

Introduction

The City of Merritt is the purveyor of drinking water to users connected to the City of Merritt Community Water System (679). This report is provided to Merritt's Mayor & Council and Interior Health for their information, and in fulfillment of the City's obligations under the Provincial Drinking Water Act and associated regulations, as well as the terms and conditions of Merritt's Water System Operating Permit. Enforcement of the regulations and issuance of water system permits is the responsibility of the Interior Health Authority's Drinking Water Officer.

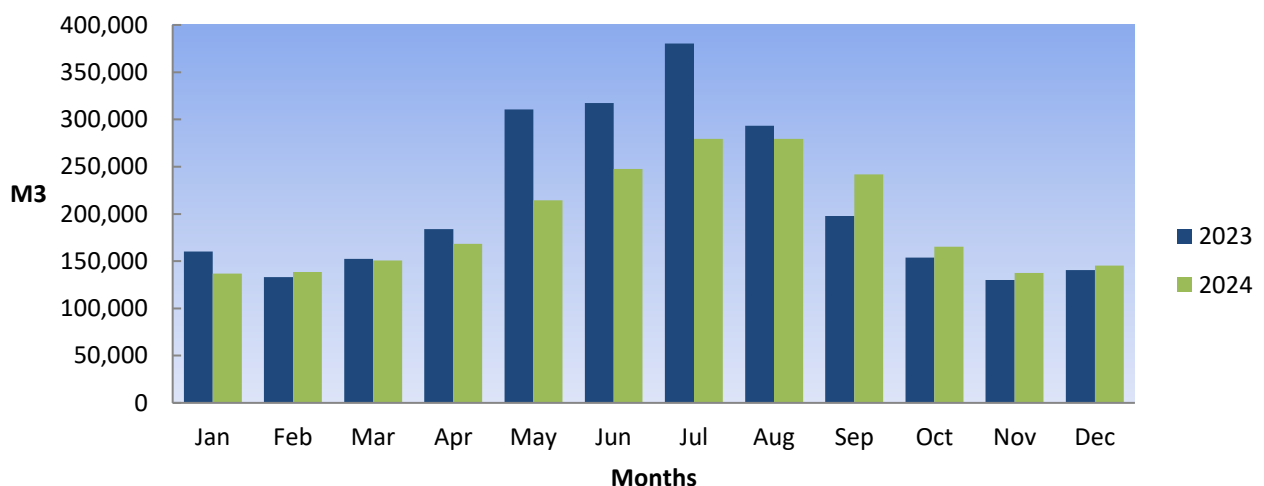
Water Consumption

Raw water for the City of Merritt water system is extracted from an aquifer through five pump stations. The aquifer provided 2,304,802,000 litres of water consumed within the Merritt system in 2024. This represents a 9.7% decrease in overall water consumption from 2023. Maximum daily water demand peaked at 11,339,000 litres on Aug 11, 2024, while minimum daily demand occurred on December 22, 2023, at 3,791,000 litres.

