Water Quality Report
2024

Aug 17th, 2024

Diana Tesic-Nagalingam
Specialist Environmental Health Officer
Environmental Health Services
Interior Health Authority
519 Columbia Street
Kamloops, BC
V2C 2T8

Via Email: Diana.Tesic-Nagalingam@interiorhealth.ca)

Hello Diana,

Re: 2024 Annual Water Quality Report to Interior Health

Please find attached Sun Peaks Mountain Resort Municipality's 2024 Annual Water Quality Report on our Water System as required under the Terms and Conditions of our Water Purveyor's Operation Permit.

This annual report is available to the public either by visiting our offices or by visiting the Utilities Division of the Municipalities' web site. A full copy of the Emergency Response Plan and Maintenance Schedule is provided to the local Health Office for their confidential use. The public version of the Emergency Response Plan is located at the Utilities' office as well as posted on the Utilities' web site. The public version of the Plan was modified to remove confidential information (such as home phone numbers, etc.).

We trust that this information is what Interior Health requires. We look forward to continuing to work with Interior Health in our joint mission to provide the community of Sun Peaks with safe drinking water.

Should you have any further questions or comments, please contact Sun Peaks Mountain Resort Municipality at 250-578-2020.

Sincerely,
Sun Peaks Mountain Resort Municipality

Jesse Goode

CC: Clint Burton, Director of Operations Sun Peaks Mountains Resort Municipality

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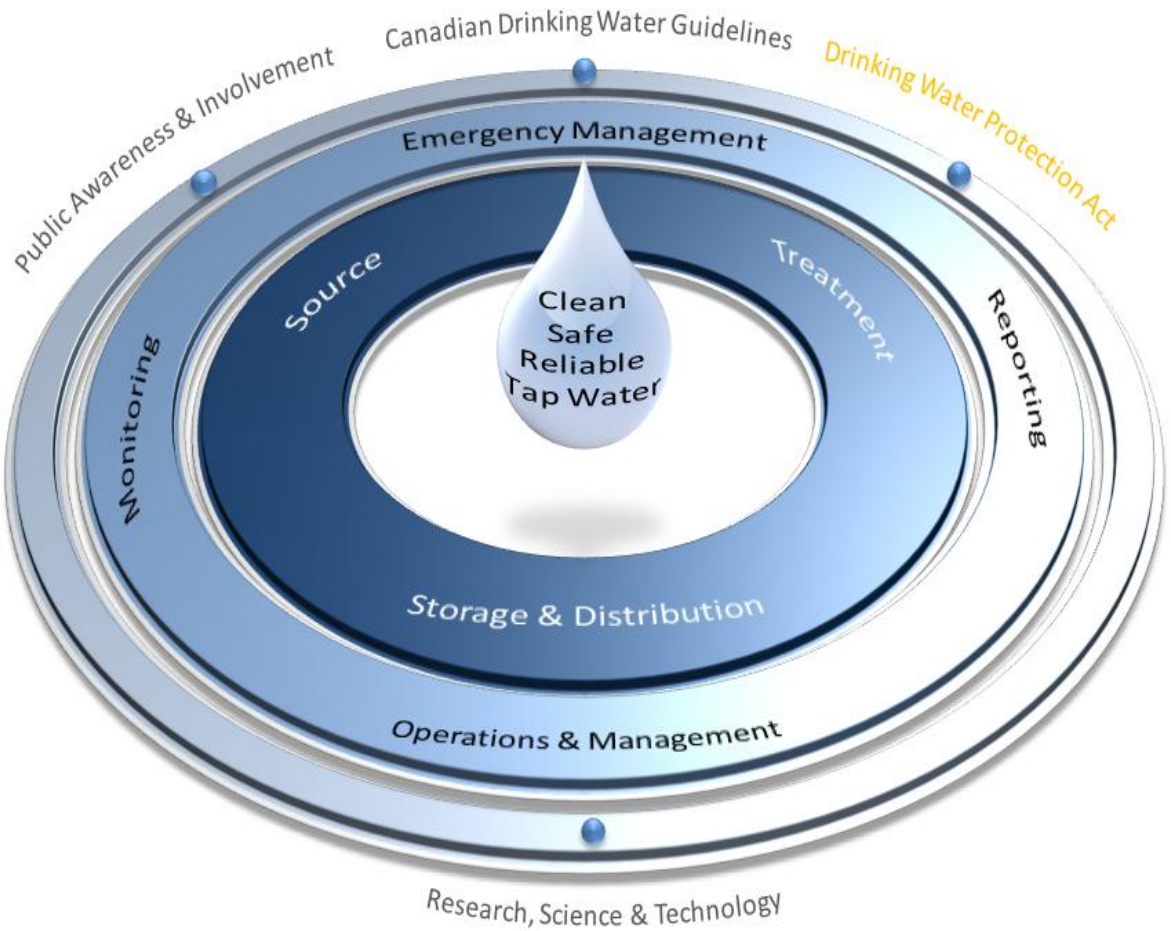
2024

Only Tap Water **Delivers**®



Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

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Acknowledgements

This report was prepared by the Utility Manager and the Director of Operations, with input from utility operators. Pat Miller (Retired Utility Manager) is also recognized for providing various system data and water quality information, prior to 2020.

Source and Treated water testing was performed by utility operators, and samples were sent to ALS Environmental for analysis. ALS environmental analyzed water samples for a variety of parameters, which are included in this report.

Additional data was provided by Urban Systems and BGC Engineering.

At any time, Interior Health Authority's (IHA's) Safe Drinking Water Officers can elect to sample the water distribution system to ensure that samples taken from the distribution system are representative of the samples taken by the Utility's field technicians.

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Definitions

AO	Aesthetic objective as per GCDWQ
BCDWPA	British Columbia's Water Protection Act
DBP	Disinfection Byproducts. Disinfection byproducts are chemical, organic, and inorganic substances that can form during a reaction of a disinfectant (chlorine) with naturally present organic matter in the water. The formation of these products mainly takes place during reactions in which organic substances and produce See the Definition Section on THM's and HAA's for more information.
EC	An electrical current result from the motion of electrically charged particles in response to forces that act on them from an electrically applied electric field. Within most solid materials a current will arise from the flow of electrons, which is called *Electronic Conduction* (EC).
Free Chlorine	Free chlorine refers to the level of available chlorine in drinking water can provide ongoing disinfection properties. Free chlorine is the difference between the total chlorine dosed and the demand chlorine (used up) and can measured at specific or required locations and provide immediate results.
EWQA	Enhanced Water Quality Assurance Program (EWQA) acts on behalf of the province of British Columbia, and through its programs of auditing and certification, strives to ensure that laboratory testing of drinking water is in compliance with the British Columbia (BC) Drinking Water Protection Act, and regulation.
GCDWQ	Guidelines for Canadian Drinking Water Quality
Groundwater	Water sourced from underground aquifers
HAA	Haloacetic acids are a type of chlorination disinfection by-product that are formed when the chlorine used to disinfect drinking water reacts with naturally occurring organic matter in water. The reported HAAs value refer to the sum of the concentration of six haloacetic acid compounds which include mono-, di-, and trichloroacetic acids, and mono- and dibromoacetic acids, and bromochloroacetic acid.
Hardness	Expressed as the equivalent quantity of calcium carbonate
MAC	Maximum acceptable concentration as per GCDWQ
Monitoring Well	A well-used to obtain water quality samples or measure groundwater level for the purpose of physical, chemical, or biological analysis to determine the amounts, types, and distribution of components in the groundwater.
NTU	The turbidity of water is expressed in nephelometric turbidity units which measures the suspended particles in water. High quality water has a low NTU reading. Water that has an NTU reading is above 5 is considered poor.

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Definitions

pH	Measurement of hydrogen ions (acidic, neutral, or basic)
Potable Water	Potable water is another term for drinking water. It refers to water which is safe to consume. Potable water must meet very stringent standards to be considered as safe for delivery to customers. Non-potable water is any water which does not meet those standards due to pollution, lack of proper treatment, or exposure to environmental contamination
Water Act	British Columbia's current Water Act was established more than one hundred years ago, and although it has evolved over the years, it is no longer adequate to address the growing population, expanding development and changing climate in B.C. and has been replaced with the Water Sustainability Act & Regulations in February 29, 2017. The Province of British Columbia prepared an overview that is available by clicking here.
Ground Water Protection Regulations	The primary purpose of the Ground Water Protection Regulation is protection of the quantity and quality of the province's valuable ground water resource by: • setting out standards to safeguard and maintain the integrity and efficient use of the ground water resource, and • ensuring activities related to well water and ground water are undertaken in an environmentally safe manner.
Water Sustainability Act & Regulations	The Water Sustainability Act updated and replace the Water Act. The Water Sustainability Regulations came into effect on February 29, 2017.
SCADA	Supervisory Control And Data Acquisition
THM	Trihalomethanes (THM) are a by-product of the chlorination of naturally occurring water supplies. Chlorination has made water supplies in North America safe from illness causing bacteria, parasites, and viruses. Most of the risks are associated with a chlorination byproduct called Trihalomethanes (THM). THMs are produced when chlorine is added to natural surface waters (lakes, rivers, streams) or ground waters (springs, wells). Naturally occurring organics in the surface water react with the chlorine to form THM. Studies conducted over the last few decades have illuminated some possible risks from consuming surface water that has been treated with chlorine.
Turbidity	Cloudiness or haziness of water caused by suspended solid matter consisting of particles of many different sizes that are too small to be seen without magnification. The measurement is given in *Nephelometric Turbidity Units* (NTU).

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Executive Summary

The Sun Peaks' potable water system is designed and constructed to provide consumers with safe, reliable, and aesthetically pleasing water in a cost-effective manner. As a popular year-round mountain resort, Sun Peaks (formerly Tod Mountain) has enjoyed significant and sustained growth since 1963. This success is expected to continue well into the future. As a tourism-based community, it is critical that the Municipality provide safe drinking water as well as meet aesthetic expectations of its residents and guests.

In 2004, Interior Health initially requested that Sun Peaks meet the water quality standards set in the British Columbia Water Protection Act (BCDWPA) and use the Guidelines for Canadian Drinking Water Quality (GCDWQ) as targets for the parameters not covered by the BCDWPA.

Sun Peaks' raw ground water sources continue to meet the GCDWQ with the exception of having slightly elevated levels of iron and manganese. These minerals are characteristic of deep groundwater wells. Groundwater is treated prior to entering the distribution system via three water treatment plants (WTP); Burfield WTP, Fairways WTP, and Village WTP. All three treatment facilities utilize Sodium Hypochlorite and Manganese Dioxide Sand Filters. Sodium Hypochlorite is added prior to filtration and acts as both an oxidant and disinfection agent in order to ensure all ground water meets the GCDWQ.

In 2019 Sun Peaks also began to utilize surface water to supplement the existing groundwater system. Surface water was supplied from an artificial alpine reservoir owned by Sun Peaks Resort (SPR). The municipality had an agreement with Sun Peaks Resort to use a portion of this water for potable water.

In 2020, the municipality began construction of its own 120 000m3. The reservoir was first filled in the spring of 2022. With municipal reservoir construction complete, the Municipality will be looking to construct an independent pipeline from the reservoir to its Ultrafiltration Membrane Water Treatment Plant. Construction of this pipeline is expected to start in spring of 2025. Further information will be outlined in the "future works" section of this report.

Water from the existing surface reservoir is treated using an Ultrafiltration Membrane water treatment plant which is located at the top of the platter ski lift, and hence called the Platter Water Treatment Plant. Due to the high elevation of the surface reservoir, pressure to this facility is reduced from 615psi to 40psi prior to treatment via multiple pressure reducing valves. This facility is primarily operated in the winter months (December to April) to supplement the existing groundwater system during the busy winter ski season.

In 2024, 192 518 cubic meters of water was withdrawn from sun peaks aquifers. The minimum daily volume withdrawn from sun peaks aquifers was 131 cubic meters per day while the maximum daily volume withdrawn was 1072 cubic meters per day. In 2024, 56 723 cubic meters were withdrawn from the surface reservoir with a minimum daily volume of 0 cubic meters and a maximum withdrawal of 713 cubic meters. Overall, Sun Peaks used a total volume of 249 241 cubic meters of water in 2024 of which 77% was groundwater and 23% was surface water.

As water demand continues to exceed sustainable yields from the groundwater wells, surface water will continue to be an important resource as the community of Sun Peaks continues to develop and grow.

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Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

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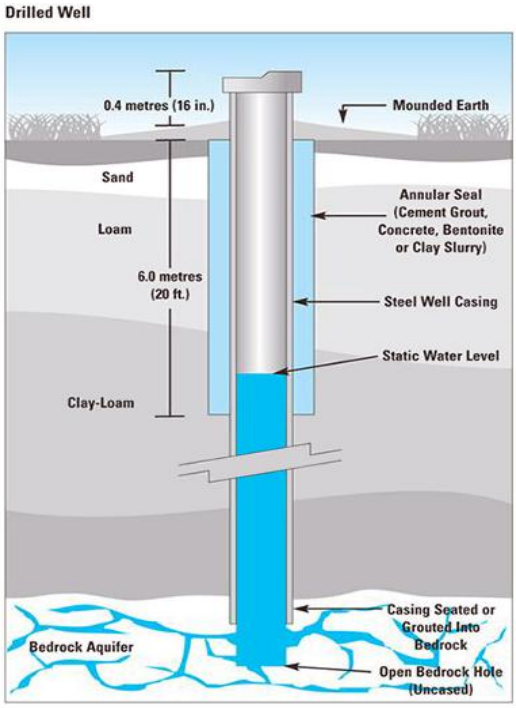
Discussion of Water Quality

1.0 Background

Sun Peaks provides quality water to the residents and guests of Sun Peaks. In conjunction with Interior Health's Drinking Water Officer, the Utility developed a Water Quality Plan to ensure the water provided meets or exceeds all requirements put in place. Each year, it is reviewed by both parties and modified to meet the growing needs of the community. The Water Quality Plan includes the requirement to report to our results, and these results are contained in the following sections.



Source: *Best Management Practices: Water Wells* (Ontario Ministry of Agriculture, Food and Rural Affairs/Agriculture and Agri-Food Canada)

1.1 Source Water Supply

The Sun Peaks water supply utilizes a mix of both groundwater and surface water. While the majority of its water supply continues to be from groundwater wells, these wells have reached their sustainable production limit. Given this, the municipality has recognized the need to utilize surface water in order to continue to meet growth needs of the community. This section will outline and describe both the groundwater and surface water supply in Sun Peaks.

Ground Water Supply

Sun Peaks presently obtains the majority of its water supply from wells located deep within the ground. This groundwater source is well protected by a confining layer of fine sands and clays. In British Columbia, the raw water from many deep groundwater wells contains some mineralization. The raw water is filtered using a high-pressure manganese dioxide sand filter system with chlorine added as an oxidant to aid in the removal of naturally occurring iron and manganese.

Residual (free) chlorine (chlorine available for further disinfection) that is left in the treated water after the treatment process, acts to reduce any bacteria that might be found in a well. This provides further protection for end users of the Sun Peaks' Water System. In addition, the filters as part of the treatment process help to reduce any turbidity that may occur naturally in the raw groundwater. The Municipality currently has four production wells and two mechanical back up wells that are connected to three water treatment plants.

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Surface Water Supply

In 2018, plans were made to share the Sun Peaks Resort LLP's Snowmaking Reservoir via a shared pipeline and deliver the surface water to a new Ultrafiltration Membrane Treatment Plant located at the top of the Platter Lift. A contract was issued to Extreme Excavation and the treatment plant was delivered in the late fall of 2018 and became operational in January of 2019. The additional water supply was necessary to meet the overall demand for treated potable water

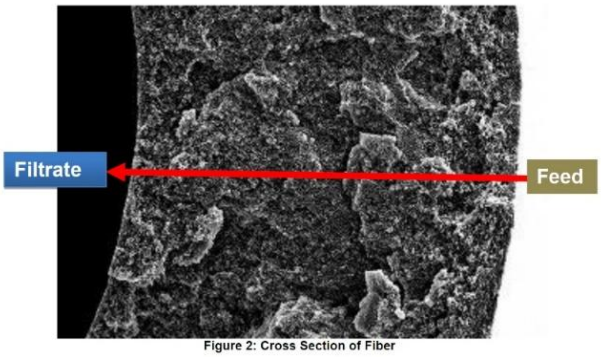


Figure 2: Cross Section of Fiber

Figure 5: HYDRAcap® MAX Schematic

In order to continue to meet the growth needs of the community, the municipality began construction of its own 120 000m3 reservoir in 2020. The municipality was also granted a water license on both 5 mile creek (Armitage creek) and yarrow creek during this time.

Construction of this reservoir was complete in late 2021, and the reservoir was first filled in 2022. This new reservoir is located approximately 200m east of SPR's existing alpine reservoir. The municipality also constructed a diversion building located approximately 0.8km west of the reservoir in close proximity to 5 mile creek. This diversion building was required in order to monitor and maintain environment flows outlined in the municipalities 5 mile creek water license (License C501842).

A 300mm water main conveys water from 5 mile creek to both the Sunburst (SPR's snowmaking reservoir) and the Municipal (potable water) reservoirs. The construction of this reservoir significantly increased the amount of potable water available to the community. However, to make full beneficial use of this new reservoir a dedicated potable water pipeline will need to be constructed to convey water directly from the municipal reservoir to the Platter Surface Water Treatment Plant. Construction of a dedicated potable water pipeline is expected to take place in 2025.

Surface water stored in the municipal reservoir is treated via the municipalities surface water treatment plant (WTP). This WTP is located at the top of the platter ski lift and is hence called the Platter WTP. The Platter WTP utilizes a direct filtration process using Nitto Hydra cap Max 80 Ultrafiltration membranes (pictures above). A coagulation system is in place upstream of the ultrafiltration membranes in order to aid in organic removal as required during certain times of the year. This membrane WTP produces high-quality treated water with treated turbidity levels typically below 0.10NTU. Sodium Hypochlorite is added after filtration prior to the treated water entering pressure zone 2 reservoir. As with the groundwater system, sodium hypochlorite aids to inactivate any potential pathogens and maintain a chlorine residual in the water distribution system. This zone 2 reservoir acts as a hub and supplies water to Pressure Zones 1A, 2, 3 and 4 (See Appendix B for the location of each pressure zone).

