



DIAND Nunavut District
Box 100
Iqaluit, NT
XOA OHO

Your file Votre référence

Our file Notre référence

February 9, 1998

B9545-5-N5L4-1447

Mrs. Rita Mike
Senior Administrative Officer
Hamlet of Pangnirtung
Pangnirtung, NT
XOA ORO

Dear Mrs. Mike,

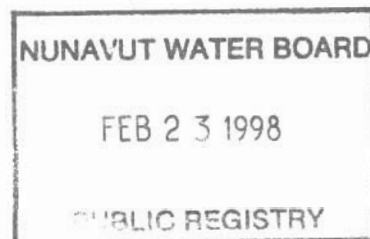
Re: Analytical Results from July 30, 1997 Inspection

1. Attached are the analytical results for the water samples collected during the last inspection. These samples were collected from the water reservoir, Duval River and below the dump (leachate).
2. The results indicate that the quality of the drinking water meets the Canadian Health and Welfare Drinking Water Guidelines for those parameters tested with the exception of pH. In both samples from the reservoir and Duval River, the pH was below the recommended level of 6.5.
3. This office would recommend contacting Public Health to investigate the various options available necessary to increase the pH of the reservoir water. In similar instances, the addition of lime has been used to increase the pH. This is a relatively simple and cost effective procedure that should be considered.
3. Please do not hesitate to contact this office if you have any questions regarding these results.

Sincerely,

Paul Smith
Water Resources Officer
Nunavut District

- cc.
- Nunavut Water Board, Gjoa Haven
 - DIAND Water Resources, YK
 - MACA, Iqaluit (Tanya Smith)
 - Public Health, Iqaluit (Nicole Ritchie)



TAIGA ENVIRONMENTAL LABORATORY
Dept. Indian Affairs & Northern Development
4601-52 nd Ave., Box 1500
Yellowknife, NT. X1A 2R3
Tel. (403) 669-2788
Fax: (403) 669-2718

To: NUNAVUT
WATER RESOURCES, NAP, DIAND
BOX 100
IQALUIT NT X0A 0H0
PAUL SMITH

SAMPLE INFORMATION

Our Lab#: 971402
Your Sample ID: Duval River
Sample Matrix: water
Collection:
Location: Duval R.
Date: 30/07/97
By: Paul Smith

Account No:

Received Date: aug/06/97

Report Date: 19-Aug-97

Approved By: 4-G

- SAMPLE ANALYSIS REPORT -

Lab#	Test	Result	Units	Detection Limit	Analysis Date	Analytical Method
971402	pH	6.23	pH	0.05	08/08/98	010301
	Conductivity	4.6	uS/cm	0.3	08/08/97	02041
	Alkalinity	0.9	mg/L	0.3	08/08/97	010101
	Colour	L5		5.00	07/08/97	02021
	Turbidity	0.2	NTU	0.1	07/08/97	002081
	Tot-Suspended-Solids	L3	mg/L	3	06/08/97	grav
	Tot-Diss-Solids	L10	mg/L	10.0	02/08/97	grav
	Fluoride	L0.05	mg/L	0.05	13/08/97	009105
	Magnesium	0.087	mg/L	0.005	07/08/97	012102
	Calcium	0.21	mg/L	0.03	07/08/97	20103
	Sodium	0.37	mg/L	0.02	08/08/97	011102
	Potassium	0.026	mg/L	0.002	08/08/97	019106
	Tot-Arsenic(water)	L0.2	ug/L	0.2	12/08/97	hydride
	Tot-Cadmium(ICP-MS)	L0.1	ug/L	0.1	14/08/97	ICP-MS

