



VILLAGE OF LYTTON 2024 WATER SYSTEM REPORT



Kevin Vilac PO CWP CWWP

Community Water System

Introduction

The Village of Lytton is the purveyor of drinking water to users connected to the Village of Lytton Community Water System. This report is provided to the Village of Lytton Council, Lytton First Nation, and Interior Health for their information, and in fulfillment of the Village's obligations under the Provincial Drinking Water Protection Act and associated regulations, the terms and conditions of the Village's Water Service Agreement with Lytton First Nation and the Village's Water System Operating Permit issued by Interior Health. Enforcement of the regulations and issuance of water system permits is the responsibility of Interior Health Authority's Drinking Water Officer.

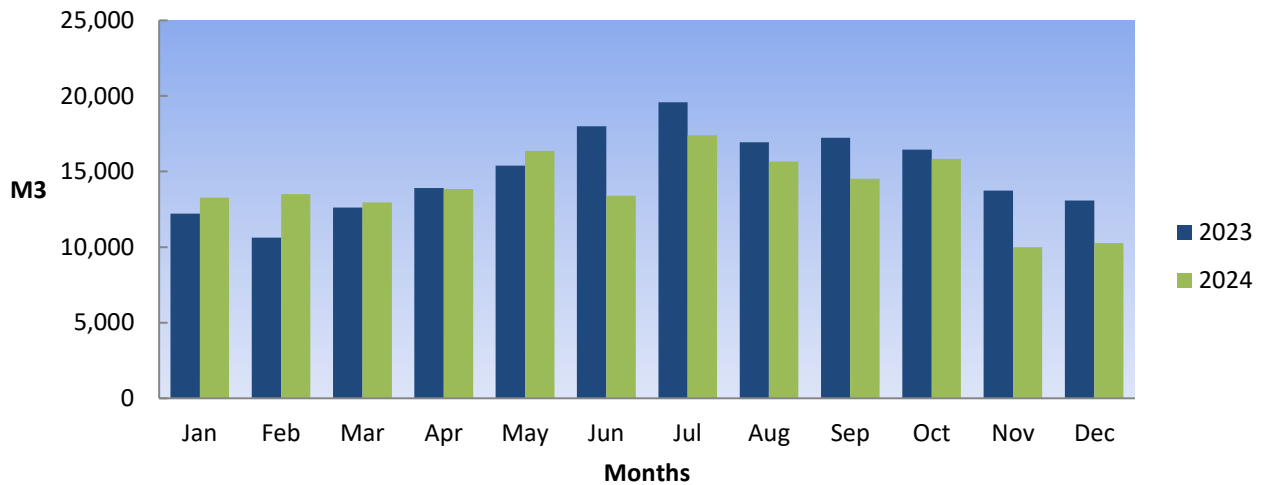
Water Consumption

Raw water for the Village of Lytton water system is supplied from Lytton Creek. When the creek does not meet the required drinking water parameters, the Village of Lytton water system is supplied with water from two wells, Well #2 and Well #3. The Creek supplied 128 473 000 litres of water, and the Wells provided 38 585 000 litres of water for a total of 167 058 000 litres consumed within the Village of Lytton water system in 2024. This was a reduction in consumption by 10.2 % from 2023. The maximum daily demand peaked at 813 000 litres on August 23, 2024, while the minimum daily demand occurred on December 20, 2024 at 103 000 litres.

