2022
Well
Test
Resuts

Valleyview Well – 38473

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:16p No. W168775
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

Site Code	Date	Time	CFU/100 ml TC	T-NC	CFU/100 ml FC	F-NC	CFU/100 mL E.coli
Valley View #1 38473	21Jun22	10:30a	0	2	0	0	0

WATER DISTRICT SCREEN

Sample	Date	Time	Lactose Fermentors	Coliforms Total	Fecal	E.coli	Total Aeromonas	Sulfur Reducing/ Iron Bacteria	Yeast/Fungi	TPC*
Valley View #1 38473	21Jun22	10:30a	0.02	ND	ND	ND	ND	ND / ND	ND / ND	6.0

* 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
Bergy's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.Systm.Bact.

Comments:
For Interpretation of Results:
Total, Fecal Coliforms or E.coli present greater than 0 CFU/100mL (0 CFU/mL):
IF Coliform numbers exceed safe limits for drinking water- water is not suitable for drinking without treatment.

Total Non-coliform bacteria (=Lactose Fermentors) equal to or greater than 200 CFU/100mL (2.0 CFU/mL):
IF the number organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

If Total Plate Count bacteria are -
A) greater than 100 CFU/mL:
high numbers of microbial organisms indicate that this water supply should be monitored on a seasonal basis.
B) greater than 500 CFU/mL:
the number of organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

- see following page for chemistry results -

W. Riggs
Sr. Microbiologist

91

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:16p No. W168775 pg2
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

Sample: Valley View #1 38473 21Jun22 10:30a

ELEMENTS		SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.031	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	1.39	ug/L	10.0 ug/L
4) Barium	Ba	<0.009	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.394	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	20.6	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	0.011	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	8.74	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	0.021	mg/L	no limit listed
22) Potassium	K	0.620	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	5.91	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	5.63	mg/L	200 mg/L
28) Strontium	Sr	0.060	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	0.015	mg/L	5.00 mg/L
Hardness (mg/L $CaCO_3$)		87.4	mg/L	75-150 mg/L = mod.hard
pH		7.67	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.

Comments:
All constituents tested meet Canadian and B.C. drinking water standards.

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:16p No. W168775 pg3
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

SAMPLE	DATE	TIME	Alkalinity (mg/L)	NH_3-N (ug/L)	Cl^- (mg/L)	Colour (TCU)	E.C. (uS/cm)
Valley View #1 38473	21Jun22	10:30a	95.0	5.90	11.5	ND	198
Lab Blank			ND	ND	ND	ND	ND
S_o			0.100	0.254	0.015	0.300	0.300
REF. VALUE			100	10.0	10.0	5.00	147
STD ± 2SD			110 ± 7.54	9.94 ± 0.799	10.8 ± 1.01	4.92 ± 0.411	142 ± 12.0

SAMPLE	DATE	TIME	CORROSIVITY (Is @20C)	F^- (mg/L)	S^{2-} (ug/L)	TKN (mg/L)	NO_3-N (ug/L)
Valley View #1 38473	21Jun22	10:30a	-0.426	0.073	ND	0.022	366
Lab Blank				ND	ND	ND	ND
S_o				0.007	0.007	0.012	0.160
REF. VALUE				1.00	50.0	1.00	10.0
STD ± 2SD				1.08 ± 0.089	48.2 ± 0.442	0.980 ± 0.091	9.88 ± 0.782

SAMPLE	DATE	TIME	NO_2-N (ug/L)	SO_4^{2-} (mg/L)	T.O.C. (mg/L)	T&L (mg/L)	TDS (mg/L)
Valley View #1 38473	21Jun22	10:30a	ND	6.31	0.750	ND	115
Lab Blank			ND	ND	ND	ND	ND
S_o			0.300	0.075	0.300	0.070	0.010
REF. VALUE			10.0	10.0	5.00	1.00	200
STD ± 2SD			10.6 ± 0.812	10.9 ± 0.833	4.88 ± 0.492	0.929 ± 0.079	203 ± 17.4

SAMPLE	DATE	TIME	Turbidity (NTU)	UVT (%)
Valley View #1 38473	21Jun22	10:30a	0.330	98.5
Lab Blank			ND	ND
S_o			0.015	0.003
REF. VALUE			40.0	90.0
STD ± 2SD			39.0 ± 4.07	90.3 ± 0.020

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

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Valleyview Well - 13088

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:13p No. W168774
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

Site Code	Date	Time	CFU/100 ml TC	T-NC	CFU/100 ml FC	F-NC	CFU/100 mL E.coli
Valley View #2 13088	21Jun22	10:45a	0	0	0	0	0

WATER DISTRICT SCREEN

Sample	Date	Time	Lactose Fermentors	Coliforms Total	Fecal	E.coli	Total Aeromonas	Sulfur Reducing/ Iron Bacteria	Yeast/Fungi	TPC*
Valley View #2 13088	21Jun22	10:45a	ND	ND	ND	ND	ND	ND / ND	ND / ND	0.04

* 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
Bergy's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.Systm.Bact.