The blended ratio of groundwater to surface water in the Sun Peaks water system depends on the time of year as well as the location in the resort. At present, the surface water supply is primarily used to supplement the groundwater system during the busy winter months. During this time, water production is typically 50% groundwater and 50% surface water. During the summer months, the municipality primarily utilizes groundwater as the groundwater supply has historically been adequate to meet the needs of the community during the summer months. However, as the community continues to experience year-round growth surface water will need to be further utilized to supplement the groundwater system year-round.

Raw & Treated Water Testing

Each year, potability tests are performed on each raw well and surface water source. Extensive testing was initially performed in 2007, which provided a base line. This level of testing will be performed from time to time as deemed necessary by either Interior Health or our professional consultants. Appendix C shows the results of the raw/source water testing samples that were taken over several months during 2024.

Treated water samples were also collected from Sun Peaks Water Treatment Plants as well as throughout the distribution system. These sample results can be found in Appendix D and E. Sample points are selected to be representative of the water quality throughout the distribution system and are shown in Appendix B. Further information regarding the Municipality's current Water Quality Testing Program can be found in Appendix A.

1.2 Storage for Peak Demand and Fire Suppression

The Municipality's potable water storage system includes an allowance for a percentage of water to be kept in its potable water reservoirs to support fire suppression activities.

Reservoir & Pressure Zone Capacity

- Pressure Zone 1 – 680 cubic meters and supplemented by pressure reduced from Pressure Zone 2
- Pressure Zone 1A – pressure reduced from Pressure Zone 2
- Pressure Zone 2 – 1,400 cubic meters
- Pressure Zone 3 – 1,490 cubic meters
- Pressure Zone 4 – 1600 cubic meters
- Surface Raw Water Reservoir – 120,000 cubic meters (when full)

Sun Peaks has four main pressure zones and one intermediate pressure zones. Zone 1A (intermediate) provides service to the lower part of Mountain View and the Cottages and Cabins. With the exemption of this pressure zone each pressure zone has its own reservoir. The distribution system has been designed to allow for the transfer of water from one pressure zone to another (either automatically or manually) in the event of significant demand due to fire suppression requirements or other requirements. Water is supplied to each pressure zone by wells/surface water or by transferring water from one pressure zone's storage to another. This allows both for redundancy of the water supply and allows the Water Utility to provide "fresh" water to customers in all zones of the distribution system. In 2022 the Municipality constructed a potable water reservoir for pressure zone 4. This reservoir was required to allow for further growth and development in the east village.

2.0 Sun Peaks Water Quality Monitoring Program

Sun Peaks Mountain Resort Municipality practices a comprehensive source to tap water quality monitoring program. Source water monitoring points include raw water from each of the groundwater production wells, as well as raw water from the surface water reservoir. Water quality is monitored before and after the treatment process as well as various points throughout the water distribution system. Distribution system sample sites monitor water quality in each pressure zone, and are selected to provide representative water quality data throughout Sun Peaks.

Operators collect free chlorine residuals daily via handheld instrumentation to monitor free chlorine entering the distribution system from all water treatment plants. Free chlorine residuals as well as other various water quality parameters are also monitored in real time via the utility SCADA system. Online instrumentation also includes monitoring for turbidity, conductivity, temperature, and pH at various WTPs and pump stations. Online water quality instrumentation continues to be added and upgraded as operational budgets permit.

On a weekly basis, utility technicians collect bacteriological samples from raw and treated water at all WTPs, as well as multiple sample sites throughout the distribution system. Utility technicians also record other parameters at the time of sample collection, some of which include pH, turbidity, conductivity, and temperature. This field data tracks changes to water quality and water treatment processes. These indicators can also warn of possible negative impacts to the raw water. For example, higher temperatures may require higher free chlorine levels to maintain enough chlorine for disinfection.

On the odd weeks of the month, samples are collected on site and then forwarded to ALS Environmental Laboratory (Kamloops). On Even weeks of the month, samples are collected and tested in-house for Total and Fecal Coliforms using the Colilert System. SPMRMs reviews their Water Quality Monitoring Program with Interior Health on an annual basis. All sample results are shared with Interior Health and are monitored by IHA, ALS laboratories, and SPMRM Utility Technicians for any abnormalities and changes to water quality.

2.1 Physical Properties

In 2024 utility staff sampled temperature, pH, and turbidity an average of once per week. The results are summarized in the following sections.

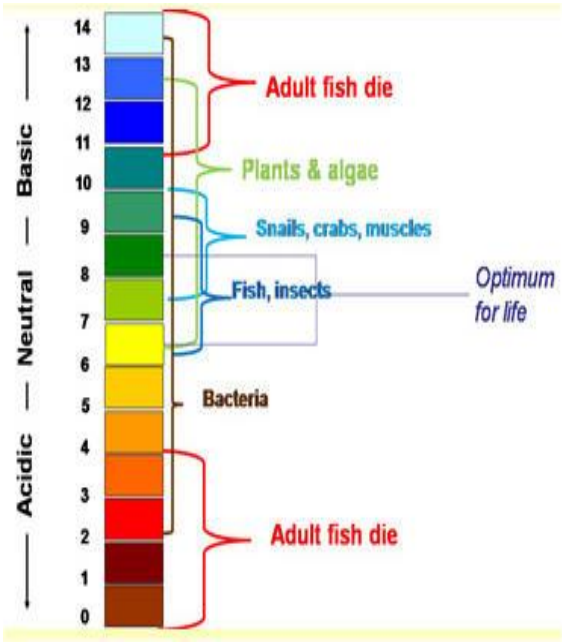
2.1.1 Temperature

The GCDWQ has set the aesthetic objective of ≤15.0°C for the temperature of drinking water. Temperatures above 15.0°C enhance the growth of nuisance organisms and as a result, taste, colour, odour and corrosion problems may be intensified. Water temperature in the distribution system is a direct result of the temperature of the source waters.

The main source water at Sun Peaks is from five deep water wells. In 2024, temperature leaving all water treatment plants ranged from 3.8-8.7°C. The average temperature throughout the distribution system was 8.1°C. The highest recorded temperature in the distribution system was 18.1°C recorded at the sun peaks fire hall, while the lowest recorded temperature in the distribution system was 3.8°C at the sun peaks fire hall. The average depth of the distribution system is greater than 2.5 meters to protect the water mains from freezing in the winter.

2.1.2 pH Readings

As this diagram shows, pH ranges from 0 to 14, with 7 being neutral. pH less than 7 is acidic while pH greater than 7 is alkaline (basic).



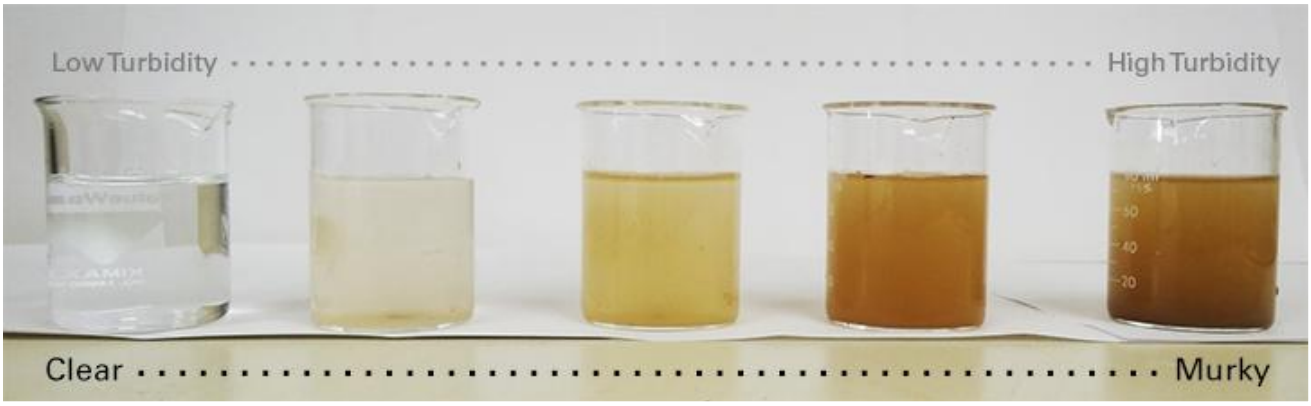
High pH can causes a bitter taste and can also lead to scale formation in water pipes and appliances. High pH also decreases the effectiveness of chlorine disinfection, thereby causing the need for more chlorine when pH is high. Low pH water will corrode or dissolve metals and other substances.

Sun Peaks water can be characterized as being moderately basic. In 2024 pH readings varied between 7.18 to 8.13 with an average value of 7.71 in treated water leaving all water treatment plants. Throughout the distribution system pH values ranged from 7.11 to 8.31 with an average pH of 7.75.

Note: pH readings do change depending on water temperature changes.

2.1.3 Turbidity

Turbidity is a measure of fine suspended particles in water, caused mostly by clay, silt and organics. It can originate from events such as hydrant use or water main flushing, which may stir up minerals deposited in the distribution system.



The current Canadian guideline for turbidity stipulates that the maximum acceptable concentration (MAC) for turbidity is 1 nephelometric turbidity unit (NTU). For certain water sources, historically, a higher level may have been permitted if the system had a history of acceptable microbiological quality and it could be demonstrated that disinfection was not compromised by this less stringent value. The aesthetic limit for turbidity at the tap (customer's point of use) is 5 NTUs.

Turbidity in water from groundwater sources is typically more stable and fluctuates less than turbidity in water from surface water sources. This is why the Platter WTP (which treats surface water) is equipped with online turbidity analyzers that will monitor turbidity in real time and have the ability to shut the plant down if turbidity in the treated water exceeds acceptable values.

All treated water samples taken in 2024 leaving the various WTPs had turbidity readings lower than 1 NTU. The average turbidity of water leaving all WTPs was 0.14NTU, with a max turbidity of 0.19 NTU recorded from Burfield WTP, and the lowest turbidity of 0.020NTU recorded from the Platter WTP. Throughout the distribution system, turbidity values ranged from 0.09 NTU to 0.47NTU with an average turbidity of 0.18 NTU.

For more information on turbidity and its effects on drinking water quality, visit Interior Health's web site at http://www.interiorhealth.ca and do a search for articles on '*turbidity*.'

2.1.4 Electronic Conducting (EC)

Pure water is not a good conductor of electricity. Ordinary distilled water in equilibrium with carbon dioxide in the air has a conductivity of about 10 x 10^{-6} $W^{-1}*m^{-1}$ (20 dS/m). Because the electrical current is transported by the ions in a solution, the conductivity increases as the concentration of ions increases.

Typical conductivity of water at 25°C:
Absolute pure water – 0.055 µS/cm Distilled water – 0.5 µS/cm Sea water – 5.0 S/m

The conductivity of water in Sun Peaks varies depending on the source water. Water from the various Sun Peaks aquifers has a higher conductivity than water from the surface reservoir. This is in part because groundwater stays in contact with rock for a longer period and will dissolve minerals found in the rock, leading to a higher conductivity.

In 2024, the average conductivity from groundwater sources was 399uS/cm and the average conductivity recorded from surface water was 107uS/cm. Conductivity in the Sun Peaks distribution system varies depending on the location. Conductivity can be lower in the east end of the resort, and in pressure zones 2 and 3. Surface water is blended with well water in PZ2 reservoir, where it is then transferred to pressure zone 3 and 4. The average conductivity values throughout the distribution system in 2024 were 346uS/cm, with the highest recorded value of 457uS/cm and the lowest recorded value of 97uS/cm.

2.2 Chemical Characteristics

There were a variety of chemical properties tested in 2024, some of which include total and dissolved metal levels, chlorine residuals and disinfection by products. These parameters are summarized in the following sections, and all laboratory test results can be found in Appendix D and E.

2.2.1 Total Hardness

Water hardness is mainly caused by the presence of calcium and magnesium. It is expressed as the equivalent quantity of calcium carbonate ($CaCO_3$). Scale formation and excessive soap consumption are the main concerns with hardness. When hard water is heated, it tends to form scale deposits on various appliances (hot water taps, etc.). This is a familiar problem in tea kettles and home water heaters.

The example of mineral deposits in a kettle shown above or glasses to the left can easily be cleaned by soaking with white household vinegar (~4%) or pickling vinegar (~11%) on a regular basis to dissolve these natural occurring minerals. Do not forget to rinse with fresh water several times to get rid of any vinegar residue!

Depending on the interaction of other factors such as pH and alkalinity, hardness levels between 80 and 100 mg/L are considered to provide an acceptable balance between corrosion and incrustation.

Public acceptance of hardness varies considerably. Hardness levels between 80 and 100 mg/L (as CaCO3) are considered acceptable; levels greater than 200 mg/L are considered poor but can be tolerated; those more than 500 mg/L are normally considered unacceptable.

Sun Peaks' primary source of potable water is from groundwater but during the winter, approximately 1/2 comes from surface water. The raw groundwater water has hardness levels between 132 and 206 mg/l (Dissolved as $CaCO_3$) depending on which well provides the water and the percentage of total water supplied from that specific well (the wells in the west end of the community have the hardest water). The average hardness from ground water (not treated) was 170mg/l (Total as $CaCo_3$) and the average hardness from the treated ground water was 183mg/L.

Surface water usually contains less minerals and is generally softer. Zones 2, 3 & 4 receive a blended mix of both well and surface water during the winter (and late summer), which lowers the overall hardness. Testing results from the surface water had a hardness of 49mg/L (Total as CaCo3). As the municipality continues to increase the amount of surface water entering the distribution system, and average hardness throughout the system will decrease.

2.2.2 Metals

Water from the Sun Peaks Aquifer is considered to be slightly aggressive, causing average corrosion in metallic water piping systems.

All metals are tested annually during the annual potability testing, however, the primary metals that are routinely tested for (bi weekly) at Sun Peaks are iron and manganese. Iron and manganese is removed via high-pressure manganese dioxide sand filters located at Burfield, Fairways, and Village WTPs. Chlorine is added prior to filtration and acts as an oxidant to aid in the removal of naturally occurring iron and manganese.

During 2024, all treated water samples were below the MAC (maximum acceptable concentration) levels for iron and manganese outlined in the Canadian Drinking Water Guidelines. There is currently no MAC for iron and the MAC for manganese is 0.12mg/L. The Sun Peaks raw/untreated ground water typically exceeds the MAC outlined for manganese (0.12mg/L) which is why high-pressure manganese dioxide sand filters are crucial in order to meet the Canadian Drinking Water Guidelines. In 2024 the average iron concentration in all treated water leaving the WTPs was 0.02395mg/L and the average manganese concentration in treated water leaving all WTPs was 0.00780 (MAC of 0.12mg/L).

Throughout the distribution system, the average manganese concentration in 2024 was 0.00625mg/L and the average iron concentration was 0.0213mg/L

More information regarding the raw and treated iron and manganese concentrations can be found in Appendix H & I.

2.2.3 Disinfection – Chlorine Residual Levels

Chlorine destroys many disease-causing organisms and helps make water safe to drink. In the past, waterborne diseases killed thousands of North Americans every year. Following its first use in Jersey City, New Jersey in 1908, drinking water chlorination started in Ottawa, Canada, in 1909.

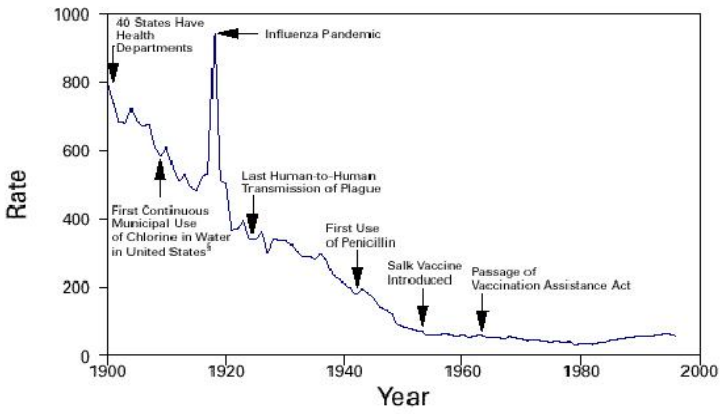
Then it rapidly spread throughout North America, where its use helped to virtually eliminate waterborne diseases like cholera, polio and typhoid fever *(See graph below)*.

NOTE: The CDC has confirmed that chlorine used at water treatment plants kills Covid-19 virus in any raw water.

Drinking water chlorination played a major role in increasing North Americans' life expectancy by 50% during the 20th century. As the graph to the right illustrates, waterborne diseases, such as typhoid, caused thousands of deaths annually in the United States in the early 1900s and are now considered rare due to chlorinated drinking water.

The Municipality uses sodium hypochlorite (commercial liquid bleach – 6% to 12%) as an oxidant to allow for the removal of excessive amounts of iron and manganese from the groundwater wells. Sodium hypochlorite is also added at the Platter WTP. As typical in many surface water treatment systems, chlorine is added post filtration to provide adequate residual throughout the distribution system and to minimize the formation of disinfection by products

CDC – History of Drinking Water Treatment



The target levels of residual (free) chlorine (chlorine available to act as a disinfection agent) are between 0.3 and 1.0 mg/L. The GCDWQ's aesthetic objective for free chlorine levels is <5.0 mg/L at all points in the distribution system.

Water ages as it travels through the water system. Homes that are located furthest away from the municipality's treatment facilities where the chlorine is added to the water will receive older water than those closer to these facilities. While the water treatment plants remove most of the naturally occurring minerals from the water, a very small amount of iron, manganese and other minerals are left in the water. If the chlorine is held in the water for long periods of time, these minerals naturally use up the free chlorine and lowers the chlorine's capability to provide disinfection in the distribution system

In 2008, the Utility instituted a policy of flushing dead-end mains on a periodic basis to improve water quality and reduce the age of the water in the area flushed. The Utility also requested that when the fire department requires use of a hydrant for fire practice, they use hydrants located at one of the various dead ended water mains throughout the community to assist in freshening the water.