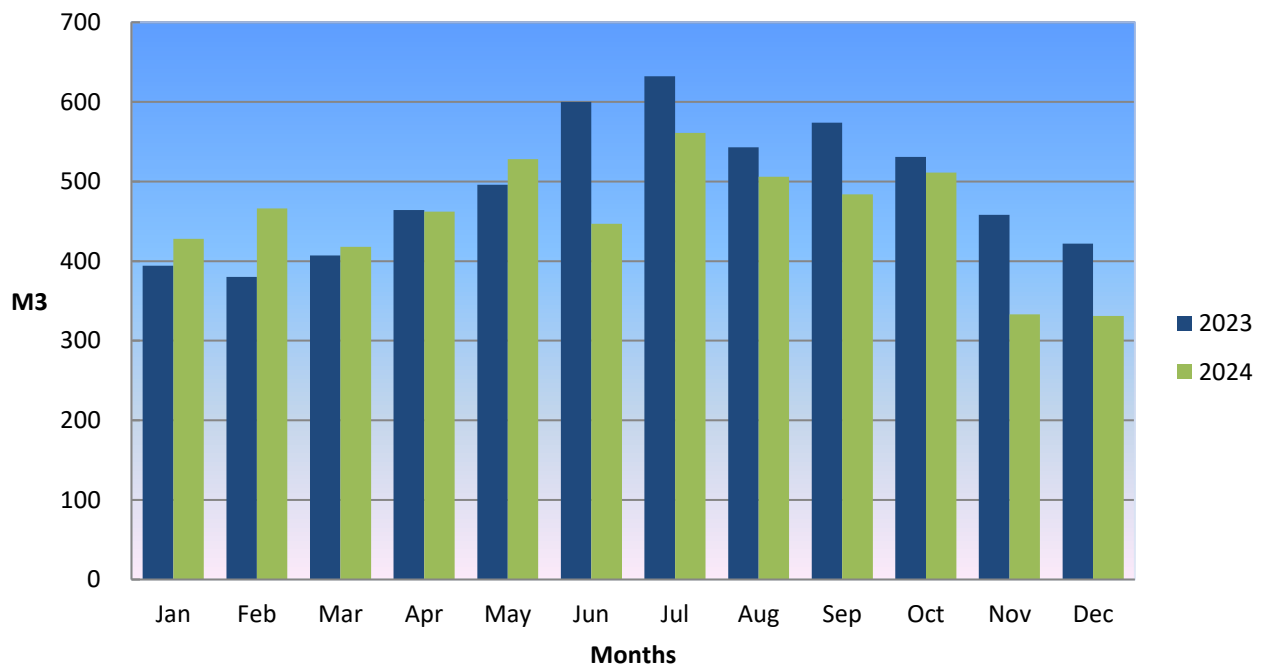
The water consumption for the Village of Lytton in 2024 averaged 457 693 litres per day. The maximum day (Aug 23rd) water consumption was 5 420 litres per person, while the minimum day (Dec 20th) consumption was 687 litres per person. The average was 3 051 litres per person in the Village of Lytton every day of the year (based on a population of 150); average daily consumption in British Columbia is only 401 litres per capita (2021 Stats Canada Survey of Drinking Water Plants). The consumption rate per person is extremely high for the Village of Lytton, some of this can be contributed to construction activities, Village maintenance/recovery operations and water leaks.

The Village of Lytton must continue to reduce water consumption through identifying and repairing water leaks and enforcing water restrictions. The Province of British Columbia faced its third consecutive year of drought in 2024 and to maintain water supplies entering another potential drought in 2025 the Village of Lytton must find ways to conserve water to ensure supply for the future.

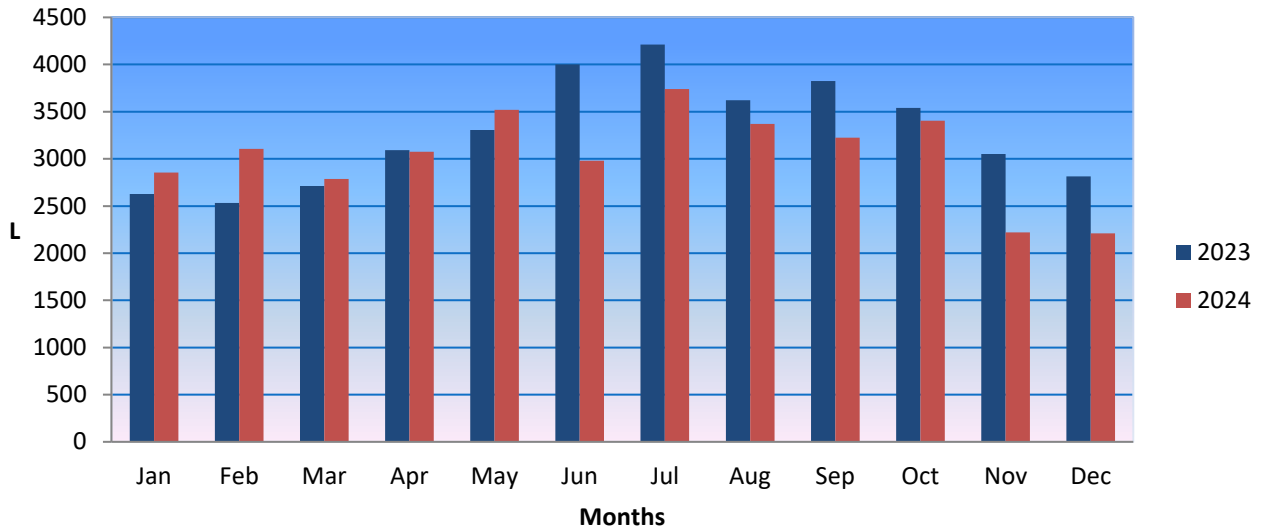
Total Water Use 2023-2024



Average Daily Water Use



Water Consumption Per Person Per Day



Water Storage

The water storage capacity is just over 1.3 million litres between three reservoirs, 345 North Reservoir 445 m³, 345 South Reservoir 480 m³, and 265 Reservoir 360 m³. The Village's distribution system accounts for another approximately 115 thousand litres. Distribution piping sizes range from 50mm to 200 mm, approximately 6.5 Km in total length.

