

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2024 (year)

Water System Burgoyne Bay

Water System Owner BC Parks

Primary Contact Name (Operator or Manager) Fred King

Phone Number (Operator or Manager) 250 539-2115

E-mail (Operator or Manager) k2parks@shaw.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) Contractor - K2 Park Services

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)



COMPLIANCE WITH OPERATING PERMIT

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

EOCP credits current

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? 22

What is the minimum required sampling frequency for this system? (#samples/month) 2/month

Additional sampling details:

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?

V.I.H.A. web site

WATER QUALITY STANDARDS FOR POTABLE WATER

<i>Parameter:</i>	<i>Standard:</i>	<i>Did this system meet standard?</i>	
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 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? Y - attached Yes No

If no, when were the last chemical samples conducted for this system? (date)

If yes, attach a list of the chemical results - attached

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) **2029**

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
Oct 9	no water to P. Prince house.	Polaris Plmbg to search for leaks-non detected.
	Holding tank empty.	Need to excavate and locate leak (Nov).
Oct 2	UV alarm sounding.	Replace cistern fill valve, some pipe, couplings etc.

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	Service & calibration on gas detection system August 21, 2024, oxygen sensor element recommended by CMJ to be replaced next year.
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
Refer to BC Parks	

November 15, 2024 DATE COMPLETED:	Debbie King COMPLETED BY:
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K2 Park Services Ltd. (BC Parks)
*B Fred or Debbie King
Site 3, Comp 9
Galiano Island, BC
VON 1P0

TEL: (877) 559-2115
k2parks@shaw.ca

14Mar24 2:59p
Source: Well
Type of Sample: Water
No. of Samples: 1
Arrival temp.: 11.1C
Pd B1161B 1403R

W179474

Sample: Burgoyne Bay Park

<u>Site Code</u>	<u>Date</u>	<u>Time</u>	CFU/100 ml		CFU/100 ml		CFU/100 mL
			TC_____	T-NC	FC_____	F-NC	<u>E.coli</u>
1 Water Sample	14Mar24	13:30	0	0	0	0	0

WATER DISTRICT SCREEN

<u>Sample</u>	<u>Date</u>	<u>Time</u>	<u>Lactose Fermentors</u>	<u>Coliforms Total</u>	<u>Fecal</u>	<u>E.coli</u>	<u>Total Aeromonas</u>
1 Water Sample	14Mar24	13:30	ND	ND	ND	ND	ND

<u>Sample</u>	<u>Date</u>	<u>Time</u>	<u>Sulfur Reducing/ Iron Bacteria</u>	<u>Yeast/Fungi</u>	<u>TPC *</u>
1 Water Sample	14Mar24	13:30	ND / ND	ND / ND	84.0

* All counts are colony forming units per milli-litre

TC = total coliform bacteria FC = fecal coliform bacteria (aka Thermotolerant Coliforms)
NC = non-coliform bacteria ND = none detected
TPC = total plate count- spread plate method - 35C/48hr TGEA FDA/BAM 9th ed, Oct 2020
CFU = colony forming units

Results may be adversely affected if samples are submitted to the laboratory more than 24 to 30 hours after collection.

E. coli = Escherichia coli, FDA/BAM 9th ed, Oct 2020
Bergey's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.System.Bact.

- See following page for chemistry results -

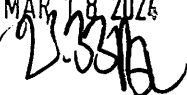


W. Riggs
Sr. Microbiologist

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EMAILED
MAR 18 2024


K2 Park Services Ltd. (BC Parks)
*B Fred or Debbie King
Site 3, Comp 9
Galiano Island, BC
VON 1P0