During 2024, the overall chlorine residual (free chlorine) levels in Sun Peak's water system were kept above the desirable level of 0.3 mg/L, with the exception of 1 test result of 0.27mg/L from lookout ridge booster station. The average free chlorine residual of treated water leaving the water treatment plants was 0.95mg/L. The target chlorine residual leaving the well Water Treatment

Plants (Burfield, Fairways, and Village WTP) is 1.0mg/L. This target residual is expressed as the operational objective, and this information can be referenced in Appendix A.

In 2024 the average free and total chlorine residuals throughout the distribution system were 0.84 and 0.90 mg/L respectively. The highest chlorine residual recorded in the distribution system was 1.18mg/L and the lowest chlorine residual recorded was 0.27mg/L.

The municipalities operating plan states that should water in any point in the distribution grid test below 0.3 mg/L free chlorine, operators will take follow up action which may include: flushing the appropriate water main(s), add additional chlorine to the storage facilities (reservoirs), or transferring water from one distribution grid to the grid that presented the low level of free chlorine.

Customers quite often ask 'Why does chlorine sometimes smell very strong?' It should be noted that chorine in water is unstable and will come out of water easily. This means that when chlorinated water sits in household pipes for a period, the chlorine will 'off gas' (come out of solution) and collect at the highest point in the piping. This is sometimes why when a tap is first turned on in an upstairs bathroom the smell of chlorine may be strong, and why running the tap for a few minutes will dissipate the smell of chlorine.

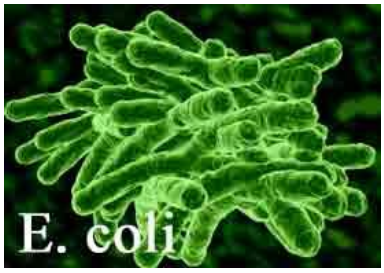
There are several options to remove chlorine from water, some of which include putting a drop of citrus juice or slice of citrus fruit in the water, or leaving a jug in the fridge overnight. Water should not be left out long after it has been de-chlorinated because it may pick up bacteria from the surrounding environment. Boiling water is another way chlorine will dissipate, so when water is used for cooking any residual chlorine does not survive.

2.2.4 **Disinfection Byproducts** – Trihalomethanes (THMs) and Halo acetic Acids (HAAs)

Disinfection-by-products (DBP's) are formed when dissolved organic compounds in the water react with disinfectant chemicals. Most of Sun Peaks' water is drawn from groundwater sources and therefore historically THMs and HAAs were not a concern at Sun Peaks. However, with the addition of the surface water treatment facility, some disinfection products were observed during the summer months of operation. Throughout 2024 the platter WTP was not operated during the summer months and therefore DBPs were not a concern.

In order to remove the risk of DBP's forming, Sun Peaks worked with their engineering consultants at Urban Systems to implement a coagulation system during 2021/2022. This coagulation system is located upstream of the Platter WTPs UF (ultrafiltration) membranes and helps to remove organic precursors from the water found in spring and summer months. This system helps to prevent the formation of chlorinate by products (DBPs) and ensure all organic levels meet or exceed Canadian drinking water guideline standards.

2.3 Microbiological Analysis



The microbiological analysis of treated and raw water samples during 2024 included testing for total coliforms and E-coli coliforms. Total coliform bacteria are a large group of indicator organisms used as a measure of the presence of pathogenic bacteria. Coliforms which are more frequently found in the gastrointestinal tract and feces of warm-blooded animals are known as fecal coliforms. E. coli is the predominant species of fecal coliforms.

While these coliform organisms are in abundance almost everywhere, they should not be confused with disease-causing bacteria. A positive result for coliform organisms may indicate the possible contamination of the water system, and further investigation will be required.

In 2024 there were no positive test results in raw well water or treated water for E-coli, with all results showing <1 CFU/100mL in treated water. There was 1 positive coliform result (1PMN/100ml) from the Rec Center on Nov 20, 2024 (KS2404855-003). As per standard operating procedures, this site was re tested and yielded negative results for both coliforms and E.coli, attributing this test result to sample error. Untreated surface water frequently produced positive results for Total Coliforms (CFU/100ml). In 2024, there were 9 positive test results for coliforms in the raw/untreated surface water. There were 0 instance of E.coli detected in the raw surface water in 2024 (Appendix F)

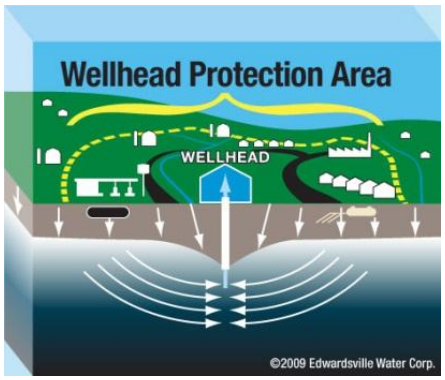
More information on internal microbiological testing system utilized by the municipality can be found at http://www.idexx.ca by performing a word search for '*Colilert Water Testing Product Information*.'

Sun Peaks Municipality prides itself on providing potable drinking water that meets or exceeds the Guidelines for Canadian Drinking Water Quality to its customers. In 2024, the bacteriological and chemical quality of Sun Peaks' water continued to meet or exceed the GCDWQ and the standards set out in the BCDWPA.

2.4 Cross Connection Control Program

A Cross Connection Control Program is in place to ensure unwanted substances are not able to be introduced into the water system from existing or new connections to the distribution system. This program was introduced in 2002 with the development and implementation of enforcement authority through Water Tariff 5, Section 9.8 to 9.11 and was approved February 2006 by the Comptroller of Water Rights and in 2018 became part of the Water Services Bylaw implemented with the transfer of the water utility to the Municipality.

The existing commercial facility assessment was completed, and implementation of the program continues. We have also moved into the enforcement of all commercial properties and their requirement to report all test reports to the Municipality. This requirement is part of the approved Water Services Bylaw 0136 (updated from Bylaw 0110 in 2019). We are working with a company that sends out notices and reminders and receives and stores the backflow prevention testing information.



2.4 Well Protection Plan

The Municipality has taken several steps to ensure that all wells are protected. A Well Protection Program is being developed in conjunction with our engineering consultants. The report was published in 2011 and a copy was given to Interior Health. The municipality continues to follow the BC Comprehensive Drinking Water Source to Tap Assessment Guide to ensure safe drinking water.

Updates to the Water Balance Report were completed in 2017 and work on the Well Protection Work Plan will continue in 2021 as funding becomes available.

2.5 Certified Operators

One of the conditions of Interior Health's Permit to Operate the potable water system at Sun Peaks is that Utility staff are to be trained and certified by the Environmental Operators Certification Program (EOCP).

For the bulk of 2024, the Municipality employed a total of 7 certified operators (most holding multiple certification). Operator certifications Status in 2024 is as follows:

Water Treatment

- 3 Operators – Level III EOCP Certification
- 1 Operators – Level II EOCP Certification
- 2 Operators – Level I EOCP Certification
- 1 Operator – SWS EOCP Certification

Water Distribution

- 1 Operator– Level III EOCP Certification
- 4 Operators-Level II EOCP Certification
- 1 Operator-Level 1 EOCP Certification

www.eocp.ca

All operators continue to work towards higher certification levels as part of their ongoing commitment to providing a high level of water quality. A current listing of all operators associated with the Sun Peaks Community Water System and their certification status is available to the public via the EOCP database accessible at www.eocp.ca

2.6 Facilities Classification

The water treatment system (EOCP Facility #509) was re classified in 2024. This system was previously classified as a level 3 system. However, with the addition of recent infrastructure upgrades, it is now classified as a Level IV system. Utility staff are working towards achieving this level of certification. The water distribution system (EOCP Facility #507) remains classified as Level III by EOCP. The next review by EOCP will be done in 2029. Any major upgrade or change to the water system also requires the facility to be re-classified prior to the next review.

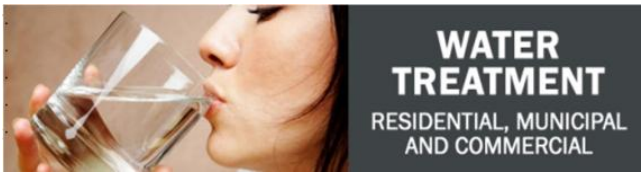
EOCP ranks level 1 systems as the simplest to operate and level IV systems as the most complex. The classification of the various water treatment and distribution facilities is available to the public via the EOCP database accessible at www.eocp.ca.

2.7 Customer Relations

Utility staff respond to any concerns regarding water quality. With the exception of Fairways WTP pipe break (outlined in section 6 of "Operational Challenges"), there were no significant water quality incidents or complaints in 2024.

2.8 Public Consultation

Sun Peaks Municipality hosts public meetings from time to time to review its overall operations and discuss various future plans for the Municipality.



2.9 Challenges and Major Planned Maintenance Projects

Sun Peaks water treatment and distribution systems continue to meet its operational objectives, but in any system there are always challenges.

A summary of operational challenges, as well as ongoing projects, maintenance, and future works are outlined in the section below.

Operational Challenges.

1) Condition of the Surface Water Treatment Plant Pipeline

The existing snow making pipeline which supplies water from the snow making reservoir to the Platter WTP is in poor condition. When water sits stagnant during periods of little to no usage, the pipeline needs to be flushed to bring water quality to acceptable levels, and to minimize fowling of the plant's UF membrane filters.

One of the only practical ways to flush the snowmaking pipeline is with a snow gun, as adequate flow and velocity are required to scour the inside of the pipe. Good communication is required between Sun Peaks Resort and the Municipality in order to coordinate flushing of the pipeline prior to the winter season, or in the event of any plant shutdowns/maintenance.

Construction of a new pipeline will significantly improve water quality upon plant start up, reduce inlet pressures to the platter WTP, and will make surface water more readily available during summer months. Construction of a new pipeline is expected to take place in 2025.

2) **Groundwater Sustainability**

Effective in late 2018, the Municipality made the decision to change geotechnical geohydrologist from BC Groundwater to BGC Engineering. BGC completes data reviews, issues annual water budgets, and provides general hydrogeological guidance related to ongoing operations of the groundwater supply wells at SPMRM. The water budgets are guided by a review of water level and pumping rate data from the previous years. In the 2024 pumping season (Calendar date of Nov 1st), Sun Peaks used a total of 197 840m3 from its 4 main production wells. This is slightly less than the amount of groundwater used in 2023 which was 211 719m3. This 2024 amount of 197 840m3 was below the 2024 water budget amount of 207 000m3, but higher than the long-term sustainable amount of 195 000m3 (appendix J)

It is important to note that total water usage (groundwater and surface water) during the 2024 pumping season was 249 752m3. Of this 249 752m3, 197 840m3 came from groundwater wells and 51 912m3 came from the surface water reservoir.

Water demand in the resort has exceeded what the groundwater wells can sustainably provide, outlining the importance of further utilizing surface water as the community continues to develop and grow.

3) **Updating of Infrastructure Maps and GIS Data**

In 2024 the Municipality worked with their engineer consultants at Urban Systems to conduct a thorough review and update all infrastructure maps for the Water Distribution and Wastewater collection systems. This review and update was required to correct various mapping attributes as well as to accommodate all new recent infrastructure developments. Keeping this information current is critical as the municipality continues to further their asset management program. Further development of the asset management program is expected to occur in 2025.

4) **Annual Filter Audits**

Filter audits are performed to evaluate the efficiency and performance of Water Treatment Plant (WTP) filtration systems. After noting a small increase in manganese in the Burfield WTP treated water, utility staff conducted an internal filter audit. Filter Audit results were reviewed by AWI- A filter optimization company. AWI initially recommended that the filter media be replaced. Media was replaced in June of 2024.

However, in the process of replacing the filter media it was observed that the filter underdrains were failing and the plants filters (originally installed in 1999) required replacement. A new “like for like” filter skid was installed in November of 2024. New filter media (previously installed in the old filters) was transferred into the new filtration system. This new filtration system is expected to have a 25-year life expectancy and is yielding improved filter performance by further reducing iron and manganese levels in the WTPs treated water. Filter Audits at Fairways and Village WTPs will be conducted in 2025 and 2026.

5) SCADA Upgrades

In 2023 SPMRM retained Exceed Electrical Engineering to conduct an electrical asset assessment of the Municipality's Utility infrastructure. The purpose of this assessment was to provide recommendations for asset improvements in communications, SCADA, controls & instrumentation, and electrical systems.

In 2024, SPMRM proceeded with "Phase 1" of the electrical asset assessment. Highlights of this work include:

- Upgrading the existing cellular network. The existing cellular radios were outdated and needed to be updated with an up-to-date cellular product.
- Improved SCADA security by moving the existing SCADA system to the EXC (Exceed Secure Cloud.)
    - The EXC is a private cloud that is exclusive to only municipal SCADA data
    - This will provide redundancy and reduce cyber risk as well as reduce the frequency/challenges associated with hardware failures, power loss, application faults and network problems
- Implementation of the VT Scada alarming system
    - VT Scada alarming is a top tier alarming system utilized by several local municipalities including Langley and North Vancouver.
    - This new alarming system is more robust and allows more specific alarms to be relayed to operational staff via text or email.
    - This work is expected to continue into 2025.

6) Fairways WTP-Pipe Break

On Oct 4, 2024 SPMRMs on call Utility operator received a call at 4:00am regarding low water pressure on fairways drive. The operator responded to fairways WTP located at 2730 Fairways Drive and observed that a surge of water from a pipe break inside the facility had pushed the doors open and water flowing out of the WTP.

Action Taken

Initial Response

The Fairways WTP was isolated via water main valving in the ground as staff could not access the interior of the building. The fairways WTP supplies water to 3 pressure zones: PZ1, PZ1A, and PZ2. Each pressure zone was isolated via valving outside/around the WTP. The leak was isolated on Oct 4th at 4:42am. All areas of the water distribution system remained under positive pressure during the incident.

Secondary Response

On October 4th at approximately 5:00am utility staff began refilling reservoirs 1 and 2 from Burfield and Fairways WTP as well cycling water back down from higher elevation reservoirs (PZ3 and PZ4). A Boil Water Notice was issued by Clint Burton and IHA at 7:25am. BC hydro was contacted to disconnect power via the transformer outside the building.

As per standard operating procedures IHA was notified of the situation and water quality testing was conducted in the effected area on Oct 4th, Oct 5th, and Oct7th

Given treated potable water had entered the creek to the east of the WTP, a spill report was filed with the MOE by Clint Burton on Oct 4, 2024 **(appendix C).**

Remedial Efforts

Various electrical equipment inside the Fairways WTP was damaged and needed to be replaced prior to re energizing the building and returning the station to normal operation. The fairways WTP and transfer pumps resumed operation on Nov 11th, 2024.

Corrective Action

Corrective actions that have been taken include:

- Engineer (Urban Systems) and plumbing assessments (IPH) of the interior piping took place. A portion of the interior piping will be redone in 2024, with the remaining piping to be replaced in 2025. Piping will be replaced with stainless steel which is stronger and more robust than the existing SCH80 piping in place.
- Implementation of new SCADA alarming system.

In the beginning of 2024, SPMRM continued working with Exceed Engineering in order to improve the utilities SCADA and alarming systems. The municipality will begin transitioning to VT SCADA which will offer improved alarming features for utility staff.

7) Leak Survey

Utility staff continue to perform additional grid pressure testing during the summer as staff time limitations and budget constraints permit. This involves isolating sections of the distribution grid and monitoring the pressure drops over a period. We continue to monitor suspect areas of the grid each year.

8) Water Main Valve Exercise Program

Due to operational time constraints, selective valve maintenance was conducted in 2024. Comprehensive maintenance of the entire Sun Peaks Water Distribution system is expected to be complete in 2025. This maintenance involves exercising all distribution system valves and identifying any valves that require further work and maintenance.

9) Unidirectional Flushing & Fire Hydrant Maintenance

Flushing water mains via fire hydrants continues to be an important part of the Municipality's routine maintenance program.

Why flush hydrants?

a) It enhances water quality by removing sediments (iron & manganese minerals) from inside the mainline and flushing them out through the closest hydrant.
b) It helps to identify malfunctions with the hydrant and related valves.
c) It helps determine weaknesses in the water distribution system.
d) It identifies inadequate water volumes and pressures in the water mains and helps determine fire flow adequacy.

System wide flushing of the Sun Peaks water distribution system was complete in 2024. All hydrants were flushed to a final Turbidity of less than 1.00NTU. While flushing hydrants, Utility staff also recorded static and residual pressures, and noted if any futher repairs were required. The municipality also conducted Fire Hydrant maintenance in 2024, and all hydrants were used to verify their operation.

10) Future Works

In 2021 SPMRM retained Urban Systems to prepare Water and Wastewater Infrastructure Plans to fully understand the infrastructure requirements for the existing community and those required to allow for community growth. This plan outlines infrastructure requirements that will be needed at different phases of community development. The future works section outlines significant infrastructure requirements that will be needed within the next 5 years. Some of which include

Dedicated Pipeline

The Municipality has received a grant for a dedicated pipeline from the new surface water reservoir to tie into the existing Platter Water Treatment Plant (estimated at $6.25 million). The proposed pipeline will utilize a hydrogeneration turbine to produce energy and offset power consumption. Construction of this pipeline is expected to take place in 2025. Once operational, this pipeline will allow SPMRM to further utilize surface water to supplement the existing ground water system.

Dedicated Potable Water Reservoir:

The Municipality has developed its own surface water reservoir which has a storage volume of approximately 120,000 cubic meters. Reservoir construction was mostly completed in 2021, and the reservoir was first filled in 2022. While this new reservoir is 120 000m3, the current water license for this new surface water reservoir allows for a maximum of 280,000 m3 of water to be diverted from Armitage Creek and Yarrow Creek, so long as stream flows allow, and environmental flow needs are met.

Given the water license allotment, there is potential to expand the new surface water reservoir to increase the total surface water storage volume to the allowable diversion volume (280 000m3). A major benefit of expanding the surface water reservoir is that SPMRM will be able to utilize the same pipeline and diversion structures, minimizing capital costs. It is important to note, a new

diversion structure on Yarrow Creek will likely be required to divert the total 280,000 m3 volume while meeting Environmental Flow Needs.

Flow monitoring devices have already been installed on Yarrow Creek, and diversion from the creek is licensed. The new surface water reservoir license allows for construction of the Yarrow Creek diversion.

