



Siskin Lane

Lot 4  
Water Testing Results  
And  
Well Log

Certificate of Potability and Water Report

As outlined in the *Canadian Safe Drinking Water Guidelines*

April 2006



**NORWEST  
LABS**

## Certificate of Potability

Norwest Labs  
#104, 19575-55 A Ave.  
Surrey, BC. V3S 8P8  
Phone: (604) 514-3322  
Fax: (604) 514-3323

Bill to: Discovery Islands Water Quality  
Services  
Report to: Discovery Islands Water Quality  
Services  
Box 180  
Quathiaski Cove, BC, Canada  
V0P 1N0  
Attn: Paul Flemming  
Sampled By:  
Company:

Project  
ID: Lot#4 - Well # 11302  
Name:  
Location:  
LSD:  
P.O.:  
Acct. Code:

NWL Lot ID: **406990**  
Control Number:  
Date Received: Sep 08, 2005  
Date Reported: Sep 14, 2005  
Report Number: 744255

Page: 1 of 1

### Sample Description: Well Head / Sisken Lane, Cortex Island / Lot #4 - Well # 11302

The above mentioned water sample number **406990 - 1** supplied by **Discovery Islands Water Quality Services** meets the chemical and bacteriological requirements specified by the Oct. 19th 2004 Guidelines for Canadian Drinking Water Quality for the constituents tested.

### Comments:

Approved by:

Bill Warning, B.Sc.  
Lab Operations Manager

### Note:

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.



## Report Transmission Cover Page

Norwest Labs  
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**NWL Lot ID:** 406990  
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**Date Received:** Sep 08, 2005  
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Contact	Company	Address									
Paul Flemming	Cash Account	Box 180									
Web		Quathiaski Cove, BC V0P 1N0									
Email Notification		Phone: (250) 830-3744									
		Fax:									
		Email: thewaterguy@uniserve.com									
<table><tr><th><u>Copies</u></th><th><u>Delivery Strategy</u></th><th><u>Format</u></th></tr><tr><td>1</td><td>Post</td><td></td></tr><tr><td>1</td><td>Email - Single Report</td><td>PDF</td></tr></table>			<u>Copies</u>	<u>Delivery Strategy</u>	<u>Format</u>	1	Post		1	Email - Single Report	PDF
<u>Copies</u>	<u>Delivery Strategy</u>	<u>Format</u>									
1	Post										
1	Email - Single Report	PDF									

NOTE: **P** indicates a preliminary report is required

NOTE: **A** indicates report is delivered using automated delivery

\_\_\_\_\_ # OF PAGES IN THIS TRANSMISSION

### Report Transmission Notes

#### Agreement Notes

#### Lot Notes

#### Sample Notes:

#### Notes to Clients

##### Lot Notes:

##### Sample Notes:

##### Batch Notes:

##### Method Notes:

##### Method Result Notes:

### Reports associated with this Lot

Id/Format/Reported Date

Id/Format/Reported Date

Id/Format/Reported Date

744255 Env Guide No Disp

### Comment:

See Methodology and Notes page of Analytical Report for all comments pertaining to this report.

If this report transmission is not satisfactory, please send report requirements to the address at the top of this page.

9/14/05

744255 14-Sep-2005

9/14/2005 11:58:14AM



## Analytical Report

Norwest Labs  
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Page: 1 of 3

NWL Number	406990-1
Sample Date	Sep 08, 2005 11:00:00AM
Sample Description	Well Head / Sisken Lane, Cortex Island / Lot #4 - Well # 11302
Sample Matrix	Water - General

