

**Drinking Water System Annual Report**

<b>Reporting Period</b>	Jan 1, 2017 to Dec 31, 2017
<b>Water System Name</b>	Blackcomb – Jersey Cream, Glacier Creek, Horstman Hut, Horstman Patrol Hut Whistler - CLC, Chic Pea, Roundhouse, Ravens
<b>Water System Owner</b>	Vail Resorts, Whistler Blackcomb
<b>Primary Contact Name (Operator or Manager)</b>	NaTai Perdue
<b>Phone Number (Operator or Manager)</b>	604-905-8409
<b>Email (Operator or Manager)</b>	nperdue@vailresorts.com

**Describe Your Water Supply System**

***What is the source(s) of Raw Water?***

Deep Well  Shallow Well  Surface Water  Other (specify): \_\_\_\_\_

***Does The Drinking Water System Have Primary Disinfection?***  Yes  No

Chlorination  Ultraviolet light  Ozonation  Other (specify): \_\_\_\_\_

***Does The Drinking Water System Have Secondary Disinfection?***  Yes  No

Chlorination; All systems except the Roundhouse system

Ultraviolet light; Only at Horstman Hut and Horstman Patrol Hut

***Does The Drinking Water System Have Filtration?***  Yes  No

Filter Type (check boxes that apply):

**Public Reporting**

***Emergency Response & Contingency Plan (ERCP)***

Is your ERCP up to date?  Yes  No

How do you inform the users of the ERCP?

Hand Delivered  Bulletin Board  Website;

Other; WB Internal Shared File

***Drinking Water System Annual Report***

How do you inform system users of the Annual Report?

Hand Delivered  Public Bulletin Board  Newspaper  Utility Bill Insert

Website; <https://www.whistlerblackcomb.com/explore-the-resort/about-the-resort/environment/mountain-drinking-water.aspx>

Other; WB Internal Shared File

**Compliance with Operating Permit**

List the conditions of your Operating Permit (Contact the DWO for a copy if needed):

- Horstman Water Hauling Unit must only be filled from Approved Potable Source(s)
- Review and update the Emergency Response Plan annually
- Monitor for E. Coli and Total Coliform semi-monthly and in accordance with the monitoring plan
- Provide a Well Protection Plan for each source
- Water Hauling limited to Horstman Hut and Patrol Hut on Blackcomb Mountain
- Monitor Cross Connection Control Program for Potable and Non-Potable Water
- Maintain a Free Chlorine Residual throughout the Distribution System
- Provide a Certified Operator; Level I Water Treatment & Level II Water Distribution

Are you in compliance with the Operating Permit?  Yes  No

**Bacteriological Testing Completed During This Reporting Period**

How many bacteriological samples did you collect? **241**

Bacteriological summary attached to this report.  Yes  No

***In order to meet the potability standard no more than 10% of samples can show the presence of total coliform bacteria and no samples can show the presence of E coli.***

Did your water system meet this standard?  Yes  No

If No, complete the table below; Attach additional sheets if necessary.

Date	T. Coliform #	E. Coli #	Reason	Corrective Action

**Chemical Sampling Completed During This Reporting Period**

Did you conduct any chemical sampling:  Yes  No?

Did all treated water samples meet the Guidelines for Canadian Drinking Water Quality?  Yes  No

If no, record the parameters in the table below: Complete additional sheets if necessary.

Parameter	Result	Corrective Action/Treatment

**Additional Testing**

Did you complete any additional water testing in this reporting period?  Yes  No

If yes, complete the table below. Attach additional sheets if necessary.

Additional Testing & Reason for Sampling	Corrective Action Taken

## Drinking Water System Annual Report

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### Water Quality Complaints

Did you receive any water quality complaints in this reporting period?  Yes  No

If yes, complete the table below. Attach additional sheets if necessary.

Date	Water Quality Complaint (i.e. taste, odour, colour, etc)	Corrective Action Taken

### Operational Problems

Did you experience operational problems during this reporting period?  Yes  No

(Typical operational problems are; insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity, etc.).

If yes, complete the table below. Attach additional sheets if necessary.

Incident Date	Type of Operational Problem	Corrective Action Taken

### Major Upgrades/Repairs & Expenses

Did you complete any upgrades/repairs and incur major expenses in this reporting period?  Yes  No

If yes, complete the table below. Attach additional sheets if necessary.

Major Upgrades/Expenses	Details
Improvements required by DWO	n/a
Additions/changes to system	In progress of installing UV Treatment system c/w 1um filtration for JC Well #1 use.
Purchase or installation of new equipment	
Equipment repair or replacement (existing)	Repair of leak in JC Well #2 Supply pipe.
Annual maintenance of system: (system flushing, replacement of carbon filters, etc)	Systems checked daily. Filters replaced, quarterly. Lamps replaced annually. Tanks Inspected and flushed annually. Lines Flushed annually. Wells shock treated annually

<b>Specialist report</b>	n/a
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**Future Improvements**

Do you have plans for any future improvements?  Yes  No

If yes, complete the table below. Attach additional sheets if necessary.

Future Upgrades or Improvements	Est. date of completion
Add a non-potable supply to the Roundhouse Water system. Potentially add water to Crabapple Snowmaking Pumphouse	Winter 2019, Winter 2018

**Date Completed;** June 27, 2018

**Completed by;** NaTai Perdue



**Signature**



## WATER FACILITY EVALUATION REPORT

### Health Protection

Premises Name <b>Blackcomb - Jersey Cream</b>		Tel: (604) 938-7661 Fax: (604) 938-7532	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4		Inspection Date April 24, 2018	Time Spent 1 hour
Operator (Person in Charge) Na Tai Perdue			
<b>Inspection Type</b> Evaluation			

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<p><b>Comments</b></p> <p>This is a 2017 year end summary inspection report for the Jersey Cream water system on Blackcomb Mountain. This water system services The Rendezvous Restaurant, the Alpine Shop, and is transported to Horstman and Patrol Huts in a permitted water hauling unit. A non-potable water system supplies the toilets in Rendezvous.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <ul style="list-style-type: none"> <li>Review and update the Emergency Response Plan annually</li> <li>Prepare a Cross Connection Control Plan</li> <li>Provide a free chlorine residual throughout distribution system</li> <li>Monitor for E. Coli and Total Coliform semi monthly and in accordance with the monitoring plan.</li> </ul> <p>A complete analysis of the well source water was conducted in December 2017. All chemical result are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines. The JC well #1 sample from December was positive for low level total coliforms (2 per 100mL).</p> <p>A 2017 water monitoring plan schedule has been provided. A total of 48 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly for each of the 2 active sample sites for the distribution system. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018. Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p> <p>Our records show that a repair was conducted on the main line from Jersey Cream Well #2 in the fall of 2017.</p> <p>A construction permit was also issued on Feb 6th 2018 to this water system for the following works, which are scheduled to be completed later this year. " The addition of water treatment when the backup well JC #1 is used, treatment includes 1 um filtration</p>
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and one R-CAN SPV-20 UV unit c/w 13.5 gpm flow restrictor, followed by chlorination and retention in two 10,000 gallon tanks; peak daily flow is estimated to be 7500 gallons."

