

R E P O R T

EHATTESAHT FIRST NATION

Assessment Studies of Water and Wastewater Systems and Associated Water Management Practices at Selected First Nation Communities

Analysis Report

CANTEST

CANTEST LTD.

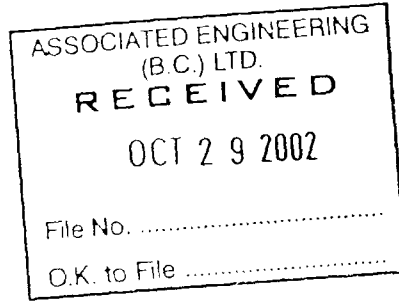
Professional
Analytical
Services

REPORT ON: Analysis of Water Samples

REPORTED TO: Associated Engineering Ltd.
Suite 300
4940 Canada Way
Burnaby, B.C.
V5G 4M5

Att'n: Mr. Robert Blakeney

CHAIN OF CUSTODY: 108187
PROJECT NAME: INAC Risk Assessments
PROJECT NUMBER: 022276



4606 Canada Way
Burnaby, B.C.
V5G 1K5

Fax: 604 731 2386

Tel: 604 734 7276

1 800 665 8566

NUMBER OF SAMPLES: 2

REPORT DATE: October 23, 2002

DATE SUBMITTED: October 11, 2002

GROUP NUMBER: 31011013

SAMPLE TYPE: Water

NOTE: Results contained in this report refer only to the testing of samples submitted.

TEST METHODS:

Conventional Parameters - analyses were performed using procedures based on those described in "British Columbia Environmental Laboratory Manual For the Analysis of Water, Wastewater, Sediment and Biological Materials" (1994 Edition), Province of British Columbia and "Standard Methods for the Examination of Water and Wastewater" 20th Edition, (1998), published by the American Public Health Association.

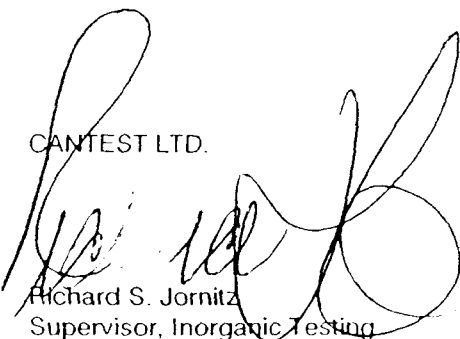
Mercury in Water - analysis was performed using procedures based on U. S. EPA Method 1631, oxidative digestion using bromination, and analysis using Cold Vapour Atomic Fluorescence Spectroscopy.

Metals in Water - analysis was performed using Inductively Coupled Plasma Optical Emission Spectroscopy (ICP), Inductively Coupled Plasma-Mass Spectroscopy (ICP/MS) or Graphite Furnace Atomic Absorption Spectrophotometry.

TEST RESULTS:

(See following pages)

CANTEST LTD.


Richard S. Jornitz
Supervisor, Inorganic Testing

REPORTED TO: Associated Engineering Ltd.



REPORT DATE: October 23, 2002

GROUP NUMBER: 31011013

Conventional Parameters in Water

CLIENT SAMPLE IDENTIFICATION:		Nuchatlaht (Oclucje I.R. #7)	Ehattesah Chanakint I.R. #12		
DATE SAMPLED:		Oct 7/02	Oct 8/02	DETECTION LIMIT	UNITS
CANTEST ID:		210110090	210110091		
Conductivity		33	-	1	μ S/cm
Turbidity		0.20	0.47	0.1	NTU
Hardness (Total)	CaCO ₃	9	-	1	mg/L
Total Dissolved Solids		33	164	10	mg/L
Total Suspended Solids		-	<	1	mg/L
Total Alkalinity	CaCO ₃	11.1	-	0.5	mg/L
Bicarbonate Alkalinity	HCO ₃	13.5	-	0.5	mg/L
Carbonate Alkalinity	CO ₃	<	-	0.5	mg/L
Hydroxide Alkalinity	OH	<	-	0.5	mg/L

μ S/cm = microsiemens per centimeter

NTU = nephelometric turbidity units

mg/L = milligrams per liter

< = Less than detection limit

Page(s) 004654 to\à 004659

Is(are) under consultation

SRC ANALYTICAL

422 Downey Road
 Saskatoon, Saskatchewan S7N 4N1
 (306) 933-6932 1-800-240-8808

Health Canada E.H.S. Pacific
 220-177 Victoria Street
 Prince George, British Columbia V2L 5R8
 Attn: Ian Baird

Apr-11-2002

Date Samples Received: Mar-26-2002 Client P.O.:

SAMPLE	CLIENT DESCRIPTION
4890	3/21/02 EHATTESAHT *WATER*
4891	3/21/02 OCLUCJE BAND *WATER*

ANALYTE	UNITS	4890	4891
RADIO CHEMISTRY			
Gross alpha	Bq/L	<0.04	<0.02
Gross beta	Bq/L	<0.03	<0.02

"<": not detected at level stated above

cc: Peter Mazey (fax)

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed : 1998 OCT 31

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Requisition : 98WW026764
Submitter Ref :

Specimen Submitter

: 342-HEALTH CANADA (CAMPBELL RI*)

Site Information

Code/Name : 02E3932 - 02E3932
Site Desc : 92B4272 - ZEBALLOS CLINIC
City/Area :
Source : Well Type : COM.W.S.