Analyte	Units	Result	Detection Limit	Guideline Limit	Guideline Comments
<b>Metals Extractable</b>					
Aluminum	Extractable mg/L	0.021	0.005	0.1	Acceptable
Antimony	Extractable mg/L	<0.0002	0.0002	0.006	Pass
Arsenic	Extractable mg/L	0.0006	0.0002	0.025	Pass
Barium	Extractable mg/L	0.004	0.001	1	Pass
Boron	Extractable mg/L	0.005	0.002	5	Pass
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Pass
Chromium	Extractable mg/L	0.0010	0.0005	0.05	Pass
Copper	Extractable mg/L	0.005	0.001	1	Acceptable
Lead	Extractable mg/L	0.0016	0.0001	0.01	Pass
Uranium	Extractable mg/L	<0.0005	0.0005	0.02	Pass
Zinc	Extractable mg/L	0.004	0.001	5	Acceptable
<b>Microbiological Analysis</b>					
Total Coliforms	Enzyme Substrate TestMPN/100 mL	<1.0	1	<1	Pass
Escherichia coli	Enzyme Substrate TestMPN/100 mL	<1	1	<1	Pass
Heterotrophic Count - Aerobic	SimPlate MPN/mL	26	2	500	Acceptable
<b>Physical and Aggregate Properties</b>					
Colour	Apparent, Potable Colour units	16	5	15	Above Aesthetic
Turbidity	NTU	10.3	0.1	5	Above Aesthetic
Temperature	As Received °C	6.0	-		n/a
<b>Routine Water</b>					
pH		7.59	-	6.5 - 8.5	Acceptable
Sodium	Extractable mg/L	9.0	0.4	200	Acceptable
Iron	Extractable mg/L	0.95	0.03	0.3	Above Aesthetic
Manganese	Extractable mg/L	0.026	0.005	0.05	Acceptable
Chloride	Dissolved mg/L	6.9	0.4	250	Acceptable
Fluoride	mg/L	0.05	0.05	1.5	Pass
Nitrate - N	mg/L	0.05	0.01	10	Pass
Nitrite - N	mg/L	<0.005	0.005	1	Pass
Sulfate (SO4)	mg/L	1	0.9	500	Acceptable

Please Note: Related regulatory criteria are provided as a service to clients. Norwest Labs' responsibility is limited to analytical data. We are not responsible for ensuring that listed criteria are current, scientifically valid, appropriate and sufficient for the user of the data.



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Sample Matrix	Water - General

Analyte	Units	Result	Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
T-Alkalinity	as CaCO <sub>3</sub>	mg/L 43	5	250-650	Low
Total Dissolved Solids	mg/L	56	1	500	Acceptable
Hardness	as CaCO <sub>3</sub>	mg/L 33	-		Soft

Approved by:

Bill Warning, B.Sc.  
Lab Operations Manager

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## Methodology and Notes

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### Method of Analysis:

MethodName	Reference	Method	Date Analysis Started	Location
Alkalinity, pH, and EC in water	APHA	* Electrometric Method, 4500-H+ B	12-Sep-05	Norwest Labs Edmonton
Alkalinity, pH, and EC in water	APHA	* Titration Method, 2320 B	12-Sep-05	Norwest Labs Edmonton
Anions (Routine) by Ion Chromatography	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	13-Sep-05	Norwest Labs Edmonton
Chloride in Water	APHA	* Automated Ferricyanide Method, 4500-Cl- E	13-Sep-05	Norwest Labs Edmonton
Colour (Apparent) in water	APHA	* Visual Comparison Method, 2120 B	13-Sep-05	Norwest Labs Edmonton
E. coli - Colilert	APHA	Enzyme Substrate Test, 9223 B	8-Sep-05	Norwest Labs Surrey
Heterotrophic (Standard) Plate Count (Aerobic SP) - Surrey	APHA	Heterotrophic Plate Count - Pour Plate Method, 9215 B	8-Sep-05	Norwest Labs Surrey
Metals ICP-MS (Extractable) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	13-Sep-05	Norwest Labs Edmonton
Metals Trace (Extractable) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	13-Sep-05	Norwest Labs Edmonton
Total Coliforms- Colilert	APHA	Enzyme Substrate Test, 9223 B	8-Sep-05	Norwest Labs Surrey
Turbidity in Water	APHA	* Nephelometric Method, 2130 B	13-Sep-05	Norwest Labs Edmonton

\* Norwest method(s) is based on reference method

### References:

APHA Standard Methods for the Examination of Water and Wastewater  
US EPA US Environmental Protection Agency Test Methods

### Comments:

Please direct any inquiries regarding this report to our Client Services group.  
Results relate only to samples as submitted

The test report shall not be reproduced except in full, without the written approval of the laboratory



Water Management Branch, Groundwater Section

## WATER WELL RECORD

Date 05/05/09

B C G S MAP [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] WELL No. [ ] [ ] ELEV [ ] [ ] [ ] Location \_\_\_\_\_ Accuracy \_\_\_\_\_