PZ1 Reservoir Replacement

The replacement and upgrade of PZ1 (Pressure Zone 1) reservoir was outlined in the Distribution System Assessment of the 2022 Sun Peaks Water and Wastewater Master Plan. At a total storage volume of 680m3, PZ1 Reservoir is the Municipalities smallest and oldest potable water reservoir, originally constructed in 1989. This reservoir provides potable water and fire flow to the west end of the resort. As the resort has experienced considerable growth since the time of reservoir construction, replacement of this reservoir will be required once the reservoir reaches the end of its useful life. SPMRM performs routine reservoir inspections in order to assess reservoir conditions. The next reservoir inspection is expected to take place in 2026.

The new PZ1 reservoir will have a larger storage volume and will be placed at a higher elevation. By increasing PZ1 reservoir elevation, fire flows within PZ1 will significantly improve. In addition, the higher elevation will allow the new reservoir to service PZ1A, and will improve domestic water pressure for all users in pressure zone 1.

Electrical Asset Upgrades

The Municipality will continue working with their electrical engineers at Exceed Engineering in 2025 in order to implement phase 2 of the electrical assessment plan. This phase will focus on updating the existing Citect SCADA with an improved SCADA software-VTScada.

VTScada integrates all core HMI-SCADA software features into a single, easy-to-use package. It has been developed from the ground up over the last 15 years and is used by many local municipalities, such as Langley City and North Vancouver. The addition of VTScada will be used actively to maintain, monitor, and run the water and wastewater systems while also historizing, capturing, and trending all data. Implementing VTScada for all sites will boost the system performance and set the Municipality up for success in the long run.

The VTScada license includes High-Performance graphics that allow SCADA developers to design to ISA-101 HMI Design standards. It includes alarm notifications, a dedicated historian and built-in trending, on-screen sticky notes, and components not commonly found in other HMI or SCADA software platforms such as polling management, trends viewer, report generation, the Slippy Map feature, application version control, and system backup.

Conclusion

Sun Peaks Mountain Resort Municipality remains committed to partnering with the Interior Health Authority to provide a sustainable supply of high-quality drinking water. The Municipality strives to continually improve water quality monitoring standards to ensure potable water meets or exceeds the expectations of its residents, guests, and commercial users.

In recent, Sun Peaks has experienced significant growth as both a destination resort and a year-round community. Through careful planning from Council, Management and guidance from their Engineers, Hydrogeologists, and operational staff, the water Utility will continue to meet the growing needs of the Sun Peaks community well into the future.

Sincerely,

Sun Peaks Mountain Resort Municipality

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

Appendix A – Water Quality Monitoring Program

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

WATER QUALITY TESTING RESULT RANGES

Installations currently online *(as of January 1, 2024)*

Facility	**Frequency** (when well pumps are running)	**Target Free Chlorine Range** (mg/l)	**Iron** [1] (mg/l)	**Manganese** [2] (mg/l)
Burfield (PW1A) Well – Raw	Weekly	N/A	Actual Data	Actual Data
Village (PW2D) Well – Raw				
Creekside/Upper Fairways (PW2E) Well – Raw				
Lower Fairways (PW1B) Well – Raw				
Snowmaking Reservoir				
Burfield (PZ1) Water Treatment Plant *(Finished water)*				
Fairways (PZ1/1A/2) Water Treatment Plant *(Finished water)*	Daily for Free Cl_2 Weekly for all others	0.8 to 1.0 mg/l	<0.3 mg/l	<0.05 mg/l
Village (PZ2) Water Treatment Plant *(Finished water)*				
Surface Water Treatment Plant *(Finished water)*				
PZ1 & 1A Distribution Grid			N/A	N/A
PZ2 Distribution Grid	Weekly	0.3 to 1.0 mg/l	N/A	N/A
PZ3 & 4 Distribution Grid				
PZ1 Reservoir				
PZ2 Reservoir	Monthly [3]	0.3 to 1.0 mg/l	N/A	N/A
PZ3 Reservoir PZ4 Reservoir	Monthly			
PZ4 Reservoir	Monthly[3]			

Additional testing and level monitoring for all production and background wells may be conducted in addition to locations noted above as instructed by the Utility's consulting hydrogeologist from time to time

[1] Canadian Drinking Water Guidelines' Aesthetic Objections for Iron is <0.3 mg/l
[2] Canadian Drinking Water Guidelines' Aesthetic Objective for Manganese is <0.05 mg/l (changing to 0.12 mg/l MAC in 2019
[3] Monitored Monthly from May to September only due to access issues

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

Sun Peaks
MOUNTAIN RESORT MUNICIPALITY

Potable Water Testing and Sampling Plan 2024

Source and Treatment Sample Locations	Frequency	Raw/Treated Water	Tests to be performed														
			Total & Fecal Coliforms (Lab)	Colilerts	Free Chlorine (mg/L)	Total Chlorine (mg/l)	Turbidity	pH	Conductivity	Temperature	UVT	Iron	Manganese	Aluminum	TOC & DOC	THM & HAA
Burfield WTP (PZ1)	Daily	Treated Water			X											
	Weekly	Raw Water					X	X	X	X						
	Weekly	Treated Water			X	X	X	X	X	X						
	Bi-Weekly	Raw Water	X	X								X	X			
	Bi-Weekly	Treated Water	X	X								X	X			
Fairways WTP (PZ1/2)	Daily	Treated Water			X											
	Weekly	Raw Water					X	X	X	X						
	Weekly	Treated Water			X	X	X	X	X	X						
	Bi-Weekly	Raw Water	X	X								X	X			
	Bi-Weekly	Treated Water	X	X								X	X			
Village WTP (PZ2)	Daily	Treated Water			X											
	Weekly	Raw Water					X	X	X	X						
	Weekly	Treated Water			X	X	X	X	X	X						
	Bi-Weekly	Raw Water	X	X								X	X			
	Bi-Weekly	Treated Water	X	X								X	X			
Platter WTP (PZ2)	Daily	Raw Water									X					
	Daily	Treated Water			X						X					
	Weekly	Raw Water					X	X	X	X						
	Weekly	Treated Water			X	X	X	X	X	X						
	Bi-Weekly	Raw Water	X	X								X	X	X	X	
	Bi-Weekly	Treated Water	X	X								X	X	X	X	
	Monthly	Raw Water														X
	Monthly	Treated Water														X

*Note-TOC/DOC and THM/HAA testing will have a summer a winter schedule. These parameters are tested monthly from May-Sept, and twice during the winter season. Total and Feacal coliforms are sampled every week and alternative between in house testing "colilerts" and Lab Testings "total %Fecal Coliforms (lab)

Distribution System Sample Locations	Frequency	Pressure Zone	Tests to be performed														
			Total & Fecal Coliforms (Lab)	Colilerts	Free Chlorine (mg/L)	Total Chlorine (mg/l)	Turbidity	pH	Conductivity	Temperature	UVT	Iron	Manganese	Aluminum	TOC & DOC	THM & HAA
STP	Weekly	PZ1	alternate weeks	alternate weeks	X	X	X	X	X	X		alternate weeks	alternate weeks			
Burfield Lodge	Weekly	PZ1	alternate weeks	alternate weeks	X	X	X	X	X	X		alternate weeks	alternate weeks			
Fire Hall	Weekly	PZ1	alternate weeks	alternate weeks	X	X	X	X	X	X		alternate weeks	alternate weeks			
Sports Center	Weekly	PZ2	alternate weeks	alternate weeks	X	X	X	X	X	X		alternate weeks	alternate weeks			
PZ2 Reservoir	Weekly-THM/HAA's monthly	PZ2	alternate weeks	alternate weeks	X	X	X	X	X	X	X	alternate weeks	alternate weeks			X-Monthly
Village Day Lodge	Weekly	PZ2	alternate weeks	alternate weeks	X	X	X	X	X	X		alternate weeks	alternate weeks			
Day Care	Weekly	PZ3	alternate weeks	alternate weeks	x	x	x	x	x	x						
Lookout Ridge	Weekly-THM/HAA Monthly	PZ3/PZ4	alternate weeks	alternate weeks	X	X	X	X	X	X	X	alternate weeks	alternate weeks			X-Monthly

*Note-TOC/DOC and THM/HAA testing will have a summer a winter schedule. These parameters are tested monthly from May-Sept, and twice during the winter season. Total and Feacal coliforms are sampled every week and alternative between in house testing "colilerts" and Lab Testings "total %Fecal Coliforms (lab)

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Water Quality Report
2024

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Water Quality Report
2024

Annual Testing[4]

Annual Sampling/Testing on raw and treated water are taken from all production and wells associated with the Potable Water System. The current wells online are the Burfield (PW1A & PW1C), Village (PW2D), Creekside (PW2E) and Fairways (PW1B). All production wells will be sampled once a year. The Surface Water Reservoir is also sampled on an annual basis. Sample locations may be at the reservoir itself or from the raw water pipeline.

Production Wells and Surface Water Full Potability Testing Parameters:

Physical Parameters:	**Dissolved Anions:**	**Dissolved Metals:[5]**	**Total Metals:[11]**
True colour	Alkalinity	Calcium	Aluminum
Conductivity	Bicarbonate	Iron	Antimony
Hardness	Carbonate	Magnesium	Arsenic
pH	Hydroxide	Potassium	Barium
Total Dissolved Solids (TSS)	Chloride	Silicon	Boron
Turbidity	Fluoride	Sodium	Magnesium
Total Organic Carbon (TOC)	Ammonia	Molybdenum	Cadmium
Total Dissolved Organic Carbon (TDOC)	Nitrate	(low detect)	Chromium
THM	Nitrite		Copper
HAA	Sulphate		Manganese
	Sulphide		Mercury
Some or all the additional tests that may be performed when contamination of the wells is suspected, or surface water is utilized.	Phosphorus		Selenium
	Ortho – Phosphate		Uranium
HPC Heterotrophic Plate Count (HPC)			Zinc
Trihalomethanes (THM)			Iron
Polycyclic aromatic hydrocarbons (PAHs)			Lead
Volatile Organic Compounds (VOCs)			Molybdenum (low detect)
Extractable Petroleum Hydrocarbons (EPHs)			

Production & Monitoring Water Distribution Grid Potability Testing Parameters:

Starting in 2017, one point in each pressure zone of the water distribution grid may be selected for further potability testing. The same testing will be performed as on the raw water in order to compare samples. The three points are identified as PZ 3 & 4 – Lookout Ridge Booster Station, PZ 1 – the Wastewater Treatment Plant and PZ 2 – home located on Fairways Drive (water produced in the Fairways WTP & Village WTP flows in each direction at this point & testing has been done at this location). Other locations may be added or removed from year to year.

Utility's production and monitoring wells annual monitoring program was developed by SPMRM in consultation with IHA, BC Groundwater, the Ministry of the Environment' Groundwater Protection Officer and the Ministry of Health's Safe Drinking Water Officer and will be reviewed on an annual basis & submitted with the Annual Report to Interior Health.

[5] Additional parameters for both dissolved and total metals may be added or removed from year to year.

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Appendix B – 2024 Sampling Stations – Maps

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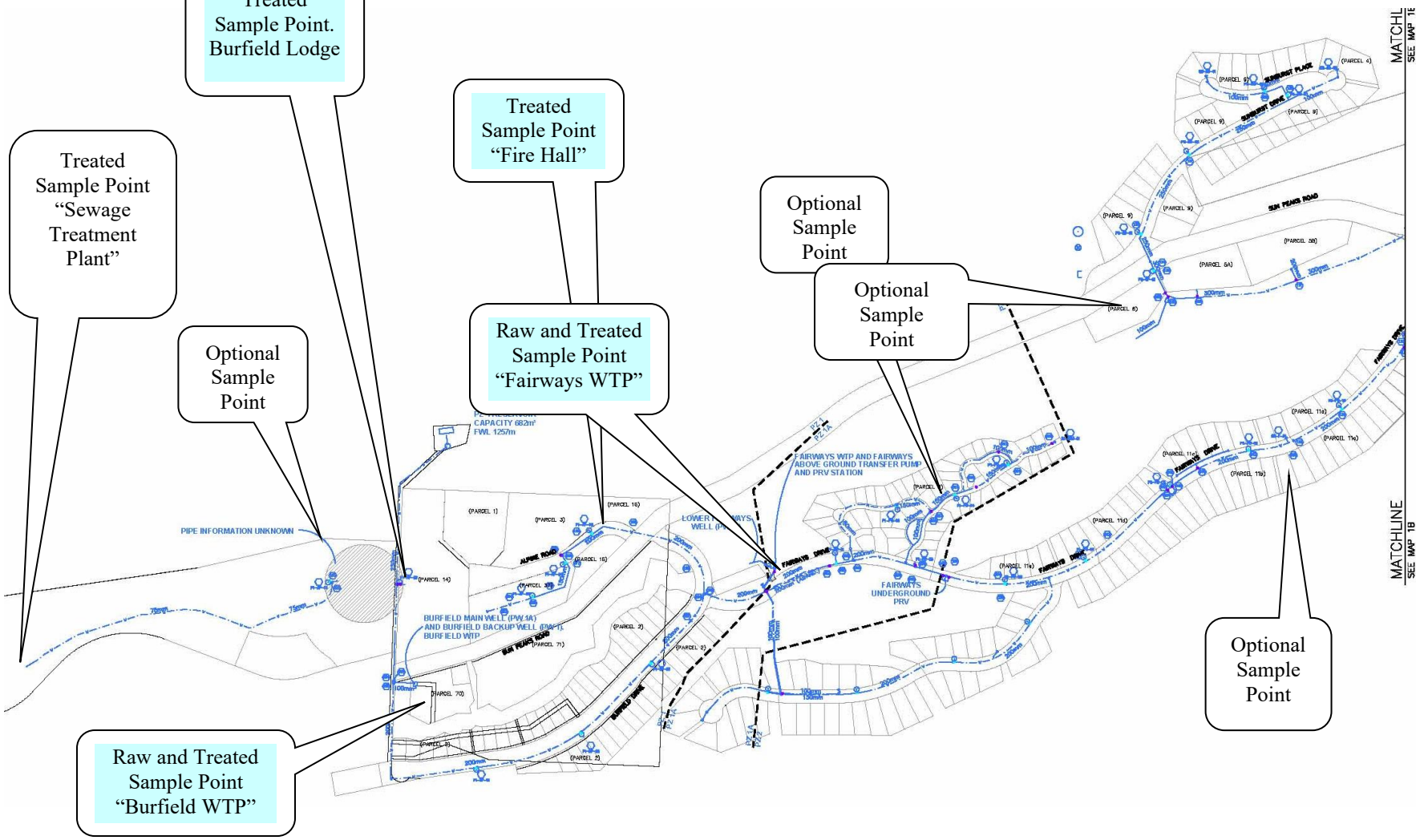
Sun Peaks Water Quality Sampling Points
Pressure Zones 1, 1A and 2



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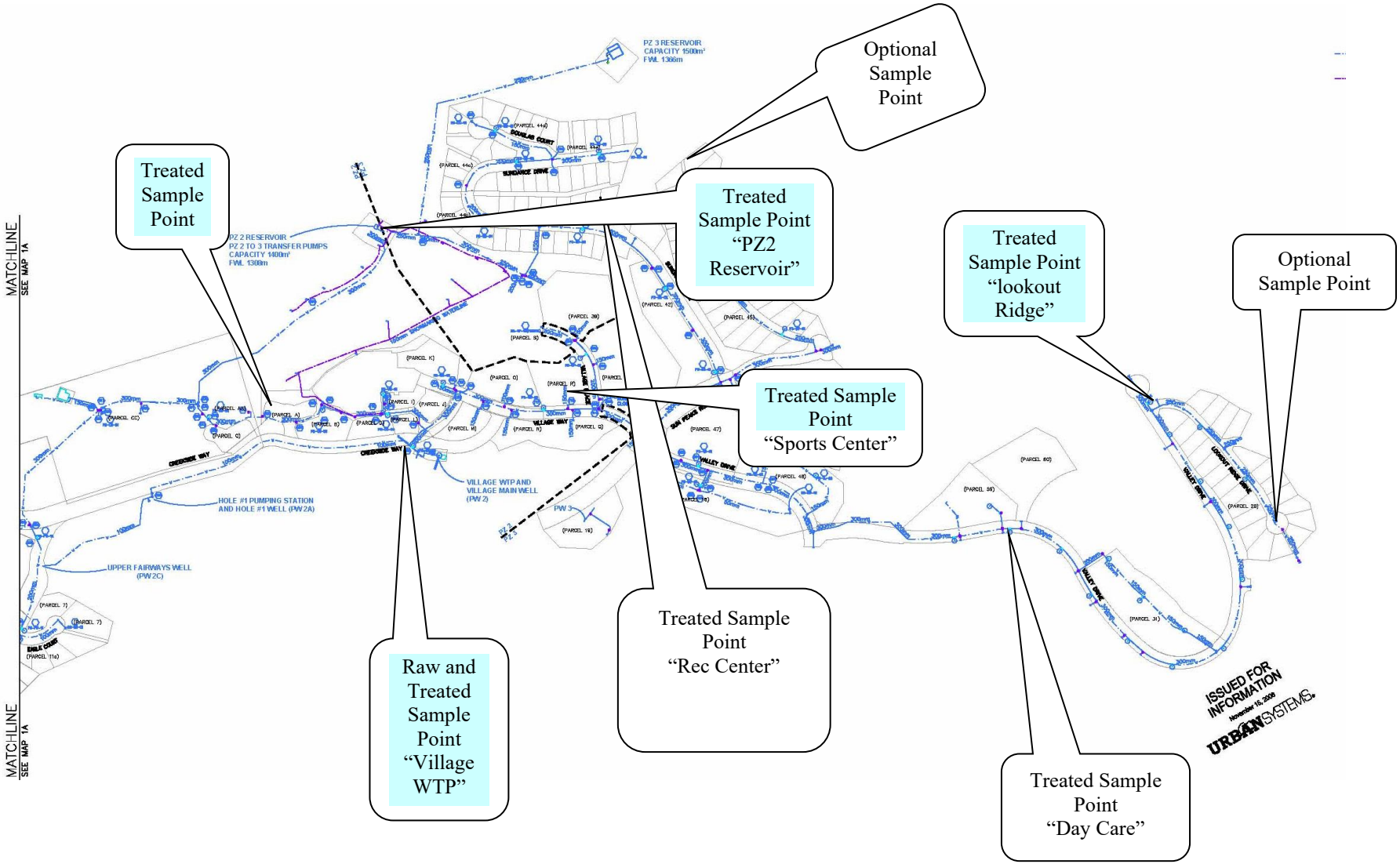
Sun Peaks Water Quality Sampling Points
Pressure Zones 2,3, and 4



