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Affairs Canada

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CANADA REMEMBERS  
LE CANADA SE SOUVIENT

DIAND Nunavut District  
Box 100  
Iqaluit, NT  
XOA OHO

Your file    Votre référence

October 16, 1996

Our file    Notre référence  
B9545-5-W8

Mr. Terry Rogers  
Senior Administrative Officer  
Hamlet of Whale Cove  
Whale Cove, NT  
XOC OJO



Dear Mr. Rogers;

Re: Water Management Inspection and Analytical Results; August 14, 1996

1. Please find enclosed a copy of the inspection report prepared as a result of the August 14, 1996 Inspection.
2. Also enclosed is a copy of the Water Licence application form and a list of information which should be submitted with it. Your application should be sent to the Nunavut Water Board. Their address is: Box 119, Gjoa Haven, NT XOE 1J0. It is a requirement of the *NWT Waters Act* that a community the size of Whale Cove be in possession of such a licence.
3. As the Hamlet is unlicensed is at this time, I would like to make some suggestions related to the storage of waste oil at the dump. Consideration should be given to the construction of a bermed area where waste oil can be placed until such a time that a waste oil furnace or some other appropriate method of disposal is decided upon. Warning signs should also be placed at the water supply and waste disposal facilities.
4. Also enclosed are the results for the water samples collected. With respect to drinking water, all parameters tested for are within the Health and Welfare Canada *Guidelines for Canadian Drinking Water Quality*.
5. Should you have any question, please do not hesitate to contact me at the above address, or by phone at (819)-979-4405. Thank you for the assistance you provided Henry Kablalik and myself during the inspection.

Sincerely,

Paul Smith  
Water Resources Officer  
Nunavut District

cc. - Nunavut Water Board, Gjoa Haven  
- RMO, DIAND, Rankin Inlet  
- MACA, Rankin Inlet

Canada

INDIAN & NORTHERN AFFAIRS  
WATER RESOURCES LABORATORY  
Box 1500  
Yellowknife, NT. X1A 2R3  
Tel. (403) 920-8129  
Fax. (403) 873-9300

To: Indian & Northern Affairs Canada  
Water Resources\NAP  
Baffin District Office  
Box 100  
==> Iqaluit NT X0A 0H0  
Paul Smith

SAMPLE INFORMATION

Our Lab # : 961347  
Your Sample ID: water supply  
Sample Matrix : grab water

Account No.: Baffin

Collection:  
Location: Whale Cove Water Mgt  
Date: 08/14/96  
By: PS

Report Date: 09/11/96

Approved by: W. Wood

- SAMPLE ANALYSIS REPORT -

Lab#	Parameter	Result Units	Detect Limit	analdate	Method
961347	Alkalinity	54.6 mg/L	0.300	08/16/96	10101
	Calcium	19.90 mg/L	0.040	08/26/96	20103
	T.Cadmium ICP-M	LO.1 ug/L	0.100	08/20/96	100133
	Chloride	50.10 mg/L	0.080	08/21/96	17206
	Colour	L5 Colour	5.000	08/16/96	02021
	Conductivity	292.0 uS/cm	0.100	08/16/96	02041
	T.Cobalt ICP-MS	0.1 ug/L	0.100	08/20/96	100115
	T.Chromium ICP-	L2 ug/L	2.000	08/20/96	100111
	T.Copper ICP-MS	3.3 ug/L	0.100	08/20/96	100119
	Potassium	1.48 mg/L	0.050	08/27/96	19106
	Magnesium	4.00 mg/L	0.010	08/26/96	12102
	T.Manganese ICP	3.6 ug/L	0.100	08/20/96	100113
	Sodium	26.00 mg/L	0.040	08/27/96	11102
	Non Filt Residu	L3 mg/L	3.000	08/16/96	10406
	T.Nickel ICP-MS	0.9 ug/L	0.100	08/20/96	100117
	T.Lead ICP-MS	0.7 ug/L	0.200	08/20/96	100145
	pH	8.17 pH	0.050	08/16/96	10301
	T.Iron	27 ug/L	20.000	08/19/96	26004
	T.Mercury-C/V	LO.01 ug/L	0.010	08/21/96	80011
	Turbidity	1.0 NTU	0.100	08/16/96	02081
	T.Zinc ICP-MS	LO.5 ug/L	0.500	08/20/96	100121

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Paul Smith

SAMPLE INFORMATION

Our Lab # : 961348  
Your Sample ID: sewage discharge  
Sample Matrix : grab water

