

**ASSESSMENT STUDY OF  
WATER AND WASTEWATER SYSTEMS  
AND ASSOCIATED  
WATER MANAGEMENT PRACTICES  
AT STONE FIRST NATION**

**A  
REPORT  
TO  
INDIAN AND NORTHERN AFFAIRS CANADA  
BC REGION**

** NovaTec Consultants Inc.  
*Environmental Engineers and Scientists***

**August 2002**

**File No.: 1407.10/18  
006372**

**Appendix C**  
**Water Testing Results**



Environmental Health Services  
 Northern District  
 Health Canada  
 First Nations & Inuit Health Branch  
 # 220 - 177 Victoria Street  
 Prince George, B.C. V2L 5R5



DATE: August 19, 2002/1320 URGENT \_\_\_\_\_ CONFIDENTIAL \_\_\_\_\_

TO: Mr. A. Kawai, P. Eng.  
Novatec Consultants

FAX NUMBER: 604-873-2353 Pages to follow: 34

Original Mailed: Yes \_\_\_\_\_ No X

FROM: David

SUBJECT: Stone Data - Water Quality

COMMENTS: Good afternoon Andrew: as promised here is the  
data for Stone. We may want to talk a bit about the gross &  
determinations. Could I impose upon you to pass the NAZKO  
data to Martin?

Call if I can be of any further help. Kind regards  
D.

If there are any troubles receiving this fax please call us at the number below:

OUR FAX NUMBER: (250) 564-3272  
 OUR PHONE NUMBER: (250) 561-5384

J. David  
 signed

AK note: Received in two batches: 15 pages + 13 pages  
(pages 6-13) relate to Nazko  
passed on to 006374 MV



ANALYTICAL SERVICES

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### Certificate of Analysis

8577 Commerce Court  
Burnaby, B.C.  
Canada V5A 4N5  
Tel 604 444 4808  
Fax 604 444 4511

#### Reported To :

HEALTH CANADA

Client Code CE

C/O PATTI JOYCE  
PO BOX 4887  
WILLIAMS LAKE, BC  
V2G 2V8

Phone : (250) 296-9136  
FAX : (250) 296-3250

#### Project Information :

Project ID : -  
Submitted By: P.JOYCE

#### Requisition Forms :

Form 08098373 logged on 25-Feb-02 completed on 3-Mar-02  
Form 08098374 logged on 25-Feb-02 completed on 3-Mar-02  
Form 08098375 logged on 25-Feb-02 completed on 3-Mar-02

#### Remarks :

- + All organic data is blank corrected except for PCDD/F, Hi-res MS and CLP volatile analyses
- + 'MDL' = Method Detection Limit, '<' = Less than MDL, '---' = Not analyzed
- + 'CDWG' = Canadian Drinking Water Guidelines
- + Solids results are based on dry weight except Biota Analyses & Special Waste Oil & Grease
- + Organic analyses are not corrected for extraction recovery standards except for Isotope Dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
- + All Groundwater samples except BTEX/VOC's or Purgeable Hydrocarbons are decanted and/or filtered prior to analysis unless otherwise mandated by regulatory agency
- + This report shall not be reproduced except in full, without the written approval of the laboratory

Methods used by Philip are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', 20th Edition, published by the American Public Health Association, or on US EPA protocols found in the 'Test Methods For Evaluating Solid Waste, Physical/Chemical Method, SW846', 3rd Edition. Other procedures are based on methodologies accepted by the appropriate regulatory agency. Methodology briefs are available by written request.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Liability for any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at Philip for a period of 30 days from receipt of data or as per contract.

PHILIP Project Manager: James Teshima

*James Teshima*



ANALYTICAL SERVICES

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Client : HEALTH CANADA  
Project :  
Sampling site :  
Submitted by : P.JOYCE

Philip ID : 12010422      12010423      12010424  
Client ID : TOOSEY            ANAHAM

STOVE

Sparcode	Parameter	Unit	MDL	CDWG			
<b>PHYSICAL</b>							
00041220	pH	pH units	0.1	6.5-8.5	8.4	8.1	8.2
00021300	Color True	Col.Unit	5	15	< 5	< 5	< 5
00111160	Specific Conductance	uS/cm	1	---	687	528	652
SCCASCALC	Computed Conductance	uS/cm		---	804	596	778
CCPDCALC	Conductance % Diff.	%		---	15.7	12.2	17.6
00081071	Residue Nonfilterable (TSS)	mg/L	4	---	< 4	< 4	< 4
007H1035	Residue Filterable 1.0u (TDS)	mg/L	10	500	410	326	396
CTDSCALC	Computed TDS	mg/L		---	426	308	406
TDSRCALC	TDS % Diff.	%		---	3.7	-5.7	2.6
00151140	Turbidity	NTU	0.10	1.0	0.26	0.22	0.60
0107CALC	Hardness Total -T	mg/L		500	218	238	260
<b>GENERAL INORGANICS</b>							
01011211	Alkalinity Phen. 8.3 as CaCO3	mg/L	1	---	4	< 1	< 1
01021210	Alkalinity Total as CaCO3	mg/L	1	---	297	290	304
CO3-CALC	Carbonate as CO3=	mg/L		---	4.8	< 0.5	< 0.5
HCO3CALC	Bicarbonate as HCO3-	mg/L		---	352	354	371
OH--CALC	Hydroxide as OH-	mg/L		---	< 0.5	< 0.5	< 0.5
2105AA04	Cyanide(SAD) + Thiocyanate	mg/L	0.0005	0.2	< 0.0005	0.0006	0.0005
0125LLHS	Sulfide Total	mg/L	0.005	0.05	< 0.005	< 0.005	< 0.005
<b>ANIONS</b>							
11041334	Chloride Dissolved	mg/L	0.5	< 250	3.1	1.5	2.2
11061341	Fluoride Dissolved	mg/L	0.01	1.5	0.20	0.16	0.18
IonBCALC	Ion Balance	%		---	0.3	0.7	0.9
AnnsCALC	Total Anions	meq/L		---	7.99	6.21	7.79
CtnsCALC	Total Cations	meq/L		---	8.04	6.30	7.92
LangCALC	Langelier Index	pH units		---	0.7	0.8	0.8
pHSACALC	Saturation pH	pH units		---	7.7	7.3	7.4
<b>CARBON</b>							
01030912	Organic Carbon - Total	mg/L	0.5	---	0.8	1.0	< 0.5

