



**DRINKING WATER SYSTEM ANNUAL REPORT**

**Reporting Period:** January 1<sup>st</sup> to December 31<sup>st</sup>, 2018 (year)

**Water System** Morton Lake Provincial Park

**Water System Owner** BC Parks

**Primary Contact Name** (Operator or Manager) Quality Recreation (Scott Russett)

**Phone Number** (Operator or Manager) 250. 540. 3453

**E-mail** (Operator or Manager) scott.russett@explorebcparcs.ca

**DESCRIBE YOUR WATER SUPPLY SYSTEM**

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

Deep Well       Shallow Well       Surface Water       Other

If other, specify details:

**Does the Drinking Water System have Primary Disinfection?**

Yes       No

Chlorination       Ultraviolet Light       Ozone       Other

If other, specify details:

**Does the Drinking Water System have Secondary Disinfection?**

Yes       No

Chlorination       Other

If other, specify details:

**Does the Drinking Water System have Filtration?**

Yes       No

Check all boxes that apply

Cartridge Filter(s)       Carbon Filter       Sand Filtration       Reverse Osmosis       Other

If other, specify details:

**PUBLIC REPORTING**

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

**Is your ERCP up to Date?**       Yes       No

**How do you Inform the System Users of the ERCP?**

Hand Delivered       Bulletin Board       Newspaper       Utility Bill Insert       Website  
 Other (specify details)

**Drinking Water System Annual Report**

**How do you Inform the System Users of the Annual Report?**

Hand Delivered       Bulletin Board       Newspaper       Utility Bill Insert       Website  
 Other (specify details)





island health

COMPLIANCE WITH OPERATING PERMIT

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

See attached

Are you in compliance with your Operating Permit?

Yes

No

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period?

9+1

What is the minimum required sampling frequency for this system? (#samples/month)

2/Month

Additional sampling details:

9 samples through VIHA + 1 conducted at private lab

Was the minimum required sampling frequency achieved?

Yes

No

Comments:

Bacteriological summary attached to this report?

Yes

No

If no, how do the users of the system view the results?

WATER QUALITY STANDARDS FOR POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable <i>Escherichia coli</i> per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, and No sample has more than 10 total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action





**CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD**

**Was any chemical sampling conducted during reporting period?**  Yes  No

**If no, when were the last chemical samples conducted for this system? (date)**  Don't know

**If yes, attach a list of the chemical results**

**If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.**

**Next scheduled full chemical test (date)** 2023

Parameter	Result	Corrective Action / Treatment / Comments

**ADDITIONAL TESTING**

**Does the system have analyzers for continuous monitoring?**  Yes  No

**If yes, check all boxes that apply:**

- Chlorine       Turbidity       Other (details)

**Are the results available on request?**

**If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.**

Additional Testing & Reason for Sampling	Corrective Action Taken

**WATER QUALITY COMPLAINTS**

**Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.)**  Yes  No

**If yes, complete the table below; attach additional sheets if necessary.**

Date	Water Quality Complaint	Corrective Action / Treatment





**OPERATIONAL PROBLEMS**

Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.).  Yes  No

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

Incident Date	Type of Operational Problem	Corrective Action Taken

**MAJOR UPGRADES/REPAIRS & EXPENSES**

Were there any major upgrades/repairs or any major costs incurred during this reporting period?  Yes  No

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

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

**FUTURE IMPROVEMENTS**

Are there any plans for future improvements?  Yes  No

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

Future Upgrades or Improvements	Estimated Date of Completion

Click here to enter a date. DATE COMPLETED: <u>Sept. 02/2019</u>	COMPLETED BY: <u>[Signature]</u>
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### Water Sample Range Report

Island Health

Facility Name: B.C. PARKS MORTON LAKE CAMPGROUND  
 Facility Type: 1 (DWQ)  
 Date Range: Jan 1 2018 to Dec 31 2018  
 Date Created: Jan 07 2019