Account No.: Baffin

Collection:  
Location: Whale Cove Water Mgt  
Date: 08/14/96  
By: PS

Report Date: 09/11/96

Approved by: W. Wood

- SAMPLE ANALYSIS REPORT -

Lab#	Parameter	Result Units	Detect Limit	analdate	Method
961348	Calcium	51.10 mg/L	0.040	08/26/96	20103
	Chloride	86.70 mg/L	0.080	08/21/96	17206
	Conductivity	664.0 uS/cm	0.100	08/16/96	02041
	Potassium	8.14 mg/L	0.050	08/27/96	19106
	Magnesium	8.03 mg/L	0.010	08/26/96	12102
	Sodium	68.00 mg/L	0.040	08/27/96	11102
	Non_Filt Residu	9 mg/L	3.000	08/16/96	10406
	Ammonia-N	0.131 mg/L	0.002	08/19/96	07562
	pH	8.21 pH	0.050	08/16/96	10301



MUNICIPAL WATER USE INSPECTION FORM

DATE: August 14/96 COMPANY REP.: Terry Rogers (SAO)  
LICENSEE: Hamlet of Whale Cove LICENCE #: Unlicensed

WATER SUPPLY

Source (s): Fish Lake Quantity Used (to date): Unknown  
Owner/Operator: DPW / Hamlet (estimate or actual) ~ 14,000 m³ / yr.

Indicate: A. - Acceptable U. - Unacceptable N/A - Not Applicable

Intake Facilities: A Storage Structure N/A Treatment Systems A Chem. Storage  
Flow Meas. Device A Convey. Lines N/A Pumping Stations A

Comments: A truck fill station is in place @ fish lake, no concerns except that there should be a warning sign at this location.

WASTE DISPOSAL

Sewage Sewage Treatment System (primary, secondary or tertiary) 2 times  
Natural Water body Continuous Discharge (land or water) to land  
Seasonal Discharge Wetlands Treatment Some Trench  
Solid Waste: Owner/Operator: DPW / Hamlet  
Landfill Burn & Landfill Other

Indicate: A. - Acceptable U. - Unacceptable N/A - Not Applicable

Disch. Quality N/A Decant Structure N/A Erosion A  
Disch. Meas. Dev. N/A Dyke Inspection N/A Seepages A  
Dams, Dykes A Freeboard A Spills N/A  
Construcion N/A O & M Plan N/A A & R Plan N/A

Periods of Discharge: Seasonal Effluent Discharge Rate: 3-4 l/min  
Comments: A bermmed waste oil pit should be built to segregate and control the storage of waste oil. The benefits of a waste oil furnace were also discussed.

FUEL STORAGE

Owner: Operator Condition of Tanks  
Berms & Liners Water within berm: Evidence of Leaks:  
Drainage Pipes Pump Station and Catchment Berm  
Pipeline Condition Not Applicable: ✓

SURVEILLANCE NETWORK PROGRAM

Samples Collected: (Hamlet) Not required  
(DIAND) @ Reservoir and below sewage lagoon  
Signs Posted: SNP None (N/A) Warning Needed with water supply + waste disposal  
Record & Reporting No requirements

Geotechnical Inspection: Not applicable

Non-Compliance of Act or Licence: Hamlet is unlicensed. The Inspector discussed the matter with Mr. Rogers and will providing an application pkg for the Hamlet.

Page 2 attached Yes ✓ No

Licensee Representatives Title  
Not Available  
Licensee Representatives Signature

Inspector's Name  
Paul Smith  
Inspector's Signature



## WATER USE INSPECTION REPORT

(continued)

Date: August 14/96

Licence #: Unlicensed

### General Comments: (Continued)

Waste Disposal site - Separate areas designated for waste metal, bagged sewage and domestic waste (all with appropriate signage).

Domestic waste is well burnt but needs to be covered with granular material.

During a 1994 inspection, a concern was noted with the sewage lagoon in that it appeared that effluent was leaching from the upside berm <sup>P<sub>3</sub></sup> and flowing towards the community. Samples were collected at that time and results indicated that if sewage effluent, then it posed little in the way of a hazard.

In a conversation with Don Forsyth (MPCA Project Engineer) the Inspector was informed that after the lagoon was constructed the Hamlet raised the berm at the discharge end - that raised the level of the sewage within the lagoon. It may be that some sewage filters through this berm and collects in a shallow until such time that the "head" decreases and all sewage then flows in the designed direction.

Pam Simon

Water Inspector