Matrix : Water      Water      Water  
Sampled on: 02/02/21 10:00      02/02/21 02:00      02/02/21 16:00

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## ANALYTICAL REPORT

Client : HEALTH CANADA  
Project : -  
Sampling site :  
Submitted by : P.JOYCEPhilip ID : 12010422      12010423      12010424  
Client ID : TOOSEY      STONE      ANAHAM

Sparcode	Parameter	Unit	MDL	CDWG			
<b>NITROGEN</b>							
11081351	Ammonia Nitrogen (N)	mg/L	0.005	---	< 0.005	< 0.005	< 0.005
1110CALC	Nitrate Nitrogen Dissolved (N)	mg/L		10.0	0.12	0.26	0.28
11091350	Nitrate + Nitrite (N)	mg/L	0.02	10.0	0.12	0.26	0.28
11111354	Nitrite Nitrogen (N)	mg/L	0.005	1.0	< 0.005	< 0.005	< 0.005
<b>SULFATE</b>							
11211405	Sulfate	mg/L	0.5	< 500	93.2	16.8	77.8
<b>METALS TOTAL</b>							
Al-T0031	Aluminum	mg/L	0.02	---	< 0.02	< 0.02	< 0.02
Sb-TMS31	Antimony	mg/L	0.001	---	< 0.001	< 0.001	< 0.001
As-TMS31	Arsenic	mg/L	0.001	0.025	0.004	0.005	0.002
Ba-T0031	Barium	mg/L	0.001	1.0	0.016	0.022	0.004
B--T0031	Boron	mg/L	0.008	5.0	0.038	0.015	0.028
Cd-T0031	Cadmium	mg/L	0.002	0.005	< 0.002	< 0.002	< 0.002
Ca-T0031	Calcium	mg/L	0.05	---	20.9	46.6	38.8
Cr-T0031	Chromium	mg/L	0.005	0.05	< 0.005	0.008	< 0.005
Co-T0031	Cobalt	mg/L	0.005	---	< 0.005	< 0.005	< 0.005
Cu-T0031	Copper	mg/L	0.005	1.0	0.011	0.005	0.014
Fe-T0031	Iron	mg/L	0.005	0.3	< 0.005	0.005	< 0.005
Pb-TMS31	Lead	mg/L	0.0005	0.01	< 0.0005	< 0.0005	< 0.0005
Mg-T0031	Magnesium	mg/L	0.05	---	40.2	29.5	39.6
Mn-T0031	Manganese	mg/L	0.001	0.05	0.018	< 0.001	< 0.001
Hg-T0310	Mercury	mg/L	0.00005	0.001	< 0.00005	< 0.00005	< 0.00005
Mo-T0031	Molybdenum	mg/L	0.005	---	0.012	< 0.005	< 0.005
Ni-T0031	Nickel	mg/L	0.008	---	< 0.008	< 0.008	< 0.008
K_T0031	Potassium	mg/L	1	---	10	6	4
Se-TMS31	Selenium	mg/L	0.001	0.01	< 0.001	0.002	0.004
Ag-T0031	Silver	mg/L	0.01	---	< 0.01	< 0.01	< 0.01
Na_T0031	Sodium	mg/L	0.05	200	79.2	32.3	60.2
U--TLLMS	Uranium	mg/L	0.00001	0.1	0.00638	0.00536	0.00628
V--T0031	Vanadium	mg/L	0.005	---	< 0.005	0.014	0.020
Zn-T0031	Zinc	mg/L	0.005	5.0	0.006	< 0.005	< 0.005

Matrix : Water      Water      Water  
Sampled on: 02/02/21 10:00      02/02/21 02:00      02/02/21 16:00

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### ANALYTICAL REPORT

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Client : HEALTH CANADA  
Project :  
Sampling site :  
Submitted by : P.JOYCE

Philtp ID : 12010422      12010423      12010424  
Client ID : TOOSEY      STONE      ANAHAM

Sparcode	Parameter	Unit	MDL	CDWG			
<b>CHLORINATED PHENOLS</b>							
EX9946Z7	Water Prep for CPs	date			02/02/26	02/02/26	02/02/26
MCP2CPWA	2-chlorophenol	mg/L	0.001	---	< 0.001	< 0.001	< 0.001
MCP3CPWA	3-chlorophenol	mg/L	0.001	---	< 0.001	< 0.001	< 0.001
MCP4CPWA	4-chlorophenol	mg/L	0.001	---	< 0.001	< 0.001	< 0.001
CPE1CPWA	2,3-Dichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CPH1CPWA	2,4+3,4-DiClPhenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CPH2CPWA	2,5-Dichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP09CPWA	2,6-Dichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CPE3CPWA	3,5-Dichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP03CPWA	2,3,4-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP04CPWA	2,3,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP05CPWA	2,3,6-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP06CPWA	2,4,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP07CPWA	2,4,6-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP44CPWA	3,4,5-Trichlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP02CPWA	2,3,4,5-Tetrachlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
CP01CPWA	2346+2356-TeClPhenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
P022CPWA	Pentachlorophenol	mg/L	0.0001	---	< 0.0001	< 0.0001	< 0.0001
<b>SURROGATE RECOVERY</b>							
DC01SURR	CL2 Phenylaceticacid	%		---	82	80	80
BR3-CPWA	Tribromophenol	%	40	---	102	102	102
<b>HYDROCARBONS</b>							
H099PT11	VH C6-C10	mg/L	0.1	---	< 0.1	< 0.1	< 0.1
EX995172	Volat. Wat. Pre-Scr.	date		---	02/02/26	02/02/26	02/02/26
H097CALC	VPHw	mg/L		---	< 0.1	< 0.1	< 0.1
<b>POLYCYCLIC AROMATIC HYDROCARBONS</b>							
EX9946Z4	PAH Extraction-Water	date			02/02/27	02/02/27	02/02/27
PA05MW02	Benzo(a)pyrene	mg/L	0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001

Matrix : Water      Water      Water  
Sampled on: 02/02/21 10:00      02/02/21 02:00      02/02/21 16:00

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## ANALYTICAL REPORT

Client : HEALTH CANADA  
Project :  
Sampling site :  
Submitted by : P.JOYCEPhillip ID : 12010422 12010423 12010424  
Client ID : TOOSEY STONE ANAHAM