**Action Taken**

Information Exchanged

**Hazard Rating For Your Facility:**     High     Moderate     Low

DWO

DWO Printed Name

**James Whalen**

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Blackcomb - Jersey Cream

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Blackcomb Alpine</u>				
<u>Shop, Blackcomb</u>				
<u>Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/15/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	4/25/2017	L1	L1	
	5/9/2017	L1	L1	
	5/23/2017	L1	L1	
	6/6/2017	L1	L1	
	7/5/2017	L1	L1	
	7/18/2017	L1	L1	
	7/31/2017	L1	L1	
	8/15/2017	L1	L1	
	8/29/2017	L1	L1	
	9/12/2017	L1	L1	
	9/25/2017	L1	L1	
	10/11/2017	L1	L1	
	11/20/2017	T		
	12/4/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	

Rendevous  
Restaurant,  
Blackcomb Mountain

1/3/2017	L1	L1
1/17/2017	L1	L1
1/31/2017	L1	L1
2/14/2017	L1	L1
2/28/2017	L1	L1
3/15/2017	L1	L1
3/28/2017	L1	L1
4/11/2017	L1	L1
4/25/2017	L1	L1

5/9/2017	L1	L1
6/6/2017	L1	L1
6/20/2017	L1	L1
6/20/2017	L1	L1
7/5/2017	L1	L1
7/18/2017	L1	L1
7/31/2017	L1	L1
8/15/2017	L1	L1
8/29/2017	L1	L1
9/12/2017	L1	L1
9/25/2017	L1	L1
10/11/2017	L1	L1
10/25/2017	L1	L1
11/20/2017	T	
12/4/2017	L1	L1
12/18/2017	<u>L1</u>	<u>L1</u>
<b>Total Positive :</b>	<b>0</b>	<b>0</b>

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	48	

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Apr 24 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202



## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: JC Well # 1	Lot ID: <b>1242570</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248022
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The Total Coliforms result in sample 1242570-1 exceeded the maximum acceptable concentration (MAC) as specified by the February 2017 Guidelines for Canadian Drinking Water Quality.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: JC Well # 1	Lot ID: <b>1242570</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248022
Sampled By:		
Company:		

<b>Reference Number</b>	1242570-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	17:00
<b>Sample Location</b>	
<b>Sample Description</b>	JC Well # 1 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.003	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	<0.0001	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0016	0.0001	1	Below MAC	
Boron	Extractable mg/L	<0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	0.00007	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	<0.0005	0.0005	1.0	Below AO	
Lead	Extractable mg/L	<0.00001	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	0.00007	0.00005			
Zinc	Extractable mg/L	0.0694	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	2.0	1.0	0 per 100 mL	Above MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.20	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.25		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	29	1		
Calcium	Extractable	mg/L	4.7	0.01		
Iron	Extractable	mg/L	0.009	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	0.13	0.02		
Manganese	Extractable	mg/L	0.002	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.11	0.04		
Silicon	Extractable	mg/L	1.7	0.005		
Sodium	Extractable	mg/L	0.7	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	13	5		
Chloride	Dissolved	mg/L	0.22	0.05	250	Below AO
Fluoride	Dissolved	mg/L	<0.01	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.11	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	0.6	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	12	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242570**  
4545 Blackcomb Way Project Name: JC Well # 1 Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248022  
Sampled By: Proj. Acct. code:  
Company:

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**Reference Number** 1242570-1  
**Sample Date** November 30, 2017  
**Sample Time** 17:00  
**Sample Location**  
**Sample Description** JC Well # 1 / 5.0 °C  
**Sample Matrix** Drinking Water

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Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids Extractable	mg/L	19	1		

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242570</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248022
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The Total Coliforms result in sample 1242570-1 exceeded the maximum acceptable concentration (MAC) as specified by the February 2017 Guidelines for Canadian Drinking Water Quality.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

Please direct any inquiries regarding this report to our Client Services Group or to the Operations Manager at the coordinates indicated at the top left of this page.

Results relate only to samples as submitted.

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

## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: JC Well # 2	Lot ID: <b>1242567</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248020
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242567-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: JC Well # 2	Lot ID: <b>1242567</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248020
Sampled By:		
Company:		

<b>Reference Number</b>	1242567-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	16:00
<b>Sample Location</b>	
<b>Sample Description</b>	JC Well # 2 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.004	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	<0.0001	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0015	0.0001	1	Below MAC	
Boron	Extractable mg/L	<0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	<0.0005	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.000097	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	0.00003	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	0.00005	0.00005			
Zinc	Extractable mg/L	0.0340	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.28	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.55		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	47	1		
Calcium	Extractable	mg/L	8.5	0.01		
Iron	Extractable	mg/L	0.008	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	0.15	0.02		
Manganese	Extractable	mg/L	<0.001	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.09	0.04		
Silicon	Extractable	mg/L	2.0	0.005		
Sodium	Extractable	mg/L	0.7	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	23	5		
Chloride	Dissolved	mg/L	0.47	0.05	250	Below AO
Fluoride	Dissolved	mg/L	<0.01	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.08	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	0.9	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	22	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242567</b>
4545 Blackcomb Way Project Name: JC Well # 2	Control Number:
Whistler, BC, Canada Project Location:	Date Received: Dec 1, 2017
VON 1B4 LSD:	Date Reported: Dec 6, 2017
Attn: Accounts Payable P.O.: 683957	Report Number: 2248020
Sampled By:	
Company:	

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<b>Reference Number</b>	1242567-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	16:00
<b>Sample Location</b>	
<b>Sample Description</b>	JC Well # 2 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

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Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	31	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242567</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248020
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242567-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

Please direct any inquiries regarding this report to our Client Services Group or to the Operations Manager at the coordinates indicated at the top left of this page.

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 FACILITY EVALUATION REPORT Health Protection

<b>Premises Name</b> Glacier Creek Water Supply System	Tel: (604) 938-7661 Fax: (604) 938-7532	
<b>Premises Address</b> 4545 Blackcomb Way Whistler, BC V0N 1B4	<b>Inspection Date</b> April 25, 2018	<b>Time Spent</b> 1 hour
<b>Operator (Person in Charge)</b> Natai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b>
<p>This is a 2017 year end summary report for Glacier Creek water supply system on Blackcomb Mountain. This system services both Glacier Creek and Crystal Hut food premises.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <ul style="list-style-type: none"> <li>Monitor cross connection control program for potable and not potable water systems in Glacier Creek Restaurant building.</li> <li>Review and update emergency response plan annually and as required.</li> <li>Maintain a free chlorine residual in the distribution system.</li> <li>Monitor for E. Coli and Total Coliform semi monthly and in accordance with monitoring plan.</li> </ul> <p>A chemical analysis of the well source water was conducted in December 2017. All results are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines. A 2017 water monitoring plan schedule has been provided. A total of 32 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly for each of the 2 active sample sites for the distribution system. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018. Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