Community Water System

Water Production

The primary drinking water source is Lytton Creek. The intake is located approximately 1km upslope and east of the Trans-Canada Highway. The Village also has two backup sources, Well 2 and Well 3.

- **Lytton Creek – rated 20 L/sec**
- **Well #2 – rated 7 L/sec**
- **Well #3 – rated 8 L/se**

In the event of a power outage the Water Treatment Plant is powered by a backup diesel generator. The Creek intake is a gravity fed system. The valve which controls the flow is located within the Water Treatment Plant. The Village also has a portable generator which is capable of powering one of the Well sites in the event of a power failure and the Creek supply does not meet the mandatory water quality guidelines.



Water Treatment Systems

The Village of Lytton has Trojan Swift low pressure UV reactors followed by Chlorination that is mixed within the 345 Reservoirs. The Reservoirs provide appropriate contact time before being distributed to ensure a minimum Free Chlorine residual of 1.20 mg/L as outlined within the Operating Permit.

The Village of Lytton follows Interior Health's 4-3-2-1-0 Drinking Water Objectives.

- 4 log inactivation of Viruses (99.99%)
- 3 log removal or inactivation of Giardia Lamblia and Cryptosporidium (99.9%)
- 2 refers to two treatment processes.
- 1 for less than 1 NTU of Turbidity
- 0 total and fecal coliforms and E. coli

Trojan Swift UV Reactors



Community Water System

Quality Monitoring



WTP Generator

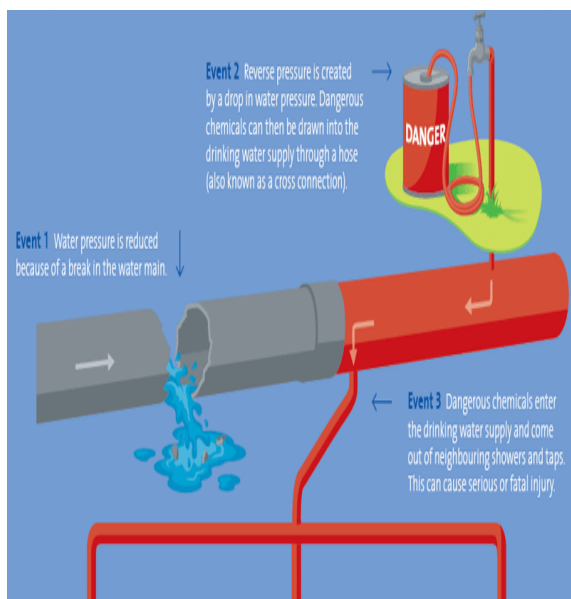
Drinking water delivered to users of the Village's system is subject to a comprehensive and rigorous testing program that ensures quality drinking water. Water samples from up to seven (7) separate locations within the system were sent in 2024, on a weekly basis, to *Caro Analytical Services* laboratories to be tested for the presence/absence of *E. coli* and Total Coliform Bacteria. The Village also performs quarterly testing to monitor for any Disinfection Byproducts. The Village of Lytton staff also perform Chlorine residual testing, and Turbidity testing to ensure the water is potable.

The standard protocol when a water sample is found to contain the presence of Coliform (an early indicator that we could have a problem arising), however minute, is to flush and resample the water immediately at the same location and resubmit for testing. The Regional Drinking Water Officer will determine if any further action

by the Village is necessary.

The water is monitored 24/7 with our water quality monitoring devices. These devices will monitor in real time Flow, Temperature, Turbidity, UVT, PH and Chlorine residual when the system is operating. The quality control and accuracy of monitoring greatly increases with these devices online. All information is logged on the new SCADA system in the Water Treatment Plant. With this real time monitoring the Operators can instantly check the water quality and tell if a problem is arising.

Cross Connection Control Program



As the Village is rebuilt it will have to develop a Cross-connection Control Program for the Village of Lytton. This program is designed to inspect and eliminate any possible connections between the potable water system and any other connections that are not potable. For example, a connection to potable water and a sprinkler system that injects fertilizer could possibly contaminate the whole water system without the proper back flow device in place.

Community Water System

Records

The Village of Lytton completed upgrading to an automated and continuous operating system to monitor Flow, Ph., Turbidity, Water temperature, Chlorine residual and Reservoir levels. This system is called SCADA, *Supervisory Control and Data Acquisition*, and it assists Village staff with maintaining a safe drinking water supply by advising of any monitored change within the water system. The SCADA system will alert staff to ensure that corrections can be made before water levels or water quality can be adversely affected.