Comments:
For Interpretation of Results:
Total, Fecal Coliforms or E.coli present greater than 0 CFU/100mL (0 CFU/mL):
IF Coliform numbers exceed safe limits for drinking water- water is not suitable for drinking without treatment.

Total Non-coliform bacteria (=Lactose Fermentors) equal to or greater than 200 CFU/100mL (2.0 CFU/mL):
IF the number organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

If Total Plate Count bacteria are -
A) greater than 100 CFU/mL:
high numbers of microbial organisms indicate that this water supply should be monitored on a seasonal basis.
B) greater than 500 CFU/mL:
the number of organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

- see following page for chemistry results -

W. Riggs
Sr. Microbiologist

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:13p No. W168774 pg2
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

Sample: Valley View #2 13088 21Jun22 10:45a

ELEMENTS		SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.032	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	1.82	ug/L	10.0 ug/L
4) Barium	Ba	<0.009	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.427	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	20.8	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	0.010	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	7.60	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	0.028	mg/L	no limit listed
22) Potassium	K	0.640	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	5.89	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	7.33	mg/L	200 mg/L
28) Strontium	Sr	0.060	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	0.016	mg/L	5.00 mg/L
Hardness (mg/L $CaCO_3$)		83.2	mg/L	75-150 mg/L = mod.hard
pH		7.86	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.

Comments:
All constituents tested meet Canadian and B.C. drinking water standards.

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:13p No. W168774 pg3
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 10.7C
Sampler: Trisha Oud

SAMPLE	DATE	TIME	Alkalinity (mg/L)	NH_3-N (ug/L)	Cl^- (mg/L)	Colour (TCU)	E.C. (uS/cm)
Valley View #2 13088	21Jun22	10:45a	90.0	3.10	8.95	0.300	187
Lab Blank			ND	ND	ND	ND	ND
S_o			0.100	0.254	0.015	0.300	0.300
REF. VALUE			100	10.0	10.0	5.00	147
STD ± 2SD			110 ± 7.54	9.94 ± 0.799	10.8 ± 1.01	4.92 ± 0.411	142 ± 12.0

SAMPLE	DATE	TIME	CORROSIVITY (Is @20C)	F^- (mg/L)	S^{2-} (ug/L)	TKN (mg/L)	NO_3-N (ug/L)
Valley View #2 13088	21Jun22	10:45a	-0.255	0.071	ND	0.004	188
Lab Blank				ND	ND	ND	ND
S_o				0.007	0.007	0.012	0.160
REF. VALUE				1.00	50.0	1.00	10.0
STD ± 2SD				1.08 ± 0.089	48.2 ± 0.442	0.980 ± 0.091	9.88 ± 0.782

SAMPLE	DATE	TIME	NO_2-N (ug/L)	SO_4^{2-} (mg/L)	T.O.C. (mg/L)	T&L (mg/L)	TDS (mg/L)
Valley View #2 13088	21Jun22	10:45a	ND	7.07	0.510	ND	108
Lab Blank			ND	ND	ND	ND	ND
S_o			0.300	0.075	0.300	0.070	0.010
REF. VALUE			10.0	10.0	5.00	1.00	200
STD ± 2SD			10.6 ± 0.812	10.9 ± 0.833	4.88 ± 0.492	0.929 ± 0.079	203 ± 17.4

SAMPLE	DATE	TIME	Turbidity (NTU)	UVT (%)
Valley View #2 13088	21Jun22	10:45a	0.320	99.4
Lab Blank			ND	ND
S_o			0.015	0.003
REF. VALUE			40.0	90.0
STD ± 2SD			39.0 ± 4.07	90.3 ± 0.020

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

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Pavenham Well - 13062

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:10p No. W168773
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 11.5C
Sampler: Trisha Oud

Site Code	Date	Time	CFU/100 ml TC	T-NC	CFU/100 ml FC	F-NC	CFU/100 mL E.coli
Office Well Plate #13062	21Jun22	09:30a	0	0	0	0	0

WATER DISTRICT SCREEN

Sample	Date	Time	Lactose Fermentors	Coliforms Total	Fecal	E.coli	Total Aeromonas	Sulfur Reducing/ Iron Bacteria	Yeast/Fungi	TPC*
Office Well Plate #13062	21Jun22	09:30a	ND	ND	ND	ND	ND	ND / ND	ND / ND	0.46

* 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
Bergy's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.Systm.Bact.