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Appendix C -2024 Annual Potability Source Water Results

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2024 Annual Potability-Source Water Results						
Client Sample ID			**Burfield-PW1A-RAW**	**Village - PW2D - RAW**	**Creekside - PW2E - RAW**	**Platter - Raw**
Date Sampled			**17-Nov-2024**	**28-Oct-2024**	**30-Sep-24**	**25-Mar-24**
Time Sampled			**11:28**	**11:02**	**10:47**	**13:38**
ALS Sample ID			**KS2404811-001**	**KS2404528-002**	**KS2404041-001**	**KS2401021-002**
Analyte	**Lowest Detection Limit**	**Units**	**Sub-Matrix: Water**	**Sub-Matrix: Water**	**Sub-Matrix: Water**	**Sub-Matrix: Water**
Physical Tests (Matrix: Water)						
Conductivity	2.0	µS/cm	427	458	361	114
Alkalinity, bicarbonate (as CaCO3)	1.0	mg/L	203	172	156	44.7
Alkalinity, carbonate (as CaCO3)	1.0	mg/L	<1.0	<1.0	4.4	<1.0
Alkalinity, hydroxide (as CaCO3)	1.0	mg/L	<1.0	<1.0	<1.0	<1.0
Alkalinity, phenolphthalein (as CaCO3)	1.0	mg/L	<1.0	<1.0	2.2	<1.0
Alkalinity, total (as CaCO3)	1.0	mg/L	203	172	161	44.7
Colour, true	5.0	CU	<5.0	<5.0	<5.0	<5.0
Hardness (as CaCO3), dissolved	0.60	mg/L	206	173	132	48
Hardness (as CaCO3), from total Ca/Mg	0.60	mg/L	217	174	135	52.3
Solids, total dissolved [TDS]	10	mg/L	263	286	228	66.5
Turbidity	0.10	NTU	1.10	0.19	0.43	2.29
pH	0.10	pH units	8.10	8.30	8.44	7.75
Anions and Nutrients (Matrix: Water)						
Ammonia, total (as N)	0.0050	mg/L	0.0109	0.138	0.0456	<0.0050
Bromide	0.050	mg/L	<0.050	<0.050	<0.050	<0.050

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Chloride	0.50	mg/L	3.41	11.6	<0.50	0.78
Fluoride	0.020	mg/L	0.141	0.465	0.426	0.024
Nitrate (as N)	0.0050	mg/L	<0.0050	<0.0050	<0.0050	0.109
Nitrate + Nitrite (as N)	0.0032	mg/L	<0.0051	<0.0051	<0.0051	0.109
Nitrite (as N)	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010
Phosphate, ortho-, dissolved (as P)	0.0010	mg/L	0.0037	0.0139	0.007	<0.0010
Phosphorus, total	0.0020	mg/L	0.0074	0.0234	0.0092	0.0044
Sulfate (as SO4)	0.30	mg/L	25.8	61.7	39.9	10.5
Organic / Inorganic Carbon (Matrix: Water)						
Carbon, dissolved organic [DOC]	0.50	mg/L	<0.50	0.80	0.58	2.56
Carbon, total organic [TOC]	0.50	mg/L	<0.50	<0.50	<0.50	2.54
Total Sulfides (Matrix: Water)						
Sulfide, total (as S)	0.010	mg/L	<0.010	<0.010	<0.010	<0.010
Sulfide, total (as H2S)	0.011	mg/L	<0.011	<0.011	<0.011	<0.011
Microbiological Tests (Matrix: Water)						
Coliforms, total	1	MPN/100mL	<1	<1	<1	2
Heterotrophic plate count [HPC]	1	CFU/mL	<1			
Coliforms, Escherichia coli [E. coli]	1	MPN/100mL	<1	<1	<1	<1
Total Metals (Matrix: Water)						
Aluminum, total	0.0030	mg/L	<0.0030	<0.0030	<0.0030	0.994
Antimony, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, total	0.00010	mg/L	0.00053	0.00022	0.0002	0.00023
Barium, total	0.00010	mg/L	0.0748	0.0599	0.0394	0.0146
Beryllium, total	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100

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Bismuth, total	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	0.010	mg/L	<0.010	<0.010	<0.010	<0.010
Cadmium, total	0.0000050	mg/L	<0.0000050	<0.0000175	<0.0000100	0.0000279
Calcium, total	0.050	mg/L	61.0	51.9	36.2	17.8
Cesium, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010	0.000014
Chromium, total	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	0.00010	mg/L	<0.00010	0.00015	<0.00010	<0.00010
Copper, total	0.00050	mg/L	<0.00050	<0.00050	0.00104	0.00194
Iron, total	0.010	mg/L	0.115	0.030	0.045	0.18
Lead, total	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, total	0.0010	mg/L	0.0016	<0.0010	<0.0010	<0.0010
Magnesium, total	0.0050	mg/L	15.7	10.9	10.9	1.91
Manganese, total	0.00010	mg/L	0.344	0.980	0.757	0.0154
Mercury, total	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	0.000050	mg/L	0.00638	0.0246	0.016	0.000963
Nickel, total	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00098
Phosphorus, total	0.050	mg/L	<0.050	<0.050	<0.050	<0.050
Potassium, total	0.050	mg/L	2.88	2.52	1.79	1.02
Rubidium, total	0.00020	mg/L	<0.00020	<0.00020	<0.00020	0.00064
Selenium, total	0.000050	mg/L	<0.000050	<0.000050	<0.000050	0.000872
Silicon, total	0.10	mg/L	5.93	6.34	4.76	2.31
Silver, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	0.050	mg/L	7.39	27.5	27.5	0.596
Strontium, total	0.00020	mg/L	0.555	0.461	1.43	0.0698
Sulfur, total	0.50	mg/L	9.13	20.7	14.1	3.41
Tellurium, total	0.00020	mg/L	<0.00020	<0.00020	0.0002	<0.00020
Thallium, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010

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Tin, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	0.00030	mg/L	<0.00030	<0.00030	<0.00030	0.00241
Tungsten, total	0.00010	mg/L	<0.00010	<0.00010	0.00021	<0.00010
Uranium, total	0.000010	mg/L	0.00475	0.00871	0.00575	0.000155
Vanadium, total	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00064
Zinc, total	0.0030	mg/L	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium, total	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Dissolved Metals (Matrix: Water)						
Aluminum, dissolved	0.0010	mg/L	0.0012	<0.0010	0.0011	0.0751
Antimony, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Arsenic, dissolved	0.00010	mg/L	0.00054	0.00022	0.0002	0.00014
Barium, dissolved	0.00010	mg/L	0.0734	0.0595	0.0396	0.0125
Beryllium, dissolved	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100
Bismuth, dissolved	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050
Boron, dissolved	0.010	mg/L	<0.010	<0.010	<0.010	<0.010
Cadmium, dissolved	0.0000050	mg/L	<0.0000050	<0.0000200	<0.0000100	0.0000209
Calcium, dissolved	0.050	mg/L	59.2	51.5	35	16.2
Cesium, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010
Chromium, dissolved	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	0.00010	mg/L	<0.00010	0.00015	<0.00010	<0.00010
Copper, dissolved	0.00020	mg/L	<0.00020	0.00049	<0.00020	0.00121
Iron, dissolved	0.010	mg/L	0.135	0.028	0.048	0.027
Lead, dissolved	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050
Lithium, dissolved	0.0010	mg/L	0.0015	<0.0010	<0.0010	<0.0010
Magnesium, dissolved	0.0050	mg/L	14.2	10.8	10.8	1.84
Manganese, dissolved	0.00010	mg/L	0.330	0.966	0.79	0.0135
Mercury, dissolved	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050

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Molybdenum, dissolved	0.000050	mg/L	0.00585	0.0243	0.0148	0.00092
Nickel, dissolved	0.00050	mg/L	<0.00050	<0.00050	<0.00050	0.00067
Phosphorus, dissolved	0.050	mg/L	<0.050	<0.050	<0.050	<0.050
Potassium, dissolved	0.050	mg/L	2.98	2.51	1.75	0.999
Rubidium, dissolved	0.00020	mg/L	<0.00020	<0.00020	<0.00020	0.00059
Selenium, dissolved	0.000050	mg/L	<0.000050	<0.000050	<0.000050	0.000833
Silicon, dissolved	0.050	mg/L	5.69	5.96	4.81	2.07
Silver, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, dissolved	0.050	mg/L	7.50	26.7	28.9	0.56
Strontium, dissolved	0.00020	mg/L	0.507	0.460	1.25	0.0708
Sulfur, dissolved	0.50	mg/L	8.44	20.1	13.3	3.63
Tellurium, dissolved	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Tin, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, dissolved	0.00030	mg/L	<0.00030	<0.00030	<0.00030	<0.00030
Tungsten, dissolved	0.00010	mg/L	<0.00010	<0.00010	0.0002	<0.00010
Uranium, dissolved	0.000010	mg/L	0.00447	0.00823	0.0054	0.000025
Vanadium, dissolved	0.00050	mg/L	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, dissolved	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010
Zirconium, dissolved	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020
Dissolved mercury filtration location			Field	Field	Field	Field
Dissolved metals filtration location			Field	Field	Field	Field
Volatile Organic Compounds (Matrix: Water)						
Chlorobenzene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Chloromethane	5.0	µg/L	<5.0	<5.0	<5.0	<5.0
Dichlorobenzene, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50

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Dichlorobenzene, 1,3-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichlorobenzene, 1,4-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloropropane, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloropropylene, cis+trans-1,3-	0.75	µg/L	<0.75	<0.75	<0.75	<0.75
Dichloropropylene, cis-1,3-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	0.20	µg/L	<0.20	<0.20	<0.20	<0.20
Trichloroethane, 1,1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds [Drycleaning] (Matrix: Water)						
Carbon tetrachloride	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Chloroethane	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloroethane, 1,1-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloroethane, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, 1,1-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, cis-1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, trans-1,2-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Dichloromethane	1.0	µg/L	<1.0	<1.0	<1.0	<1.0
Dichloropropylene, trans-1,3-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Trichloroethane, 1,1,1-	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	0.40	µg/L	<0.40	<0.40	<0.40	<0.40
Volatile Organic Compounds [Fuels] (Matrix: Water)						
Benzene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50

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Methyl-tert-butyl ether [MTBE]	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Styrene	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Toluene	0.40	µg/L	<0.40	<0.40	<0.40	<0.40
Xylene, m+p-	0.40	µg/L	<0.40	<0.40	<0.40	<0.40
Xylene, o-	0.30	µg/L	<0.30	<0.30	<0.30	<0.30
Xylenes, total	0.50	µg/L	<0.50	<0.50	<0.50	<0.50
Volatile Organic Compounds [THMs] (Matrix: Water)						
Bromodichloromethane	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Bromoform	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Chloroform	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Dibromochloromethane	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Trihalomethanes [THMs], total	2.0	µg/L	<2.0	<2.0	<2.0	<2.0
Volatile Organic Compounds [THMs] Surrogates (Matrix: Water)						
Bromofluorobenzene, 4-	1.0	%	103	94.7	94.2	86.9
Difluorobenzene, 1,4-	1.0	%	102	99.0	101	93.9
Hydrocarbons (Matrix: Water)						
EPH (C10-C19)	250	µg/L	<250	<250	<250	<250
EPH (C19-C32)	250	µg/L	<250	<250	<250	<250
LEPHw	250	µg/L	<250	<250	<250	<250
HEPHw	250	µg/L	<250	<250	<250	<250
Hydrocarbons Surrogates (Matrix: Water)						
Bromobenzotrifluoride, 2- (EPH surrogate)	1.0	%	82.5	89.7	90.4	84.3
Volatile Organic Compounds Surrogates (Matrix: Water)						

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Bromofluorobenzene, 4-	1.0	%	99.7	91.2	95.3	85
Difluorobenzene, 1,4-	1.0	%	101	97.2	97.1	92.8
Polycyclic Aromatic Hydrocarbons (Matrix: Water)						
Acenaphthene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Acenaphthylene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Acridine	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Anthracene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Benz(a)anthracene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Benzo(a)pyrene	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(b+j)fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Benzo(b+j+k)fluoranthene	0.015	µg/L	<0.015	<0.015	<0.015	<0.015
Benzo(g,h,i)perylene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Benzo(k)fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Chrysene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Dibenz(a,h)anthracene	0.0050	µg/L	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Fluorene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Indeno(1,2,3-c,d)pyrene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Methylnaphthalene, 1-	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Methylnaphthalene, 2-	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Naphthalene	0.050	µg/L	<0.050	<0.050	<0.050	<0.050
Phenanthrene	0.020	µg/L	<0.020	<0.020	<0.020	<0.020
Pyrene	0.010	µg/L	<0.010	<0.010	<0.010	<0.010
Quinoline	0.050	µg/L	<0.050	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates (Matrix: Water)						
Chrysene-d12	0.1	%	91.9	99.2	83.1	81.7

Naphthalene-d8	0.1	%	95.0	89.2	76.2	99.1
Phenanthrene-d10	0.1	%	95.0	89.9	85.1	97.8
Haloacetic Acids (Matrix: Water)						
Bromochloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Dibromoacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Dichloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Monobromoacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Monochloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Trichloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00	<1.00
Haloacetic acids, total [HAA5]	5.00	µg/L	<5.00	<5.00	<5.00	<5.00

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Appendix D -2024 Annual Potability Treated Water Results

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2024 Annual Potability Results-Treated Water					
Client Sample ID			**Burfield WTP-Treated**	**Village WTP Treated**	**Platter WTP Treated**
Date Sampled			**17-Nov-2024**	**28-Oct-2024**	**25-Mar-24**
Time Sampled			**12:03**	**10:12**	**12:20**
ALS Sample ID			**KS2404811-002**	**KS2404528-001**	**KS2401021-001**
Analyte	**Lowest Detection Limit**	**Units**	**Sub-Matrix: Water**	**Sub-Matrix: Water**	**Sub-Matrix: Water**
Physical Tests (Matrix: Water)					
Conductivity	2.0	µS/cm	422	425	123
Alkalinity, bicarbonate (as CaCO3)	1.0	mg/L	204	166	45.6
Alkalinity, carbonate (as CaCO3)	1.0	mg/L	<1.0	<1.0	<1.0
Alkalinity, hydroxide (as CaCO3)	1.0	mg/L	<1.0	<1.0	<1.0
Alkalinity, phenolphthalein (as CaCO3)	1.0	mg/L	<1.0	<1.0	<1.0
Alkalinity, total (as CaCO3)	1.0	mg/L	204	166	45.6
Colour, true	5.0	CU	<5.0	<5.0	<5.0
Hardness (as CaCO3), dissolved	0.60	mg/L	206	159	49.4
Hardness (as CaCO3), from total Ca/Mg	0.60	mg/L	222	160	51.2
Solids, total dissolved [TDS]	10	mg/L	265	267	70.7
Turbidity	0.10	NTU	<0.10	<0.10	0.11
pH	0.10	pH units	8.09	8.25	7.74
Anions and Nutrients (Matrix: Water)					
Ammonia, total (as N)	0.0050	mg/L	<0.0050	<0.0050	0.0061
Bromide	0.050	mg/L	<0.050	<0.050	<0.050

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Chloride	0.50	mg/L	4.96	10.1	2.86
Fluoride	0.020	mg/L	0.125	0.458	<0.020
Nitrate (as N)	0.0050	mg/L	<0.0050	0.0052	0.112
Nitrate + Nitrite (as N)	0.0032	mg/L	<0.0051	0.0052	0.112
Nitrite (as N)	0.0010	mg/L	<0.0010	<0.0010	<0.0010
Phosphate, ortho-, dissolved (as P)	0.0010	mg/L	0.0032	0.0116	<0.0010
Phosphorus, total	0.0020	mg/L	0.0047	0.0134	<0.0020
Sulfate (as SO4)	0.30	mg/L	25.6	52.4	10.7
Organic / Inorganic Carbon (Matrix: Water)					
Carbon, dissolved organic [DOC]	0.50	mg/L	<0.50	0.99	2.1
Carbon, total organic [TOC]	0.50	mg/L	<0.50	0.62	1.48
Total Sulfides (Matrix: Water)					
Sulfide, total (as S)	0.010	mg/L	<0.010	<0.010	<0.010
Sulfide, total (as H2S)	0.011	mg/L	<0.011	<0.011	<0.011
Microbiological Tests (Matrix: Water)					
Coliforms, total	1	MPN/100mL	<1	<1	<1
Heterotrophic plate count [HPC]	1	CFU/mL	1		
Coliforms, Escherichia coli [E. coli]	1	MPN/100mL	<1	<1	<1
Total Metals (Matrix: Water)					
Aluminum, total	0.0030	mg/L	<0.0030	<0.0030	0.0044
Antimony, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Arsenic, total	0.00010	mg/L	0.00027	0.00015	0.00013
Barium, total	0.00010	mg/L	0.0639	0.0446	0.0128