Test records are stored on Interior Health's website

<https://services.interiorhealth.ca/publichealthprotection/watersamples.aspx>

Appendix A has comprehensive test results for the raw water (Well 2, Well 3 and the Creek) and one sample for finished water from 345 South Reservoir.

Operation

The Village of Lytton Community Water System and Water Treatment facilities are operated and maintained by highly trained and certified operators. The SCADA system will continuously monitor the water quality which in turn assists the operators to make necessary adjustments to meet or exceed the provincial drinking water quality objectives established by Interior Health as well as federal Canadian Drinking Water Quality objectives. Water distribution work is also carried out by staff certified for their tasks: water main leak repair, water service installation, and fire hydrant maintenance. Special tasks such as reservoir cleaning, leak detection and water main replacement are undertaken by qualified contractors with the proper equipment and experience to complete the work.

Operations Staff

- Kevin Vilac
 - EOCP Wastewater Treatment IV
 - - EOCP Water Distribution IV
 - - EOCP Water Treatment MU II
 - - EOCP Wastewater Collections MU II
 - - BCWWA Chlorine Handling Certificate
 - - ABC Class II Wastewater Treatment Professional Operator
 - Cross Connection Control Inspector Certificate
- Morgan Heaster – EOCP Small Water Systems Certification
 - EOCP Small Wastewater Systems Certification
- Gene McArthur - Operator in Training

Community Water System

Maintenance / Capital Projects – 2024

- Completed the replacement of the water main on First St.
- Completed the replacement of the water main on River Rd.
- Serviced UV reactors 1 & 2.
- Cut and capped and abandoned leaking 2” water main on Alonzo Way.
- Commissioned Well 3.
- Replaced valve at Station Rd and 7th St.
- Cleaned the Creek intake twice.
- Repaired water main leak on the main Reservoir feed.
- Repaired water leak on West Loring.
- Deleted a 2-inch water main along Alonzo Way with multiple water leaks.
- 237 Weekly water samples.

Initiatives – 2025

In 2025 the Village will continue to identify and repair water leaks and replace old infrastructure. The Village will also work towards a complete Source Water Protection Plan, Drought response plan and an Emergency Response Plan. With these plans and programs in place, it is a positive step forward in protecting the Village’s drinking water system. The Village also has planned multiple water main upgrades, cooling for Well 2 kiosk and 5 water sampling stations throughout the Village.



Future Water Quality

The Village of Lytton will have to work towards finding and eliminating existing water leaks as the water consumption is far greater than it should be. Through ongoing training, monitoring and responsible planning the Village will be able to ensure potable water for its consumers. The Village will also have to implement water conservation strategies to ensure water for future generations.



Conclusion

The Village of Lytton Employees work hard in the effort to maintain, ensure proper water usage, identify and repair water leaks, monitor water quantity, monitor water quality, and educate the public whenever possible. With these goals the Village of Lytton should be able to maintain a quality water source and distribution system for many years to come.

This 2024 Village of Lytton Water System Report is presented to the public, by way of posting on the Village of Lytton website, as required by the British Columbia Drinking Water Protection Act and Regulations, as well as to meet the terms and conditions of the Village's Water System Operating Permit issued by Interior Health's Drinking Water Officer.

Community Water System

Appendix "A"

Page : 4 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analytical Results Evaluation