Comments:
For Interpretation of Results:
Total, Fecal Coliforms or E.coli present greater than 0 CFU/100mL (0 CFU/mL):
IF Coliform numbers exceed safe limits for drinking water- water is not suitable for drinking without treatment.

Total Non-coliform bacteria (=Lactose Fermentors) equal to or greater than 200 CFU/100mL (2.0 CFU/mL):
IF the number organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

If Total Plate Count bacteria are -
A) greater than 100 CFU/mL:
high numbers of microbial organisms indicate that this water supply should be monitored on a seasonal basis.
B) greater than 500 CFU/mL:
the number of organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

- see following page for chemistry results -

W. Riggs
Sr. Microbiologist

MB LABS LTD.
ANALYTICAL & TESTING SERVICES P.O. BOX 2103, SIDNEY, B.C. V8L 1Y0

MB LABORATORIES LTD.
TEL: (250) 656-1334 EMAIL: info@mblabs.com

Client/Code

Independent Pump & Mechanical -E
*A
PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:10p No. W168773 pg2
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 11.5C
Sampler: Trisha Oud

Sample: Office Well Plate #13062 21Jun22 09:30a

ELEMENTS		SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.034	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	3.17	ug/L	10.0 ug/L
4) Barium	Ba	0.018	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.516	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	30.8	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	1.05	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	9.45	mg/L	50.0 mg/L
17) Manganese	Mn	0.225	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	0.945	mg/L	no limit listed
22) Potassium	K	0.900	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	6.89	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	13.3	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	0.010	mg/L	5.00 mg/L
Hardness (mg/L $CaCO_3$)		116	mg/L	75-150 mg/L = mod.hard
pH		7.87	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

Client/Code

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Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:10p No. W168773.pg3
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 11.5C
Sampler: Trisha Oud

Sample: Office Well Plate #13062 21Jun22 09:30a

Comments:

Iron: high amounts of Iron can cause staining of laundry, porcelain and plumbing fixtures; can produce an undesirable taste. Essential for health.

Manganese: not considered to be toxic; high amounts of Manganese can cause staining of laundry, porcelain and plumbing fixtures; may produce an undesirable taste.

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

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TEL: (250) 743-3075
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Date 21Jun22 2:10p No. W168773 pg4
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 11.5C
Sampler: Trisha Oud

SAMPLE	DATE	TIME	Alkalinity (mg/L)	NH_3-N (mg/L)	Cl^- (mg/L)	Colour (TCU)	E.C. (uS/cm)
Office Well	21Jun22	09:30a	165	1.26	11.5	9.53	283
Plate #13062							
Lab Blank			ND	ND	ND	ND	ND
S_o			0.100	0.254 ug/L	0.015	0.300	0.300
REF. VALUE			100	10.0	10.0	5.00	147
STD ± 2SD			110 ± 7.54	9.94 ± 0.799	10.8 ± 1.01	4.92 ± 0.411	142 ± 12.0

SAMPLE	DATE	TIME	CORROSIVITY (Is @20C)	F^- (mg/L)	S^{2-} (ug/L)	TKN (mg/L)	NO_3-N (ug/L)
Office Well	21Jun22	09:30a	0.189	0.073	ND	1.26	13.0
Plate #13062							
Lab Blank				ND	ND	ND	ND
S_o				0.007	0.007	0.012	0.160
REF. VALUE				1.00	50.0	1.00	10.0
STD ± 2SD				1.08 ± 0.089	48.2 ± 0.442	0.980 ± 0.091	9.88 ± 0.782

SAMPLE	DATE	TIME	NO_2-N (ug/L)	SO_4^{2-} (mg/L)	T.O.C. (mg/L)	T&L (mg/L)	TDS (mg/L)
Office Well	21Jun22	09:30a	10.3	6.31	0.197	0.534	164
Plate #13062							
Lab Blank			ND	ND	ND	ND	ND
S_o			0.300	0.075	0.300	0.070	0.010
REF. VALUE			10.0	10.0	5.00	1.00	200
STD ± 2SD			10.6 ± 0.812	10.9 ± 0.833	4.88 ± 0.492	0.929 ± 0.079	203 ± 17.4

