:40	22-JAN-13 12:00	25-JAN-13		Water
L1260495-3	NUIJAK SCHOOL	21-JAN-13 10:26	22-JAN-13 12:00	25-JAN-13		Water
L1260495-4	HEALTH CENTRE	21-JAN-13 10:20	22-JAN-13 12:00	25-JAN-13		Water
L1260495-5	HAMLET OFFICE	21-JAN-13 12:35	22-JAN-13 12:00	25-JAN-13		Water

Analysis Requested :	Total Coliform and E.coli	Sample Handling and Disposal Fee
TRUCK NOZZLE	✓	✓
PAATSAALIK SCHOOL	✓	✓
NUIJAK SCHOOL	✓	✓
HEALTH CENTRE	✓	✓
HAMLET OFFICE	✓	✓

Sample Integrity Observations: No observations were identified for this work order submission.

ALS Group strives to deliver on-time results to our clients at all times. However, there are times when due to capacity issues or other unforeseen circumstances we are unable to meet our expected turnaround times. The information above is related to a recent workorder you have submitted to our laboratory. In the event that you have an inquiry, please refer to the Lab Work Order # when calling your Account Manager.

Chain of Custody / Analytical Request Form

ALS Environmental

L1260495

COC # _____ Page ___ of ___

L1260495-COFC

Report To				Service Requested (Rush for routine analysis subject to availability)
Company:	Municipality of SANIKILUAQ (W10375)			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	MOSES NOVALINGA			○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	Box 157	Email 1:	sanisao@qiniq.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Sanikiluaq, NU, X0A 0W0	Email 2:	sanirec@qiniq.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	867-266-7900 Fax: 867-266-7924	Email 3:	cvanlankveld1@gov.nu.ca	
Invoice To	Same as Report ? ☐ Yes ☐ No	Client / Project Information		
Hardcopy of Invoice with Report?	☐ Yes ☐ No	Job #:	SANIKILUAQ WTP - DRINKING WATER	
Company:	(W10375)	PO / AFE:		
Contact:		LSD:		
Address:				
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact:	Sampler: MOSES	

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	TC,EC-QT51-WP	ROU4W+MET-T-WP (chem)	COLOUR-TRUE-WP	Number of Containers
1)	Truck Nozzle	21-01-13	11:45 AM	HO-42				
2)	Paatsaalik school	"	11:40 AM	LAUNDRY RM				
3)	Nuijak school	"	10:26 am	STAFF Room				
4)	Health Centre	"	10:20 AM	SOCIAL SERVICE RM				
5)	Hamlet office	"	12:35 AM	HALLWAY				

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

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-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
			SA	Jan 22/13	12:00PM	4.2 °C				

GENF 18.01 Front