				Client sample ID							
				Creek	Well 2	Well 3	South Reservoir	----	----	----	----
				Sampling date/time				----	----	----	----
				12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 09:00	----	----	----	----
				Sub-Matrix				----	----	----	----
				Water	Water	Water	Water	----	----	----	----
Analyte	CAS Number	Method/Lab	Unit	KS2405233-001	KS2405233-002	KS2405233-003	KS2405233-004	----	----	----	----
Physical Tests											
Absorbance, UV (@ 254nm), unfiltered	---	E405/VA	AU/cm	0.0460	0.0060	0.0050	---	---	---	---	---
Alkalinity, total (as CaCO3)	---	E290/VA	mg/L	48.7	112	142	---	---	---	---	---
Colour, true	---	E329/VA	CU	6.2	<5.0	<5.0	---	---	---	---	---
Conductivity	---	E100/VA	µS/cm	97.1	222	283	---	---	---	---	---
Hardness (as CaCO3), from total Ca/Mg	---	EC100A/VA	mg/L	45.9	109	142	---	---	---	---	---
Langelier index (@ 15°C)	---	EC105A/VA	-	-0.580	0.374	0.514	---	---	---	---	---
Langelier index (@ 20°C)	---	EC105A/VA	-	-0.506	0.446	0.587	---	---	---	---	---
Langelier index (@ 25°C)	---	EC105A/VA	-	-0.434	0.518	0.658	---	---	---	---	---
Langelier index (@ 4°C)	---	EC105A/VA	-	-0.756	0.199	0.339	---	---	---	---	---
Langelier index (@ 60°C)	---	EC105A/VA	-	0.016	0.961	1.10	---	---	---	---	---
Langelier index (@ 77°C)	---	EC105A/VA	-	0.216	1.16	1.30	---	---	---	---	---
pH	---	E108/VA	pH units	7.94	8.29	8.26	---	---	---	---	---
Solids, total dissolved [TDS]	---	E162/VA	mg/L	79	154	196	---	---	---	---	---
Turbidity	---	E121/VA	NTU	<0.10	<0.10	0.51	---	---	---	---	---
pH, saturation (@ 4°C)	---	EC105A/VA	pH units	8.70	8.09	7.92	---	---	---	---	---
Transmittance, UV (@ 254nm), unfiltered	---	E405/VA	% T/cm	89.9	98.6	98.8	---	---	---	---	---
pH, saturation (@ 15°C)	---	EC105A/VA	pH units	8.52	7.92	7.75	---	---	---	---	---
pH, saturation (@ 20°C)	---	EC105A/VA	pH units	8.44	7.84	7.67	---	---	---	---	---
pH, saturation (@ 25°C)	---	EC105A/VA	pH units	8.37	7.77	7.60	---	---	---	---	---
pH, saturation (@ 60°C)	---	EC105A/VA	pH units	7.92	7.33	7.16	---	---	---	---	---
pH, saturation (@ 77°C)	---	EC105A/VA	pH units	7.72	7.13	6.96	---	---	---	---	---
Anions and Nutrients											
Ammonia, total (as N)	7664-41-7	E288/VA	mg/L	<0.0050	<0.0050	<0.0050	---	---	---	---	---
Bromide	24959-67-9	E235 Br-LVA	mg/L	<0.050	<0.050	<0.050	---	---	---	---	---
Chloride	16887-00-6	E235 Cl/VA	mg/L	<0.50	2.47	2.15	---	---	---	---	---
Fluoride	16984-48-8	E235 F/VA	mg/L	0.034	0.059	0.076	---	---	---	---	---
Kjeldahl nitrogen, total [TKN]	---	E318/VA	mg/L	<0.050	<0.050	<0.050	---	---	---	---	---
Nitrate (as N)	14797-55-8	E235 NO3-LVA	mg/L	0.0116	0.224	0.0940	---	---	---	---	---

Page : 5 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analytical Results Evaluation

				Client sample ID							
Matrix: Water					Creek	Well 2	Well 3	South Reservoir	---	---	---
				Sampling date/time	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 09:00	---	---	---
				Sub-Matrix	Water	Water	Water	Water	---	---	---
Analyte	CAS Number	Method/Lab	Unit	KS2405233-001	KS2405233-002	KS2405233-003	KS2405233-004				
Anions and Nutrients											
Nitrite (as N)	14797-65-0	E235 NO2-LVA	mg/L	<0.0010	<0.0010	<0.0010	---	---	---	---	---
Nitrogen, total organic	---	EC363/VA	mg/L	<0.050	<0.050	<0.050	---	---	---	---	---
Sulfate (as SO4)	14808-79-8	E235 SO4/VA	mg/L	2.63	6.37	12.6	---	---	---	---	---
Cyanides											
Cyanide, strong acid dissociable (Total)	---	E333/VA	mg/L	<0.0050	<0.0050	<0.0050	---	---	---	---	---
Organic / Inorganic Carbon											
Carbon, dissolved organic [DOC]	---	E388-L/VA	mg/L	---	---	---	1.88	---	---	---	---
Carbon, total organic [TOC]	---	E385-L/VA	mg/L	1.65	<0.50	<0.50	1.79	---	---	---	---
Microbiological Tests											
Coliforms, total	---	E010/KS	MPN/100 mL	67	<1	<1	---	---	---	---	---
Coliforms, Escherichia coli [E. coli]	---	E010/KS	MPN/100 mL	<1	<1	<1	---	---	---	---	---
Total Metals											
Aluminum, total	7429-90-5	E420/VA	mg/L	0.0116	0.0042	<0.0030	---	---	---	---	---
Antimony, total	7440-36-0	E420/VA	mg/L	<0.00010	<0.00010	<0.00010	---	---	---	---	---
Arsenic, total	7440-38-2	E420/VA	mg/L	0.00023	0.00197	0.00156	---	---	---	---	---
Barium, total	7440-39-3	E420/VA	mg/L	0.00728	0.0196	0.0188	---	---	---	---	---
Beryllium, total	7440-41-7	E420/VA	mg/L	<0.000100	<0.000100	<0.000100	---	---	---	---	---
Bismuth, total	7440-69-9	E420/VA	mg/L	<0.000050	<0.000050	<0.000050	---	---	---	---	---
Boron, total	7440-42-8	E420/VA	mg/L	<0.010	0.038	0.054	---	---	---	---	---
Cadmium, total	7440-43-9	E420/VA	mg/L	<0.000050	<0.000050	<0.000050	---	---	---	---	---
Calcium, total	7440-70-2	E420/VA	mg/L	15.9	30.6	37.1	---	---	---	---	---
Cesium, total	7440-46-2	E420/VA	mg/L	<0.000010	<0.000010	<0.000010	---	---	---	---	---
Chromium, total	7440-47-3	E420/VA	mg/L	<0.00050	0.00095	0.00122	---	---	---	---	---
Cobalt, total	7440-48-4	E420/VA	mg/L	<0.00010	<0.00010	<0.00010	---	---	---	---	---
Copper, total	7440-50-8	E420/VA	mg/L	0.0140	0.00842	<0.00050	---	---	---	---	---
Iron, total	7439-89-6	E420/VA	mg/L	<0.010	0.087	0.059	---	---	---	---	---