Sparcode	Parameter	Unit	MDL	CDWG			
<b>VOLATILE ORGANICS-MAH</b>							
B020MS11	Benzene	ug/L	0.5	5.0	< 0.5	< 0.5	< 0.5
V919MS11	Chlorobenzene	ug/L	0.5	80.0	< 0.5	< 0.5	< 0.5
V924MS11	1,2-Dichlorobenzene	ug/L	0.5	200.0	< 0.5	< 0.5	< 0.5
V925MS11	1,3-Dichlorobenzene	ug/L	0.3	---	< 0.3	< 0.3	< 0.3
V926MS11	1,4-Dichlorobenzene	ug/L	0.4	5.0	< 0.4	< 0.4	< 0.4
B021MS11	Ethylbenzene	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
V921MS11	Styrene	ug/L	0.4	---	< 0.4	< 0.4	< 0.4
T001MS11	Toluene	ug/L	0.5	24.0	< 0.5	< 0.5	< 0.5
X_8842_5	Xylenes	ug/L	0.5	300.0	< 0.5	< 0.5	< 0.5
X003MS11	m,p - Xylene	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
X002MS11	o - Xylene	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
<b>VOLATILE ORGANICS-CHLORINATED ALIPHATIC</b>							
V903MS11	Bromomethane	ug/L	3	---	< 3	< 3	< 3
C034MS11	Carbon tetrachloride	ug/L	1	---	< 1	< 1	< 1
V904MS11	Chloroethane	ug/L	4	---	< 4	< 4	< 4
V914MS11	2-chloroethylvinylether	ug/L	2	---	< 2	< 2	< 2
V901MS11	Chloromethane	ug/L	1	---	< 1	< 1	< 1
V909MS11	1,1-Dichloroethane	ug/L	0.7	---	< 0.7	< 0.7	< 0.7
V912MS11	1,2-Dichloroethane	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
V906MS11	1,1-Dichloroethene	ug/L	0.4	---	< 0.4	< 0.4	< 0.4
V910MS11	cis-1,2-Dichloroethene	ug/L	0.4	---	< 0.4	< 0.4	< 0.4
V908MS11	trans-1,2-Dichloroethene	ug/L	0.7	---	< 0.7	< 0.7	< 0.7
V907MS11	Dichloromethane	ug/L	0.9	---	< 0.9	< 0.9	< 0.9
V913MS11	1,2-Dichloropropane	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
V915MS11	cis-1,3-Dichloropropene	ug/L	0.4	---	< 0.4	< 0.4	< 0.4
V916MS11	trans-1,3-Dichloropropene	ug/L	0.3	---	< 0.3	< 0.3	< 0.3
V918MS11	1,2-Dibromoethane	ug/L	1	---	< 1	< 1	< 1
V923MS11	1,1,2,2-Tetrachloroethane	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
T030MS11	Tetrachloroethene	ug/L	0.5	30.0	< 0.5	< 0.5	< 0.5
V911MS11	1,1,1-Trichloroethane	ug/L	0.7	---	< 0.7	< 0.7	< 0.7
V917MS11	1,1,2-Trichloroethane	ug/L	0.5	---	< 0.5	< 0.5	< 0.5
T029MS11	Trichloroethene	ug/L	0.6	50.0	< 0.6	< 0.6	< 0.6
V905MS11	Trichlorofluoromethane	ug/L	4	---	< 4	< 4	< 4

Matrix : Water Water Water  
Sampled on: 02/02/21 10:00 02/02/21 02:00 02/02/21 16:00

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### ANALYTICAL REPORT

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Client : HEALTH CANADA  
Project :  
Sampling site :  
Submitted by : P.JOYCE

Philip ID :	12010422	12010423	12010424
Client ID :	TOOSEY	STONE	ANAHAM

Sparcode	Parameter	Unit	MDL	CDWG			
V902MS11	Vinyl Chloride	ug/L	1	2.0	< 1	< 1	< 1
<b>VOLATILE ORGANICS-TRihalOMETHANES</b>							
B012MS11	Bromodichloromethane	ug/L	0.5	100.0	< 0.5	< 0.5	< 0.5
B013MS11	Bromoform	ug/L	0.4	100.0	< 0.4	< 0.4	< 0.4
C032MS11	Chloroform	ug/L	0.6	100.0	< 0.6	< 0.6	< 0.6
C033MS11	Dibromochloromethane	ug/L	0.4	100.0	< 0.4	< 0.4	< 0.4
<b>VOC SURROGATE RECOVERY</b>							
VS01VSUR	Bromofluorobenzene	%	0	---	96	97	98
VS02VSUR	d4-1,2-dichloroethane	%	0	---	118	117	117
VS03VSUR	d8-Toluene	%	0	---	101	102	103

Matrix :	Water	Water	Water
Sampled on:	02/02/21 10:00	02/02/21 02:00	02/02/21 16:00



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## DUPLICATE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Duplicate Conc.	MDL	Unit	Relative % Diff.
Chloride Dissolved	TOOSEY	12010422	3.1	3.0	0.5	mg/L	3.28
Sulfate Dissolved	TOOSEY	12010422	93.2	93.3	0.5	mg/L	-0.11
VH C6-C10	TOOSEY	12010422	< 0.1	< 0.1	0.1	mg/L	0.00
Chloromethane	TOOSEY	12010422	< 1	< 1	1	ug/L	0.00
Vinyl Chloride	TOOSEY	12010422	< 1	< 1	1	ug/L	0.00
Bromomethane	TOOSEY	12010422	< 3	< 3	3	ug/L	0.00
Chloroethane	TOOSEY	12010422	< 4	< 4	4	ug/L	0.00
Trichlorofluoromethane	TOOSEY	12010422	< 4	< 4	4	ug/L	0.00
1,1-Dichloroethene	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
Dichloromethane	TOOSEY	12010422	< 0.9	< 0.9	0.9	ug/L	0.00
trans-1,2-Dichloroethene	TOOSEY	12010422	< 0.7	< 0.7	0.7	ug/L	0.00
1,1-Dichloroethane	TOOSEY	12010422	< 0.7	< 0.7	0.7	ug/L	0.00
cis-1,2-Dichloroethene	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
Chloroform	TOOSEY	12010422	< 0.6	< 0.6	0.6	ug/L	0.00
1,1,1-Trichloroethane	TOOSEY	12010422	< 0.7	< 0.7	0.7	ug/L	0.00
1,2-Dichloroethane	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Carbon tetrachloride	TOOSEY	12010422	< 1	< 1	1	ug/L	0.00
Benzene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
1,2-Dichloropropane	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Trichloroethene	TOOSEY	12010422	< 0.6	< 0.6	0.6	ug/L	0.00
Bromodichloromethane	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
2-chloroethylvinylether	TOOSEY	12010422	< 2	< 2	2	ug/L	0.00
cis-1,3-Dichloropropene	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
trans-1,3-Dichloropropene	TOOSEY	12010422	< 0.3	< 0.3	0.3	ug/L	0.00
Toluene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
1,1,2-Trichloroethane	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Dibromochloromethane	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
1,2-Dibromoethane	TOOSEY	12010422	< 1	< 1	1	ug/L	0.00
Tetrachloroethene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Chlorobenzene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Ethylbenzene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
m,p - Xylene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
Bromoform	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
Styrene	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
o - Xylene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
1,1,1,2-Tetrachloroethane	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
1,2-Dichlorobenzene	TOOSEY	12010422	< 0.5	< 0.5	0.5	ug/L	0.00
1,3-Dichlorobenzene	TOOSEY	12010422	< 0.3	< 0.3	0.3	ug/L	0.00