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Beryllium, total	0.000100	mg/L	<0.000100	<0.000100	<0.000100
Bismuth, total	0.000050	mg/L	<0.000050	<0.000050	<0.000050
Boron, total	0.010	mg/L	<0.010	<0.010	<0.010
Cadmium, total	0.0000050	mg/L	<0.0000050	<0.0000050	0.0000198
Calcium, total	0.050	mg/L	63.8	46.5	17.4
Cesium, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010
Chromium, total	0.00050	mg/L	<0.00050	<0.00050	<0.00050
Cobalt, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Copper, total	0.00050	mg/L	0.00535	0.120	0.00146
Iron, total	0.010	mg/L	0.018	<0.010	0.017
Lead, total	0.000050	mg/L	0.000087	<0.000050	<0.000050
Lithium, total	0.0010	mg/L	0.0016	<0.0010	<0.0010
Magnesium, total	0.0050	mg/L	15.2	10.7	1.88
Manganese, total	0.00010	mg/L	0.00561	0.00117	0.0122
Mercury, total	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	0.000050	mg/L	0.00621	0.0184	0.000925
Nickel, total	0.00050	mg/L	<0.00050	<0.00050	0.00062
Phosphorus, total	0.050	mg/L	<0.050	<0.050	<0.050
Potassium, total	0.050	mg/L	2.88	2.34	0.988
Rubidium, total	0.00020	mg/L	0.00021	<0.00020	0.00058
Selenium, total	0.000050	mg/L	<0.000050	<0.000050	0.000745
Silicon, total	0.10	mg/L	5.99	5.87	2.09
Silver, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010
Sodium, total	0.050	mg/L	8.25	30.6	2.18
Strontium, total	0.00020	mg/L	0.570	0.607	0.072
Sulfur, total	0.50	mg/L	9.02	18.2	3.57
Tellurium, total	0.00020	mg/L	<0.00020	<0.00020	<0.00020
Thallium, total	0.000010	mg/L	<0.000010	<0.000010	<0.000010

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Thorium, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Tin, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Titanium, total	0.00030	mg/L	<0.00030	<0.00030	<0.00030
Tungsten, total	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Uranium, total	0.000010	mg/L	0.00466	0.00790	<0.000010
Vanadium, total	0.00050	mg/L	<0.00050	<0.00050	<0.00050
Zinc, total	0.0030	mg/L	<0.0030	<0.0030	<0.0030
Zirconium, total	0.00020	mg/L	<0.00020	<0.00020	<0.00020
Dissolved Metals (Matrix: Water)					
Aluminum, dissolved	0.0010	mg/L	<0.0010	<0.0010	0.0034
Antimony, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Arsenic, dissolved	0.00010	mg/L	0.00028	0.00014	0.0001
Barium, dissolved	0.00010	mg/L	0.0643	0.0427	0.0126
Beryllium, dissolved	0.000100	mg/L	<0.000100	<0.000100	<0.000100
Bismuth, dissolved	0.000050	mg/L	<0.000050	<0.000050	<0.000050
Boron, dissolved	0.010	mg/L	<0.010	<0.010	<0.010
Cadmium, dissolved	0.0000050	mg/L	<0.0000050	<0.0000100	0.0000218
Calcium, dissolved	0.050	mg/L	58.9	46.5	16.8
Cesium, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010
Chromium, dissolved	0.00050	mg/L	<0.00050	<0.00050	<0.00050
Cobalt, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Copper, dissolved	0.00020	mg/L	0.00542	0.113	0.00164
Iron, dissolved	0.010	mg/L	<0.010	<0.010	0.017
Lead, dissolved	0.000050	mg/L	<0.000050	<0.000050	<0.000050
Lithium, dissolved	0.0010	mg/L	0.0015	<0.0010	<0.0010
Magnesium, dissolved	0.0050	mg/L	14.4	10.4	1.82
Manganese, dissolved	0.00010	mg/L	0.00342	0.00083	0.0128

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Mercury, dissolved	0.0000050	mg/L	<0.0000050	<0.0000050	<0.0000050
Molybdenum, dissolved	0.000050	mg/L	0.00543	0.0182	0.0009
Nickel, dissolved	0.00050	mg/L	<0.00050	<0.00050	0.00065
Phosphorus, dissolved	0.050	mg/L	<0.050	<0.050	<0.050
Potassium, dissolved	0.050	mg/L	2.99	2.33	1.01
Rubidium, dissolved	0.00020	mg/L	<0.00020	<0.00020	0.00062
Selenium, dissolved	0.000050	mg/L	<0.000050	<0.000050	0.000932
Silicon, dissolved	0.050	mg/L	5.83	5.45	2.01
Silver, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010
Sodium, dissolved	0.050	mg/L	8.72	29.5	2.07
Strontium, dissolved	0.00020	mg/L	0.507	0.608	0.0726
Sulfur, dissolved	0.50	mg/L	8.62	17.0	3.61
Tellurium, dissolved	0.00020	mg/L	<0.00020	<0.00020	<0.00020
Thallium, dissolved	0.000010	mg/L	<0.000010	<0.000010	<0.000010
Thorium, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Tin, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Titanium, dissolved	0.00030	mg/L	<0.00030	<0.00030	<0.00030
Tungsten, dissolved	0.00010	mg/L	<0.00010	<0.00010	<0.00010
Uranium, dissolved	0.000010	mg/L	0.00446	0.00728	<0.000010
Vanadium, dissolved	0.00050	mg/L	<0.00050	<0.00050	<0.00050
Zinc, dissolved	0.0010	mg/L	0.0029	0.0018	<0.0010
Zirconium, dissolved	0.00020	mg/L	<0.00020	<0.00020	<0.00020
Dissolved mercury filtration location			Field	Field	Field
Dissolved metals filtration location			Field	Field	Field
Volatile Organic Compounds (Matrix: Water)					
Chlorobenzene	0.50	µg/L	<0.50	<0.50	<0.50
Chloromethane	5.0	µg/L	<5.0	<5.0	<5.0

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Dichlorobenzene, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Dichlorobenzene, 1,3-	0.50	µg/L	<0.50	<0.50	<0.50
Dichlorobenzene, 1,4-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloropropane, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloropropylene, cis+trans-1,3-	0.75	µg/L	<0.75	<0.75	<0.75
Dichloropropylene, cis-1,3-	0.50	µg/L	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	0.20	µg/L	<0.20	<0.20	<0.20
Trichloroethane, 1,1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Trichlorofluoromethane	0.50	µg/L	<0.50	<0.50	<0.50
Volatile Organic Compounds [Drycleaning] (Matrix: Water)					
Carbon tetrachloride	0.50	µg/L	<0.50	<0.50	<0.50
Chloroethane	0.50	µg/L	<0.50	<0.50	<0.50
Dichloroethane, 1,1-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloroethane, 1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloroethylene, 1,1-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloroethylene, cis-1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloroethylene, trans-1,2-	0.50	µg/L	<0.50	<0.50	<0.50
Dichloromethane	1.0	µg/L	<1.0	<1.0	<1.0
Dichloropropylene, trans-1,3-	0.50	µg/L	<0.50	<0.50	<0.50
Tetrachloroethylene	0.50	µg/L	<0.50	<0.50	<0.50
Trichloroethane, 1,1,1-	0.50	µg/L	<0.50	<0.50	<0.50
Trichloroethylene	0.50	µg/L	<0.50	<0.50	<0.50
Vinyl chloride	0.40	µg/L	<0.40	<0.40	<0.40
Volatile Organic Compounds [Fuels] (Matrix: Water)					
Benzene	0.50	µg/L	<0.50	<0.50	<0.50

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Ethylbenzene	0.50	µg/L	<0.50	<0.50	<0.50
Methyl-tert-butyl ether [MTBE]	0.50	µg/L	<0.50	<0.50	<0.50
Styrene	0.50	µg/L	<0.50	<0.50	<0.50
Toluene	0.40	µg/L	<0.40	<0.40	<0.40
Xylene, m+p-	0.40	µg/L	<0.40	<0.40	<0.40
Xylene, o-	0.30	µg/L	<0.30	<0.30	<0.30
Xylenes, total	0.50	µg/L	<0.50	<0.50	<0.50
Volatile Organic Compounds [THMs] (Matrix: Water)					
Bromodichloromethane	1.0	µg/L	<1.0 <0.50	<1.0 0.69	<1.0 <0.50
Bromoform	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Chloroform	1.0	µg/L	<1.0 0.80	<1.0 1.76	2.4 11.4
Dibromochloromethane	1.0	µg/L	<1.0 <0.50	<1.0 <0.50	<1.0 <0.50
Trihalomethanes [THMs], total	2.0	µg/L	<2.0	<2.0	2.4
Volatile Organic Compounds [THMs] Surrogates (Matrix: Water)					
Bromofluorobenzene, 4-	1.0	%	102	91.0	86
Difluorobenzene, 1,4-	1.0	%	102	99.8	94.3
Hydrocarbons (Matrix: Water)					
EPH (C10-C19)	250	µg/L	<250	<250	<250
EPH (C19-C32)	250	µg/L	<250	<250	<250
LEPHw	250	µg/L	<250	<250	<250
HEPHw	250	µg/L	<250	<250	<250
Hydrocarbons Surrogates (Matrix: Water)					
Bromobenzotrifluoride, 2- (EPH surrogate)	1.0	%	90.7	87.5	84.5

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Volatile Organic Compounds Surrogates (Matrix: Water)					
Bromofluorobenzene, 4-	1.0	%	102	91.6	84.2
Difluorobenzene, 1,4-	1.0	%	101	97.3	93.2
Polycyclic Aromatic Hydrocarbons (Matrix: Water)					
Acenaphthene	0.010	µg/L	<0.010	<0.010	<0.010
Acenaphthylene	0.010	µg/L	<0.010	<0.010	<0.010
Acridine	0.010	µg/L	<0.010	<0.010	<0.010
Anthracene	0.010	µg/L	<0.010	<0.010	<0.010
Benz(a)anthracene	0.010	µg/L	<0.010	<0.010	<0.010
Benzo(a)pyrene	0.0050	µg/L	<0.0050	<0.0050	<0.0050
Benzo(b+j)fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010
Benzo(b+j+k)fluoranthene	0.015	µg/L	<0.015	<0.015	<0.015
Benzo(g,h,i)perylene	0.010	µg/L	<0.010	<0.010	<0.010
Benzo(k)fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010
Chrysene	0.010	µg/L	<0.010	<0.010	<0.010
Dibenz(a,h)anthracene	0.0050	µg/L	<0.0050	<0.0050	<0.0050
Fluoranthene	0.010	µg/L	<0.010	<0.010	<0.010
Fluorene	0.010	µg/L	<0.010	<0.010	<0.010
Indeno(1,2,3-c,d)pyrene	0.010	µg/L	<0.010	<0.010	<0.010
Methylnaphthalene, 1-	0.010	µg/L	<0.010	<0.010	<0.010
Methylnaphthalene, 2-	0.010	µg/L	<0.010	<0.010	<0.010
Naphthalene	0.050	µg/L	<0.050	<0.050	<0.050
Phenanthrene	0.020	µg/L	<0.020	<0.020	<0.020
Pyrene	0.010	µg/L	<0.010	<0.010	<0.010
Quinoline	0.050	µg/L	<0.050	<0.050	<0.050
Polycyclic Aromatic Hydrocarbons Surrogates (Matrix: Water)					

Chrysene-d12	0.1	%	96.1	107	93.8
Naphthalene-d8	0.1	%	111	101	114
Phenanthrene-d10	0.1	%	98.9	105	100
Haloacetic Acids (Matrix: Water)					
Bromochloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00
Dibromoacetic acid	1.00	µg/L	<1.00	<1.00	<1.00
Dichloroacetic acid	1.00	µg/L	<1.00	<1.00	3.47
Monobromoacetic acid	1.00	µg/L	<1.00	<1.00	<1.00
Monochloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00
Trichloroacetic acid	1.00	µg/L	<1.00	<1.00	<1.00
Haloacetic acids, total [HAA5]	5.00	µg/L	<5.00	<5.00	<5.00
Qualifier Legend					
RRV	Reported result verified by repeat analysis.				

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Appendix E- 2024 Summary of Water Quality Samples for Laboratory Analysis

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2024 Summary of Water Quality Samples for Laboratory Analysis			
Sample Location	**Sampling Date**	**Received Date**	**ALS ID**
Sewage Treatment Plant	02-01-2024	03-01-2024	KS2400031-001
Fire Hall	02-01-2024	03-01-2024	KS2400031-002
Rec Center	02-01-2024	03-01-2024	KS2400031-003
Lookout Ridge Booster Stn (PZ3/4)	02-01-2024	03-01-2024	KS2400031-004
PZ2 Reservoir	02-01-2024	03-01-2024	KS2400031-005
Platter Plant (Raw)	02-01-2024	03-01-2024	KS2400031-006
Platter Plant (Treated)	02-01-2024	03-01-2024	KS2400031-007
Village Day Lodge	02-01-2024	03-01-2024	KS2400031-008
Sun Peaks Day Care	02-01-2024	03-01-2024	KS2400031-009
Burfield Well PW1A (Raw)	03-01-2024	04-01-2024	KS2400046-001
Burfield WTP (Treated)	03-01-2024	04-01-2024	KS2400046-002
Fairways Well PW1B (Raw)	03-01-2024	04-01-2024	KS2400046-003
Fairways WTP (Treated)	03-01-2024	04-01-2024	KS2400046-004
Village Well PW2E (Raw)	03-01-2024	04-01-2024	KS2400046-005
Village Well PW2D (Raw)	03-01-2024	04-01-2024	KS2400046-006
Village WTP (Treated)	03-01-2024	04-01-2024	KS2400046-007
Sewage Treatment Plant	17-01-2024	18-01-2024	KS2400173-001
Fire Hall	17-01-2024	18-01-2024	KS2400173-002
Rec Center	17-01-2024	18-01-2024	KS2400173-003
Lookout Ridge Booster Stn (PZ3/4)	17-01-2024	18-01-2024	KS2400173-004
PZ2 Reservoir	17-01-2024	18-01-2024	KS2400173-005
Platter Plant (Raw)	17-01-2024	18-01-2024	KS2400173-006
Platter Plant (Treated)	17-01-2024	18-01-2024	KS2400173-007
Village Day Lodge	17-01-2024	18-01-2024	KS2400173-008
Sun Peaks Day Care	17-01-2024	18-01-2024	KS2400173-009
Burfield Well PW1A (Raw)	17-01-2024	18-01-2024	KS2400174-001

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Burfield WTP (Treated)	17-01-2024	18-01-2024	KS2400174-002
Fairways Well PW1B (Raw)	17-01-2024	18-01-2024	KS2400174-003
Fairways WTP (Treated)	17-01-2024	18-01-2024	KS2400174-004
Creekside PW2E (Raw)	17-01-2024	18-01-2024	KS2400174-005
Village Well PW2D (Raw)	17-01-2024	18-01-2024	KS2400174-006
Village WTP (Treated)	17-01-2024	18-01-2024	KS2400174-007
Burfield Well PW1A (Raw)	31-01-2024	01-02-2024	KS2400319-001
Burfield WTP (Treated)	31-01-2024	01-02-2024	KS2400319-002
Fairways Well PW1B (Raw)	31-01-2024	01-02-2024	KS2400319-003
Fairways WTP (Treated)	31-01-2024	01-02-2024	KS2400319-004
Village Well PW2E (Raw)	31-01-2024	01-02-2024	KS2400319-005
Village Well PW2D (Raw)	31-01-2024	01-02-2024	KS2400319-006
Village WTP (Treated)	31-01-2024	01-02-2024	KS2400319-007
Sewage Treatment Plant	31-01-2024	01-02-2024	KS2400320-001
Fire Hall	31-01-2024	01-02-2024	KS2400320-002
Rec Center	31-01-2024	01-02-2024	KS2400320-003
Lookout Ridge Booster Stn (PZ3/4)	31-01-2024	01-02-2024	KS2400320-004
PZ2 Reservoir	31-01-2024	01-02-2024	KS2400320-005
Platter Plant (Raw)	31-01-2024	01-02-2024	KS2400320-006
Platter Plant (Treated)	31-01-2024	01-02-2024	KS2400320-007
Village Day Lodge	31-01-2024	01-02-2024	KS2400320-008
Sun Peaks Day Care	31-01-2024	01-02-2024	KS2400320-009
Burfield Well PW1A (Raw)	13-02-2024	14-02-2024	KS2400500-001
Burfield WTP (Treated)	13-02-2024	14-02-2024	KS2400500-002
Fairways Well PW1B (Raw)	13-02-2024	14-02-2024	KS2400500-003
Fairways WTP (Treated)	13-02-2024	14-02-2024	KS2400500-004
Village Well PW2E (Raw)	13-02-2024	14-02-2024	KS2400500-005
Village Well PW2D (Raw)	13-02-2024	14-02-2024	KS2400500-006

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Village WTP (Treated)	13-02-2024	14-02-2024	KS2400500-007
Sewage Treatment Plant	14-02-2024	15-02-2024	KS2400518-001
Fire Hall	14-02-2024	15-02-2024	KS2400518-002
Rec Center	14-02-2024	15-02-2024	KS2400518-003
Lookout Ridge Booster Stn (PZ3/4)	14-02-2024	15-02-2024	KS2400518-004
PZ2 Reservoir	14-02-2024	15-02-2024	KS2400518-005
Platter Plant (Raw)	14-02-2024	15-02-2024	KS2400518-006
Platter Plant (Treated)	14-02-2024	15-02-2024	KS2400518-007
Village Day Lodge	14-02-2024	15-02-2024	KS2400518-008
Day Care	14-02-2024	15-02-2024	KS2400518-009
Burfield Well PW1A (Raw)	28-02-2024	29-02-2024	KS2400691-001
Burfield WTP (Treated)	28-02-2024	29-02-2024	KS2400691-002
Fairways Well PW1B (Raw)	28-02-2024	29-02-2024	KS2400691-003
Fairways WTP (Treated)	28-02-2024	29-02-2024	KS2400691-004
Village Well PW2E (Raw)	28-02-2024	29-02-2024	KS2400691-005
Village Well PW2D (Raw)	28-02-2024	29-02-2024	KS2400691-006
Village WTP (Treated)	28-02-2024	29-02-2024	KS2400691-007
Sewage Treatment Plant (STP)	28-02-2024	29-02-2024	KS2400692-001
Fire Hall	28-02-2024	29-02-2024	KS2400692-002
Rec Centre	28-02-2024	29-02-2024	KS2400692-003
Lookout Ridge Booster	28-02-2024	29-02-2024	KS2400692-004
PZ2-Reservoir	28-02-2024	29-02-2024	KS2400692-005
Village Day Lodge	28-02-2024	29-02-2024	KS2400692-006
Sun Peaks DayCare	28-02-2024	29-02-2024	KS2400692-007
Burfield Well PW1A (Raw)	12-03-2024	13-03-2024	KS2400846-001
Burfield WTP (Treated)	12-03-2024	13-03-2024	KS2400846-002
Fairways Well PW1B (Raw)	12-03-2024	13-03-2024	KS2400846-003
Fairways WTP (Treated)	12-03-2024	13-03-2024	KS2400846-004