...contin\

Client/Code

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Date 21Jun22 2:10p No. W168773 pg5
Source Well
Type of Sample water
No. of Samples 1
Comments Arrival temp.: 11.5C
Sampler: Trisha Oud

SAMPLE	DATE	TIME	Turbidity (NTU)	UVT (%)
Office Well	21Jun22	09:30a	2.29	74.7
Plate #13062				
Lab Blank			ND	ND
S_o			0.015	0.003
REF. VALUE			5.00	90.0
STD ± 2SD			4.89 ± 0.422	90.3 ± 0.020

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

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Kidd Well - 13060

Drillwell Enterprises Ltd. - M
*A
4994 Polkey Rd.
Duncan, BC
V9L 6W3
TEL: (800) 746-7444
drill@drillwell.com

12Jul22 4:24p W169145
FWS
water
1

Arrival temp.: 15.1C

Sample: Calvin Slade - Well ID 13060 12Jul22

ELEMENTS		SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.135	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	0.549	ug/L	10.0 ug/L
4) Barium	Ba	0.291	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.863	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	123	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	0.660	mg/L	0.300 mg/L
14) Lanthanum	La	<0.020	mg/L	no limit listed
15) Lead	Pb	2.15	ug/L	5.00 ug/L
16) Magnesium	Mg	59.9	mg/L	50.0 mg/L
17) Manganese	Mn	0.268	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	0.292	mg/L	no limit listed
22) Potassium	K	33.6	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	5.48	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	702	mg/L	200 mg/L
28) Strontium	Sr	4.08	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	0.007	mg/L	5.00 mg/L
Hardness (mg/L $CaCO_3$)		554	mg/L	>300 mg/L = very hard
pH		7.77	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.

Comments:

Iron: high amounts of Iron can cause staining of laundry, porcelain and plumbing fixtures; can produce an undesirable taste. Essential for health.

Magnesium: adds to the hardness of water; in high concentrations with sulfate may act as a laxative.

Manganese: not considered to be toxic; high amounts of Manganese can cause staining of laundry, porcelain and plumbing fixtures; may produce an undesirable taste.

Sodium: essential for health; usually from salt-water intrusion, water softeners & some mineral deposits.

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist

Client/Code

Independent Pump & Mechanical -E
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PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:30p No. W168776
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 12.1C
Sampler: Trisha Oud

Site Code	Date	Time	CFU/100 ml TC	T-NC	CFU/100 ml FC	F-NC	CFU/100 mL E.coli
Kidd Well #13060	21Jun22	10:00a	0	4	0	0	0

WATER DISTRICT SCREEN

Sample	Date	Time	Lactose Fermentors	Coliforms Total	Fecal	E.coli	Total Aeromonas	Sulfur Reducing/ Iron Bacteria	Yeast/Fungi	TPC*
Kidd Well #13060	21Jun22	10:00a	0.04	ND	ND	ND	ND	ND / ND	ND / ND	1.22

* 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

Redone...

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
Bergy's Manual of Systematic Bacteriology vol 1, AOAC 1984; J.Clin.Micro., J.Intern.Syst.Bact.

Comments:
For Interpretation of Results:
Total, Fecal Coliforms or E.coli present greater than 0 CFU/100mL (0 CFU/mL):
IF Coliform numbers exceed safe limits for drinking water- water is not suitable for drinking without treatment.

Total Non-coliform bacteria (=Lactose Fermentors) equal to or greater than 200 CFU/100mL (2.0 CFU/mL):
IF the number organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

If Total Plate Count bacteria are -
A) greater than 100 CFU/mL:
high numbers of microbial organisms indicate that this water supply should be monitored on a seasonal basis.
B) greater than 500 CFU/mL:
the number of organisms present exceed recommended guidelines for drinking water; treatment is strongly recommended.

- see following page for chemistry results -

W. Riggs
Sr. Microbiologist

MB LABS LTD.
ANALYTICAL & TESTING SERVICES P.O. BOX 2103, SIDNEY, B.C. V8L 1Y0

MB LABORATORIES LTD.
TEL: (250) 656-1334 EMAIL: info@mblabs.com

Client/Code

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Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:30p No. W168776 pg2
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 12.1C
Sampler: Trisha Oud