Specimen

Treatment : UNTREATED
Nature : WATER
Ph Level : Free Chlorine Level : ppm
Exams Req : Total Coliform
EHO : D. HAYES : Fecal Coliform

Collected : 1998 OCT 28
Received : 1998 OCT 30

RESULTS

Reported on 1998 OCT 31

<u>Test</u>	<u>Result</u>	<u>Units</u>
1. Total Coliform (Membrane Filtration)	L1	TC Count/100ml
2. Fecal Coliform (Membrane Filtration)	L1	FC Count/100ml
L: LESS THAN		

DON'T WAIT FOR THESE RESULTS TO ARRIVE IN THE MAIL!
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computer or on your fax. It's easy, fast and convenient, at no charge to you.
Call now, at 737-1477 in Vancouver or toll free at 1-800-737-3771.

For inquiries regarding laboratory results, please contact the Central Inquiry
line at (604) 660-5100.

Specimen was 48 hours in transit

THE B.C. CENTRE FOR DISEASE CONTROL

The Province's centre of expertise in communicable disease control and provider of specialty health support services.

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed : 1998 NOV 2

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Requisition : 98WW026765
Submitter Ref :

Specimen Submitter

: 342-HEALTH CANADA (CAMPBELL RI*

Site Information

Code/Name : 02E3934 - 02E3934
Site Desc : 92B4270 - EHATTIS BAND OFFICE
City/Area :
Source : Well Type : COM.W.S.

Specimen

Treatment : UNTREATED
Nature : WATER
Ph Level : Free Chlorine Level : ppm
Exams Req : Total Coliform
: Fecal Coliform

PHO : D. HAYES

Collected : 1998 OCT 28
Received : 1998 OCT 30

RESULTS

Reported on 1998 NOV 2

Test	Result	Units
1. Total Coliform (Membrane Filtration)	1	TC Count/100ml
2. Fecal Coliform (Membrane Filtration)	L1	FC Count/100ml
L: LESS THAN		

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Specimen was 48 hours in transit

THE B.C. CENTRE FOR DISEASE CONTROL

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ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed :1999 NOV 15

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Requisition :99WW028737
Submitter Ref :

Specimen Submitter

:342-HEALTH CANADA (CAMPBELL RI*

Site Information

Code/Name :92B4171 - 92B4171
Site Desc :EHATIS BAND OFFICE
City/Area :

Source :Well

Type :COM.W.S.

Specimen

Treatment :TREATED

Nature :WATER

Ph Level :Free Chlorine Level :ppm
Exams Req :Total Coliform

EHO :D.HAYES

:Fecal Coliform

Collected :1999 NOV 10

Received :1999 NOV 12

RESULTS

Reported on 1999 NOV 15

Test

1. Total Coliform (Membrane Filtration)
 2. Fecal Coliform (Membrane Filtration)
- L:LESS THAN

Result

L1

L1

Units

TC Count/100ml

FC Count/100ml

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Specimen was 48 hours in transit

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ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed : 2000 JUN 9

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Requisition : A0WW007823
Submitter Ref :

Specimen Submitter

: 342-HEALTH CANADA (CAMPBELL RI*

Site Information

Code/Name : 02J7921 - 02J7921
Site Desc : 92B4270 EHATIS BAND OFFICE
City/Area :
Source : Well Type : COM.W.S.

Specimen

Treatment : TREATED
Nature : WATER

Ph Level : Free Chlorine Level : ppm
Exams Req : Total Coliform

EHO : D. HAYES

: Fecal Coliform

Collected : 2000 JUN 7
Received : 2000 JUN 8

RESULTS

Reported on 2000 JUN 9

Test

- | | | |
|---|--------|----------------|
| 1. Total Coliform (Membrane Filtration) | Result | Units |
| 2. Fecal Coliform (Membrane Filtration) | L1 | TC Count/100ml |
| L: LESS THAN | L1 | FC Count/100ml |

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For inquiries from medical personnel regarding laboratory results, please contact the Central Inquiry Line at 604-660-5100.