<b>DWO</b>
DWO Printed Name <b>James Whalen</b>

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Glacier Creek Water Supply System

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Natai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Glacier Creek</u>				
<u>Restaurant,</u>				
<u>Blackcomb Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/15/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	8/15/2017	L1	L1	
	8/29/2017	L1	L1	
	9/25/2017	L1	L1	
	10/25/2017	L1	L1	
	11/20/2017	T		
	12/4/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	
<u>Crystal Hut</u>				
<u>Restaraunt,</u>				
<u>Blackcomb Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/15/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	7/5/2017	L1	L1	
	7/18/2017	L1	L1	
	7/31/2017	L1	L1	
	8/15/2017	L1	L1	
	8/29/2017	L1	L1	
	9/25/2017	L1	L1	
	11/27/2017	L1	L1	
	12/4/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	

**Total Positive :**                    **0**                    **0**

---

**Result Values:**                    **E - estimated**                    **L - less than**                    **G - greater than**

Samples that contain total coliform:	0		0.00% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	32		

**Comments:**

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Environmental Health Officer  
Apr 27 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202

## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Glacier Creek Well	Lot ID: <b>1242556</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248010
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

  

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242556-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Glacier Creek Well	Lot ID: <b>1242556</b>
4545 Blackcomb Way	Control Number:	
Whistler, BC, Canada	Project Location:	Date Received: Dec 1, 2017
VON 1B4	LSD:	Date Reported: Dec 6, 2017
Attn: Accounts Payable	P.O.: 683957	Report Number: 2248010
Sampled By:	Proj. Acct. code:	
Company:		

<b>Reference Number</b>	1242556-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	17:00
<b>Sample Location</b>	
<b>Sample Description</b>	Glacier Creek Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.001	0.001	0.1	Below OG	
Antimony	Extractable mg/L	0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0019	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0220	0.0001	1	Below MAC	
Boron	Extractable mg/L	0.005	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	0.0007	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00003	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	0.0005	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	0.00019	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	0.00020	0.00005			
Zinc	Extractable mg/L	0.0009	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.50	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.98		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	201	1		
Calcium	Extractable	mg/L	36	0.01		
Iron	Extractable	mg/L	0.081	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	0.78	0.02		
Manganese	Extractable	mg/L	0.005	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.17	0.04		
Silicon	Extractable	mg/L	4.9	0.005		
Sodium	Extractable	mg/L	4.7	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	79	5		
Chloride	Dissolved	mg/L	0.37	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.04	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	<0.01	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	23.8	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	94	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242556**  
4545 Blackcomb Way Project Name: Glacier Creek Well Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248010  
Sampled By: Proj. Acct. code:  
Company:

---

<b>Reference Number</b>	1242556-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	17:00
<b>Sample Location</b>	
<b>Sample Description</b>	Glacier Creek Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	127	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242556</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248010
Sampled By:	
Company:	
Project Name: Glacier Creek Well	
Project Location:	
LSD:	
P.O.: 683957	
Proj. Acct. code:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242556-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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## WATER FACILITY EVALUATION REPORT Health Protection

<b>Premises Name</b> <b>Blackcomb Mountain- Horstman Hut</b>	Tel: (604) 938-7661 Fax: (604) 938-7532	
<b>Premises Address</b> 4545 Blackcomb Way Whistler, BC V0N 1B4	<b>Inspection Date</b> April 25, 2018	<b>Time Spent</b> 1 hour
<b>Operator (Person in Charge)</b> Na Tai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<p><b>Comments</b></p> <p>This is a 2017 year end summary inspection report for the Horstman Hut water system on Blackcomb Mountain. The water system is supplied by water from the Jersey Cream water system via a permitted water hauling unit to a storage reservoir. The water supply is then treated with sedimentation filters and UV disinfection equipment</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <p>Review and update the Emergency Response Plan annually          Prepare a Cross Connection Control Plan          Water hauling procedures must meet VCH Bulk Water Hauling Guidelines          Monitor for E. Coli and Total Coliform semi monthly and in accordance with monitoring plan.</p> <p>A 2017 water monitoring plan schedule has been provided. A total of 15 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018.          Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>
---

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
<b>DWO Printed Name</b> <b>James Whalen</b>



## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Blackcomb Mountain- Horstman Hut

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Horstman Hut,</u>				
<u>Blackcomb Mountain</u>				
	1/3/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/15/2017	L1	L1	
	3/29/2017	L1	L1	
	4/11/2017	L1	L1	
	4/25/2017	L1	L1	
	5/9/2017	L1	L1	
	5/23/2017	L1	L1	
	6/12/2017	L1	L1	
	6/20/2017	L1	L1	
	7/5/2017	L1	L1	
	9/25/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	15	

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Jun 5 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202



## WATER FACILITY EVALUATION REPORT

### Health Protection

Premises Name <b>Blackcomb Mountain -- Patrol Hut</b>	Tel: (604) 938-7661 Fax: (604) 938-7532	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 25, 2018	Time Spent 1 hour
Operator (Person in Charge) Natai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b>
<p>This is a 2017 year end summary inspection report for the Patrol Hut water system on Blackcomb Mountain. The water system is supplied by water from the Jersey Cream water system via a permitted water hauling unit to a storage reservoir. The water is then treated with sedimentation filters and UV disinfection equipment.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <ul style="list-style-type: none"> <li>Review and update the Emergency Response Plan annually</li> <li>Prepare a Cross Connection Control Plan</li> <li>Water hauling procedures must meet VCH Bulk Water Hauling Guidelines</li> <li>Monitor for E. Coli and Total Coliform semi monthly and in accordance with monitoring plan.</li> </ul> <p>A 2017 water monitoring plan schedule has been provided. A total of 13 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018.</p> <p>Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
DWO Printed Name <b>James Whalen</b>

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Blackcomb Mountain -- Patrol Hut

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Natai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Blackcomb Patrol Hut, Blackcomb Mountain</u>				
	1/3/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/15/2017	L1	L1	
	3/29/2017	L1	L1	
	4/11/2017	L1	L1	
	4/25/2017	L1	L1	
	5/9/2017	L1	L1	
	5/23/2017	L1	L1	
	6/12/2017	L1	L1	
	6/20/2017	L1	L1	
	7/5/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	

Result Values:	E - estimated	L - less than	G - greater than
Samples that contain total coliform:	0		0.00% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	13		

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Jun 5 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202



## WATER FACILITY EVALUATION REPORT Health Protection

Premises Name <b>Blackcomb Mountain - Water Hauling Unit</b>	Tel: Fax:	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 25, 2018	Time Spent 1 hour
Operator (Person in Charge) Na Tai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b>
<p>This is a 2017 evaluation for the Water Hauling Unit that services the Hortsman and Patrol Huts. The Water Hauling Unit is permitted in accordance with the VCH Water Hauling Guideline.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <p>Approved for potable water delivery only.  Review and update the Emergency Response Plan annually.  Water hauling limited from Jersey Cream Water Supply System to Horstman Hut and Patrol Hut on Blackcomb Mountain.  Provide an operation and maintenance manual</p> <p>A 2017 water monitoring plan schedule has been provided. Sampling of the end point of the water hauling (i.e. Horstman and Patrol huts) serves as a validation of the transport process for this water hauling unit.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018.  Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
DWO Printed Name <b>James Whalen</b>