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### DUPLICATE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Duplicate Conc.	MDL	Unit	Relative % Diff.
1,4-Dichlorobenzene	TOOSEY	12010422	< 0.4	< 0.4	0.4	ug/L	0.00
pH	ANAHAM	12010424	8.2	8.2	0.1	pH units	0.00
Specific Conductance	ANAHAM	12010424	652	651	1	uS/cm	0.15
Alkalinity Phen. 8.3 as CaCO3	ANAHAM	12010424	< 1	< 1	1	mg/L	0.00
Alkalinity Total as CaCO3	ANAHAM	12010424	304	304	1	mg/L	0.00
Silver	ANAHAM	12010424	< 0.01	< 0.01	0.01	mg/L	0.00
Aluminum	ANAHAM	12010424	< 0.02	< 0.02	0.02	mg/L	0.00
Boron	ANAHAM	12010424	0.028	0.025	0.008	mg/L	11.32
Barium	ANAHAM	12010424	0.004	0.004	0.001	mg/L	0.00
Calcium	ANAHAM	12010424	38.8	38.6	0.05	mg/L	0.52
Cadmium	ANAHAM	12010424	< 0.002	< 0.002	0.002	mg/L	0.00
Cobalt	ANAHAM	12010424	< 0.005	< 0.005	0.005	mg/L	0.00
Chromium	ANAHAM	12010424	< 0.005	< 0.005	0.005	mg/L	0.00
Copper	ANAHAM	12010424	0.014	0.013	0.005	mg/L	7.41
Iron	ANAHAM	12010424	< 0.005	< 0.005	0.005	mg/L	0.00
Potassium	ANAHAM	12010424	4	4	1	mg/L	0.00
Magnesium	ANAHAM	12010424	39.6	39.6	0.05	mg/L	0.00
Manganese	ANAHAM	12010424	< 0.001	< 0.001	0.001	mg/L	0.00
Molybdenum	ANAHAM	12010424	< 0.005	< 0.005	0.005	mg/L	0.00
Sodium	ANAHAM	12010424	60.2	60.3	0.05	mg/L	-0.17
Nickel	ANAHAM	12010424	< 0.008	< 0.008	0.008	mg/L	0.00
Vanadium	ANAHAM	12010424	0.020	0.020	0.005	mg/L	0.00
Zinc	ANAHAM	12010424	< 0.005	< 0.005	0.005	mg/L	0.00



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### SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
pH	Blank Spike. Batch :	24400768	< 0.1	6.0	6	pH units	100
Residue Nonfilterable (TSS)	Blank Spike. Batch :	24400756	< 4	199	200	mg/L	100
Residue Filterable 1.0u (TDS)	Blank Spike. Batch :	24400749	< 10	96	100	mg/L	94
Turbidity	Blank Spike. Batch :	24400754	< 0.10	2.01	2	NTU	96
Alkalinity Total as CaCO3	Blank Spike. Batch :	24400769	< 1	100	100	mg/L	100
Cyanide(SAD) + Thiocyanate	Blank Spike. Batch :	24100439	0.0005	0.0213	.02	mg/L	104
Sulfide Total	Blank Spike. Batch :	24100430	< 0.005	0.096	.1	mg/L	96
Chloride Dissolved	TOOSEY	12010422	3.1	107	100	mg/L	104
Chloride Dissolved	Blank Spike. Batch :	24100427	< 0.5	104	100	mg/L	104
Fluoride Dissolved	Blank Spike. Batch :	24100440	< 0.01	0.50	.5	mg/L	100
Organic Carbon - Total	Blank Spike. Batch :	24100412	< 0.5	10.7	10	mg/L	107
Ammonia Nitrogen (N)	Blank Spike. Batch :	24100431	< 0.005	0.188	.2	mg/L	94
Nitrate + Nitrite (N)	Blank Spike. Batch :	24100431	< 0.02	0.55	.6	mg/L	91
Nitrite Nitrogen (N)	Blank Spike. Batch :	24100431	< 0.005	0.200	.2	mg/L	100
Sulfate Dissolved	TOOSEY	12010422	93.2	198	100	mg/L	105
Sulfate Dissolved	Blank Spike. Batch :	24100428	< 0.5	105	100	mg/L	105
Mercury	Blank Spike. Batch :	24200683	< 0.00005	0.00046	.0005	mg/L	92
Arsenic	Blank Spike. Batch :	24200676	< 0.001	0.021	.02	mg/L	105
Lead	Blank Spike. Batch :	24200676	< 0.0005	0.0208	.02	mg/L	104
Selenium	Blank Spike. Batch :	24200676	< 0.001	0.020	.02	mg/L	101
Pentachlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0021	.002	mg/L	104
2346 + 2356-TeClPhenol	Blank Spike. Batch :	24500372	< 0.0001	0.0038	.004	mg/L	95
4-chlorophenol	Blank Spike. Batch :	24500372	< 0.001	0.022	.02	mg/L	110
2,3,4,5-Tetrachlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0020	.002	mg/L	98
2,3,4-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0018	.002	mg/L	88
2,3,5-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0018	.002	mg/L	89
2,3,6-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0017	.002	mg/L	84
2,4,5-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0018	.002	mg/L	88
2,4,6-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0016	.002	mg/L	82
3,4,5-Trichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0021	.002	mg/L	105
2,4 + 3,4-DiClPhenol	Blank Spike. Batch :	24500372	< 0.0001	0.0038	.004	mg/L	96
2,3-Dichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0016	.002	mg/L	81
2,5-Dichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0017	.002	mg/L	85
3,5-Dichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0019	.002	mg/L	95
2,6-Dichlorophenol	Blank Spike. Batch :	24500372	< 0.0001	0.0016	.002	mg/L	82
2-chlorophenol	Blank Spike. Batch :	24500372	< 0.001	0.018	.02	mg/L	88
3-chlorophenol	Blank Spike. Batch :	24500372	< 0.001	0.020	.02	mg/L	99
Benzo(a)pyrene	Blank Spike. Batch :	24500365	< 0.00001	0.0018	.0025	mg/L	71