Specimen was 24 hours in transit

BC Centre for
Disease Control
Society

BCCDC LABORATORY SERVICES
655 12th Avenue West
Vancouver, B.C. V5Z 4R4

Fax: (604)660-6073

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed : 2001 JUL 17

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Requisition : A1WW019977
Submitter Ref :

Specimen Submitter

: 342-HEALTH CANADA (CAMPBELL RI*)

Site Information

Code/Name : 02P2503 - 02P2503

Site Desc : BAND OFFICE, EHATTISAHT, ZEBALLOS ("BATHROOM TAP" ON SAMPLE BOTTLE LABEL)

City/Area :

Source : Well

Type : COM.W.S.

Specimen

Treatment : TREATED

Nature : WATER

Ph Level : Free

Chlorine Level : ppm

Exams Req : Total Coliform

: Fecal Coliform

EHO : CAROL MACRAE

Collected : 2001 JUL 11

Received : 2001 JUL 13

RESULTS

Reported on 2001 JUL 17

Test

1. Total Coliform (Membrane Filtration)
 2. Fecal Coliform (Membrane Filtration)
- L: LESS THAN

Result

L1

L1

Units

TC Count/100ml

FC Count/100ml

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For inquiries from medical personnel regarding laboratory results, please contact the Central Inquiry Line at 604-660-5100.

Specimen was 48 hours in transit

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Page(s) 004666 to\à 004666

Is(are) under consultation

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed : 2002 MAR 23

Requisition : A1WW064247
Submitter Ref :

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Specimen Submitter

: 342-HEALTH CANADA (CAMPBELL RI*

Site Information

Code/Name : 02T2646 - 02T2646
Site Desc : EHATTESAHT BAND OFFICE, ZEBELLOS
City/Area : Type : COM.W.S.
Source : Well

Specimen

Treatment: UNTREATED
Nature : WATER

Ph Level: Free Chlorine Level: ppm
Exams Req : Total Coliform

EHO : D. HAYES

: Fecal Coliform

Collected: 2002 MAR 21
Received: 2002 MAR 22

RESULTS

Reported on 2002 MAR 23

<u>Test</u>	<u>Result</u>	<u>Units</u>
1. Total Coliform (Membrane Filtration)	L1	TC Count/100ml
2. Fecal Coliform (Membrane Filtration)	L1	FC Count/100ml
L: LESS THAN		

Specimen was 24 hours in transit
Coliform test may NOT be valid if specimen was more than 30 hrs in transit

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed :2002 MAR 23

Requisition :A1WW064246

Submitter Ref :

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Specimen Submitter

:342-HEALTH CANADA (CAMPBELL RI*

Site Information

Code/Name :02T2645 - 02T2645
Site Desc :EHATTESAHT, S. END, ZEBELLOS
City/Area :
Source :Well Type :COM.W.S.

Specimen

Treatment:UNTREATED Ph Level: Free Chlorine Level: ppm
Nature :WATER Exams Req :Total Coliform
EHO :D. HAYES :Fecal Coliform

Collected:2002 MAR 21
Received :2002 MAR 22

RESULTS

Reported on 2002 MAR 23

<u>Test</u>	<u>Result</u>	<u>Units</u>
1. Total Coliform (Membrane Filtration)	L1	TC Count/100ml
2. Fecal Coliform (Membrane Filtration)	L1	FC Count/100ml
L:LESS THAN		

Specimen was 24 hours in transit
Coliform test may NOT be valid if specimen was more than 30 hrs in transit

For
control

BCCDC LABORATORY SERVICES
655 12th Avenue West
Vancouver, B.C. V5Z 4N4

Fax: (604)660-6073

ENVIRONMENTAL
BACTERIOLOGY

Phone Number :

Printed :2002 SEP 28

Requisition :A2WW034692

Submitter Ref :

HEALTH CANADA (CAMPBELL RIVER) - 342
OCCUPATIONAL & ENVIRONMENTAL HEALTH
1180 IRONWOOD ST SUITE 119
CAMPBELL RIVER BC V9W 5P7

Specimen Submitter

:342-HEALTH CANADA (CAMPBELL RI

Site Information

Code/Name :02W4287 - 02W4287

Site Desc :EHATASAHT STORE

City/Area :

Type :COM.W.S.

Source :Well

Specimen

Treatment:TREATED

Ph Level:

Free Chlorine Level: ppm

Nature :WATER

Exams Req :Total Coliform

EHO :D.HAYES

:Fecal Coliform

Collected:2002 SEP 26

Received :2002 SEP 27

RESULTS

Reported on 2002 SEP 28

<u>Test</u>	<u>Result</u>	<u>Units</u>
1. Total Coliform (Membrane Filtration)	L1	TC Count/100ml
2. Fecal Coliform (Membrane Filtration)	L1	FC Count/100ml
L:LESS THAN		

Specimen was 24 hours in transit

Coliform test may NOT be valid if specimen was more than 30 hrs in transit

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697

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004669