## WATER FACILITY EVALUATION REPORT Health Protection

Premises Name <b>Whistler Mountain - Children's Learning Center</b>	Tel: (604) 938-7661 Fax: (604) 938-7532	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 24, 2018	Time Spent 1 hour
Operator (Person in Charge) Na Tai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b>
<p>This is a 2017 year end inspection summary report for the Children's Learning water system on Whistler Mountain. The system services The Children's Learning Center, the Olympic Station, The Adaptive Learning Center and the Food Premises.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <p>Monitor for E. Coli and Total Coliform semi monthly and in accordance with water quality monitoring plan          Provide a free available chlorine residual throughout the distribution system.          Review and update the Emergency Response Plan annually.          Prepare a Cross Connection Control Plan</p> <p>A chemical analysis of the well source water was conducted in December 2017. All results are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines. A 2017 water monitoring plan schedule has been provided. A total of 47 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly for each of the 2 sample sites. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been completed. The 2017 Annual Report is due on June 30th, 2018.</p> <p>The Emergency Response plan is regularly updated. Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
-----

DWO Printed Name  
**James Whalen**

---

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Whistler Mountain - Children's Learning Center

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

<u>Sampling Site</u>	<u>Date Collected</u>	<u>Total Coliform</u>	<u>E. Coli</u>	<u>Fecal Coliform</u>
<u>Olympic Station,</u>				
<u>Whistler Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/14/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	4/25/2017	L1	L1	
	5/10/2017	L1	L1	
	5/24/2017	L1	L1	
	6/6/2017	L1	L1	
	7/4/2017	L1	L1	
	7/17/2017	L1	L1	
	7/31/2017	L1	L1	
	8/14/2017	L1	L1	
	8/29/2017	L1	L1	
	9/11/2017	L1	L1	
	9/26/2017	L1	L1	
	10/24/2017	L1	L1	
	11/20/2017	T		
	12/5/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	
 <u>Children's Learning</u>				
<u>Center, Whistler</u>				
<u>Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/14/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	5/24/2017	L1	L1	
	6/7/2017	L1	L1	

6/20/2017	L1	L1
6/20/2017	L1	L1
7/4/2017	L1	L1
7/17/2017	L1	L1
7/31/2017	L1	L1
8/14/2017	L1	L1
8/29/2017	L1	L1
9/11/2017	L1	L1
9/26/2017	L1	L1
10/24/2017	L1	L1
11/7/2017	L1	L1
11/20/2017	T	
12/5/2017	L1	L1
12/18/2017	<u>L1</u>	<u>L1</u>
<b>Total Positive :</b>	<b>0</b>	<b>0</b>

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0		0.00% of total
Samples that contain e. coli:	0		0.00% of total
Samples that contain fecal coliform:	0		0.00% of total
Number of consecutive samples that contain total coliform:	0		
Number of samples that contain total coliform in last 30 days:	0/0		
Total number of samples:	47		

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Apr 24 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202



## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: CLC Well	Lot ID: <b>1242552</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248007
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

  

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

  

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242552-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: CLC Well	Lot ID: <b>1242552</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248007
Sampled By:		
Company:		

<b>Reference Number</b>	1242552-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:30
<b>Sample Location</b>	
<b>Sample Description</b>	CLC Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	<0.001	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0002	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0137	0.0001	1	Below MAC	
Boron	Extractable mg/L	0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	0.00002	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	0.0007	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00011	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	0.00007	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	<0.00005	0.00005			
Zinc	Extractable mg/L	0.0017	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.16	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.80		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	261	1		
Calcium	Extractable	mg/L	52	0.01		
Iron	Extractable	mg/L	0.018	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	0.97	0.02		
Manganese	Extractable	mg/L	<0.001	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.51	0.04		
Silicon	Extractable	mg/L	3.8	0.005		
Sodium	Extractable	mg/L	1.7	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	111	5		
Chloride	Dissolved	mg/L	0.63	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.02	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.07	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	25.1	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	130	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: CLC Well	Lot ID: <b>1242552</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248007
Sampled By:		
Company:		

---

<b>Reference Number</b>	1242552-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:30
<b>Sample Location</b>	
<b>Sample Description</b>	CLC Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	158	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242552</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248007
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242552-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

Please direct any inquiries regarding this report to our Client Services Group or to the Operations Manager at the coordinates indicated at the top left of this page.

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 FACILITY EVALUATION REPORT

## Health Protection

Premises Name <b>Whistler Mountain - Chic Pea</b>	Tel: (604) 938-7593 Fax: (604) 938-7532	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 24, 2018	Time Spent 1 hour
Operator (Person in Charge) Na Tai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b> <p>This is a year end summary report for the Chic Pea water system. This system services the Chic Pea food premises on Whistler Mountain. A non potable water system services the toilets.</p> <p>The Operating Permit for the Drinking Water system contains the following conditions:</p> <p>Maintain a free chlorine residual throughout the distribution system Monitor for E. Coli and Total Coliform semi monthly and in accordance with water quality monitoring plan Review and update the Emergency Response Plan annually. Monitor cross connection control program for potable and not potable water systems in Chic Pea.</p> <p>A chemical analysis of the well source water was conducted in December 2017. All results are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines with the exception of Iron, which was above the aesthetic objective. A 2017 water monitoring plan schedule has been provided. A total of 16 samples were collected from the distribution system, which exceeds the frequency listed as a condition of the Operating Permit as semi-monthly. The 2017 sample range report indicates bacteriological monitoring results are all potable in accordance with the potable water quality standard of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, and the 2016 annual report has been provided. The 2017 Annual Report is due on June 30th, 2018.</p> <p>Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>
--

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
DWO Printed Name <b>James Whalen</b>

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Whistler Mountain - Chic Pea

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Chic Pea</u>				
<u>Restaurant, Whistler</u>				
<u>Mountain</u>				
	17/01/2017	L1	L1	
	31/01/2017	L1	L1	
	14/02/2017	L1	L1	
	28/02/2017	L1	L1	
	14/03/2017	L1	L1	
	28/03/2017	L1	L1	
	11/04/2017	L1	L1	
	12/06/2017	L1	L1	
	17/07/2017	L1	L1	
	31/07/2017	L1	L1	
	14/08/2017	L1	L1	
	29/08/2017	L1	L1	
	12/09/2017	L1	L1	
	24/10/2017	L1	L1	
	20/11/2017	T		
	18/12/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	16	