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Village Well PW2E (Raw)	12-03-2024	13-03-2024	KS2400846-005
Village Well PW2D (Raw)	12-03-2024	13-03-2024	KS2400846-006
Village WTP (Treated)	12-03-2024	13-03-2024	KS2400846-007
Sewage Treatment Plant (STP)	13-03-2024	14-03-2024	KS2400868-001
Fire Hall	13-03-2024	14-03-2024	KS2400868-002
Rec Centre	13-03-2024	14-03-2024	KS2400868-003
Lookout Ridge Booster	13-03-2024	14-03-2024	KS2400868-004
PZ2-Reservoir	13-03-2024	14-03-2024	KS2400868-005
Village Day Lodge	13-03-2024	14-03-2024	KS2400868-006
Platter (Treated)	13-03-2024	14-03-2024	KS2400868-007
Platter (RAW)	13-03-2024	14-03-2024	KS2400868-008
Sun Peaks Day Care	13-03-2024	14-03-2024	KS2400868-009
Platter WTP Train 2 Treated	25-03-2024	26-03-2024	KS2401021-001
Platter - Raw	25-03-2024	26-03-2024	KS2401021-002
Burfield Well PW1A (Raw)	25-03-2024	26-03-2024	KS2401020-001
Burfield WTP (Treated)	25-03-2024	26-03-2024	KS2401020-002
Fairways Well PW1B (Raw)	25-03-2024	26-03-2024	KS2401020-003
Fairways WTP (Treated)	25-03-2024	26-03-2024	KS2401020-004
Village Well PW2E (Raw)	25-03-2024	26-03-2024	KS2401020-005
Village Well PW2D (Raw)	25-03-2024	26-03-2024	KS2401020-006
Village WTP (Treated)	25-03-2024	26-03-2024	KS2401020-007
Sewage Treatment Plant	26-03-2024	27-03-2024	KS2401054-001
Rec. Center	26-03-2024	27-03-2024	KS2401054-002
Village Day Lodge	26-03-2024	27-03-2024	KS2401054-003
Lookout Ridge Booster Station	26-03-2024	27-03-2024	KS2401054-004
PZ2 Reservoir	26-03-2024	27-03-2024	KS2401054-005
Platter WTP (Raw)	26-03-2024	27-03-2024	KS2401054-006
Platter WTP (Treated)	26-03-2024	27-03-2024	KS2401054-007

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Sun Peaks Daycare	26-03-2024	27-03-2024	KS2401054-008
Fire Hall	26-03-2024	27-03-2024	KS2401054-009
Sewage Treatment Plant (STP)	08-04-2024	09-04-2024	KS2401205-001
Fire Hall	08-04-2024	09-04-2024	KS2401205-002
Rec Center	08-04-2024	09-04-2024	KS2401205-003
Lookout Ridge Booster Station	08-04-2024	09-04-2024	KS2401205-004
PZ2 Reservoir	08-04-2024	09-04-2024	KS2401205-005
Village Day Lodge	08-04-2024	09-04-2024	KS2401205-006
Day Care	08-04-2024	09-04-2024	KS2401205-007
Burfield PW1A Raw	09-04-2024	09-04-2024	KS2401230-001
Fairways PW1B Raw	09-04-2024	09-04-2024	KS2401230-002
Creekside PW2E Raw	09-04-2024	09-04-2024	KS2401230-003
VillagePW2D Raw	09-04-2024	09-04-2024	KS2401230-004
Platter WTP Raw	09-04-2024	09-04-2024	KS2401230-005
Burfield WTP (Treated)	09-04-2024	09-04-2024	KS2401236-001
Fairways WTP (Treated)	09-04-2024	09-04-2024	KS2401236-002
Village WTP (Treated)	09-04-2024	09-04-2024	KS2401236-003
Platter WTP (Treated)	09-04-2024	09-04-2024	KS2401236-004
Surface Reservoir "Spill Site"	10-04-2024	15-04-2024	KS2401285-001
Surface Reservoir "Snow Stockpile"	10-04-2024	15-04-2024	KS2401285-002
Platter - RAW	14-04-2024	15-04-2024	KS2401285-003
PZ2 Reservoir	14-04-2024	15-04-2024	KS2401285-004
Sewage Treatment Plant (STP)	22-04-2024	23-04-2024	KS2401403-001
Fire Hall	22-04-2024	23-04-2024	KS2401403-002
Rec Center	22-04-2024	23-04-2024	KS2401403-003
Lookout Ridge Booster Station	22-04-2024	23-04-2024	KS2401403-004
PZ2 Reservoir	22-04-2024	23-04-2024	KS2401403-005
Village Day Lodge	22-04-2024	23-04-2024	KS2401403-006

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Day Care	22-04-2024	23-04-2024	KS2401403-007
Burfield WTP (Treated)	23-04-2024	24-04-2024	KS2401432-001
Fairways WTP (Treated)	23-04-2024	24-04-2024	KS2401432-002
Village WTP (Treated)	23-04-2024	24-04-2024	KS2401432-003
Burfield Well PW1A (Raw)	23-04-2024	24-04-2024	KS2401432-004
Fairways Well PW1B (Raw)	23-04-2024	24-04-2024	KS2401432-005
Village Well PW2E (Raw)	23-04-2024	24-04-2024	KS2401432-006
Village Well PW2D (Raw)	23-04-2024	24-04-2024	KS2401432-007
Burfield WTP (Treated)	07-05-2024	09-05-2024	KS2401623-001
Fairways WTP (Treated)	07-05-2024	09-05-2024	KS2401623-002
Village WTP (Treated)	07-05-2024	09-05-2024	KS2401623-003
Burfield PW1A Raw	07-05-2024	09-05-2024	KS2401623-004
Fairways PW1B Raw	07-05-2024	09-05-2024	KS2401623-005
Creekside PW2E Raw	07-05-2024	09-05-2024	KS2401623-006
Village PW2D Raw	07-05-2024	09-05-2024	KS2401623-007
Sewage Treatment Plant	08-05-2024	09-05-2024	KS2401643-001
Fire Hall	08-05-2024	09-05-2024	KS2401643-002
Rec Center	08-05-2024	09-05-2024	KS2401643-003
Lookout Ridge Booster Stn (PZ3/4)	08-05-2024	09-05-2024	KS2401643-004
PZ2 Reservoir	08-05-2024	09-05-2024	KS2401643-005
Village Day Lodge	08-05-2024	09-05-2024	KS2401643-006
Day Care	08-05-2024	09-05-2024	KS2401643-007
Burfield WTP (Treated)	20-05-2024	21-05-2024	KS2401794-001
Fairways WTP (Treated)	20-05-2024	21-05-2024	KS2401794-002
Village WTP (Treated)	20-05-2024	21-05-2024	KS2401794-003
Burfield Well PW1A (Raw)	20-05-2024	21-05-2024	KS2401794-004
Fairways Well PW1B (Raw)	20-05-2024	21-05-2024	KS2401794-005
Village Well PW2E (Raw)	20-05-2024	21-05-2024	KS2401794-006

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Village Well PW2D (Raw)	20-05-2024	21-05-2024	KS2401794-007
Sewage Treatment Plant	22-05-2024	23-05-2024	KS2401842-001
Fire Hall	22-05-2024	23-05-2024	KS2401842-002
Rec Center	22-05-2024	23-05-2024	KS2401842-003
Lookout Ridge Booster Station	22-05-2024	23-05-2024	KS2401842-004
PZ2 Reservoir	22-05-2024	23-05-2024	KS2401842-005
Village Day Lodge	22-05-2024	23-05-2024	KS2401842-006
Day Care	22-05-2024	23-05-2024	KS2401842-007
Sewage Treatment Plant (STP)	05-06-2024	06-06-2024	KS2402112-001
Fire Hall	05-06-2024	06-06-2024	KS2402112-002
Rec Center	05-06-2024	06-06-2024	KS2402112-003
Lookout Ridge Booster Station	05-06-2024	06-06-2024	KS2402112-004
PZ2 Reservoir	05-06-2024	06-06-2024	KS2402112-005
Village Day Lodge	05-06-2024	06-06-2024	KS2402112-006
Day Care	05-06-2024	06-06-2024	KS2402112-007
Burfield WTP (Treated)	05-06-2024	06-06-2024	KS2402113-001
Fairway WTP (Treated)	05-06-2024	06-06-2024	KS2402113-002
Village WTP (Treated)	05-06-2024	06-06-2024	KS2402113-003
Burfield PW1A Raw	05-06-2024	06-06-2024	KS2402113-004
Fairways PW1B Raw	05-06-2024	06-06-2024	KS2402113-005
Creekside PW2E Raw	05-06-2024	06-06-2024	KS2402113-006
Village PW2D Raw	05-06-2024	06-06-2024	KS2402113-007
Sewage Treatment Plant (STP)	19-06-2024	20-06-2024	KS2402345-001
Fire Hall	19-06-2024	20-06-2024	KS2402345-002
Rec Center	19-06-2024	20-06-2024	KS2402345-003
Lookout Ridge Booster Station	19-06-2024	20-06-2024	KS2402345-004
PZ2 Reservoir	19-06-2024	20-06-2024	KS2402345-005
Village Day Lodge	19-06-2024	20-06-2024	KS2402345-006

Day Care	19-06-2024	20-06-2024	KS2402345-007
Burfield WTP (Treated)	19-06-2024	20-06-2024	KS2402348-001
Fairway WTP (Treated)	19-06-2024	20-06-2024	KS2402348-002
Village WTP (Treated)	19-06-2024	20-06-2024	KS2402348-003
Burfield PW1A Raw	19-06-2024	20-06-2024	KS2402348-004
Fairways PW1B Raw	19-06-2024	20-06-2024	KS2402348-005
Creekside PW2E Raw	19-06-2024	20-06-2024	KS2402348-006
Village PW2D Raw	19-06-2024	20-06-2024	KS2402348-007
Burfield PW1A Raw	01-07-2024	02-07-2024	KS2402520-001
Fairways PW1B Raw	01-07-2024	02-07-2024	KS2402520-002
Creekside PW2E Raw	01-07-2024	02-07-2024	KS2402520-003
Village PW2D Raw	01-07-2024	02-07-2024	KS2402520-004
Burfield WTP (Treated)	01-07-2024	02-07-2024	KS2402520-005
Fairway WTP (Treated)	01-07-2024	02-07-2024	KS2402520-006
Village WTP (Treated)	01-07-2024	02-07-2024	KS2402520-007
Sewage Treatment Plant (STP)	02-07-2024	03-07-2024	KS2402532-001
Fire Hall	02-07-2024	03-07-2024	KS2402532-002
Rec Center	02-07-2024	03-07-2024	KS2402532-003
Lookout Ridge Booster Station	02-07-2024	03-07-2024	KS2402532-004
PZ2 Reservoir	02-07-2024	03-07-2024	KS2402532-005
Village Day Lodge	02-07-2024	03-07-2024	KS2402532-006
Day Care	02-07-2024	03-07-2024	KS2402532-007
Burfield PW1A Raw	15-07-2024	16-07-2024	KS2402732-001
Fairways PW1B Raw	15-07-2024	16-07-2024	KS2402732-002
Creekside PW2E Raw	15-07-2024	16-07-2024	KS2402732-003
Village PW2D Raw	15-07-2024	16-07-2024	KS2402732-004
Burfield WTP (Treated)	15-07-2024	16-07-2024	KS2402732-005
Fairways WTP (Treated)	15-07-2024	16-07-2024	KS2402732-006

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Village WTP (Treated)	15-07-2024	16-07-2024	KS2402732-007
Sewage Tratment Plant (STP)	16-07-2024	17-07-2024	KS2402767-001
Fire Hall	16-07-2024	17-07-2024	KS2402767-002
Rec Center	16-07-2024	17-07-2024	KS2402767-003
Lookout Ridge Booster Station	16-07-2024	17-07-2024	KS2402767-004
PZ2 Reservoir	16-07-2024	17-07-2024	KS2402767-005
Village Day Lodge	16-07-2024	17-07-2024	KS2402767-006
Day Care	16-07-2024	17-07-2024	KS2402767-007
Sewage Treatment Plant (STP)	30-07-2024	31-07-2024	KS2402988-001
Fire Hall	30-07-2024	31-07-2024	KS2402988-002
Rec Center	30-07-2024	31-07-2024	KS2402988-003
Lookout Ridge Booster Station	30-07-2024	31-07-2024	KS2402988-004
PZ2 Reservoir	30-07-2024	31-07-2024	KS2402988-005
Village Day Lodge	30-07-2024	31-07-2024	KS2402988-006
Day Care	30-07-2024	31-07-2024	KS2402988-007
Burfield Well PW1A (Raw)	30-07-2024	31-07-2024	KS2402996-001
Fairways Well PW1B (Raw)	30-07-2024	31-07-2024	KS2402996-002
Creekside PW2E (Raw)	30-07-2024	31-07-2024	KS2402996-003
Village Well PW2D (Raw)	30-07-2024	31-07-2024	KS2402996-004
Burfield WTP (Treated)	30-07-2024	31-07-2024	KS2402996-005
Fairways WTP (Treated)	30-07-2024	31-07-2024	KS2402996-006
Village WTP (Treated)	30-07-2024	31-07-2024	KS2402996-007
Burfield WTP (Treated)	12-08-2024	13-08-2024	KS2403187-001
Fairways WTP (Treated)	12-08-2024	13-08-2024	KS2403187-002
Village WTP (Treated)	12-08-2024	13-08-2024	KS2403187-003
Burfield Well PW1A (Raw)	12-08-2024	13-08-2024	KS2403187-004
Fairways Well PW1B (Raw)	12-08-2024	13-08-2024	KS2403187-005
Creekside PW2E (Raw)	12-08-2024	13-08-2024	KS2403187-006

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Village Well PW2D (Raw)	12-08-2024	13-08-2024	KS2403187-007
Sewage Treatment Plant (STP)	13-08-2024	14-08-2024	KS2403218-001
Fire Hall	13-08-2024	14-08-2024	KS2403218-002
Rec Center	13-08-2024	14-08-2024	KS2403218-003
Lookout Ridge Booster Station	13-08-2024	14-08-2024	KS2403218-004
PZ2 Reservoir	13-08-2024	14-08-2024	KS2403218-005
Village Day Lodge	13-08-2024	14-08-2024	KS2403218-006
Daycare	13-08-2024	14-08-2024	KS2403218-007
SPR-1	14-08-2024	16-08-2024	KS2403292-001
SPR-2	14-08-2024	16-08-2024	KS2403292-002
SPR-3	14-08-2024	16-08-2024	KS2403292-003
SPR-4	14-08-2024	16-08-2024	KS2403292-004
Muni-1	14-08-2024	16-08-2024	KS2403291-001
Muni-2	14-08-2024	16-08-2024	KS2403291-002
Muni-3	14-08-2024	16-08-2024	KS2403291-003
Muni-4	14-08-2024	16-08-2024	KS2403291-004
Burfield WTP (Treated)	26-08-2024	27-08-2024	KS2403451-001
Fairways WTP (Treated)	26-08-2024	27-08-2024	KS2403451-002
Village WTP (Treated)	26-08-2024	27-08-2024	KS2403451-003
Burfield PW1A Raw	26-08-2024	27-08-2024	KS2403451-004
Fairways PW1B Raw	26-08-2024	27-08-2024	KS2403451-005
Creekside PW2E Raw	26-08-2024	27-08-2024	KS2403451-006
Village PW2B Raw	26-08-2024	27-08-2024	KS2403451-007
Sewage Treatment Plant (STP)	27-08-2024	28-08-2024	KS2403495-001
Fire Hall	27-08-2024	28-08-2024	KS2403495-002
Rec Center	27-08-2024	28-08-2024	KS2403495-003
Lookout Ridge Booster Station	27-08-2024	28-08-2024	KS2403495-004
PZ2 Reservoir	27-08-2024	28-08-2024	KS2403495-005

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Village Day Lodge	27-08-2024	28-08-2024	KS2403495-006
Day Care	27-08-2024	28-08-2024	KS2403495-007
SPR-1	28-08-2024	05-09-2024	KS2403627-001
SPR-2	28-08-2024	05-09-2024	KS2403627-002
SPR-3	28-08-2024	05-09-2024	KS2403627-003
SPR-4	28-08-2024	05-09-2024	KS2403627-004
Muni-1	28-08-2024	05-09-2024	KS2403627-005
Muni-2	28-08-2024	05-09-2024	KS2403627-006
Muni-3	28-08-2024	05-09-2024	KS2403627-007
Muni-4	28-08-2024	05-09-2024	KS2403627-008
Burfield WTP (Treated)	09-09-2024	10-09-2024	KS2403689-001
Fairways WTP (Treated)	09-09-2024	10-09-2024	KS2403689-002
Village WTP (Treated)	09-09-2024	10-09-2024	KS2403689-003
Burfield Well PW1A (Raw)	09-09-2024	10-09-2024	KS2403689-004
Fairways Well PW1B (Raw)	09-09-2024	10-09-2024	KS2403689-005
Creekside PW2E (Raw)	09-09-2024	10-09-2024	KS2403689-006
Village Well PW2D (Raw)	09-09-2024	10-09-2024	KS2403689-007
Sewage Treatment Plant (STP)	10-09-2024	11-09-2024	KS2403721-001
Fire Hall	10-09-2024	11-09-2024	KS2403721-002
Rec Center	10-09-2024	11-09-2024	KS2403721-003
Lookout Ridge Booster Station	10-09-2024	11-09-2024	KS2403721-004
PZ2 Reservoir	10-09-2024	11-09-2024	KS2403721-005
Village Day Lodge	10-09-2024	11-09-2024	KS2403721-006
Day Care	10-09-2024	11-09-2024	KS2403721-007
Burfield WTP (Treated)	23-09-2024	24-09-2024	KS2403921-001
Fairway WTP (Treated)	23-09-2024	24-09-2024	KS2403921-002
Village WTP (Treated)	23-09-2024	24-09-2024	KS2403921-003
Burfield PW1A Raw	23-09-2024	24-09-2024	KS2403921-004