14Mar24 2:59p
Source: Well
Type of Sample: Water
No. of Samples: 1

W179474 pg2

TEL: (877) 559-2115
k2parks@shaw.ca


Arrival temp.: 11.1C
Pd B1161B 1403R

Sample: Burgoyne Bay Park - Water Sample 14Mar24 13:30

<u>ELEMENTS</u>		<u>SAMPLE</u>	<u>UNITS</u>	<u>Maximum Limits In Drinking Water*</u>
1) Aluminium	Al	0.207	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	1.19	ug/L	10.0 ug/L
4) Barium	Ba	0.023	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.658	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	32.8	mg/L	200 mg/L
9) Chromium	Cr	<0.003	mg/L	0.050 mg/L
10) Cobalt	Co	<0.005	mg/L	no limit listed
11) Copper	Cu	<0.008	mg/L	1.00 mg/L
12) Gold	Au	<0.040	mg/L	no limit listed
13) Iron	Fe	0.066	mg/L	0.300 mg/L
14) Lanthanum	La	<0.020	mg/L	no limit listed
15) Lead	Pb	<0.500	ug/L	5.00 ug/L
16) Magnesium	Mg	3.52	mg/L	50.0 mg/L
17) Manganese	Mn	<0.004	mg/L	0.120 MAC 0.020 AO
18) Mercury	Hg	<0.010	ug/L	1.00 ug/L
19) Molybdenum	Mo	<0.005	mg/L	no limit listed
20) Nickel	Ni	<0.004	mg/L	no limit listed
21) Phosphorus	P	<0.010	mg/L	no limit listed
22) Potassium	K	1.37	mg/L	no limit listed
23) Scandium	Sc	<0.050	mg/L	no limit listed
24) Selenium	Se	<0.500	ug/L	5.0 ug/L
25) Silicon	Si	10.3	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	31.2	mg/L	200 mg/L
28) Strontium	Sr	0.110	mg/L	no limit listed
29) Tin	Sn	<0.020	mg/L	no limit listed
30) Titanium	Ti	<0.010	mg/L	no limit listed
31) Tungsten	W	<0.050	mg/L	no limit listed
32) Vanadium	V	<0.010	mg/L	no limit listed
33) Zinc	Zn	0.009	mg/L	5.00 mg/L
Hardness (mg/L CaCO ₃)		96.4	mg/L	75-150 mg/L = moderately hard
pH		8.20	units	7.0 to 10.5

* As per Canadian or B.C. Health Act Safe Drinking Water Regulation BC Reg 230/92, & 390 Sch 120, 2001. Task Force of the Canadian Council of Resource and Environment Ministers - Guidelines for Canadian Drinking Water Quality, 2020.

R. Bilodeau
Analytical Chemist



H. Hartmann
Sr. Analytical Chemist

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TEL: (877) 559-2115
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14Mar24 2:59p
 Source: Well
 Type of Sample: Water
 No. of Samples: 1
 Arrival temp.: 11.1C
 Pd B1161B 1403R

W179474 pg3

Sample: Burgoyne Bay Park

<u>SAMPLE</u>	<u>DATE</u>	<u>TIME</u>	<u>Alkalinity</u> (mg/L)	<u>NH₃-N</u> (ug/L)	<u>Cl⁻</u> (mg/L)	<u>Colour</u> (TCU)	<u>E.C.</u> (uS/cm)
Water Sample	14Mar24	13:30	175	ND	4.41	1.92	305
Lab Blank			ND	ND	ND	ND	ND
So			0.100	0.254	0.015	0.300	0.300
REF. VALUE			100	10.0	10.0	5.00	147
STD ± 2SD			106 ± 7.11	9.83 ± 0.755	10.3 ± 0.887	4.98 ± 0.356	141 ± 13.0

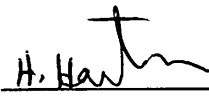
<u>SAMPLE</u>	<u>DATE</u>	<u>TIME</u>	<u>CORROSIVITY</u> (Is @20C)	<u>F⁻</u> (mg/L)	<u>S²⁻</u> (ug/L)	<u>TKN</u> (mg/L)	<u>NO₃-N</u> (ug/L)
Water Sample	14Mar24	13:30	0.572	ND	ND	ND	5.60
Lab Blank				ND	ND	ND	ND
So				0.007	0.007	0.012	0.160
REF. VALUE				1.00	50.0	1.00	10.0
STD ± 2SD				0.977 ± 0.059	52.0 ± 3.97	1.03 ± 0.076	10.5 ± 0.744

<u>SAMPLE</u>	<u>DATE</u>	<u>TIME</u>	<u>NO₂-N</u> (ug/L)	<u>SO₄²⁻</u> (mg/L)	<u>T.O.C.</u> (mg/L)	<u>T&L</u> (mg/L)	<u>TDS</u> (mg/L)
Water Sample	14Mar24	13:30	ND	12.7	9.91	ND	177
Lab Blank			ND	ND	ND	ND	ND
So			0.300	0.075	0.300	0.070	0.010
REF. VALUE			10.0	10.0	10.0	1.0	200
STD ± 2SD			9.77 ± 0.705	9.78 ± 0.690	10.3 ± 0.762	0.983 ± 0.033	206 ± 14.9

<u>SAMPLE</u>	<u>DATE</u>	<u>TIME</u>	<u>Turbidity</u> (NTU)	<u>UVT</u> (%)
Water Sample	14Mar24	13:30	0.230	96.8
Lab Blank			ND	ND
So			0.015	0.003
REF. VALUE			0.500	90.0
STD ± 2SD			0.492 ± 0.056	90.2 ± 0.02

SD = standard deviation; REF VALUE = primary or secondary reference material
 STD = secondary standard calibrated to primary standard reference material
 So = standard deviation at zero analyte concentration; method detection limit
 is generally considered to be 3x So value
 ND = none detected n/a = not applicable

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