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### SPIKE SUMMARY

Parameter	Client ID	Philip ID	Sample Conc.	Sample & Spike Conc.	Spike Amount	Unit	Percent Recovery
Chloromethane	Blank Spike. Batch :	25201024	< 1	56	50	ug/L	112
Vinyl Chloride	Blank Spike. Batch :	25201024	< 1	55	50	ug/L	109
Bromomethane	Blank Spike. Batch :	25201024	< 3	48	50	ug/L	97
Chloroethane	Blank Spike. Batch :	25201024	< 4	51	50	ug/L	101
Trichlorofluoromethane	Blank Spike. Batch :	25201024	< 4	46	50	ug/L	92
1,1-Dichloroethene	Blank Spike. Batch :	25201024	< 0.4	11	10	ug/L	106
Dichloromethane	Blank Spike. Batch :	25201024	< 0.9	9.4	10	ug/L	92
trans-1,2-Dichloroethene	Blank Spike. Batch :	25201024	< 0.7	10	10	ug/L	102
1,1-Dichloroethane	Blank Spike. Batch :	25201024	< 0.7	10	10	ug/L	101
cis-1,2-Dichloroethene	Blank Spike. Batch :	25201024	< 0.4	9.9	10	ug/L	99
Chloroform	Blank Spike. Batch :	25201024	< 0.6	10	10	ug/L	100
1,1,1-Trichloroethane	Blank Spike. Batch :	25201024	< 0.7	10	10	ug/L	103
1,2-Dichloroethane	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	106
Carbon tetrachloride	Blank Spike. Batch :	25201024	< 1	10	10	ug/L	104
Benzene	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	107
1,2-Dichloropropane	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	108
Trichloroethene	Blank Spike. Batch :	25201024	< 0.6	11	10	ug/L	106
Bromodichloromethane	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	107
cis-1,3-Dichloropropene	Blank Spike. Batch :	25201024	< 0.4	10	10	ug/L	100
trans-1,3-Dichloropropene	Blank Spike. Batch :	25201024	< 0.3	11	10	ug/L	111
Toluene	Blank Spike. Batch :	25201024	< 0.5	10	10	ug/L	103
1,1,2-Trichloroethane	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	108
Dibromochloromethane	Blank Spike. Batch :	25201024	< 0.4	11	10	ug/L	109
1,2-Dibromoethane	Blank Spike. Batch :	25201024	< 1	11	10	ug/L	108
Tetrachloroethene	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	105
Chlorobenzene	Blank Spike. Batch :	25201024	< 0.5	10	10	ug/L	103
Ethylbenzene	Blank Spike. Batch :	25201024	< 0.5	10	10	ug/L	102
m,p - Xylene	Blank Spike. Batch :	25201024	< 0.5	21	20	ug/L	105
Bromoform	Blank Spike. Batch :	25201024	< 0.4	11	10	ug/L	105
Styrene	Blank Spike. Batch :	25201024	< 0.4	10	10	ug/L	104
o - Xylene	Blank Spike. Batch :	25201024	< 0.5	10	10	ug/L	104
1,1,2,2-Tetrachloroethane	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	108
1,2-Dichlorobenzene	Blank Spike. Batch :	25201024	< 0.5	11	10	ug/L	105
1,3-Dichlorobenzene	Blank Spike. Batch :	25201024	< 0.3	10	10	ug/L	100
1,4-Dichlorobenzene	Blank Spike. Batch :	25201024	< 0.3	10	10	ug/L	100
Residue Nonfilterable (TSS)	ANAHAM	12010424	< 4	27	25	mg/L	103
Alkalinity Total as CaCO3	ANAHAM	12010424	304	487	200	mg/L	92



ANALYTICAL SERVICES

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## ANALYSIS DATES

	Philip ID: Client ID:	12010422 TOOSEY	12010423 STONE	12010424 ANAHAM
00041220	pH	01-MAR-2002	01-MAR-2002	01-MAR-2002
00021300	Color True	01-MAR-2002	01-MAR-2002	01-MAR-2002
00111160	Specific Conductance	01-MAR-2002	01-MAR-2002	01-MAR-2002
00081071	Residue Nonfilterable (TSS)	28-FEB-2002	28-FEB-2002	28-FEB-2002
007H1035	Residue Filterable 1.0u (TDS)	25-FEB-2002	25-FEB-2002	25-FEB-2002
00151140	Turbidity	28-FEB-2002	28-FEB-2002	28-FEB-2002
01011211	Alkalinity Phen. 8.3 as CaCO3	01-MAR-2002	01-MAR-2002	01-MAR-2002
01021210	Alkalinity Total as CaCO3	01-MAR-2002	01-MAR-2002	01-MAR-2002
2105AA04	Cyanide(SAD) + Thiocyanate	27-FEB-2002	27-FEB-2002	27-FEB-2002
0125LLHS	Sulfide Total	27-FEB-2002	27-FEB-2002	27-FEB-2002
11041334	Chloride Dissolved	26-FEB-2002	26-FEB-2002	26-FEB-2002
11061341	Fluoride Dissolved	27-FEB-2002	27-FEB-2002	27-FEB-2002
TOC-W	15004 Sparg/Ox-Mem Color	26-FEB-2002	26-FEB-2002	26-FEB-2002
11081351	Ammonia Nitrogen (N)	27-FEB-2002	27-FEB-2002	27-FEB-2002
11091350	Nitrate + Nitrite (N)	27-FEB-2002	27-FEB-2002	27-FEB-2002
11111354	Nitrite Nitrogen (N)	27-FEB-2002	27-FEB-2002	27-FEB-2002
11211405	Sulfate	26-FEB-2002	26-FEB-2002	26-FEB-2002
Sb-TMS31	Antimony	07-MAR-2002	07-MAR-2002	07-MAR-2002
Hg-T0310	Mercury	27-FEB-2002	27-FEB-2002	27-FEB-2002
MET-DWS	Public Metals ICP/HGA	26-FEB-2002	26-FEB-2002	26-FEB-2002
CPWAGCMS	GOLDCPS	28-FEB-2002	28-FEB-2002	28-FEB-2002
DC01SURR	CL2 Phenylaceticacid	28-FEB-2002	28-FEB-2002	28-FEB-2002
H099PT11	VH C6-C10	26-FEB-2002	26-FEB-2002	26-FEB-2002
PA05MW02	Benzo(a)pyrene	28-FEB-2002	28-FEB-2002	28-FEB-2002
VOC-W1	VOC's P&T GC/MS	26-FEB-2002	26-FEB-2002	26-FEB-2002
VOC-SR	Surrogate Recovery	26-FEB-2002	26-FEB-2002	26-FEB-2002
	Matrix:	Water	Water	Water
	Sampled on:	21-FEB-2002	21-FEB-2002	21-FEB-2002