UTM Z [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] N Date 19 \_\_\_\_ Well Type \_\_\_\_

Owners Name & Address Renewal Land Company Suite 610-220 Cambie St  
Legal Description & Address Vancouver, BC V6B 2M1

Descriptive Location hot

1. TYPE OF WORK

1 <input checked="" type="checkbox"/> New Well	2 <input type="checkbox"/> Reconditioned
3 <input type="checkbox"/> Deepened	4 <input type="checkbox"/> Abandoned

2. WORK METHOD

1 ☐ Cable tool    2 ☐ Bored    3 ☐ Jetted  
4 ☒ Rotary    a ☐ mud    b ☒ air    c ☐ reverse  
☐ Other

3. WATER 1 ☒ Domestic 2 ☐ Municipal 3 ☐ Irrigation  
WELL USE 4 ☐ Comm. & Ind. ☐ Other

#### 4. DRILLING ADDITIVES

5. MEASUREMENTS from 1 ☒ ground level 2 ☐ top of casing  
casing height above ground level 3 ft.

[illegible]

7. CONSULTANT \_\_\_\_\_  
Address \_\_\_\_\_

3. WELL LOCATION SKETCH

9. CASING: 1 ☒ Steel 2 ☐ Galvanized 3 ☐ Wood  
Materials 4 ☐ Plastic 5 ☐ Concrete  
☐ Other

						units
Hole Diameter						ins
Diameter	6					ins
from	+ 29'					ft
to	269'					ft
Thickness						ins
Weight						lb/ft

Pitless unit \_\_\_\_\_ ft 1 ☐ above 2 ☐ below ground level

1 ☒ Welded 2 ☐ Cemented 3 ☐ Threaded | 1 ☐ New 2 ☐ Used  
Perforations:

Shoe(s): one six inch

Open hole, from \_\_\_\_\_ to \_\_\_\_\_ ft Diameter \_\_\_\_\_ ins

Grout :

10. SCREEN: 1 ☒ Nominal (Telescope) 2 ☐ Pipe Size

Type 1 ☒ Continuous Slot 2 ☐ Perforated 3 ☐ Louvre  
☐ Other \_\_\_\_\_

Material 1 ☒ Stainless Steel 2 ☐ Plastic ☐ Other \_\_\_\_\_  
Set from 267.25 to 272 ft below ground level

RISER, SCREEN & BLANKS						units
Length	4'9 1/2"					ft
Diam. I D	3"					ins
Slot Size	8th					ins
from	26'2 3/4"					ft
to	27'					ft

Fittings, top K-packer bottom blank.  
Gravel Pack \_\_\_\_\_

II. DEVELOPED BY: 1 ☐ Surging 2 ☐ Jetting 3 ☐ Air  
4 ☐ Bailing 5 ☐ Pumping ☐ Other \_\_\_\_\_

12. TEST 1 ☐ Pump 2 ☐ Ball 3 ☐ Air Date                       
Rate        USgpm Temp        °C SWL before test        ft  
Water Level        ft after test of        hrs

[illegible]

13.	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
		ft	USgpm

14. WATER TYPE: 1 ☒ fresh 2 ☐ salty 3 ☒ clear 4 ☐ cloudy  
colour \_\_\_\_\_ smell \_\_\_\_\_; qos 1 ☐ yes 2 ☒ no

15. WATER ANALYSIS:

1 Hardness	_____	mg/L
2 Iron	_____	mg/L
3 Chloride	_____	mg/L
4 pH	_____	
Field Date _____		

SITE ID No

Lab Date 11/11/11

## 16. FINAL WELL COMPLETION DATA

Well Depth 272 ft Well Yield 18 US gpm  
 Static Water Level 227 ft Artesian Flow      US gpm Pressure Head      ft  
 Back filled Native material  
 Well Head Completion Bensoal Surface Seal  
9 well cap

17. DRILLER PARKER SURNAME ROBERT FIRST NAME  
PLEASE PRINT

Signature

18. CONTRACTOR, **RED WILLIAMS WELL DRILLING LTD**  
Address

989 PRATT ROAD

# QUALICUM BEACH, BC

Member, B C G W A

WPK 145