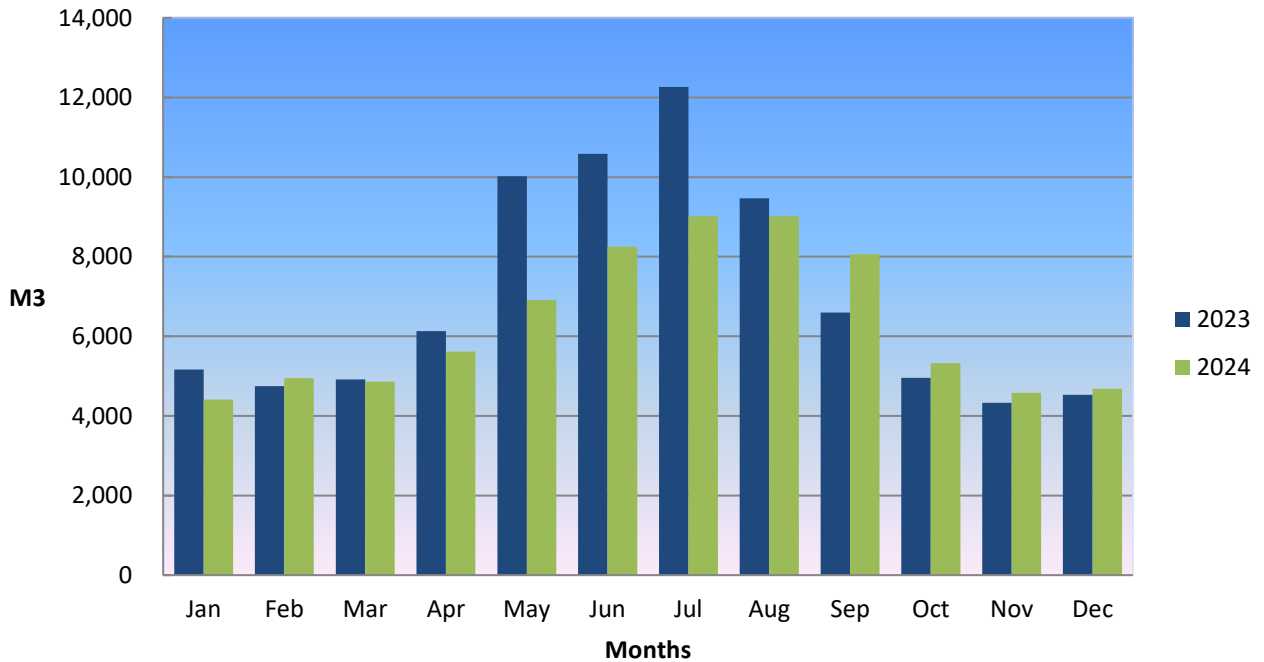
The water consumption for Merritt in 2024 averaged 6,297,000 litres per day. The maximum day (Aug 11th) water consumption was 1,491 litres per person, while the minimum day (Dec 22) consumption was 498 litres per person. The average was 828 litres per person in Merritt every day of the year (based on a population of 7,606 Civic Info BC); average daily consumption in British Columbia is only 401 litres per person (2021 Stats Canada Survey of Drinking Water Plants).

The City of Merritt has been tracking water consumption since 1977. The year 2019 had the lowest water consumption in the last 47 years. Due to the level 4 drought, the City of Merritt enforced watering restrictions which we believe contributed to this reduced water consumption. To continue a reduction in water usage the enforcement of sprinkling, excess water usage and repairing water leaks must be a high priority.

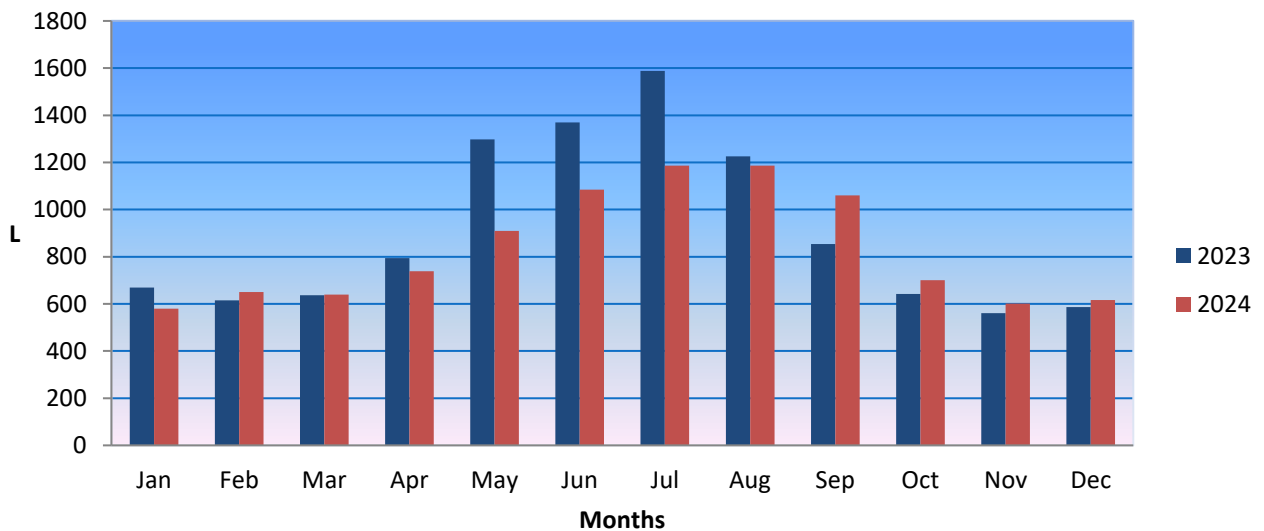
Total Water Use 2023-2024



Average Daily Water Use



Water Consumption Per Person Per Day



Water Storage

Water storage capacity is just over 8.5 million litres between five reservoirs: Active Mountain, Grandview, Grimmett, Nicola and Southeast Balancing Reservoir. Merritt's distribution system accounts for another approximately 1.7 million litres. Distribution piping sizes range from 100mm to 350mm – approx. 86 Km in total length.