**Comments:**

\_\_\_\_\_  
Environmental Health Officer  
Apr 24 2018

FOR FURTHER INFORMATION PLEASE CALL: Cindy Watson (604) 892-2293

## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Chic Pea Well	Lot ID: <b>1242549</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248002
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email - Single Report	PDF	Invoice
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com
<u>Delivery</u>	<u>Format</u>	<u>Deliverables</u>
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242549-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Chic Pea Well	Lot ID: <b>1242549</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248002
Sampled By:		
Company:		

<b>Reference Number</b>	1242549-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	10:30
<b>Sample Location</b>	
<b>Sample Description</b>	Chic Pea Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.033	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0005	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0003	0.0001	1	Below MAC	
Boron	Extractable mg/L	<0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	0.0008	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00018	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	<0.00005	0.00005			
Zinc	Extractable mg/L	0.0028	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	8.4	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.85		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	295	1		
Calcium	Extractable	mg/L	60	0.01		
Iron	Extractable	mg/L	0.53	0.004	0.3	Above AO
Magnesium	Extractable	mg/L	0.97	0.02		
Manganese	Extractable	mg/L	0.012	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.17	0.04		
Silicon	Extractable	mg/L	4.1	0.005		
Sodium	Extractable	mg/L	2.9	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	83	5		
Chloride	Dissolved	mg/L	5.18	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.05	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.01	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	63.9	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	150	1		



## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242549**  
4545 Blackcomb Way Project Name: Chic Pea Well Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248002  
Sampled By: Proj. Acct. code:  
Company:

---

**Reference Number** 1242549-1  
**Sample Date** November 30, 2017  
**Sample Time** 10:30  
**Sample Location**  
**Sample Description** Chic Pea Well / 5.0 °C  
**Sample Matrix** Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	194	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242549</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248002
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242549-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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# WATER FACILITY EVALUATION REPORT

## Health Protection

Premises Name <b>Whistler Mountain - Roundhouse Lodge</b>	Tel: (604) 938-7661 Fax: (604) 938-7532
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 24, 2018
Operator (Person in Charge) Na Tai Perdue	Time Spent 1 hour
<b>Inspection Type</b> Evaluation	

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b>
<p>This is a 2017 year end summary inspection report for the Roundhouse Lodge water system. The system services the Roundhouse Lodge and Alpine Shop on Whistler Mountain. The sources supplying the water system are wells 1,4, and 5.</p> <p>The Operating Permit for this Drinking Water system contains the following conditions:</p> <p>Monitor for E. Coli and Total Coliform semi monthly and in accordance with monitoring plan Review and update the Emergency Response Plan annually. Prepare a Cross Connection Control Plan</p> <p>A chemical analysis of the well source water was conducted in December 2017. Chemical results are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines. A 2017 water monitoring plan schedule has been submitted. A total of 52 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly for each of the 2 sample sites based on 12 months of operation. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.</p> <p>Annual Reports for this system have been submitted in a timely manner, a copy of the 2016 annual report has been completed. The 2017 Annual Report is due on June 30th, 2018.</p> <p>The Emergency Response Plan is complete and up to date. Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.</p>

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
DWO Printed Name



## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Whistler Mountain - Roundhouse Lodge

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Roundhouse</u>				
<u>Restaurant, Whistler</u>				
<u>Mountain</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/14/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	4/25/2017	L1	L1	
	5/10/2017	L1	L1	
	5/24/2017	L1	L1	
	6/6/2017	L1	L1	
	7/4/2017	L1	L1	
	7/17/2017	L1	L1	
	7/31/2017	L1	L1	
	8/14/2017	L1	L1	
	8/29/2017	L1	L1	
	9/12/2017	L1	L1	
	9/26/2017	L1	L1	
	10/11/2017	L1	L1	
	10/24/2017	L1	L1	
	11/7/2017	L1	L1	
	11/20/2017	T		
	12/4/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	
<u>Prep Kitchen,</u>				
<u>Whistler Mountain</u>				
	6/20/2017	L1	L1	
	6/20/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	
<u>Whistler Alpine</u>				
<u>Shop, Whistler</u>				
<u>Mountain</u>				

1/3/2017	L1	L1
1/17/2017	L1	L1
1/31/2017	L1	L1
2/14/2017	L1	L1
2/28/2017	L1	L1
3/14/2017	L1	L1
3/28/2017	L1	L1
4/11/2017	L1	L1
4/25/2017	L1	L1
5/10/2017	L1	L1
5/24/2017	L1	L1
6/6/2017	L1	L1
7/4/2017	L1	L1
7/17/2017	L1	L1
7/31/2017	L1	L1
8/14/2017	L1	L1
8/29/2017	L1	L1
9/12/2017	L1	L1
9/26/2017	L1	L1
10/11/2017	L1	L1
10/24/2017	L1	L1
11/7/2017	L1	L1
11/20/2017	T	
12/4/2017	L1	L1
12/18/2017	<u>L1</u>	<u>L1</u>
<b>Total Positive :</b>	<b>0</b>	<b>0</b>

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	52	

**Comments:**

Environmental Health Officer  
Apr 24 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202

## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 1	Lot ID: <b>1242548</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248001
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242548-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 1	Lot ID: <b>1242548</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248001
Sampled By:		
Company:		

<b>Reference Number</b>	1242548-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:00
<b>Sample Location</b>	
<b>Sample Description</b>	RHL Well # 1 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	<0.001	0.001	0.1	Below OG	
Antimony	Extractable mg/L	0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0002	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0007	0.0001	1	Below MAC	
Boron	Extractable mg/L	0.005	0.002	5	Below MAC	
Cadmium	Extractable mg/L	0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	<0.0005	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00003	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	<0.00005	0.00005			
Zinc	Extractable mg/L	0.0035	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.22	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.39		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	262	1		
Calcium	Extractable	mg/L	49	0.01		
Iron	Extractable	mg/L	0.034	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	1.3	0.02		
Manganese	Extractable	mg/L	0.004	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.29	0.04		
Silicon	Extractable	mg/L	3.2	0.005		
Sodium	Extractable	mg/L	4.0	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	72	5		
Chloride	Dissolved	mg/L	6.29	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.02	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.27	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	54.6	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	130	1		



## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242548**  
4545 Blackcomb Way Project Name: RHL Well # 1 Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248001  
Sampled By: Proj. Acct. code:  
Company:

---

<b>Reference Number</b>	1242548-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:00
<b>Sample Location</b>	
<b>Sample Description</b>	RHL Well # 1 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	168	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242548</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248001
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
 Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
 Guideline Comments MAC = Maximum Acceptable Concentration  
 AO = Aesthetic Objective  
 OG = Operational Guideline for Water Treatment Plants  
 Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242548-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242562**  
4545 Blackcomb Way Project Name: RHL Well # 4 Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248016  
Sampled By: Proj. Acct. code:  
Company:

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

  

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The Total Coliforms result in sample 1242562-1 exceeded the maximum acceptable concentration (MAC) as specified by the February 2017 Guidelines for Canadian Drinking Water Quality.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 4	Lot ID: <b>1242562</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248016
Sampled By:		
Company:		