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971402

Tot-Cobalt(ICP-MS)	0.1	ug/L	0.1	14/08/97	ICP-MS
Tot-Chromium(ICP-MS)	0.2	ug/L	0.2	14/08/97	ICP-MS
Tot-Copper(ICP/MS)	0.7	ug/L	0.1	14/08/97	ICP-MS
Tot-Iron(AA)	0.014	mg/L	0.012	06/08/97	ICP-MS
Tot-Manganese(ICP-MS)	0.7	ug/L	0.1	14/08/97	ICP-MS
Tot-Nickel(ICP-MS)	0.1	ug/L	0.1	14/08/97	ICP-MS
Tot-Lead(ICP-MS)	L0.2	ug/L	0.2	14/08/97	ICP-MS
Tot-Zinc(ICP-MS)	L0.5	ug/L	0.5	14/08/97	ICP-MS

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SEP 11 1997

D.I.A.N.D.
IQALUIT, NT

SAMPLE INFORMATION

Our Lab#: 971404
Your Sample ID: Pangnirtung dump leachate
Sample Matrix: water

Account No:

Collection:

Location: dump leachate
Date: 7/30/97
By: Paul Smith

Received Date: 06-August-1997

Report Date: 03-Sep-97

Approved By: W. Smith

- SAMPLE ANALYSIS REPORT -

Lab#	Test	Result	Units	Detection Limit	Analysis Date	Analytical Method
971404						
	pH	7.42	pH	0.05	8/8/98	010301
	Conductivity	5.1	uS/cm	0.3	8/8/97	02041
	Alkalinity	H 1280	mg/L	0.3	8/8/97	010101
	Colour	280		5.00	8/7/97	02021
	Ammonia-N	46.7	mg/L	0.002	8/13/97	007562
	Calcium	520	mg/L	0.03	8/7/97	20103
	Magnesium	143	mg/L	0.005	8/7/97	012102
	Sodium	338	mg/L	0.02	8/8/97	011102
	Potassium	94.1	mg/L	0.002	8/8/97	019106
	Tot-Mercury(water)	L0.001	ug/L	0.01	9/2/97	080314
	Tot-Arsenic(water)	L0.2	ug/L	0.2	8/12/97	hydride
	Tot-Cadmium(ICP-MS)	0.3	ug/L	0.1	8/12/97	ICP-MS
	Tot-Cobalt(ICP-MS)	23.0	ug/L	0.1	8/12/97	ICP-MS
	Tot-Chromium(ICP-MS)	5.8	ug/L	2.0	8/12/97	ICP-MS

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971404

Tot-Copper(ICP/MS)	49.4	ug/L	0.1	8/12/97	ICP-MS
Tot-Iron(AA)	35.5	mg/L	0.012	8/13/97	ICP-MS
Tot-Manganese(ICP-MS)	8380	ug/L	0.1	8/20/97	ICP-MS
Tot-Nickel(ICP-MS)	35.7	ug/L	0.1	8/12/97	ICP-MS
Tot-Lead(ICP-MS)	2.8	ug/L	0.2	8/12/97	ICP-MS
Tot-Zinc(ICP-MS)	118	ug/L	0.5	8/12/97	ICP-MS

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PAUL SMITH

SAMPLE INFORMATION

Our Lab#: 971403
Your Sample ID: Pangnirtung reservoir
Sample Matrix: water

Collection:

Location: Reservoir
Date: 7/30/97
By: Paul Smith

Account No:

Received Date: 06-August-1997

Report Date: 03-Sep-97

Approved By: W. Teedy

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SEP 11 1997

IQALUIT, NT

- SAMPLE ANALYSIS REPORT -

Lab#	Test	Result	Units	Detection Limit	Analysis Date	Analytical Method
971403	pH	6.16	pH	0.05	8/8/98	010301
	Conductivity	11.4	uS/cm	0.3	8/8/97	02041
	Alkalinity	1.0	mg/L	0.3	8/8/97	010101
	Colour	L5		5.00	8/7/97	02021
	Turbidity	0.8	NTU	0.1	8/7/97	002081
	Tot-Suspended-Solids	L3	mg/L	3	8/6/97	grav
	Tot-Diss-Solids	15.0	mg/L	10.0	8/2/97	grav
	Fluoride	0.73	mg/L	0.05	8/13/97	009105
	Calcium	0.86	mg/L	0.03	8/7/97	20103
	Magnesium	0.264	mg/L	0.005	8/7/97	012102
	Sodium	0.66	mg/L	0.02	8/8/97	011102
	Potassium	0.115	mg/L	0.002	8/8/97	019106
	Tot-Mercury(water)	L0.001	ug/L	0.01	9/2/97	080314
	Tot-Arsenic(water)	L0.2	ug/L	0.2	8/12/97	hydride