Page : 6 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analytical Results Evaluation

				Client sample ID						
Matrix: Water					Creek	Well 2	Well 3	South Reservoir	---	---
				Sampling date/time	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 09:00	---	---
				Sub-Matrix	Water	Water	Water	Water	---	---
Analyte	CAS Number	Method/Lab	Unit		KS2405233-001	KS2405233-002	KS2405233-003	KS2405233-004	---	---
Total Metals										
Lead, total	7439-92-1	E420/VA	mg/L		0.00116	0.00138	<0.000050	---	---	---
Lithium, total	7439-93-2	E420/VA	mg/L		<0.0010	0.0017	0.0021	---	---	---
Magnesium, total	7439-95-4	E420/VA	mg/L		1.51	7.87	12.0	---	---	---
Manganese, total	7439-96-5	E420/VA	mg/L		0.00020	0.00102	0.00050	---	---	---
Mercury, total	7439-97-6	E508/VA	mg/L		<0.0000050	<0.0000050	<0.0000050	---	---	---
Molybdenum, total	7439-98-7	E420/VA	mg/L		0.00132	0.00155	0.00393	---	---	---
Nickel, total	7440-02-0	E420/VA	mg/L		<0.00050	0.00130	<0.00050	---	---	---
Phosphorus, total	7723-14-0	E420/VA	mg/L		<0.050	<0.050	<0.050	---	---	---
Potassium, total	7440-09-7	E420/VA	mg/L		0.266	1.10	1.16	---	---	---
Rubidium, total	7440-17-7	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	---	---	---
Selenium, total	7782-49-2	E420/VA	mg/L		<0.000050	0.000253	0.000348	---	---	---
Silicon, total	7440-21-3	E420/VA	mg/L		5.84	6.65	7.06	---	---	---
Silver, total	7440-22-4	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	---	---	---
Sodium, total	7440-23-5	E420/VA	mg/L		2.03	4.53	5.80	---	---	---
Strontium, total	7440-24-6	E420/VA	mg/L		0.0675	0.156	0.231	---	---	---
Sulfur, total	7704-34-9	E420/VA	mg/L		0.67	2.12	4.32	---	---	---
Tellurium, total	13494-80-9	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	---	---	---
Thallium, total	7440-28-0	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	---	---	---
Thorium, total	7440-29-1	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	---	---	---
Tin, total	7440-31-5	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	---	---	---
Titanium, total	7440-32-6	E420/VA	mg/L		<0.00030	<0.00030	<0.00030	---	---	---
Tungsten, total	7440-33-7	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	---	---	---
Uranium, total	7440-61-1	E420/VA	mg/L		0.000574	0.000920	0.00165	---	---	---
Vanadium, total	7440-62-2	E420/VA	mg/L		0.00071	0.00176	0.00198	---	---	---
Zinc, total	7440-66-6	E420/VA	mg/L		0.0184	0.0180	<0.0030	---	---	---
Zirconium, total	7440-67-7	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	---	---	---
Volatile Organic Compounds [THMs]										
Bromodichloromethane	75-27-4	E611B/VA	µg/L		---	---	---	<1.0	---	---

Page : 7 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analytical Results Evaluation