Sample: Kidd Well #13060 21Jun22 10:00a

ELEMENTS		SAMPLE	UNITS	Maximum Limits Permissible In Drinking Water*
1) Aluminium	Al	0.055	mg/L	no limit listed
2) Antimony	Sb	<0.500	ug/L	6.00 ug/L
3) Arsenic	As	0.592	ug/L	10.0 ug/L
4) Barium	Ba	0.202	mg/L	2.00 mg/L
5) Beryllium	Be	<0.003	mg/L	no limit listed
6) Boron	B	0.650	mg/L	5.00 mg/L
7) Cadmium	Cd	<0.010	ug/L	7.00 ug/L
8) Calcium	Ca	93.8	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	0.041	mg/L	1.00 mg/L
12) Gold	Au	<0.040	mg/L	no limit listed
13) Iron	Fe	1.73	mg/L	0.300 mg/L
14) Lanthanum	La	<0.020	mg/L	no limit listed
15) Lead	Pb	14.7	ug/L	5.00 ug/L
16) Magnesium	Mg	42.2	mg/L	50.0 mg/L
17) Manganese	Mn	0.294	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	0.305	mg/L	no limit listed
22) Potassium	K	23.6	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	5.17	mg/L	no limit listed
26) Silver	Ag	<0.010	mg/L	no limit listed
27) Sodium	Na	472	mg/L	200 mg/L
28) Strontium	Sr	2.87	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	0.024	mg/L	5.00 mg/L
Hardness (mg/L $CaCO_3$)		408	mg/L	>300 mg/L = very hard
pH		7.91	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

Client/Code

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PO Box 390
Shawnigan Lake, BC
V0R 2W0

TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:30p No. W168776 pg3
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 12.1C
Sampler: Trisha Oud

Sample: Kidd Well #13060 21Jun22 10:00a

Comments:

Iron: high amounts of Iron can cause staining of laundry, porcelain and plumbing fixtures; can produce an undesirable taste. Essential for health.

Lead: toxic and accumulates in body tissues; Lead may come from old lead pipes, solders, or industrial discharges. Even small amounts can contribute to learning disability in children.

Manganese: not considered to be toxic; high amounts of Manganese can cause staining of laundry, porcelain and plumbing fixtures; may produce an undesirable taste.

Sodium: essential for health; usually from salt-water intrusion, water softeners & some mineral deposits.

R. Bilodeau
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H. Hartmann
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TEL: (250) 743-3075
admin@independentpump.ca

Date 21Jun22 2:30p No. W168776 pg4
Source Well
Type of Sample water
No. of Samples 1

Comments Arrival temp.: 12.1C
Sampler: Trisha Oud

SAMPLE	DATE	TIME	Alkalinity (mg/L)	NH_3-N (mg/L)	Cl^- (mg/L)	Colour (TCU)	E.C. (uS/cm)
Kidd Well #13060	21Jun22	10:00a	150	1.85	926	4.68	2850
Lab Blank			ND	ND	ND	ND	ND
S_o			0.100	0.254 ug/L	0.015	0.300	0.300
REF. VALUE			100	10.0	10.0	5.00	147
STD ± 2SD			110 ± 7.54	9.94 ± 0.799	10.8 ± 1.01	4.92 ± 0.411	142 ± 12.0

SAMPLE	DATE	TIME	CORROSIVITY (Is @20C)	F^- (mg/L)	S^{2-} (ug/L)	TKN (mg/L)	NO_3-N (ug/L)
Kidd Well #13060	21Jun22	10:00a	0.671	ND	ND	2.04	ND
Lab Blank				ND	ND	ND	ND
S_o				0.007	0.007	0.012	0.160
REF. VALUE				1.00	50.0	1.00	10.0
STD ± 2SD				1.08 ± 0.089	48.2 ± 0.442	0.980 ± 0.091	9.88 ± 0.782

SAMPLE	DATE	TIME	NO2-N (ug/L)	SO_4^{2-} (mg/L)	T.O.C. (mg/L)	T&L (mg/L)	TDS (mg/L)
Kidd Well #13060	21Jun22	10:00a	ND	ND	2.34	0.293	1653
Lab Blank			ND	ND	ND	ND	ND
S_o			0.300	0.075	0.300	0.070	0.010
REF. VALUE			10.0	10.0	5.00	1.00	200
STD ± 2SD			10.6 ± 0.812	10.9 ± 0.833	4.88 ± 0.492	0.929 ± 0.079	203 ± 17.4

SAMPLE	DATE	TIME	Turbidity (NTU)	UVT (%)
Kidd Well #13060	21Jun22	10:00a	2.41	90.3
Lab Blank			ND	ND
S_o			0.015	0.003
REF. VALUE			40.0	90.0
STD ± 2SD			39.0 ± 4.07	90.3 ± 0.020

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

R. Bilodeau
Analytical Chemist

H. Hartmann
Sr.Analytical Chemist