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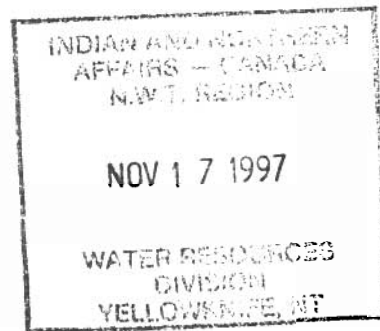
971403

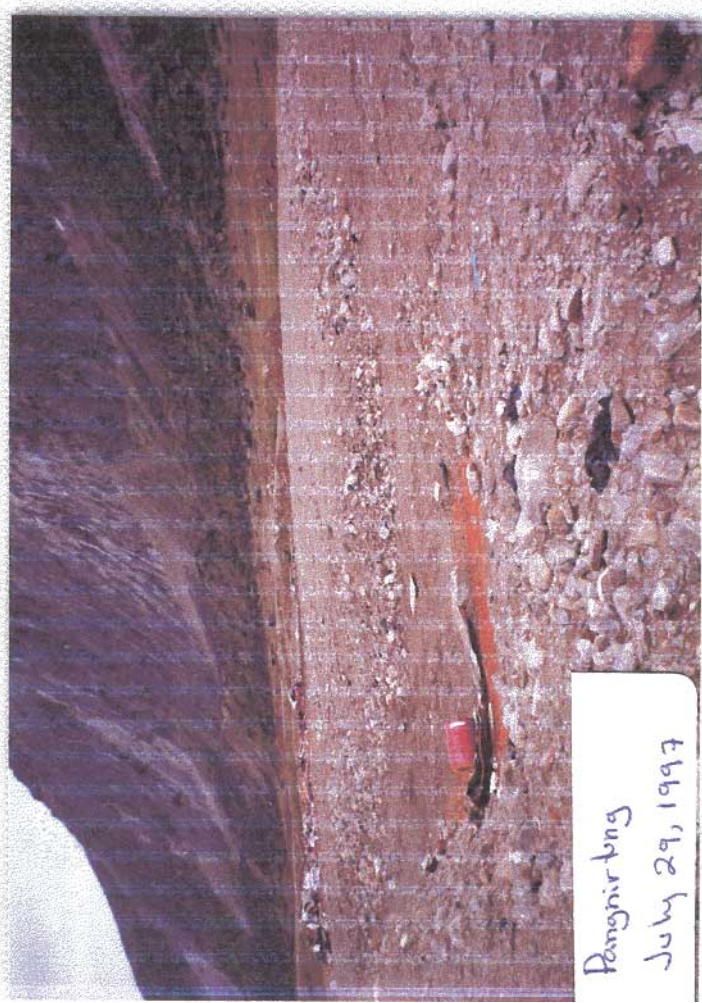
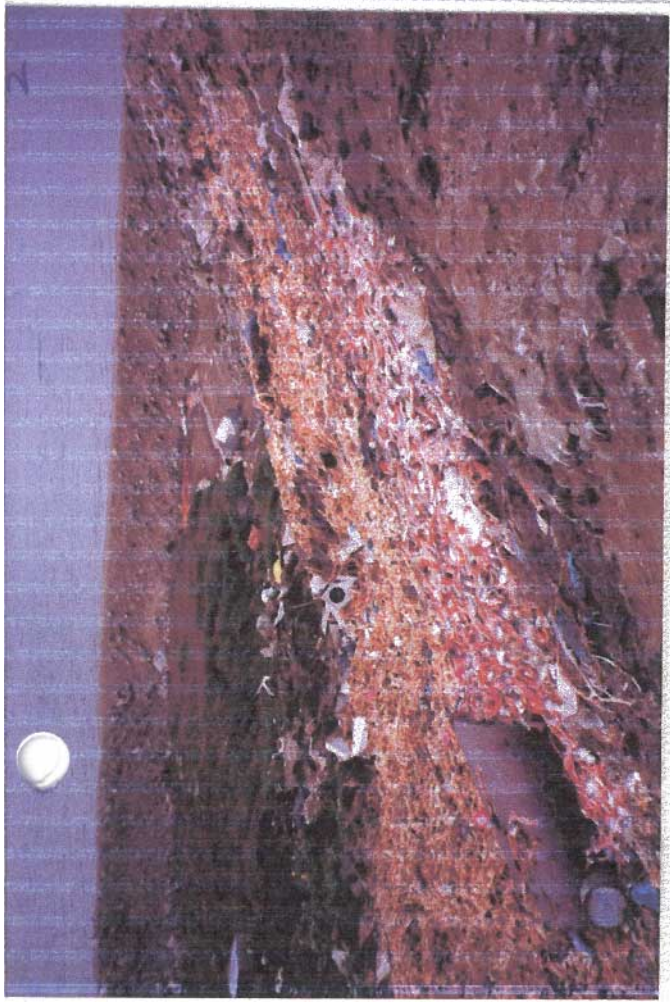
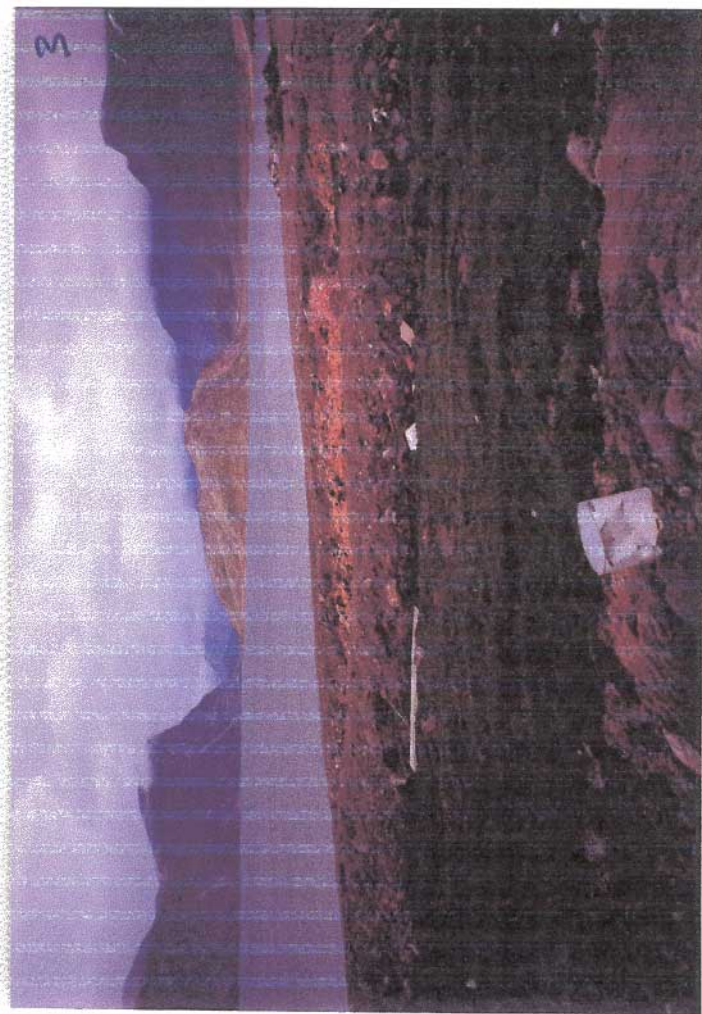
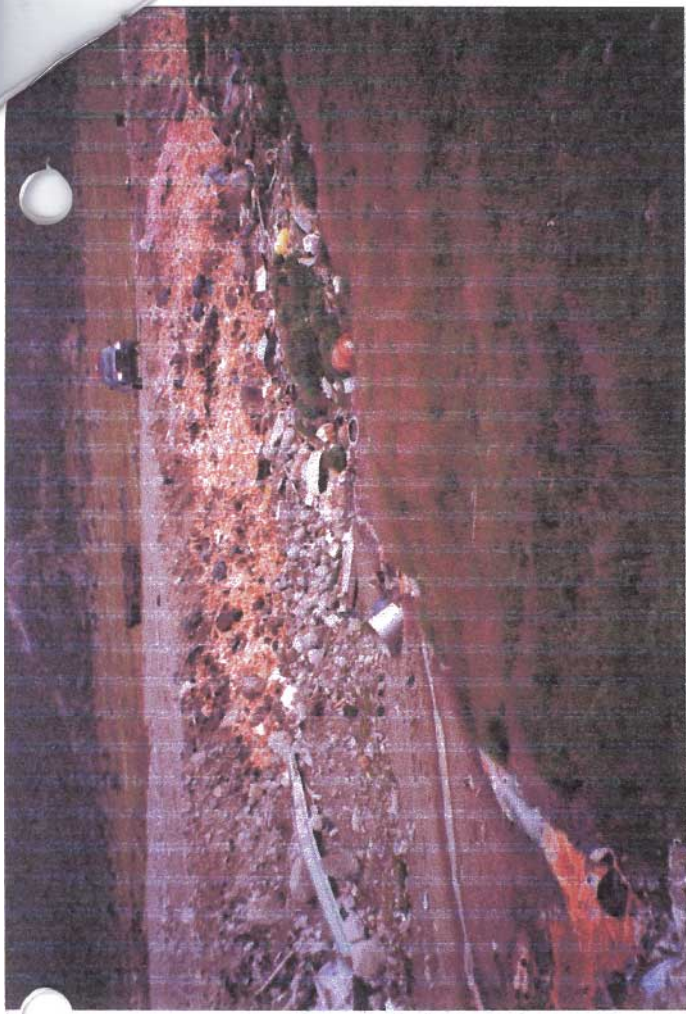
Tot-Cadmium(ICP-MS)	L0.1	ug/L	0.1	8/14/97	ICP-MS
Tot-Cobalt(ICP-MS)	0.2	ug/L	0.1	8/14/97	ICP-MS
Tot-Chromium(ICP-MS)	L0.2	ug/L	0.2	8/14/97	ICP-MS
Tot-Copper(ICP/MS)	0.8	ug/L	0.1	8/14/97	ICP-MS
Tot-Iron(AA)	0.012	mg/L	0.012	8/6/97	ICP-MS
Tot-Manganese(ICP-MS)	4.8	ug/L	0.1	8/14/97	ICP-MS
Tot-Nickel(ICP-MS)	0.5	ug/L	0.1	8/14/97	ICP-MS
Tot-Lead(ICP-MS)	L0.2	ug/L	0.2	8/14/97	ICP-MS
Tot-Zinc(ICP-MS)	L0.5	ug/L	0.5	8/14/97	ICP-MS

Pangnirtung - July 29, 1997

- 1-3. 3 views of the waste disposal site where fish offal is disposed.
4. The corner of one cell of the waste disposal site. Note staining denoting the accumulation of leachate at this location.
- 5-6. 2 views of the waste disposal site. Only the one corner is currently being used.
- 7-10. Sewage discharge and 'pit' into which sewage is disposed.
11. Earthworks initiated for new 2-cell lagoon. Community later expressed opposition to the site. \$200K work had already been done.

1447
N'10B
ERLWT/MACB





Pangnirbing
July 29, 1997

