

**ASSESSMENT STUDY OF WATER AND WASTEWATER SYSTEMS
AND ASSOCIATED WATER MANAGEMENT PRACTICES
HUU-AY-AHT FIRST NATION, ANACLA IR NO. 12**

For

**Indian and Northern Affairs Canada
British Columbia Region**

By

**UMA Engineering Ltd.
3030 Gilmore Diversion
Burnaby, British Columbia
V5G 3B4**

April 2002

Assessment Study of Water and Wastewater Systems
Huu-ay-aht First Nation, Anacla IR No. 12

Appendix D

WATER TESTING RESULTS

(CHEMICAL/PHYSICAL/BACTERIOLOGICAL)
WITH COMPARISONS TO THE
GUIDELINES FOR CANADIAN DRINKING WATER QUALITY (GCDWQ)



827 FORT STREET,
VICTORIA, B.C. V8W 1H6
Tel: (250) 385-8112
Fax: (250) 382-8364

DATE: April 3, 1997

JOB NO: JB 1767
LR NO: 23484

CLIENT: Giles Environmental Engineering
108 - 3930 Shelbourne St.
Victoria, BC
V8P 5P6

SAMPLING DATE: March 12/97
SAMPLING AGENT: Client

The sample(s) submitted
by the agent have been
tested as requested and
we report as follows:

Attn: Mr. George Giles, MEng, PEng.

Sample: Anacla Pump #1 Raw

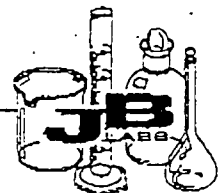
SAMPLE:

		<u>Dissolved</u>	<u>Total</u>
Aluminum	mg/L	< 0.2	< 0.2
Antimony	mg/L	< 0.2	< 0.2
Arsenic	mg/L	< 0.001	< 0.001
Barium	mg/L	< 0.001	< 0.001
Beryllium	mg/L	< 0.003	< 0.003
Boron	mg/L	0.02	0.02
Cadmium	ug/L	< 0.2	< 0.2
Calcium	mg/L	51.6	52.3
Chromium	mg/L	< 0.03	< 0.03
Cobalt	mg/L	< 0.02	< 0.02
Copper	mg/L	< 0.02	< 0.02
Iron	mg/L	< 0.03	< 0.03
Lead	mg/L	0.001	0.002
Magnesium	mg/L	2.48	2.61
Manganese	mg/L	0.005	0.007
Mercury	ug/L	< 0.05	---
Molybdenum	mg/L	< 0.04	< 0.04
Nickel	mg/L	< 0.03	< 0.03
Phosphorus	mg/L PO ₄	< 0.4	0.4
Potassium	mg/L	1.33	1.38
Silica	mg/L SiO ₂	12.5	13.1
Silver	mg/L	< 0.03	< 0.03
Sodium	mg/L	6.7	7.7
Strontium	mg/L	0.37	0.37
Tin	mg/L	< 0.03	< 0.03
Titanium	mg/L	< 0.006	< 0.006
Vanadium	mg/L	< 0.01	< 0.01
Zinc	mg/L	< 0.02	< 0.02

		<u>Total</u>
Tot Dissolved Solids	mg/L	130
Conductivity	umhos/cm	274
Colour	TCU	< 5
Turbidity	NTU	0.20
pH		7.9
Alkalinity, Total	mg/L CaCO ₃	137
Total Hardness	mg/L CaCO ₃	139
Hydrogen Sulphide	mg/L S	< 0.05
Chloride	mg/L	8
Sulphate	mg/L	3
Fluoride	mg/L	0.09
Nitrite	mg/L N	0.003
Nitrate	mg/L N	0.16
Total Coliform	CFU/100mL	< 1
Faecal Coliform	CFU/100mL	< 1
Noncoliform Bact.	CFU/100mL	< 1
(Bact. = Bacteria)		

< = less than

JB Laboratories Ltd.
Water/Wastewaters



John E. Evanoff, M.Sc.
Barbara M. Klassen, B.Sc.

Analysis performed according to "A Laboratory Manual for the Chemical Analysis of water, Wastewaters and Biological Tissues", Chemistry Laboratory, Water Resource Service and/or "Standard Methods/Water and Wastewater", American Public Health Association.

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The sample(s) submitted
by the agent have been
tested as requested and
we report as follows:

Attn: Mr. George Giles, MEng, PEng.

Sample: Anac̄a. Band Office

SAMPLE:

		Dissolved	Total		Total
Aluminum	mg/L	< 0.2	< 0.2	Tot Dissolved Solids	mg/L 127
Antimony	mg/L	< 0.2	< 0.2	Conductivity	umhos/cm 261
Arsenic	mg/L	0.002	0.002	Colour	TCU < 5
Barium	mg/L	< 0.001	< 0.001	Turbidity	NTU 0.45
Beryllium	mg/L	< 0.003	< 0.003	pH	7.9
Boron	mg/L	< 0.01	0.01	Alkalinity, Total	mg/L CaCO ₃ 124
Cadmium	ug/L	< 0.2	< 0.2	Total Hardness	mg/L CaCO ₃ 137
Calcium	mg/L	51.3	51.9	Hydrogen Sulphide	mg/L S < 0.05
Chromium	mg/L	< 0.03	< 0.03	Chloride	mg/L 8
Cobalt	mg/L	< 0.02	< 0.02	Sulphate	mg/L 6
Copper	mg/L	< 0.02	0.03	Fluoride	mg/L 0.08
Iron	mg/L	< 0.03	< 0.03	Nitrite	mg/L N 0.002
Lead	mg/L	0.001	0.001	Nitrate	mg/L N 0.06
Magnesium	mg/L	1.69	1.69	Total Coliform	CFU/100mL < 1
Manganese	mg/L	0.004	0.005	Faecal Coliform	CFU/100mL < 1
Mercury	ug/L	< 0.05	—	Noncoliform Bact.	CFU/100mL < 1
Molybdenum	mg/L	< 0.04	< 0.04	(Bact. = Bacteria)	
Nickel	mg/L	< 0.03	< 0.03		
Phosphorus	mg/L PO ₄	< 0.4	< 0.4		
Potassium	mg/L	0.60	0.66		
Silica	mg/LSiO ₂	10.0	10.5		
Silver	mg/L	< 0.03	< 0.03		
Sodium	mg/L	4.5	4.7		
Strontium	mg/L	0.36	0.36		
Tin	mg/L	< 0.03	< 0.03		
Titanium	mg/L	< 0.006	< 0.006		
Vanadium	mg/L	< 0.01	< 0.01		
Zinc	mg/L	0.03	< 0.02		

< = less than

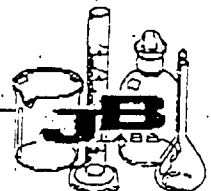
Barbara M. Klassen

JB Laboratories Ltd.

water/wastewaters

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Analysis performed according to "A Laboratory Manual for the Chemical Analysis of water, Wastewaters and Biological Tissues", Chemistry Laboratory, Water Resources Service and/or "Standard Methods/Water and Wastewater", American Public Health Association.



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Huu-ay-aht First Nation, Anacla IR No. 12

Appendix E

WASTEWATER TESTING RESULTS

(CHEMICAL/PHYSICAL/BACTERIOLOGICAL)

WITH COMPARISONS TO THE
GUIDELINES FOR EFFLUENT QUALITY AND WASTEWATER
TREATMENT AT FEDERAL ESTABLISHMENTS

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