

Indian and
Northern Affairs

Affaires indiennes
et du Nord

Department of Indian &
Northern Affairs
Northern Operations Branch

JAN 27 1982

WATER MANAGEMENT
YELLOWKNIFE, N.W.T.

DIAND
P.O. Box 100
Frobisher Bay, N.W.T.
XOA OHO

January 18, 1982

Your file Votre référence

Our file Notre référence

B9590-1

Mr. Brad Colpitts
Environmental Health Officer
National Health & Welfare
Frobisher Bay General Hospital
Frobisher Bay, N.W.T.

Dear Brad;

Re: Results of Analysis on Community Water Supplies

Attached are the results of analysis on various
Communities' water supplies from the past year.
The communities include:

Grise Fiord	May 7, 1981
Lake Harbour	July 22, 1981
Hall Beach	August 7, 1981
Cape Dorset	September 10, 1981
Sanikiluaq	September 15, 1981
Frobisher Bay	November 2, 1981
Frobisher Bay	November 9, 1981

file each place
N.B
R.L
W.P.
J.L.

~~1-20~~
1-21
1-27
1-7
1-49
-0087

The November 2 Frobisher Bay sample was taken at
the same time that samples were collected for PCB
analysis.

Also available are results on analysis performed on
six DEW Stations in the Baffin District.

If you have any questions or comments, please contact
me.

Yours sincerely

Peter Bannon

Peter Bannon
Water Resources officer
Baffin

cc. N. Bryant

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
WATER RESOURCES DIVISION -- NORTHWEST TERRITORIES
REQUEST FOR AND RESULTS OF LABORATORY ANALYSIS

LISEE Grise Fiord		LICENCE NO. n/a		LOCATION water tank	
DATE SAMPLED May 7/81		DATE RECEIVED		DATE ANALYZED 8/06/81	
SAMPLE STATION NUMBER	FB-C10-81	FB-C11-81	FB-C12-81		
LABORATORY NUMBER	← 1961 →				
ANALYSIS REQUIRED	✓	✓	✓	✓	✓
pH (units)	✓ 7.2				
Sp. Cond. (umho/cm)	✓ 23				
Dissolved Oxygen					
Turbidity (JTU)	✓ 16				
Colour (colour U.)					
Suspended Solids	✓ <5				
TDS, Residue					
Oil & Grease					
Phenols					
Calcium	✓ 1.4				
Magnesium	✓ 0.7				
Tot. Hardness [as]	✓ 7.0				
Tot. Alkalinity [CaCO ₃]	✓ 2.5				
Sodium	✓ 1.2				
Potassium	✓ 10.1				
Tot. Coliform [ent/100]					
Faecal Coli. 100					
Faecal Streptococci					
BOD ₅					
COD					
Carbon, IC					
Carbon, TOC					
Total Cyanide					
Chloride	✓ 1.3				
Sulphate	✓ 1.3				
Sulphide					
Ammonia Nitrogen [as]					
Nitrate-Nitrite [N]					
Total Kjeldahl N [N]					
Phosphorus O-P [as]					
Phosphorus Tot. [P]					
Silica React. as SiO ₂					
Arsenic	T		✓ <0.01		
	D				
Cadmium	T		✓ <0.01		
	E				
Copper	T		✓ 0.02		
	E				
Iron	T		✓ 0.20		
	E				
Lead	T		✓ <0.03		
	E				
Mercury	T (ng/l)				
	E (ng/l)			✓ 0.02	
Nickel	T		✓ <0.01		
	E				
Zinc	T		✓ 0.01		
	E				

all samples received frozen

All results are expressed in mg/l except as indicated in brackets ().
O-P = ortho phosphate; TDS = total dissolved solids and is the filterable residue, dried at 105°C; T = Total; E = Extractable; D = Dissolved;
IC = inorganic carbon; TOC = total organic carbon.

FIELD SAMPLING AND DATA

LICENCEE Grise Fiord	LICENCE NO. n/a	LOCATION Water Tank
DATE SAMPLED May 7/81	SAMPLED BY Peter Bannon	

SAMPLE COLLECTION	ANALYSIS REQUIRED	VOLUME TO BE COLLECTED	PRESERVATIVE TO BE USED	STATION NUMBER				
				BOTTLE NUMBER				
MISC. & ARSENIC	2 LITRES	NONE	FB-010-81					
HEAVY METALS	1 LITRE	2ml HNO ₃	FB-011-81					
CYANIDE	1 LITRE	2ml 50% NaOH Soln.						
MERCURY	250 ML	2ml HNO ₃ + 2ml 5% K ₂ Cr ₂ O ₇ Soln.	FB-012-81					

FIELD OBSERVATION	Time of Day	2330				
	Wind Velocity	—				
	Wind Direction	—				
	Air Temperature	—				
	Barometric Pressure	—				
	Water Level	—				
	Rate of Flow	—				
	Ice Thickness	—				
	Depth of Sampling	—				

FIELD ANALYSIS	pH	—				
	Sp. Conductance	—				
	Dissolved O ₂	—				
	Turbidity	—				
	Water Temperature	~ 5°C				

NOTES

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
WATER RESOURCES DIVISION -- NORTHWEST TERRITORIES
REQUEST FOR AND RESULTS OF LABORATORY ANALYSIS

INTEREST Grise Fiord		LICENCE NO. n/a		LOCATION ^W _T	
DATE SAMPLED May 7/81		DATE RECEIVED		DATE ANALYZ	
Sample STATION NUMBER	FB-C10-81	FB-C11-81	FB-C12-81		
LABORATORY NUMBER	← 10161 →				
ANALYSIS REQUIRED	✓	✓	✓	✓	✓
pH (units)	✓ 7.2				
Sp. Cond. (umho/cm)	✓ 23				
Dissolved Oxygen					
Turbidity (JTU)	✓ 16				
Colour (colour U.)					
Suspended Solids	✓ <5				
TDS, Residue					
Oil & Grease					
Phenols					
Calcium	✓ 1.4				
Magnesium	✓ 0.7				
Tot. Hardness [as]	✓ 7.0				
Tot. Alkalinity CaCO ₃	✓ 2.8				
Sodium	✓ 1.2				
Potassium	✓ 20.1				
Tot. Coliform [cnt/					
Faecal Coli. 100					
Faecal Strep. ml					
BOD ₅					
COD					
Carbon, IC					
Carbon, TOC					
Total Cyanide					
Chloride	✓ 1.3				
Sulphate	✓ 1.3				
Sulphide					
Ammonia Nitrogen [as]					
Nitrate-Nitrite [N]					
Total Kjeldahl N [N]					
Phosphorus O-P [as]					
Phosphorus Tot. [P]					
Silica Reac. as SiO ₂					
Arsenic	T		✓ <0.01		
	D				
Cadmium	T		✓ <0.01		
	E				
Copper	T		✓ 0.02		
	E				
Iron	T		✓ 0.20		
	E				
Lead	T		✓ <0.03		
	E				
Mercury	T (µg/l)				
	E (µg/l)			✓ 0.02	
Nickel	T		✓ <0.01		
	E				
Zinc	T		✓ 0.01		
	E				

All results are expressed in mg/l except as indicated in bracket
O-P = ortho phosphate; TDS = total dissolved solids and is the residue, dried at 105°C; T = Total; E = Extractable; D = Dissolve
IC = inorganic carbon; TOC = total organic carbon.

all samples receive frozen