<b>Reference Number</b>	1242562-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	10:45
<b>Sample Location</b>	
<b>Sample Description</b>	RHL Well # 4 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.008	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	<0.0001	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0005	0.0001	1	Below MAC	
Boron	Extractable mg/L	0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	0.00061	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	0.0013	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00006	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	<0.00005	0.00005			
Zinc	Extractable mg/L	0.0015	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	1.0	1.0	0 per 100 mL	Above MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.94	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		8.27		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	119	1		
Calcium	Extractable	mg/L	16	0.01		
Iron	Extractable	mg/L	0.37	0.004	0.3	Above AO
Magnesium	Extractable	mg/L	0.29	0.02		
Manganese	Extractable	mg/L	0.013	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.10	0.04		
Silicon	Extractable	mg/L	4.4	0.005		
Sodium	Extractable	mg/L	8.2	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	18	5		
Chloride	Dissolved	mg/L	0.27	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.05	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	<0.01	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	32.5	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	42	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 4	Lot ID: <b>1242562</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248016
Sampled By:		
Company:		

---

<b>Reference Number</b>	1242562-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	10:45
<b>Sample Location</b>	
<b>Sample Description</b>	RHL Well # 4 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	80	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

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## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242562</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248016
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
 Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
 Guideline Comments MAC = Maximum Acceptable Concentration  
 AO = Aesthetic Objective  
 OG = Operational Guideline for Water Treatment Plants  
 Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The Total Coliforms result in sample 1242562-1 exceeded the maximum acceptable concentration (MAC) as specified by the February 2017 Guidelines for Canadian Drinking Water Quality.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 5	Lot ID: <b>1242551</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248005
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242551-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The information contained on this and all other pages transmitted, is intended for the addressee only and is considered confidential. If the reader is not the intended recipient, you are hereby notified that any use, dissemination, distribution or copy of this transmission is strictly prohibited. If you receive this transmission by error, or if this transmission is not satisfactory, please notify us by telephone.

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 5	Lot ID: <b>1242551</b>
4545 Blackcomb Way	Control Number:	
Whistler, BC, Canada	Project Location:	Date Received: Dec 1, 2017
VON 1B4	LSD:	Date Reported: Dec 6, 2017
Attn: Accounts Payable	P.O.: 683957	Report Number: 2248005
Sampled By:	Proj. Acct. code:	
Company:		

<b>Reference Number</b>	1242551-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	10:00
<b>Sample Location</b>	
<b>Sample Description</b>	RHL Well # 5 / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.007	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0019	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0001	0.0001	1	Below MAC	
Boron	Extractable mg/L	<0.002	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	<0.0005	0.0005	1.0	Below AO	
Lead	Extractable mg/L	0.00003	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	0.0003	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	0.00030	0.00005			
Zinc	Extractable mg/L	0.0315	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	2.6	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.77		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	106	1		
Calcium	Extractable	mg/L	16	0.01		
Iron	Extractable	mg/L	0.017	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	0.58	0.02		
Manganese	Extractable	mg/L	<0.001	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.14	0.04		
Silicon	Extractable	mg/L	2.0	0.005		
Sodium	Extractable	mg/L	1.4	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	18	5		
Chloride	Dissolved	mg/L	15.6	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.01	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	0.08	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	8.3	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	41	1		



## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID: Lot ID: **1242551**  
4545 Blackcomb Way Project Name: RHL Well # 5 Control Number:  
Whistler, BC, Canada Project Location: Date Received: Dec 1, 2017  
VON 1B4 LSD: Date Reported: Dec 6, 2017  
Attn: Accounts Payable P.O.: 683957 Report Number: 2248005  
Sampled By: Proj. Acct. code:  
Company:

---

**Reference Number** 1242551-1  
**Sample Date** November 30, 2017  
**Sample Time** 10:00  
**Sample Location**  
**Sample Description** RHL Well # 5 / 5.0 °C  
**Sample Matrix** Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	58	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: RHL Well # 5	Lot ID: <b>1242551</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248005
Sampled By:		
Company:		

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

- Dec 06, 2017 - The analysis of water sample 1242551-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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# WATER FACILITY EVALUATION REPORT

## Health Protection

Premises Name <b>Whistler Mountain - Raven's Nest</b>	Tel: (604) 938-7661 Fax: (604) 938-7532	
Premises Address 4545 Blackcomb Way Whistler, BC V0N 1B4	Inspection Date April 24, 2018	Time Spent 1 hour
Operator (Person in Charge) Na Tai Perdue		
<b>Inspection Type</b> Evaluation		

<b>Observed Violations</b>
There are no observed violations.

<b>Section Details</b>

<b>Comments</b> This is a 2017 year end summary inspection report for Raven's Nest water system which services Raven's Nest food premises on Whistler Mountain.  The Operating Permit for this Drinking Water system contains the following conditions:  Monitor supply for Total Coliform and E. Coli semi monthly and in accordance with monitoring plan. Review and update the Emergency Response Plan annually. Maintain a free chlorine residual in the distribution system at all times.  A chemical analysis of the well source water was conducted in December 2017. All results are below the Operational Guidelines, Maximum Acceptable Concentrations and Aesthetic Objectives of the Canadian Drinking Water Guidelines. A 2017 water monitoring plan schedule has been submitted. A total of 18 samples were collected from the distribution system, which would exceed the frequency listed as a condition of the Operating Permit as semi-monthly based on 12 months of operation. The 2017 sample range report indicates bacteriological monitoring results are in accordance with the potable water quality standards of the BC Drinking Water Protection Regulation.  Annual Reports for this system have been submitted in a timely manner, a copy of the 2016 annual report is available. The 2017 Annual Report is due on June 30th, 2018.  A recently updated Emergency Response plan is available. Please update your Emergency Response plan to include the current list of VCH contacts provided with this report.
--

<b>Action Taken</b>
<input checked="" type="checkbox"/> Information Exchanged

<b>Hazard Rating For Your Facility:</b> <input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low
---

DWO
DWO Printed Name <b>James Whalen</b>

## Sample Range Report

Vancouver Coastal Health

**Facility Name:** Whistler Mountain - Raven's Nest

**Date Range:** Jan 1 2017 to Dec 31 2017

**Operator** Na Tai Perdue  
C/O 4545 Blackcomb Way  
Whistler, BC V0N 1B4

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Raven's Nest</u>				
<u>Restaurant - Faucet,</u>				
	1/3/2017	L1	L1	
	1/17/2017	L1	L1	
	1/31/2017	L1	L1	
	2/14/2017	L1	L1	
	2/28/2017	L1	L1	
	3/14/2017	L1	L1	
	3/28/2017	L1	L1	
	4/11/2017	L1	L1	
	7/4/2017	L1	L1	
	7/17/2017	L1	L1	
	8/29/2017	L1	L1	
	9/11/2017	L1	L1	
	10/24/2017	L1	L1	
	11/20/2017	T		
	12/4/2017	L1	L1	
	12/18/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	
<u>Raven's Nest,</u>				
<u>Whistler Mountain</u>				
	7/31/2017	L1	L1	
	8/14/2017	<u>L1</u>	<u>L1</u>	
	<b>Total Positive :</b>	<b>0</b>	<b>0</b>	