				Client sample ID	Creek	Well 2	Well 3	South Reservoir	---	---	---
Matrix: Water				Sampling date/time	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 08:30	12-Dec-2024 09:00	---	---	---
				Sub-Matrix	Water	Water	Water	Water	---	---	---
Analyte	CAS Number	Method/Lab	Unit		KS2405233-001	KS2405233-002	KS2405233-003	KS2405233-004	---	---	---
Volatile Organic Compounds [THMs]											
Bromoform	75-25-2	E811B/VA	µg/L		---	---	---	<1.0	---	---	---
Chloroform	67-66-3	E811B/VA	µg/L		---	---	---	45.6	---	---	---
Dibromochloromethane	124-48-1	E811B/VA	µg/L		---	---	---	<1.0	---	---	---
Trihalomethanes [THMs], total	---	E811B/VA	µg/L		---	---	---	45.6	---	---	---
Volatile Organic Compounds [THMs] Surrogates											
Bromofluorobenzene, 4-	460-00-4	E811B/VA	%		---	---	---	98.1	---	---	---
Diffuorobenzene, 1,4-	540-36-3	E811B/VA	%		---	---	---	101	---	---	---
Haloacetic Acids											
Bromochloroacetic acid	5589-96-8	E750/WT	µg/L		---	---	---	<1.00	---	---	---
Dibromoacetic acid	631-64-1	E750/WT	µg/L		---	---	---	<1.00	---	---	---
Dichloroacetic acid	79-43-6	E750/WT	µg/L		---	---	---	20.6	---	---	---
Monobromoacetic acid	79-08-3	E750/WT	µg/L		---	---	---	<1.00	---	---	---
Monochloroacetic acid	79-11-8	E750/WT	µg/L		---	---	---	<1.00	---	---	---
Trichloroacetic acid	76-03-9	E750/WT	µg/L		---	---	---	34.0	---	---	---
Haloacetic acids, total [HAA5]	n/a	E750/WT	µg/L		---	---	---	54.6	---	---	---

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Please refer to the Accreditation section for an explanation of analyte accreditations.

Community Water System

Page : 8 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Summary of Guideline Limits

Analyte	CAS Number	Unit	CDWG AO	CDWG MAC	CDWG OG				
Physical Tests									
Absorbance, UV (@ 254nm), unfiltered	---	AU/cm	--	--	--				
Alkalinity, total (as CaCO3)	---	mg/L	--	--	--				
Colour, true	---	CU	15 CU	--	--				
Conductivity	---	µS/cm	--	--	--				
Hardness (as CaCO3), from total Ca/Mg	---	mg/L	--	--	--				
Langelier index (@ 15°C)	---	-	--	--	--				
Langelier index (@ 20°C)	---	-	--	--	--				
Langelier index (@ 25°C)	---	-	--	--	--				
Langelier index (@ 4°C)	---	-	--	--	--				
Langelier index (@ 60°C)	---	-	--	--	--				
Langelier index (@ 77°C)	---	-	--	--	--				
pH, saturation (@ 15°C)	---	pH units	--	--	--				
pH, saturation (@ 20°C)	---	pH units	--	--	--				
pH, saturation (@ 25°C)	---	pH units	--	--	--				
pH, saturation (@ 4°C)	---	pH units	--	--	--				
pH, saturation (@ 60°C)	---	pH units	--	--	--				
pH, saturation (@ 77°C)	---	pH units	--	--	--				
pH	---	pH units	--	--	7 - 10.5 pH units				
Solids, total dissolved [TDS]	---	mg/L	500 mg/L	--	--				
Transmittance, UV (@ 254nm), unfiltered	---	% T/cm	--	--	--				
Turbidity	---	NTU	1 NTU	--	--				
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	mg/L	--	--	--				
Bromide	24959-67-9	mg/L	--	--	--				
Chloride	16887-00-6	mg/L	250 mg/L	--	--				
Fluoride	16984-48-8	mg/L	--	1.5 mg/L	--				
Kjeldahl nitrogen, total [TKN]	---	mg/L	--	--	--				
Nitrate (as N)	14797-55-8	mg/L	--	10 mg/L	--				
Nitrite (as N)	14797-65-0	mg/L	--	1 mg/L	--				
Nitrogen, total organic	---	mg/L	--	--	--				
Sulfate (as SO4)	14808-79-8	mg/L	500 mg/L	--	--				
Cyanides									
Cyanide, strong acid dissociable (Total)	---	mg/L	--	--	--				
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	---	mg/L	--	--	--				
Carbon, total organic [TOC]	---	mg/L	--	--	--				