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## BATCH NUMBERS

	Philip ID:	12010422	12010423	12010424
	Client ID:	TOOSEY	STONE	ANAHAM
00041220	pH	24400768	24400768	24400768
00021300	Color True	24100453	24100453	24100453
00111160	Specific Conductance	24400770	24400770	24400770
00081071	Residue Nonfilterable (TSS)	24400756	24400756	24400756
007H1035	Residue Filterable 1.0u (TDS)	24400749	24400749	24400749
00151140	Turbidity	24400754	24400754	24400754
01011211	Alkalinity Phen. 8.3 as CaCO3	24400771	24400771	24400771
01021210	Alkalinity Total as CaCO3	24400769	24400769	24400769
2105AA04	Cyanide(SAD) + Thiocyanate	24100439	24100439	24100439
0125LLHS	Sulfide Total	24100430	24100430	24100430
11041334	Chloride Dissolved	24100427	24100427	24100427
11061341	Fluoride Dissolved	24100440	24100440	24100440
TOC-W	15004 Sparg/Ox-Mem Color	24100412	24100412	24100412
11081351	Ammonia Nitrogen (N)	24100431	24100431	24100431
11091350	Nitrate + Nitrite (N)	24100431	24100431	24100431
11111354	Nitrite Nitrogen (N)	24100431	24100431	24100431
11211405	Sulfate	24100428	24100428	24100428
Sb-TMS31	Antimony	24200815	24200815	24200815
Hg-T0310	Mercury	24200683	24200683	24200683
MET-DWS	Public Metals ICP/HGA	24200676	24200676	24200676
CPWAGCMS	GOLDCPS	24500372	24500372	24500372
DC01SURR	CL2 Phenylacetic acid	24500373	24500373	24500373
H099PT11	VH C6-C10	25201025	25201025	25201025
PA05MW02	Benzo(a)pyrene	24500365	24500365	24500365
VOC-W1	VOC's P&T GC/MS	25201024	25201024	25201024
VOC-SR	Surrogate Recovery	25201026	25201026	25201026
	Matrix:	Water	Water	Water
	Sampled on:	21-FEB-2002	21-FEB-2002	21-FEB-2002



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## BLANK SUMMARY

All method blanks were less than MDL



**PSC ANALYTICAL SERVICES**  
 8577 Commerce Court  
 Burnaby, B.C. V5A 4N5  
 Phone: (604) 444-4808  
 Fax: (604) 444-4511  
 Toll Free: 1-800-440-4808

**CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST** PAGE **2** OF **3**  
**ANALYSIS REQUEST 8098374**

**COMPANY NAME:** Health Canada  
**COMPANY ADDRESS:** Box 4887  
 Williams Lake, BC  
 V2G 2V8  
**PHONE:** 250-296-9136  
**FAX:** 250-296-7250  
**CLIENT PROJECT ID: (#)**

**SAMPLER NAME (PRINT):** P. Joyce  
**PROJECT MANAGER:**

FIELD SAMPLE ID	PSC LAB # (Lab Use Only)	MATRIX				# CONTAINERS	SAMPLING		HEADSPACE VAPOUR
		GROUND WATER	SURFACE WATER	SOIL	OTHER		DATE	TIME	
1 Stone 1 x 250ml	10423	✓	✓	✓	1	Feb 21/02	noon	metals sulphide chlorinated phenols benzo-pyrene cyanide TOC VOC physical nutrient ions (TSYTD) AMPA	
2 " 1 x 250ml		✓	✓	✓	1	"	"		
3 " 1 x 1L AG		✓	✓	✓	1	"	"		
4 " 1 x 500ml		✓	✓	✓	1	"	"		
5 " 1 x 250ml		✓	✓	✓	1	"	"		
6 " 1 x 250ml		✓	✓	✓	1	"	"		
7 " 3 x 40ml		✓	✓	✓	3	"	"		
8 " 3 x 1L		✓	✓	✓	3	"	"		
9 " 1 x 1L AG		✓	✓	✓	1	"	"		
10									
11									
12									

**TAT (Turnaround Time)**  
 5 DAY TAT (AUST HAVE PRIOR APPROVAL)  
 \* some exceptions apply please contact lab

**PO NUMBER / QUOTE NUMBER:** 357028  
**SPECIAL DETECTION UNITS / CONTAMINANT TYPE**

**ACCOUNTING CONTACT:**  
**SPECIAL REPORTING OR BILLING INSTRUCTIONS**

**RELINQUISHED BY:** P. Joyce  
**DATE:** Feb 21/02  
**TIME:** 4pm

**RECEIVED BY:** [Signature]  
**DATE:** Feb 21/02  
**TIME:** 11:10

**LAB USE ONLY**  
**LAB INFORMATION:** 10C  
 Mar 01/02

**STANDARD NO BUSINESS DAYS**   
**STANDARD 5 BUSINESS DAYS**   
**RUSH 2 BUSINESS DAYS**   
**URGENT 1 BUSINESS DAY**   
**OTHER BUSINESS DAYS** \_\_\_\_\_