**Result Values:**                      **E - estimated**                      **L - less than**                      **G - greater than**

Samples that contain total coliform:	0	0.00% of total
Samples that contain e. coli:	0	0.00% of total
Samples that contain fecal coliform:	0	0.00% of total
Number of consecutive samples that contain total coliform:	0	
Number of samples that contain total coliform in last 30 days:	0/0	
Total number of samples:	18	

**Comments:**

---

Environmental Health Officer  
Jun 5 2018

FOR FURTHER INFORMATION PLEASE CALL: James Whalen (604) 932-3202

## Report Transmission Cover Page

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Ravens Nest Well	Lot ID: <b>1242569</b>
4545 Blackcomb Way	Project Location:	Control Number:
Whistler, BC, Canada	LSD:	Date Received: Dec 1, 2017
VON 1B4	P.O.: 683957	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Proj. Acct. code:	Report Number: 2248021
Sampled By:		
Company:		

Contact	Company	Address
<b>Accounts Payable</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 932-3141 Fax: (604) 932-0416 Email: apinvoice@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	Invoice

Contact	Company	Address
<b>NaTai Perdue</b>	<b>Whistler Blackcomb Holdings Inc. dba Whistler &amp; Blackcomb Mountain Resort Ltd.</b>	4545 Blackcomb Way  Whistler, BC V0N 1B4 Phone: (604) 938-7593 Fax: (604) 938-7532 Email: nperdue@vailresorts.com

Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

### Notes To Clients:

- Dec 06, 2017 - The analysis of water sample 1242569-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the February 2017 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Ravens Nest Well	Lot ID: <b>1242569</b>
4545 Blackcomb Way	Control Number:	
Whistler, BC, Canada	Project Location:	Date Received: Dec 1, 2017
VON 1B4	LSD:	Date Reported: Dec 6, 2017
Attn: Accounts Payable	P.O.: 683957	Report Number: 2248021
Sampled By:	Proj. Acct. code:	
Company:		

<b>Reference Number</b>	1242569-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:00
<b>Sample Location</b>	
<b>Sample Description</b>	Ravens Nest Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments	
<b>Metals Extractable</b>						
Aluminum	Extractable mg/L	0.003	0.001	0.1	Below OG	
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC	
Arsenic	Extractable mg/L	0.0007	0.0001	0.010	Below MAC	
Barium	Extractable mg/L	0.0007	0.0001	1	Below MAC	
Boron	Extractable mg/L	0.004	0.002	5	Below MAC	
Cadmium	Extractable mg/L	<0.00001	0.00001	0.005	Below MAC	
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC	
Copper	Extractable mg/L	<0.0005	0.0005	1.0	Below AO	
Lead	Extractable mg/L	<0.00001	0.00001	0.01	Below MAC	
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC	
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC	
Vanadium	Extractable mg/L	<0.00005	0.00005			
Zinc	Extractable mg/L	0.0007	0.0005	5.0	Below AO	
<b>Microbiological Analysis</b>						
Total Coliforms	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test	MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
<b>Physical and Aggregate Properties</b>						
Colour	True	Colour units	<5	5		
Turbidity		NTU	0.18	0.05		
<b>Routine Water</b>						
pH - Holding Time			Exceeded			
pH	at 25 °C		7.87		7.0-10.5	Within Range
Electrical Conductivity		µS/cm at 25 °C	240	1		
Calcium	Extractable	mg/L	42	0.01		
Iron	Extractable	mg/L	0.036	0.004	0.3	Below AO
Magnesium	Extractable	mg/L	1.1	0.02		
Manganese	Extractable	mg/L	0.013	0.001	0.05	Below AO
Potassium	Extractable	mg/L	0.50	0.04		
Silicon	Extractable	mg/L	5.0	0.005		
Sodium	Extractable	mg/L	3.7	0.1	200	Below AO
T-Alkalinity	as CaCO3	mg/L	80	5		
Chloride	Dissolved	mg/L	0.33	0.05	250	Below AO
Fluoride	Dissolved	mg/L	0.03	0.01	1.5	Below MAC
Nitrate - N	Dissolved	mg/L	<0.01	0.01	10	Below MAC
Nitrite - N	Dissolved	mg/L	<0.01	0.01	1	Below MAC
Sulfate (SO4)	Dissolved	mg/L	40.6	0.1	500	Below AO
Hardness	as CaCO3 (extractable)	mg/L	110	1		

## Analytical Report

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Project Name: Ravens Nest Well	Lot ID: <b>1242569</b>
4545 Blackcomb Way	Control Number:	
Whistler, BC, Canada	Project Location:	Date Received: Dec 1, 2017
VON 1B4	LSD:	Date Reported: Dec 6, 2017
Attn: Accounts Payable	P.O.: 683957	Report Number: 2248021
Sampled By:	Proj. Acct. code:	
Company:		

---

<b>Reference Number</b>	1242569-1
<b>Sample Date</b>	November 30, 2017
<b>Sample Time</b>	11:00
<b>Sample Location</b>	
<b>Sample Description</b>	Ravens Nest Well / 5.0 °C
<b>Sample Matrix</b>	Drinking Water

---

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
<b>Routine Water - Continued</b>					
Total Dissolved Solids	Extractable	mg/L	150	1	

Approved by:   
Mathieu Simoneau  
Operations Manager

Data have been validated by Analytical Quality Control and Exova's Integrated Data Validation System (IDVS).

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## Methodology and Notes

Bill To: Whistler Blackcomb Holdings Inc. Project ID:	Lot ID: <b>1242569</b>
4545 Blackcomb Way	Control Number:
Whistler, BC, Canada	Date Received: Dec 1, 2017
VON 1B4	Date Reported: Dec 6, 2017
Attn: Accounts Payable	Report Number: 2248021
Sampled By:	
Company:	

## Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (Surrey)	APHA	* Alkalinity - Titration Method, 2320 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* Conductivity, 2510 B	Dec 2, 2017	Exova Surrey
Alk, pH, EC, Turb in water (Surrey)	APHA	* pH - Electrometric Method, 4500-H+ B	Dec 2, 2017	Exova Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Dec 1, 2017	Exova Surrey
Metals SemiTrace (Extractable) in water (Surrey)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Dec 1, 2017	Exova Surrey
Total and E-Coli - Colilert - DW (Surrey)	APHA	Enzyme Substrate Test, APHA 9223 B	Dec 1, 2017	Exova Surrey
Trace Metals (extractable) in Water (Surrey)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Dec 1, 2017	Exova Surrey
True Color in water (Surrey)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Dec 2, 2017	Exova Surrey
Turbidity - Water (Surrey)	APHA	* Turbidity - Nephelometric Method, 2130 B	Dec 1, 2017	Exova Surrey