Southeast Balancing Reservoir

Water Production

Three of the production water wells are located within the deepest part of the upper aquifer. One of the production wells is located within the deepest part of the middle aquifer and Kengard was drilled into the lower aquifer. These rates are based on the monthly pumping average on each well.

- **Voght Park #1** - 250hp – rated at 168 L/sec.
- **Voght Park #2** 200hp – rated 110 L/sec.
- **Fairley Park** - 100hp – rated at 55 L/sec.
- **Collettville** - 125hp – rated at 47 L/sec.
- **Kengard** – 100hp – rated at 48 L/sec.

Well depths range from 29.8m at Fairley Park to 135m below ground surface at Kengard.



Kengard Pump House

In the event of a power outage the Voght Park pumps, and Disinfection building are powered by a diesel generator.

Source Water Quality

The coarse composition of the Aquifer suggests the Aquifer is unconfined - (the Aquifer is not pressurized or capped) therefore it is very vulnerable to contamination. The BC Ministry of Environment Aquifer Classification system categorizes the Merritt Aquifer as type "IA", identifying it as one of the most highly developed and vulnerable Aquifers in the Province. Less than 5% of Aquifers identified in BC currently have this rating. The City of Merritt has enjoyed a high-quality source of water for many years from this Aquifer. Our water source is also rated as Groundwater at Risk of Pathogens (GARP) therefore we have ongoing plans to protect the Aquifer and the area around it. We have placed signage over the Aquifer to let the public know where it is to help protect the Aquifer. We have also developed a Source Water Protection Plan to help protect our Aquifer.

Source water is tested several times a year for a variety of characteristics from the presence of metals or chemicals to its clarity (turbidity), acidity, base (pH) and temperature. The 2024 ALS Analytical lab results are in Appendix "A".

Water Treatment Systems

The City has ETS-UV Spectra II SX635 and SX225 reactors followed by Chlorination with complete mix chlorine contact piping installed at each pumphouse.

Merritt follows Interior Health's 4-3-2-1-0 Drinking Water Objectives.

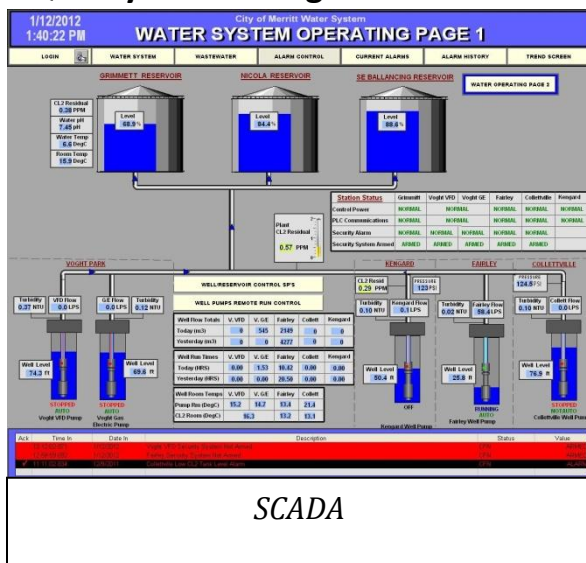
- 4 log inactivation of Viruses (99.99%)
- 3 log removal or inactivation of Giardia Lamblia and Cryptosporidium (99.9%)
- 2 refers to two treatment processes.
- 1 for less than 1 NTU of Turbidity
- 0 total coliforms and E. coli



Voght Park Disinfection

Interior Health mandated our water supply to be treated due to the GARP (Groundwater at Risk of Pathogens) rating of the shallow and unconfined (not pressurized or capped) Aquifer the City uses.

Quality Monitoring



Drinking water delivered to users of the city system is subject to a comprehensive and rigorous testing program that ensures quality drinking water. Water samples from up to eleven (11) separate locations within the system were sent in 2024, on a weekly basis, to *ALS Environmental-Kamloops* to be tested for the presence/absence of E. coli and Total Coliform Bacteria. City staff also perform Chlorine residual testing to ensure proper levels of Chlorine are maintained. Lab results are emailed to the Chief Operator and Cross Connection Control Officer for review.