**CUSTOMY RECEIPT**

ORIGINAL - PSC YELLOW - PSC PINK - CLIENT



	stone	location	date	gen.bact	t.colif	fecal.c	treatm	sampler
	1	Band Office	KT,CS 1st Draw	02/21/02	96	36	0	1.00
	2	Band Office	KT,CS 2nd Draw	02/21/02	96	20	0	1.00
	3	Treatment Plant	Raw Water	05/01/02	812	40	0	1.00
	4	Reservoir #1 CS		05/01/02	6	0	0	1.00
	5	Band Office KTCS	Free = 0.44	05/09/02	0	0	0	1.00
	6	Health Centre	KTCS Free=0.38	05/09/02	0	0	0	1.00
s.19(1)	7	School KT CS	wscreen Fr=0.13	05/09/02	0	0	0	1.00
	8	Treatment Plant	Raw Water	05/13/02	38	68	0	2.00
	9	Reservoir CS		05/13/02	0	0	0	2.00
	10			05/13/02	0	0	0	2.00
	11	Band Office CS		05/13/02	0	0	0	2.00
	12	Band Office KT		05/23/02	0	0	0	2.00
	13	Band Office WC		05/23/02	0	0	0	2.00
	14	Clinic WC		05/23/02	0	0	0	2.00
	15	School	Staffroom	05/23/02	0	0	0	2.00
	16	Ida Quilt OT		05/23/02	0	0	0	2.00
	17			05/23/02	0	0	0	2.00
	18	Raw Water	Before Sed.Filt	05/23/02	12	22	0	2.00
	19	Raw Water	After Sed.Filte	05/23/02	0	0	0	2.00
	20		CS	05/30/02	2	2	0	2.00

	stone	location	date	gen.bact	t.colif	fecal.c	treatm	sampler
21			05/30/02	0	0	0		2.00
22		CS	05/30/02	0	0	0		2.00
23			05/30/02	0	0	0		2.00
24		CS	05/30/02	0	0	0		2.00
25			05/30/02	0	0	0		2.00
26	Stone Clinic CS		05/30/02	0	0	0		2.00
27	Reservoir Intake	Raw Water CS	05/30/02	206	12	0		2.00
28	School KT CS	with screen	06/13/02	0	0	0		2.00
29		KT,CS	06/13/02	48	2	0		2.00
30		CS	06/13/02	90	24	0		2.00
31	Stone Daycare	CS	06/13/02	6	0	0		2.00
32	Band Office	CS	06/13/02	4	0	0		2.00
33			06/13/02	0	0	0		2.00
34			06/13/02	0	0	0		2.00
35			06/13/02	0	0	0		2.00
36			06/13/02	0	0	0		2.00
37		CS	06/13/02	0	0	0		2.00
38			06/13/02	16	0	0		2.00
39			06/27/02	600	0	0		2.00
40	East Reservoir	CS	06/27/02	2	0	0		2.00

stone	location	date	gen.bact	t.colif	fecal.c	ream	sampler
41	CS	06/27/02	0	0	0	.	2.00
42		06/27/02	0	0	0	.	2.00
43		06/27/02	0	0	0	.	2.00
44	CS	06/27/02	0	0	0	.	2.00
45	CS	06/27/02	0	0	0	.	2.00
46	CS	06/27/02	0	0	0	.	2.00
47		06/27/02	0	0	0	.	2.00
48	Teachorage (Duplex) CS	06/27/02	0	0	0	.	2.00
49	Chicotin Spring #1	07/08/02	22	0	0	.	2.00
50	Chicotin Spring #2	07/08/02	8	8	0	.	2.00
s.19(1) 51	Health Centre KT CS Free=0.02	07/18/02	0	0	0	.	1.00
52	CS Free=0.02	07/18/02	0	0	0	.	1.00
53	Band Office KT CS Free=0.03	07/18/02	0	0	0	.	1.00
54	WTP Tap CS	07/18/02	0	0	0	.	1.00
55	Stone Clinic CS	07/25/02	0	0	0	.	2.00
56		07/25/02	0	0	0	.	2.00
57		07/25/02	0	0	0	.	2.00
58		07/25/02	0	0	0	.	2.00
59		07/25/02	0	0	0	.	2.00
60	CS	07/25/02	0	0	0	.	2.00

	stone	location	date	gen.bact	t.colif	fecal.c	treatm	sampler
1	Stone Reservoir		01/25/01	376	28	0		2.00
2	Randolf Quilt		01/25/01	24656	50	0		2.00
3		CS	01/25/01	498	50	0		2.00
4		CS	01/25/01	32	2	0		2.00
5			02/14/01	46	10	0		2.00
6			02/14/01	86	62	0		2.00
7			02/14/01	256	50	0		2.00
8	Water Reservoir	CS	02/14/01	138	46	0		2.00
9	Reservoir CS		05/17/01	790	58	0		2.00
10		CS	05/17/01	1474	28	0		2.00
11		CS	05/17/01	2546	38	0		2.00
12		CS	05/17/01	80	24	0		2.00
13	Reservoir		05/31/01	30	0	0		2.00
14		CS	05/31/01	8	0	0		2.00
15		CS	05/31/01	0	0	0		2.00
16		CS	05/31/01	66	0	0		2.00
17		CS	06/27/01	68	4	0		2.00
18		CS	06/27/01	264	38	0		2.00
19		CS	06/27/01	554	32	0		2.00
20		CS	06/27/01	922	78	0		2.00

s.19(1)

SRC Group: 2002-934

**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

Mar-08-2002

Date Samples Received: Feb-27-2002 Client P.O.:

SAMPLE	CLIENT DESCRIPTION			
3210	2/22/02	LHEIDLI T'ENNEH SOUTH (19)-BAND OFFICE	*WATER*	
3211	2/21/02	KWADACHA (FT. WARE-16) - HEALTH CLINIC	*WATER*	
3212	2/21/02	TSAY KEY (44) TSAY KEH DENE - HEALTH CLINIC	*WATER*	

ANALYTE	UNITS	3210	3211	3212
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RADIO CHEMISTRY				
Gross alpha	Bq/L	<0.16	<0.13	0.18±0.09
Gross beta	Bq/L	0.19±0.04	<0.08	<0.08

SAMPLE	CLIENT DESCRIPTION			
3213	2/20/02	LHATACHO-BAND OFFICE	*WATER*	
3214	2/19/02	REDSTONE CS	*WATER*	
3215	2/19/02	REDSTONE @ MICHAEL GARDENS CS	*WATER*	

ANALYTE	UNITS	3213	3214	3215
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RADIO CHEMISTRY				
Gross alpha	Bq/L	<0.21	<0.10	<0.09
Gross beta	Bq/L	0.17±0.12	0.08±0.02	0.13±0.02

SAMPLE	CLIENT DESCRIPTION			
3216	2/21/02	TOOSEY CS	*WATER*	
3217	2/21/02	ANAHAM CS	*WATER*	
3218	2/21/02	STONE CS	*WATER*	

ANALYTE	UNITS	3216	3217	3218
---------	-------	------	------	------

RADIO CHEMISTRY				
Gross alpha	Bq/L	0.24±0.13	0.20±0.11	0.17±0.10
Gross beta	Bq/L	0.34±0.06	0.18±0.04	0.21±0.04

E4380-717

T.K. THIEN



C.N.

