

**Assessment Study of
Water and Wastewater Systems and
Associated Water Management Practices
at the Shackan First Nation Community**

**for the
Indian and Northern Affairs Canada
BC Region**



July, 2002

Appendix C

Water Quality Test Results

Name: Shack

Date: June 14, 99

WHAT HAPPENS WITH YOUR WATER SAMPLE:

Merritt Health Center - Indian Health Office

Water samples are collected randomly from houses in the community by a Community Health Associate. Water is usually taken from your drinking water source (kitchen sink tap) at households, from different water systems.

- 1) Private wells
- 2) On the same line as private wells
- 3) Community system, (reservoir)

Procedure for collecting sample:

- Water is collected **ONLY** on Monday or Tuesday, once a month.
- It is taken from the cold water tap.
- The water is turned on and left on for about 1 minute.
- The bottles are filled, procedures are followed by the worker to ensure that it remains sterile.
- They are then labelled with household owners name, house # and community name.
- All water samples are kept in a cooler with ice packs.
- It is brought back to the office, and prepared for shipment to the lab in Vancouver.
- It is then taken to the post office and sent by Priority Post.
- Reports are often ready by Friday, if not it will be by the following week.
- The Water Sample Report gets sent from Vanc. lab to the office of Rita Manual, EHO 378-5764.
- A copy then gets sent to your band office.
- We then receive a copy for your community water sample file.
- Your water report comes back as *Unsatisfactory* or *Satisfactory*.

Unsatisfactory Water Sample Procedure

- ▶ Report is received by Rita Manual, EHO.
- ▶ Copy of report is sent directly to the Band.
- ▶ If "Boil Water Alert" is necessary Band will notify household.
- ▶ Notification to household is given.
- ▶ Boil Alert Notice **MUST** be followed by all in the household.
- ▶ Band to drain, disinfect/clean, flush, water system.
- ▶ After the system is cleaned the CHA is given direction to resample.
- ▶ We then collect water on the following Monday or Tuesday.
- ▶ If you have questions about the results please call Rita or the Band office.

Satisfactory Water Sample Procedure

- ▶ Report is received by Rita Manual, EHO.
- ▶ Copy of report is sent directly to the Band.
- ▶ We then receive a copy & it is inserted in the Community Water sample file.
- ▶ Usually if you don't hear anything about the water sample collected, "Your water tested satisfactory" and no immediate action or repeat sample is taken.
- ▶ Your household is then back on the routine water sample collection list, which is done randomly throughout the year.

HEALTH CANADA
ENVIRONMENTAL HEALTH SERVICES

BOIL WATER ADVISORY

A boil water advisory has been issued for your drinking water supply. Boiling water will ensure water is safe for drinking by destroying any harmful microorganisms that were present. The heat applied to the water will kill off all harmful bacteria (e.g. Shigella and Salmonella), viruses (e.g. Hepatitis A & E), or protozoa (e.g. Giardia and Cryptosporidium). Boiling water for 5 minutes will be sufficient to achieve a supply of water safe for human consumption.

We issue a boil water advisory when the general background bacteria exceeds 200 colonies, 10 total coliform, or 0 fecal coliform per 100 ml. Excessive growth of general bacteria is of public health concern because it may mask the presence of any total or fecal coliforms. Sometimes these bacteria may cause disease, especially for the young, elderly and those with poor immune systems.

Please call your Environmental Health Officer at (250) 378-5764 if you need further information.

Prepared by Environmental Health Services, Health Canada, June 1997.

Use disinfected water for

- drinking
- cooking
- brushing teeth
- washing dishes
- washing fruit and vegetables to be eaten raw
- rinsing contact lenses

TABLE 3.1
CHEMICAL ANALYSIS OF SHACKAN
WATERWELLS

<u>PHYSICAL TESTS</u>	<u>ACCEPTABLE STANDARDS</u>	<u>WELL #1</u> <u>Aug/86</u>	<u>WELL #2</u> <u>March/88</u>
PH	6.5-8.5	7.38	7.93
Conductivity (Micromhos/cm)	----	309	320
Colour (Pt-Co scale)	15	L 2	5
Turbidity (NTU)	5	0.67	L.2
Hardness	----	188	183
<u>SOLIDS</u>			
Total Dissolved	500	206	255
<u>DISSOLVED ANIONS (mg/L)</u>			
Alkalinity: Bicarbonate	500	---	256
Alkalinity: Carbonate	500	7.27	L0.5
Alkalinity: Hydroxide	500	---	L0.5
Sulfate	500	14.0	58
Nitrites & Nitrates	10	.070	0.127
Fluorides	1.5	0.16	0.46
<u>DISSOLVED METALS (mg/L)</u>			
Calcium	200	50.7	66.2
Iron	0.30	L.01	0.02
Manganese	0.05	0.06	L.01
Sodium	20	12.5	13.6
Sulfide	0.05	---	0.50
<u>TOTAL METALS (mg/L)</u>			
Iron	0.30	L.01	0.03
Manganese	0.05	0.07	0.02
<u>BACTERIOLOGICAL</u>	L 1	L 1	---

Note: "L" denotes "Less" than.

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Is(are) under consultation

Appendix D
Wastewater Quality Test Results

No wastewater information was seen