Community Water System

Page : 9 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analyte	CAS Number	Unit	CDWG AO	CDWG MAC	CDWG OG				
Microbiological Tests									
Coliforms, Escherichia coli [E. coli]	---	MPN/100mL	--	1 MPN/100mL	--				
Coliforms, total	---	MPN/100mL	--	1 MPN/100mL	--				
Total Metals									
Aluminum, total	7429-90-5	mg/L	--	2.9 mg/L	0.1 mg/L				
Antimony, total	7440-36-0	mg/L	--	0.006 mg/L	--				
Arsenic, total	7440-38-2	mg/L	--	0.01 mg/L	--				
Barium, total	7440-39-3	mg/L	--	2 mg/L	--				
Beryllium, total	7440-41-7	mg/L	--	--	--				
Bismuth, total	7440-69-9	mg/L	--	--	--				
Boron, total	7440-42-8	mg/L	--	5 mg/L	--				
Cadmium, total	7440-43-9	mg/L	--	0.007 mg/L	--				
Calcium, total	7440-70-2	mg/L	--	--	--				
Cesium, total	7440-46-2	mg/L	--	--	--				
Chromium, total	7440-47-3	mg/L	--	0.05 mg/L	--				
Cobalt, total	7440-48-4	mg/L	--	--	--				
Copper, total	7440-50-8	mg/L	1 mg/L	2 mg/L	--				
Iron, total	7439-89-6	mg/L	0.3 mg/L	--	--				
Lead, total	7439-92-1	mg/L	--	0.005 mg/L	--				
Lithium, total	7439-93-2	mg/L	--	--	--				
Magnesium, total	7439-95-4	mg/L	--	--	--				
Manganese, total	7439-96-5	mg/L	0.02 mg/L	0.12 mg/L	--				
Mercury, total	7439-97-6	mg/L	--	0.001 mg/L	--				
Molybdenum, total	7439-98-7	mg/L	--	--	--				
Nickel, total	7440-02-0	mg/L	--	--	--				
Phosphorus, total	7723-14-0	mg/L	--	--	--				
Potassium, total	7440-09-7	mg/L	--	--	--				
Rubidium, total	7440-17-7	mg/L	--	--	--				
Selenium, total	7782-49-2	mg/L	--	0.05 mg/L	--				
Silicon, total	7440-21-3	mg/L	--	--	--				
Silver, total	7440-22-4	mg/L	--	--	--				
Sodium, total	7440-23-5	mg/L	200 mg/L	--	--				
Strontium, total	7440-24-6	mg/L	--	7 mg/L	--				
Sulfur, total	7704-34-9	mg/L	--	--	--				
Tellurium, total	13494-80-9	mg/L	--	--	--				
Thallium, total	7440-28-0	mg/L	--	--	--				
Thorium, total	7440-29-1	mg/L	--	--	--				
Tin, total	7440-31-5	mg/L	--	--	--				
Titanium, total	7440-32-6	mg/L	--	--	--				
Tungsten, total	7440-33-7	mg/L	--	--	--				

Community Water System

Page : 10 of 10
Work Order : KS2405233
Client : Village of Lytton
Project : Int Health Comp DW



Analyte	CAS Number	Unit	CDWG AO	CDWG MAC	CDWG OG				
Total Metals - Continued									
Uranium, total	7440-61-1	mg/L	--	0.02 mg/L	--				
Vanadium, total	7440-62-2	mg/L	--	--	--				
Zinc, total	7440-66-6	mg/L	5 mg/L	--	--				
Zirconium, total	7440-67-7	mg/L	--	--	--				
Volatile Organic Compounds [THMs]									
Bromodichloromethane	75-27-4	µg/L		--					
Bromoform	75-25-2	µg/L		--					
Chloroform	67-66-3	µg/L		--					
Dibromochloromethane	124-48-1	µg/L		--					
Trihalomethanes [THMs], total	--	µg/L		100 µg/L					
Bromofluorobenzene, 4-	460-00-4	%		--					
Difluorobenzene, 1,4-	540-36-3	%		--					
Haloacetic Acids									
Bromochloroacetic acid	5589-96-8	µg/L		--					
Dibromoacetic acid	631-64-1	µg/L		--					
Dichloroacetic acid	79-43-6	µg/L		--					
Haloacetic acids, total [HAA5]	n/a	µg/L		80 µg/L					
Monobromoacetic acid	79-08-3	µg/L		--					
Monochloroacetic acid	79-11-8	µg/L		--					
Trichloroacetic acid	76-03-9	µg/L		--					

Please refer to the General Comments section for an explanation of any qualifiers detected.

Key:

CDWG

AO
MAC
OG

Canada Guidelines for Canadian Drinking Water Quality (AUG, 2024)

Aesthetic Objective
Maximum Acceptable Concentrations
Operational Guidance