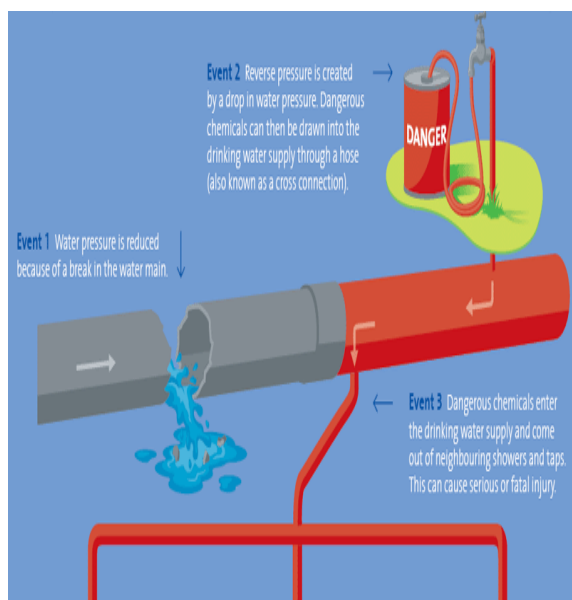
The standard protocol when a water sample is found to contain the presence of Coliform (an early indicator that we could have a problem arising), however minute, is to flush

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 City of Merritt is necessary.

All five wells, pumps and reservoirs are monitored 24/7 with our water quality monitoring devices. These devices will monitor in real time Flow, Temperature, Turbidity, UVT, PH and Chlorine residual. The quality control and accuracy of monitoring greatly increases with these devices online. All information from the different stations is sent back to the central computer system (SCADA) at the Wastewater Treatment Plant

for monitoring and review. With this real time monitoring the Operators can instantly check the water quality and tell if a problem is arising. In many cases, before the lab results are finished each week. With the SCADA alarm system Operators will also be made aware of any problems 24/7, if any one system falls outside of the control parameters.

Cross Connection Control Program



Merritt has a Cross Connection Control Coordinator (CCCC) and he has developed a Cross-connection Control Program for the City of Merritt. This program is designed to inspect and eliminate any possible connections between our 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 and maintained. Our Cross Connection Control Coordinator inspects all commercial and industrial connections to our system. Our CCCC also makes sure consumers regularly have their back-flow assemblies inspected, tested and maintained. This is vitally important to ensure a safe clean drinking water supply for the City of Merritt.

Records

The City of Merritt employs an automated and continuous operating system to monitor Flow, Ph., Turbidity, Water temperature, Well room temperature, Chlorine residual and Reservoir storage. This system is called SCADA, *Supervisory Control and Data Acquisition*, and it assists City staff with maintaining a safe drinking water supply by advising us of any monitored change within our water system. The SCADA system will alert staff by way of a portable 2-way radio and/or cell phone to ensure that corrections can be made before water levels or quality can be adversely affected. Information from this database can be retrieved in many formats for presentation, analysis or public information. This data is also used to provide information to the provincial Drinking Water Officer, including the completion of this annual report.

Appendix A contains comprehensive water samples completed in 2024.

Operation

The City of Merritt's Community Water System and Water Treatment facilities are operated and maintained by highly trained and certified operators. The SCADA system continuously monitors 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 replacement, water service installation, fire hydrant maintenance, valve maintenance and leak detection. Special tasks such as reservoir cleaning 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
- Jessica Sulz
 - EOCP Wastewater Treatment MU II
 - - EOCP Water Distribution MU II
 - - EOCP Water Treatment MU II
 - - EOCP Wastewater Collection MU I
 - - BCWWA Chlorine Handling Certificate
- Jeremy Long
 - EOCP Water Treatment MU II
 - - EOCP Water Distribution MU II
 - -EOCP Wastewater Treatment MU II
 - - EOCP Wastewater Collection MU II
 - - EOCP Small Water System
 - - EOCP Small Wastewater System
 - - BCWWA Chlorine Handling Certificate
- Craig Fournier
 - EOCP Wastewater Treatment MU II
 - EOCP Water Treatment MU II
 - EOCP Water Distribution MU I
- Tom Harrington – EOCP Water Distribution II
 - EOCP Wastewater Collection II

- Trista Selby – EOC Water Distribution II
 - EOC Water Wastewater Collection I
- Ryan Peck – EOC Water Distribution II
 - EOC Water Treatment MU I
 - Cross Connection Control Inspector Certificate
 - Backflow Preventer Tester Certification
 - BCWWA Chlorine Handling Certificate
 - Occupational First Aid Level II Certificate
- Remo Jacoe - EOC Water Distribution I



Emergency Callouts – 2024

There was a total of 19 emergency callouts in 2024. The callouts were two (2) UV reactor alarms, two (2) well alarms, six (6) power outage alarms and nine (9) chlorine pump faults.