\* Reference Method Modified

## References

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

## Guidelines

Guideline Description Health Canada GCDWQ  
Guideline Source Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017  
Guideline Comments MAC = Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline for Water Treatment Plants  
Refer to Health Canada GCDWQ for complete guidelines and additional drinking water information at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)

## Comments:

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# Potable Water Emergency Contacts

**All water inquiries should be directed first to the Water Purveyors.**

Snowmaking is responsible for all on hill water supply and will respond from 905-8146, Radio ch. #4/6

<b>Water Purveyors / Snowmaking</b>			
<b>Snowmaking Maintenance</b>		<b>604-905-8146</b>	
Supervisor	<b>NaTai Perdue</b>	938-7593	c.905-8409
Manager	<b>Bob Pasch</b>	938-7234	c.905-9129
Operator	<b>Kevin Phelps</b>	938-7661	c.388-9523

<b>Vancouver Coastal Health</b>			
Water Officer	<b>James Whalen</b>	w.935-5318	c.698-5422
Water Officer	<b>Len Clarkson</b>	c.815.6841	w.892-7528
EHO	<b>Angela Whalen</b>	w.892-2293	c.698-5467
Manager	<b>Mark Ritson</b>	w.983-6751	c.219-7359

<b>Food &amp; Beverage Contacts</b>			
F&B Director	<b>Paul Street</b>	938-7239	c.905-9912
Food Safety	<b>James Linklater</b>	938-7241	c.905-8329
GM - Bars	<b>Mike Varrin</b>	938-7386	c.932-7821
F&B Administrator	<b>Rebecca Robbins</b>	938-7353	
Catering Manager	<b>Stephanie Spence</b>	905-3039	c.778-997-8784

<b>Whistler/Blackcomb Contacts</b>			
Electrical	<b>Laird Brown</b>	938-7208	c.932-7977
Plumbing	<b>Roy Molby</b>	938-7254	c.905-9054

<b>Whistler Restaurants</b>			
<b><u>Roundhouse</u></b>			
General Manager	<b>Doug Burnett</b>	905-2376	c.907-1190
Asst. Manager	<b>Dan Villeneuve</b>	905-2373	
Chef	<b>Larry Johnson</b>	905-2375	
<b><u>Chic Pea</u></b>			
Supervisor	<b>Enrico Cadei</b>	905-2383	
<b><u>Ravens Nest</u></b>			
Supervisor	<b>Ashlee Ford</b>	905-2176	
<b><u>Children's Learning Center</u></b>			
Manager	<b>Becky Seiler</b>	4019	c.902-6629
<b><u>Ollie's</u></b>			
Manager	<b>Ria Jones</b>	c.218-7428	

<b>Blackcomb Restaurants</b>			
<b><u>Rendezvous</u></b>			
Manager	<b>James Paton</b>	938-7400	c.902-4087
Chef	<b>Waide Wright</b>	938-7435	
<b><u>Horstman Hut</u></b>			
Manager	<b>Alex Quinlan</b>	902-6633	
Supervisor	<b>Rachel Cutler</b>	938-7404	
<b><u>Glacier Creek</u></b>			
Manager	<b>Sheila Kearns</b>	938-7410	c.698-5607
Chef	<b>Harvey Upton</b>	938-7429	
<b><u>Crystal Hut</u></b>			
Manager	<b>Alex Quinlan</b>	902-6633	
Supervisor	<b>Brighid Brophy</b>	938-7408	

<b>Municipal Water Systems</b>			
<b><u>Dusty's &amp; Backside</u></b>			
Manager	<b>Joshua Kearns</b>	905-2146	
Supervisor	<b>Harri Dobrochodow</b>	905-2145	
<b><u>Garibaldi Lift Company</u></b>			
Manager	<b>Mike Wilson</b>	905-2062	
Supervisor	<b>Derek Pretty</b>	905-2050	
<b><u>EBCB</u></b>			
Supervisor	<b>Ria Jones</b>	905-2065	

<b>Municipal Water Systems</b>			
<b><u>Merlin's &amp; Wizard Grill</u></b>			
Chef	<b>Jordano Palacio</b>	938-7706	
<b><u>18 Below</u></b>			
Manager	<b>Maren Oetling</b>	938-7264	

# Whistler/Blackcomb Potable Water 2017 Schedule

Updated March 2017

## Whistler Mountain

Site Name	Source	System Name	Sample Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Reservoir Storage
Whistler Alpine Shop	Deep Well	Whistler Mountain - Roundhouse Lodge	Bi-Weekly													100 000 gallons
Roundhouse Lodge	Deep Well	Whistler Mountain - Roundhouse Lodge	Bi-Weekly													
RHL Well #1	Deep Well	Whistler Mountain - Roundhouse Lodge	Semi-Annually													
RHL Well #4	Deep Well	Whistler Mountain - Roundhouse Lodge	Semi-Annually													
RHL Well #5	Deep Well	Whistler Mountain - Roundhouse Lodge	Semi-Annually													
Chic Pea	Deep Well	Whistler Mountain - Chic Pea	Bi-Weekly													10 000 gallons
Chic Pea Well	Deep Well	Whistler Mountain - Chic Pea	Semi-Annually													
Raven's Nest	Deep Well	Whistler Mountain - Ravens Nest	Bi-Weekly												10 000 gallons	
Raven's Nest Well	Deep Well	Whistler Mountain - Ravens Nest	Semi-Annually													
Children's Learning Center	Deep Well	Whistler Mountain - Children's Learning Center	Bi-Weekly												9 000 gallons	
Olympic Station	Deep Well	Whistler Mountain - Children's Learning Center	Bi-Weekly													
CLC Well	Deep Well	Whistler Mountain - Children's Learning Center	Semi-Annually													

## Blackcomb Mountain

Site Name	Source	System Name	Sample Frequency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Reservoir Storage
Horstman Hut	Deep Well	Blackcomb - Jersey Cream	Bi-Weekly												300 gallons	
Horstman Patrol Hut	Deep Well	Blackcomb - Jersey Cream	Bi-Weekly												50 gallons	
Blackcomb Alpine Shop	Deep Well	Blackcomb - Jersey Cream	Bi-Weekly												20 000 gallons	
Rendezvous	Deep Well	Blackcomb - Jersey Cream	Bi-Weekly													
JC Well #1	Deep Well	Blackcomb - Jersey Cream	Semi-Annually													
JC Well #2	Deep Well	Blackcomb - Jersey Cream	Semi-Annually													
Crystal Hut	Deep Well	Blackcomb - Glacier Creek WSS	Bi-Weekly												10 000 gallons	
Glacier Creek	Deep Well	Blackcomb - Glacier Creek WSS	Bi-Weekly												30 000 gallons	
GC Well	Deep Well	Blackcomb - Glacier Creek WSS	Semi-Annually													

Wells Pumping Year Round

Facility Open to Public

Facility Closed to Public

UV Treated (NSF)  
Water Storage

Un-Chlorinated  
Water Storage

Chlorinated  
Water Storage