Sampling Site	Date Collected	Total Coliform	E. Coli	Fecal Coliform
<u>Campground Well,</u>				
<u>Well Plate #14006,</u>				
<u>Campground Well,</u>				
<u>Well Plate #14006,</u>				
<u>Dist. site,</u>				
<u>Semi-monthly</u>				
	07-May-2018	L1	L1	
	22-May-2018	L1	L1	
	04-Jun-2018	L1	L1	
	25-Jun-2018	L1	L1	
	03-Jul-2018	A		
	31-Jul-2018	L1	L1	
	14-Aug-2018	L1	L1	
	29-Aug-2018	L1	L1	
	11-Sep-2018	L1	L1	
	24-Sep-2018	<u>L1</u>	<u>L1</u>	
	Total Positive:	0	0	0
<u>Audit Campground</u>				
<u>Well, Well Plate</u>				
<u>#14006, Audit</u>				
<u>Campground Well,</u>				
<u>Well Plate #14006,</u>				
<u>Dist. site, Monthly</u>				
	22-May-2018	L1	L1	
	17-Jul-2018	<u>L1</u>	<u>L1</u>	
	Total Positive:	0	0	0

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

#### Interpreting Sample Reports

In VIHA, the results of drinking water sampling are reported using the following coding system:

- L1 Less than 1 (no detectable bacteria) - Meaning: No bacteria present
- OG Overgrown - Meaning: Too many background bacteria to give an accurate count
- EST Estimated Count
- and
- A Sample not tested; Too long in transit
- C Sample leaked/broken in transit
- D Sample not tested; No collection date given
- T Sample submitted unsatisfactory. Exceeded 30 hours holding time, please resample.
- NS No sample received with requisition

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 positive samples in last 30 days:	0/0	
Total number of samples:	12	

**Comments:**

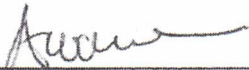
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Environmental Health Officer  
 Aug 22 2019

FOR FURTHER INFORMATION PLEASE CALL: Clements, Nancy (250) 850-2110 Campbell River Office

**Operator**

Ministry of Environment B.C. Parks  
 502 Alder Street  
 Campbell River, BC  
 V9W 2P1

(250) 751-3100





## APPENDIX A

### WATER SYSTEM OPERATING CONDITIONS FOR

#### B.C. PARKS MORTON LAKE CAMPGROUND

Morton Lake Road

Campbell River, BC, V9T 6J9

##### Condition 1.

Routine bacteriological water sampling frequency shall be at least twice per month. No more than one routine bacteriological water sample shall be collected in any single week, unless otherwise specified by the Drinking Water Officer. Bacteriological water samples must be analyzed at a Provincial Health Officer approved laboratory. The water system owner shall be responsible for collecting routine bacteriological water samples and submitting them to a VIHA office, or make their own arrangements with an approved private lab.

##### Condition 2.

Chemical water sampling shall be conducted by the water supply system owner at the expense of the water system owner and at a frequency of no less than once every five years. Parameters to be sampled for shall meet the list of parameters specified in the VIHA Guidelines for Approval of a Waterworks System. Each water source shall have its own water analysis.

##### Condition 3.

The water system owner must provide a proposed operator-training program and implementation plan. The operator-training program must be acceptable to the Drinking Water Officer and must consider the Drinking Water Protection Regulation, Drinking Water Officer's Guide and the VIHA policy 3.2, Training Guidelines For Operators of Small Water Systems.

##### Condition 4.

The water system owner shall assess the well for flood proofing and where wells are not found to be flood proof the water supplier shall provide a time frame acceptable to the Drinking Water Officer for when it will be made flood proof. The water system owner shall use as a minimum, construction standards within the BC Ground Water Protection Regulation for flood proofing. Copies of all assessments shall be submitted to the Drinking Water Officer. The development of an acceptable time frame must be completed by April 1, 2010.

##### Condition 5.

The water system owner shall protect the wellhead by applying the Ministry of Environment Wellhead Protection Toolkit. The fixed radius model in the tool kit is an acceptable method. Implementation shall start no later than April 1, 2010 and be completed by April 1, 2011.

**Health Protection and Environmental Services** .../2

#200 - 1100 Island Highway, Campbell River, BC, V9W 8C6 • Telephone: 250-850-2110 • Fax: 250-286-3486

*Our Vision: Healthy People, Healthy Island Communities, Seamless Service*