Maintenance - 2024

- Installed a PRV at the Active Mountain Booster Station.
- Brought Active Mountain Reservoir online.
- Rehabilitated Collettsville Well.
- Installed a new pump and motor into Collettsville Well.
- Flushed VFD Well and brought online.
- Grandview, Grimmer and Nicola Reservoirs inspected with a ROV.
- Grimmer and Nicola Reservoirs were cleaned with a ROV.
- Serviced the UV reactors once.
- Replaced backflow preventer on the deck hose line in the WWTP.
- 304 Weekly water samples.
- 61 Dead-ends flushed twice a year (April and October)
- 215 Hydrants Maintained (full teardown and flushed)
- Repaired 11 water main leaks and 5 water service leaks.



Capital Projects – 2024

- Installed new isolation valves and an altitude valve at Nicola Reservoir.
- Repaired the Grandview Reservoir drain.
- Replaced 2 Hydrants and 1 main valve.
- Watermain extension into new Industrial/Commercial area in Collettsville.
- Watermain upgrade on Voght St.

Initiatives – 2025

In 2025 the City will inspect, clean and replace the sacrificial anodes in Southeast Balancing Reservoir. Replace and old leaking water main in the alley between Quilchena Ave and Granite Ave. The City will begin the installation of water meters in residential homes. The City is also going to begin the consultation and design stage of water treatment for Kengard Well. The Cross-Connection Control Coordinator will continue to perform facility hazard assessments throughout the city to identify and work closely with owners to install the proper backflow assemblies. With these devices in place, it is a positive step forward in protecting the City's drinking water system.

Future Water Quality

Council has committed to an on-going program to improve quality and fire flow throughout the City through the reduction of dead-end mains and installation of blow off assemblies where they presently do not exist. The City of Merritt has been advised by the Drinking Water Officer to include compliance with the new Drinking Water Regulation standards in any future capital works plans. Replacement or expansion of major parts of the City's water system will have to include provisions to ensure that standards of treatment required by current regulations are achieved.



Conclusion

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

This 2024 City of Merritt Water System Report is presented to the public, by way of posting on the City of Merritt website, as required by the British Columbia Drinking Water Protection Act and Regulations, as well as to meet the terms and conditions of the City's Water System Operating Permit (0210617) issued by the Interior Health Drinking Water Officer.

Appendix "A"

Page 4 of 9
Work Order KS2402276
Client City of Merritt
Project Weekly Drinking Water



Analytical Results

Sub-Matrix: Water

Client sample ID

(Matrix: Water)

					Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
Client sampling date / time					18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005
					Result	Result	Result	Result	Result
Physical Tests									
Absorbance, UV (@ 254nm), unfiltered	---	E405/A	0.0050	AU/cm	0.0100	0.0170	0.0070	0.0070	0.0070
Alkalinity, total (as CaCO ₃)	---	E290/A	1.0	mg/L	146	214	114	105	121
Colour, true	---	E329/A	5.0	CU	<5.0	<5.0	<5.0	<5.0	<5.0
Conductivity	---	E100/A	2.0	µS/cm	450	950	326	279	361
Hardness (as CaCO ₃), from total Ca/Mg	---	EC100A/A	0.60	mg/L	191	486	154	128	171
Langelier index (@ 15°C)	---	EC105A/A	0.010	-	0.050	0.935	-0.365	-0.231	-0.173
Langelier index (@ 20°C)	---	EC105A/A	0.010	-	0.125	1.01	-0.290	-0.156	-0.098
Langelier index (@ 25°C)	---	EC105A/A	0.010	-	0.196	1.08	-0.219	-0.084	-0.027
Langelier index (@ 4°C)	---	EC105A/A	0.010	-	-0.124	0.763	-0.541	-0.407	-0.349
Langelier index (@ 60°C)	---	EC105A/A	0.010	-	0.643	1.51	0.230	0.365	0.421
Langelier index (@ 77°C)	---	EC105A/A	0.010	-	0.844	1.71	0.432	0.566	0.622
pH	---	E108/A	0.10	pH units	7.66	8.19	7.41	7.66	7.56
Solids, total dissolved [TDS]	---	E162/A	10	mg/L	304	714	228	189	238
Turbidity	---	E121/A	0.10	NTU	0.15	0.26	<0.10	<0.10	<0.10
pH, saturation (@ 4°C)	---	EC105A/A	0.010	pH units	7.78	7.43	7.95	8.07	7.91
Transmittance, UV (@ 254nm), unfiltered	---	E405/A	1.0	% T/cm	97.7	96.2	98.4	98.4	98.4
pH, saturation (@ 15°C)	---	EC105A/A	0.010	pH units	7.61	7.26	7.78	7.89	7.73
pH, saturation (@ 20°C)	---	EC105A/A	0.010	pH units	7.54	7.18	7.70	7.82	7.66
pH, saturation (@ 25°C)	---	EC105A/A	0.010	pH units	7.46	7.11	7.63	7.74	7.59
pH, saturation (@ 60°C)	---	EC105A/A	0.010	pH units	7.02	6.68	7.18	7.29	7.14
pH, saturation (@ 77°C)	---	EC105A/A	0.010	pH units	6.82	6.48	6.98	7.09	6.94
Anions and Nutrients									
Ammonia, total (as N)	7664-41-7	E298/WP	0.0050	mg/L	<0.0050	0.0352	<0.0050	0.0053	<0.0050
Bromide	24959-67-9	E235.Br-L/A	0.050	mg/L	<0.050	<0.250 ^{CL}	<0.050	<0.050	<0.050
Chloride	16887-00-6	E235.Cl/A	0.50	mg/L	33.0	7.96	14.4	9.66	16.0
Fluoride	16984-48-8	E235.F/A	0.020	mg/L	0.041	<0.100 ^{CL}	0.045	0.048	0.040
Kjeldahl nitrogen, total [TKN]	---	E318/WP	0.050	mg/L	0.087	0.060	<0.050	<0.050	<0.050
Nitrate (as N)	14797-55-8	E235.NO3-L/V A	0.0050	mg/L	0.798	<0.0250 ^{CL}	0.374	0.157	0.374

Page : 5 of 9
Work Order : KS2402276
Client : City of Merritt
Project : Weekly Drinking Water



Analytical Results

Sub-Matrix: Water

Client sample ID

(Matrix: Water)

					Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
Client sampling date / time					18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005
					Result	Result	Result	Result	Result
Anions and Nutrients									
Nitrite (as N)	14797-65-0	E235.NO2-L/V A	0.0010	mg/L	<0.0010	<0.0050 ^{DLR}	<0.0010	<0.0010	<0.0010
Nitrogen, total organic	—	EC363/WP	0.050	mg/L	<0.109	<0.108	<0.108	<0.108	<0.108
Sulfate (as SO4)	14808-79-8	E235.SO4/VA	0.30	mg/L	33.7	304	32.1	25.5	42.4
Cyanides									
Cyanide, strong acid dissociable (Total)	—	E333/WT	0.0050	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Organic / Inorganic Carbon									
Carbon, total organic [TOC]	—	E355-L/WP	0.50	mg/L	0.71	1.46	0.50	0.54	0.69
Microbiological Tests									
Coliforms, total	—	E010/KS	1	MPN/100mL	<1	<1	<1	<1	<1
Coliforms, Escherichia coli [E. coli]	—	E010/KS	1	MPN/100mL	<1	<1	<1	<1	<1
Total Metals									
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	<0.00010	0.00282	<0.00010	<0.00010	0.00024
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.100	0.0718	0.0622	0.0478	0.0630
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/VA	0.010	mg/L	0.016	0.057	0.015	0.012	0.016
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	0.0000057	<0.0000050	<0.0000050	<0.0000050	0.0000054
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	53.0	101	43.8	35.3	45.8
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L	<0.000010	0.000022	<0.000010	<0.000010	<0.000010
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total	7440-50-8	E420/VA	0.00050	mg/L	0.00626	0.00115	0.00337	0.00087	0.00239
Iron, total	7439-89-6	E420/VA	0.010	mg/L	<0.010	0.056	<0.010	<0.010	<0.010
Lead, total	7439-92-1	E420/VA	0.000050	mg/L	0.000164	<0.000050	0.000291	<0.000050	0.000078
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L	<0.0010	0.0030	<0.0010	<0.0010	<0.0010
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L	14.3	56.8	10.9	9.75	13.7
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L	<0.00010	0.135	<0.00010	<0.00010	0.00464