Environmental Health Services  
Health Canada, Medical Services  
c/o Cariboo Tribal Council  
17 South 1<sup>st</sup> Avenue  
Williams Lake, BC  
V2G 1H4

July 4, 2000

Ivor Myers  
Chief  
Stone Band  
General Delivery  
Hanceville, BC  
V0L 1K0

0 2 8 4 '00 JUL 28 10:19

Your file / Votre référence

Our file / Notre référence

150-5-12  
Stone

Dear Ivor,

**RE: WATER BACTERIOLOGY REPORT**

The following samples, collected from your community was tested in our Prince George lab. Result is as follows:

DATE COLLECTED: June 22, 2000

Sampled by: Patti Joyce

Sample Location/Source	General Bacteria	Total Coliform	Fecal Coliform
School, CS	1608	2	0
Band Office, CS	1126	28	0
<b>PSEUDOMONAS :</b> School 48hrs: 48 colonies			
<b>AEROMONAS:</b> School 48hrs: 0 colonies			

**REMARKS:** The chlorine level at the time of sampling was not detectable. Boil Water advisory is in effect for community water system. Presence of Pseudomonas may cause skin irritation in some individuals.

Canada



E4380-712  
T.K. Trien

ML

Environmental Health Services  
First Nations and Inuit Health  
17 South 1<sup>st</sup> Avenue  
Williams Lake, BC  
V2G 1H4

Your file    Votre référence

Our file    Notre référence

March 29, 2000

150-5-12

Anaham

Leslie Stump  
Chief  
Tl'etinqox-t'in Government  
General Delivery  
Alexis Creek, BC  
V0L 1A0

9995 00 APR 10 13:06

Dear Leslie

**RE: WATER BACTERIOLOGY REPORT**

The following samples, collected from your community were tested in our Prince George Lab. Results are as follows:

DATE COLLECTED: March 16, 2000

Sample	Colony Count	Colony Count	Colony Count
	0	0	0
	0	0	0
	0	0	0

s.19(1)

**REMARKS: All samples were satisfactory for bacteria.**

If you require an interpretation guide or if you have any questions, please call our office at (250)392-7361.

Yours truly,

Patti Joyce  
Environmental Health Officer

cc. Sally Hance, CHR  
CHN, Alexis Creek Health Centre  
INAC, Vancouver

Canada

If you have any questions please feel free to call our office at 250-392-7361.

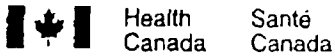
Yours truly,



Patti Joyce  
Environmental Health Officer

cc: Betty Lulua, CHR  
Alexis Creek Health Centre, CHN  
Craig Buchan, Band Manager  
INAC, Vancouver

E4380-717 TK. THIEN



Environmental Health Services  
Health Canada, Medical Services  
17 South 1<sup>st</sup> Avenue  
Williams Lake, BC  
V2G 1H4

C.N.

February 1, 2000

Your life Votre référence

PS05-12 <sup>12</sup> *extra référence*

Stone

Dan Case  
Chief  
Stone Band  
Box 158 Hanceville, BC  
V0L 1K0

Dear Dan,

**RE: WATER BACTERIOLOGY REPORT**

The following samples, collected from your community was tested in our Prince George lab.  
Result is as follows:

DATE COLLECTED: January 28, 2000

Sampled by: Patti Joyce

Sample Location/Source	General Bacteria	Total Coliform	Fecal Coliform
School, CS	0	0	0
	0	0	0
	0	0	0
	0	0	0
Band Office	0	0	0
	0	0	0
Bottled Water at BO	tntc	0	0
PSEUDOMONAS :			
AEROMONAS:			

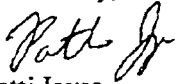
s.19(1)

Canada

**REMARKS:** The chlorine level at the time of sampling was 0.2 mg/l total chlorine with no free chlorine. This level of chlorination was effective in destroying general bacteria and coliform, but was not sufficient to destroy *Pseudomonas* and *Aeromonas*. These microorganisms are known to be chlorine resistant. *Pseudomonas* is capable of producing itchy rashes on some people, as has been reported in the community. It is recommended to increase the chlorine level to maintain a free chlorine residual between 0.1 and 0.2 mg/l at the end of the line. Water cooler at Band Office should be disinfected as per previous instructions.

If you have any questions please feel free to call our office at 250-392-7361.

Yours truly,



Patti Joyce  
Environmental Health Officer

cc: Betty Lulua, CHR  
Alexis Creek Health Centre, CHN  
Craig Buchan, Band Manager  
INAC, Vancouver



Health Canada Santé Canada

TK Thien  
E4380-717

Environmental Health Services  
Health Canada, Medical Services  
17 South 1<sup>st</sup> Avenue  
Williams Lake, BC  
V2G 1H4

October 26, 1999

Dan Case  
Chief  
Stone Band  
Box 158 Hanceville, BC  
V0L 1K0

9 1 4 8 ' 9 9 NOV 1 9 10:14

Your file / Votre référence

150-5-12  
Stone

Dear Dan,

**RE: WATER BACTERIOLOGY REPORT**

The following samples, collected from your community was tested in our Prince George lab. Result is as follows:

DATE COLLECTED: October 20th, 1999

Sampled by: Patti Joyce

Sample Location/Source	General Bacteria	Total Coliform	Fecal Coliform
Grey House, 1 <sup>st</sup> Reservoir, Outside Tap	290	66	0
School, Kitchen Drinking Water tap	166	2	0

**REMARKS:** Boil water advisory remains in effect for the Stone Community Water System. The large coliform count found from the water coming from the first reservoir indicates the need to clean and disinfect this reservoir.

If you need an interpretation guide or if you have any questions please feel free to call our office at 250-392-7361.

Yours truly,

Patti Joyce  
Environmental Health Officer

cc: Betty Lulua, CHR  
Alexis Creek Health Centre, CHN  
INAC, Vancouver

Canada