Page : 6 of 9
Work Order : KS2402276
Client : City of Merritt
Project : Weekly Drinking Water



Analytical Results

Sub-Matrix: Water

Client sample ID

(Matrix: Water)

Sub-Matrix: Water					Client sample ID	Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
(Matrix: Water)										
Client sampling date / time					18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05	
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005	
					Result	Result	Result	Result	Result	
Total Metals										
Mercury, total	7439-97-6	E508/V/A	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	
Molybdenum, total	7439-98-7	E420/V/A	0.000050	mg/L	0.000374	0.00540	0.000470	0.000639	0.000697	
Nickel, total	7440-02-0	E420/V/A	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Phosphorus, total	7723-14-0	E420/V/A	0.050	mg/L	<0.050	0.051	<0.050	<0.050	0.144	
Potassium, total	7440-09-7	E420/V/A	0.050	mg/L	1.72	6.61	1.26	1.27	1.64	
Rubidium, total	7440-17-7	E420/V/A	0.00020	mg/L	0.00027	0.00183	0.00022	<0.00020	0.00034	
Selenium, total	7782-49-2	E420/V/A	0.000050	mg/L	0.000132	<0.000050	0.000063	<0.000050	0.000084	
Silicon, total	7440-21-3	E420/V/A	0.10	mg/L	6.90	11.6	6.83	6.76	7.18	
Silver, total	7440-22-4	E420/V/A	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Sodium, total	7440-23-5	E420/V/A	0.050	mg/L	22.7	46.6	10.5	9.68	14.9	
Strontium, total	7440-24-6	E420/V/A	0.00020	mg/L	0.392	0.772	0.256	0.209	0.281	
Sulfur, total	7704-34-9	E420/V/A	0.50	mg/L	12.7	121	12.2	9.31	16.1	
Tellurium, total	13494-80-9	E420/V/A	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium, total	7440-28-0	E420/V/A	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	
Thorium, total	7440-29-1	E420/V/A	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Tin, total	7440-31-5	E420/V/A	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Titanium, total	7440-32-6	E420/V/A	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	
Tungsten, total	7440-33-7	E420/V/A	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Uranium, total	7440-61-1	E420/V/A	0.000010	mg/L	0.000658	0.00447	0.000478	0.000500	0.000623	
Vanadium, total	7440-62-2	E420/V/A	0.00050	mg/L	0.00060	<0.00050	<0.00050	0.00052	0.00050	
Zinc, total	7440-66-6	E420/V/A	0.0030	mg/L	0.0056	<0.0030	0.0111	<0.0030	0.0036	
Zirconium, total	7440-67-7	E420/V/A	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Volatile Organic Compounds										
Chlorobenzene	108-90-7	E611C/V/A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	
Chloromethane	74-87-3	E611C/V/A	5.0	µg/L	<5.0	<5.0	<5.0	<5.0	<5.0	
Dichlorobenzene, 1,2-	95-50-1	E611C/V/A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	
Dichlorobenzene, 1,3-	541-73-1	E611C/V/A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	
Dichlorobenzene, 1,4-	106-46-7	E611C/V/A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	
Dichloropropane, 1,2-	78-87-5	E611C/V/A	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50	
Dichloropropylene, cis+trans-1,3-	542-75-6	E611C/V/A	0.75	µg/L	<0.75	<0.75	<0.75	<0.75	<0.75	

Page : 7 of 9
Work Order : KS2402276
Client : City of Merritt
Project : Weekly Drinking Water



Analytical Results

Sub-Matrix: Water

Client sample ID

(Matrix: Water)

					Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
Client sampling date / time					18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005
					Result	Result	Result	Result	Result
Volatile Organic Compounds									
Dichloropropylene, cis-1,3-	10061-01-5	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,1,2-	630-20-6	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	79-34-5	E611C/VA	0.20	µg/L	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethane, 1,1,2-	79-00-5	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	75-69-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds [Drycleaning]									
Carbon tetrachloride	56-23-5	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroethane	75-00-3	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloroethane, 1,1-	75-34-3	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloroethane, 1,2-	107-06-2	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, 1,1-	75-35-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, cis-1,2-	156-59-2	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, trans-1,2-	156-60-5	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dichloromethane	75-09-2	E611C/VA	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloropropylene, trans-1,3-	10061-02-6	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	127-18-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethane, 1,1,1-	71-55-6	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	79-01-6	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	75-01-4	E611C/VA	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Volatile Organic Compounds [Fuels]									
Benzene	71-43-2	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	100-41-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl-tert-butyl ether [MTBE]	1634-04-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	100-42-5	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	108-88-3	E611C/VA	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Xylene, m+p-	179601-23-1	E611C/VA	0.40	µg/L	<0.40	<0.40	<0.40	<0.40	<0.40
Xylene, o-	95-47-6	E611C/VA	0.30	µg/L	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes, total	1330-20-7	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds [THMs]									
Bromodichloromethane	75-27-4	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	1.31

Page : 8 of 9
Work Order : KS2402276
Client : City of Merritt
Project : Weekly Drinking Water



Analytical Results

Sub-Matrix: Water

Client sample ID

(Matrix: Water)

					Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
Client sampling date / time					18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005
					Result	Result	Result	Result	Result
Volatile Organic Compounds [THMs]									
Bromoform	75-25-2	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	E611C/VA	0.50	µg/L	0.55	<0.50	<0.50	<0.50	2.36
Dibromochloromethane	124-48-1	E611C/VA	0.50	µg/L	<0.50	<0.50	<0.50	<0.50	0.98
Volatile Organic Compounds Surrogates									
Bromofluorobenzene, 4-	460-00-4	E611C/VA	1.0	%	88.2	87.0	87.2	82.2	85.5
Difluorobenzene, 1,4-	540-36-3	E611C/VA	1.0	%	104	103	102	104	102
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	83-32-9	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Acenaphthylene	208-96-8	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Acridine	260-94-6	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Anthracene	120-12-7	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Benz(a)anthracene	56-55-3	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(a)pyrene	50-32-8	E641A/VA	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(b+j)fluoranthene	n/a	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(b+j+k)fluoranthene	n/a	E641A/VA	0.015	µg/L	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(g,h,i)perylene	191-24-2	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Benzo(k)fluoranthene	207-08-9	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Chrysene	218-01-9	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Dibenz(a,h)anthracene	53-70-3	E641A/VA	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	206-44-0	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Fluorene	86-73-7	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Indeno(1,2,3-c,d)pyrene	193-39-5	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Methylnaphthalene, 1-	90-12-0	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Methylnaphthalene, 2-	91-57-6	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Naphthalene	91-20-3	E641A/VA	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Phenanthrene	85-01-8	E641A/VA	0.020	µg/L	<0.020	<0.020	<0.020	<0.020	<0.020
Pyrene	129-00-0	E641A/VA	0.010	µg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Quinoline	91-22-5	E641A/VA	0.050	µg/L	<0.050	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates									
Chrysene-d12	1719-03-5	E641A/VA	0.1	%	88.8	88.6	89.7	93.5	85.4

Page : 9 of 9
Work Order : KS2402276
Client : City of Merritt
Project : Weekly Drinking Water



Analytical Results

Sub-Matrix: Water					Client sample ID	Fairley Pump House	Kengard Pump House	Voght Park G/E	Voght Park VFD	Grimmett Reservoir
(Matrix: Water)										
					Client sampling date / time	18-Jun-2024 07:35	18-Jun-2024 08:35	18-Jun-2024 06:45	18-Jun-2024 07:05	18-Jun-2024 08:05
Analyte	CAS Number	Method/Lab	LOR	Unit	KS2402276-001	KS2402276-002	KS2402276-003	KS2402276-004	KS2402276-005	
					Result	Result	Result	Result	Result	
Polycyclic Aromatic Hydrocarbons Surrogates										
Naphthalene-d8	1146-65-2	E641A/VA	0.1	%	97.0	101	89.9	97.0	102	
Phenanthrene-d10	1517-22-2	E641A/VA	0.1	%	108	110	99.4	106	103	
Haloacetic Acids										
Bromochloroacetic acid	5589-96-8	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Dibromoacetic acid	631-64-1	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Dichloroacetic acid	79-43-6	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Monobromoacetic acid	79-08-3	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Monochloroacetic acid	79-11-8	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Trichloroacetic acid	76-03-9	E750/WT	1.00	µg/L	---	---	---	---	<1.00	
Haloacetic acids, total [HAA5]	n/a	E750/WT	5.00	µg/L	---	---	---	---	<5.00	

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.