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Fairway PW1B Raw	23-09-2024	24-09-2024	KS2403921-005
Creekside PW2E Raw	23-09-2024	24-09-2024	KS2403921-006
Village PW2D Raw	23-09-2024	24-09-2024	KS2403921-007
-	24-09-2024	25-09-2024	KS2403951-001
-	24-09-2024	25-09-2024	KS2403951-002
-	24-09-2024	25-09-2024	KS2403951-003
-	24-09-2024	25-09-2024	KS2403951-004
	24-09-2024	25-09-2024	KS2403951-005
-	24-09-2024	25-09-2024	KS2403951-006
-	24-09-2024	25-09-2024	KS2403951-007
Creekside - PW2E - RAW	30-09-2024	01-10-2024	KS2404041-001
Sewage Treatment Plant	07-10-2024	08-10-2024	KS2404171-001
Fire Hall	07-10-2024	08-10-2024	KS2404171-002
Rec Center	07-10-2024	08-10-2024	KS2404171-003
Lookout Ridge Booster Stn (PZ3/4)	07-10-2024	08-10-2024	KS2404171-004
PZ2 Reservoir	07-10-2024	08-10-2024	KS2404171-005
Village Day Lodge	07-10-2024	08-10-2024	KS2404171-006
Day Care	07-10-2024	08-10-2024	KS2404171-007
Burfield WTP (Treated)	08-10-2024	09-10-2024	KS2404194-001
Village WTP (Treated)	08-10-2024	09-10-2024	KS2404194-002
Burfield PW1A Raw	08-10-2024	09-10-2024	KS2404194-003
Creekside PW2E Raw	08-10-2024	09-10-2024	KS2404194-004
Village PW2D Raw	08-10-2024	09-10-2024	KS2404194-005
Municipal Reservoir 1	11-10-2024	16-10-2024	KS2404302-001
Municipal Reservoir 2	11-10-2024	16-10-2024	KS2404302-002
Municipal Reservoir 3	11-10-2024	16-10-2024	KS2404302-003
Municipal Reservoir 4	11-10-2024	16-10-2024	KS2404302-004
Snow Making Reservoir 1	11-10-2024	16-10-2024	KS2404304-001

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Snow Making Reservoir 2	11-10-2024	16-10-2024	KS2404304-002
Snow Making Reservoir 3	11-10-2024	16-10-2024	KS2404304-003
Snow Making Reservoir 4	11-10-2024	16-10-2024	KS2404304-004
Effluent Prior to Discharge (composite sample)	15-10-2024	16-10-2024	KS2404303-001
Burfield WTP (Treated)	21-10-2024	22-10-2024	KS2404400-001
Village WTP (Treated)	21-10-2024	22-10-2024	KS2404400-002
Burfield PW1A Raw	21-10-2024	22-10-2024	KS2404400-003
Creekside PW2E Raw	21-10-2024	22-10-2024	KS2404400-004
Village PW2D Raw	21-10-2024	22-10-2024	KS2404400-005
Sewage Treatment Plant	22-10-2024	23-10-2024	KS2404433-001
Fire Hall	22-10-2024	23-10-2024	KS2404433-002
Rec Center	22-10-2024	23-10-2024	KS2404433-003
Lookout Ridge Booster Stn (PZ3/4)	22-10-2024	23-10-2024	KS2404433-004
PZ2 Reservoir	22-10-2024	23-10-2024	KS2404433-005
Village Day Lodge	22-10-2024	23-10-2024	KS2404433-006
Day Care	22-10-2024	23-10-2024	KS2404433-007
Village WTP (Treated) - PW2D	28-10-2024	29-10-2024	KS2404528-001
Village - PW2D - RAW	28-10-2024	29-10-2024	KS2404528-002
Sewage Treatment Plant	04-11-2024	05-11-2024	KS2404626-001
Fire Hall	04-11-2024	05-11-2024	KS2404626-002
Rec Center	04-11-2024	05-11-2024	KS2404626-003
Lookout Ridge Booster Stn (PZ3/4)	04-11-2024	05-11-2024	KS2404626-004
PZ2 Reservoir	04-11-2024	05-11-2024	KS2404626-005
Village Day Lodge	04-11-2024	05-11-2024	KS2404626-006
Day Care	04-11-2024	05-11-2024	KS2404626-007
Burfield WTP (Treated)	05-11-2024	06-11-2024	KS2404673-001
Village WTP (Treated)	05-11-2024	06-11-2024	KS2404673-002
Burfield Well PW1A (Raw)	05-11-2024	06-11-2024	KS2404673-003

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Creekside Well PW2E (Raw)	05-11-2024	06-11-2024	KS2404673-004
Village Well PW2D (Raw)	05-11-2024	06-11-2024	KS2404673-005
Burfield-PW1A-RAW	17-11-2024	18-11-2024	KS2404811-001
Burfield-PW1A-Treated	17-11-2024	18-11-2024	KS2404811-002
Burfield WTP (Treated)	18-11-2024	19-11-2024	KS2404821-001
Fairways WTP (Treated)	18-11-2024	19-11-2024	KS2404821-002
Village WTP (Treated)	18-11-2024	19-11-2024	KS2404821-003
Burfield Well PW1A (Raw)	18-11-2024	19-11-2024	KS2404821-004
Fairways Well PW1B (Raw)	18-11-2024	19-11-2024	KS2404821-005
Creekside Well PW2E (Raw)	18-11-2024	19-11-2024	KS2404821-006
Village Well PW2D (Raw)	18-11-2024	19-11-2024	KS2404821-007
Sewage Treatment Plant (STP)	19-11-2024	20-11-2024	KS2404855-001
Fire Hall	19-11-2024	20-11-2024	KS2404855-002
Rec Center	19-11-2024	20-11-2024	KS2404855-003
Lookout Ridge Booster Station	19-11-2024	20-11-2024	KS2404855-004
PZ2 Reservoir	19-11-2024	20-11-2024	KS2404855-005
Village Day Lodge	19-11-2024	20-11-2024	KS2404855-006
Day Care	19-11-2024	20-11-2024	KS2404855-007
Sewage Treatment Plant	02-12-2024	03-12-2024	KS2405076-001
Fire Hall	02-12-2024	03-12-2024	KS2405076-002
Rec Center	02-12-2024	03-12-2024	KS2405076-003
Lookout Ridge Booster Stn (PZ3/4)	02-12-2024	03-12-2024	KS2405076-004
PZ2 Reservoir	02-12-2024	03-12-2024	KS2405076-005
Village Day Lodge	02-12-2024	03-12-2024	KS2405076-006
Day Care	02-12-2024	03-12-2024	KS2405076-007
Burfield WTP (Treated)	03-12-2024	04-12-2024	KS2405110-001
Fairways WTP (Treated)	03-12-2024	04-12-2024	KS2405110-002
Village WTP (Treated)	03-12-2024	04-12-2024	KS2405110-003

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Platter Plant (Treated)	03-12-2024	04-12-2024	KS2405110-004
Burfield Well PW1A (Raw)	03-12-2024	04-12-2024	KS2405110-005
Fairways Well PW1B (Raw)	03-12-2024	04-12-2024	KS2405110-006
Creekside PW2E (Raw)	03-12-2024	04-12-2024	KS2405110-007
Village Well PW2D (Raw)	03-12-2024	04-12-2024	KS2405110-008
Platter Plant (Raw)	03-12-2024	04-12-2024	KS2405110-009
Burfield WTP (Treated)	18-12-2024	19-12-2024	KS2405331-001
Village WTP (Treated)	18-12-2024	19-12-2024	KS2405331-002
Platter Plant (Treated)	18-12-2024	19-12-2024	KS2405331-003
Burfield Well PW1A (Raw)	18-12-2024	19-12-2024	KS2405331-004
Creekside PW2E (Raw)	18-12-2024	19-12-2024	KS2405331-005
Village Well PW2D (Raw)	18-12-2024	19-12-2024	KS2405331-006
Platter Plant (Raw)	18-12-2024	19-12-2024	KS2405331-007
Sewage Treatment Plant (STP)	18-12-2024	19-12-2024	KS2405332-001
Fire Hall	18-12-2024	19-12-2024	KS2405332-002
Rec Center	18-12-2024	19-12-2024	KS2405332-003
Lookout Ridge Booster Station	18-12-2024	19-12-2024	KS2405332-004
PZ2 Reservoir	18-12-2024	19-12-2024	KS2405332-005
Day Care	18-12-2024	19-12-2024	KS2405332-006
Sewage Treatment Plant	29-12-2024	30-12-2024	KS2405372-001
Fire Hall	29-12-2024	30-12-2024	KS2405372-002
Rec Center	29-12-2024	30-12-2024	KS2405372-003
Lookout Ridge Booster Stn (PZ3/4)	29-12-2024	30-12-2024	KS2405372-004
PZ2 Reservoir	29-12-2024	30-12-2024	KS2405372-005
Village Day Lodge	29-12-2024	30-12-2024	KS2405372-006
Burfield Well PW1A (Raw)	29-12-2024	30-12-2024	KS2405374-001
Fairways Well PW1B (Raw)	29-12-2024	30-12-2024	KS2405374-002
Creekside PW2E (Raw)	29-12-2024	30-12-2024	KS2405374-003

Village Well PW2D (Raw)	29-12-2024	30-12-2024	KS2405374-004
Platter WTP (Raw)	29-12-2024	30-12-2024	KS2405374-005
Burfield WTP (Treated)	29-12-2024	30-12-2024	KS2405374-006
Fairways WTP (Treated)	29-12-2024	30-12-2024	KS2405374-007
Village WTP (Treated)	29-12-2024	30-12-2024	KS2405374-008
Platter WTP (Treated)	29-12-2024	30-12-2024	KS2405374-009

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Appendix F- 2024 Summary of Laboratory and Colilert Positive Coliform results

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
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Water Quality Report
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2024 Laboratory Microbiological Analysis, Positive Samples for E.Coli and Coliforms					
Sampling Date	**Sampling Location**	**ALS ID**	**Coliforms, Escherichia coli [E. coli] MPN/100mL**	**Coliforms, total MPN/100mL**	**Action Taken**
January 2, 2024	Platter Plant (Raw)	KS2400031-006 (1)	<1	14	None-Raw Water
January 17, 2024	Platter Plant (Raw)	KS2400173-006 (1)	<1	5	None-Raw Water
January 31, 2024	Platter Plant (Raw)	KS2400320-006 (1)	<1	9	None-Raw Water
February 14, 2024	Platter Plant (Raw)	KS2400518-006 (1)	<1	4	None-Raw Water
March 13, 2024	Platter (RAW)	KS2400868-008 (1)	<1	1	None-Raw Water
March 25, 2024	Platter - Raw	KS2401021-002 (1)	<1	2	None-Raw Water
November 20, 2024	Rec Center	KS2404855-003 (1)	<1	1	Re Sample-Sample Error
December 4, 2024	Platter Plant (Raw)	KS2405110-009 (1)	<1	24	None-Raw Water
December 19, 2024	Platter Plant (Raw)	KS2405331-007 (1)	<1	11	None-Raw Water
December 30, 2024	Platter WTP (Raw)	KS2405374-005 (1)	<1	6	None-Raw Water

*Figure 1-2024 Laboratory Microbiology Analysis-Positive Samples for E.coli and Coliforms. *Note all other sample in 2024 produced negative results for E.coli and Coliforms*

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Appendix G- 2024 Treated Water Free Chlorine and Turbidity

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

Burfield Water Treatment Plant Readings

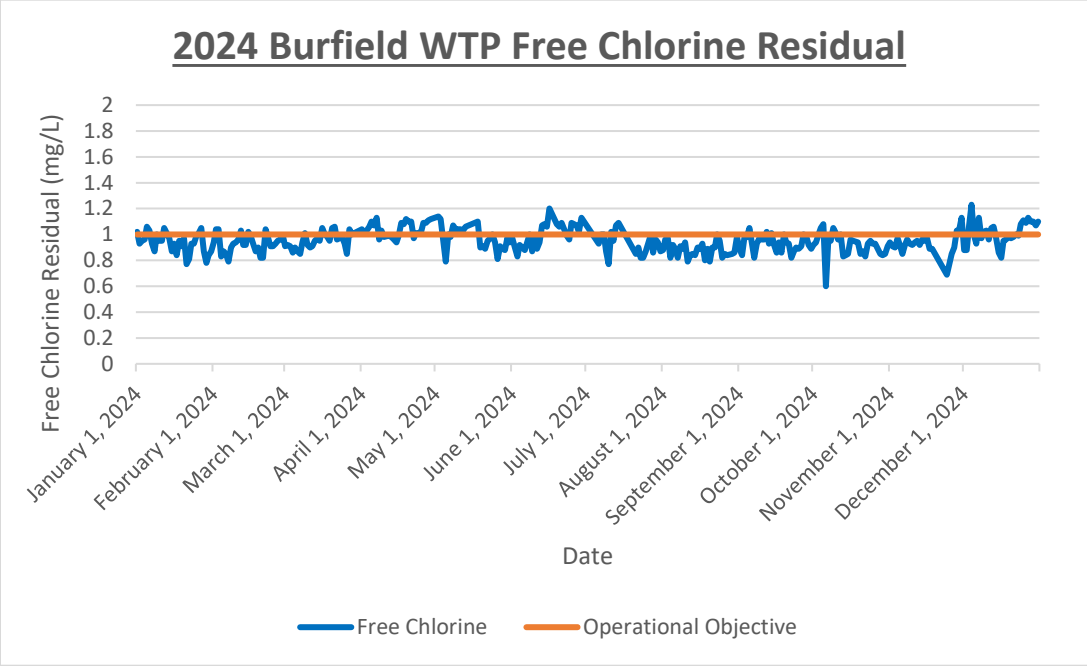

Figure 1
2

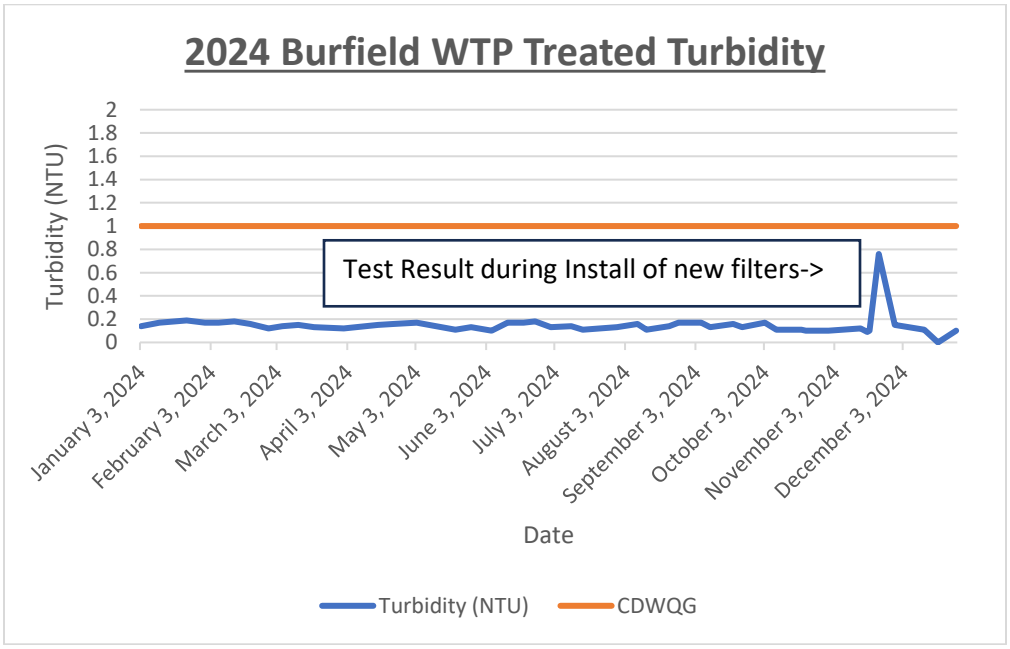

Figure 23

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Fairways Water Treatment Plant Readings

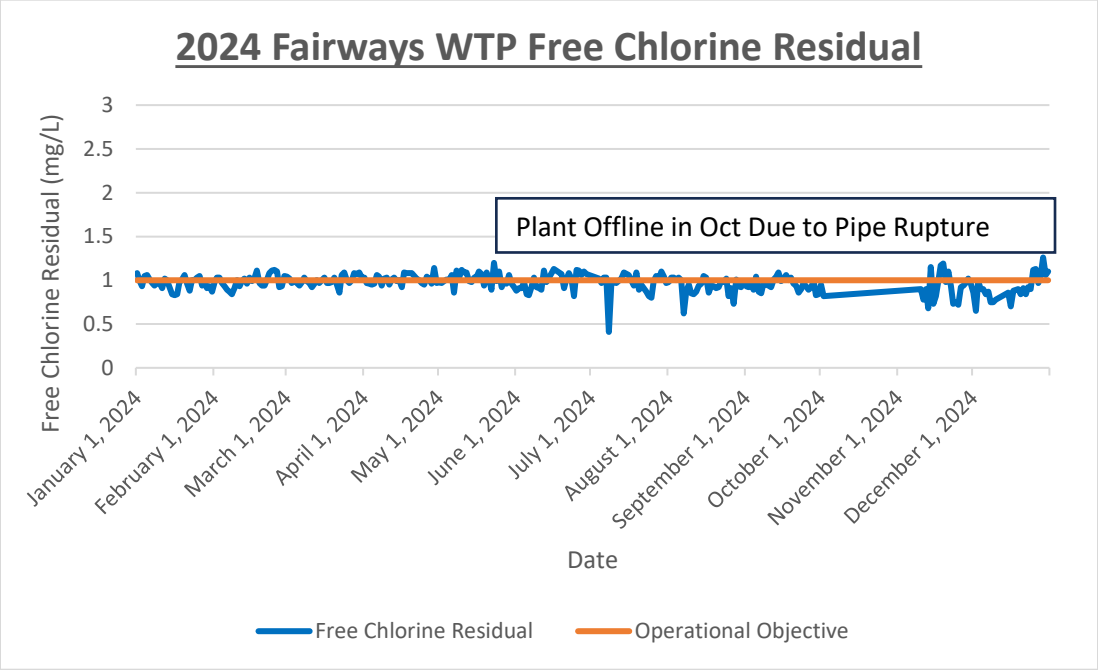

Figure 34

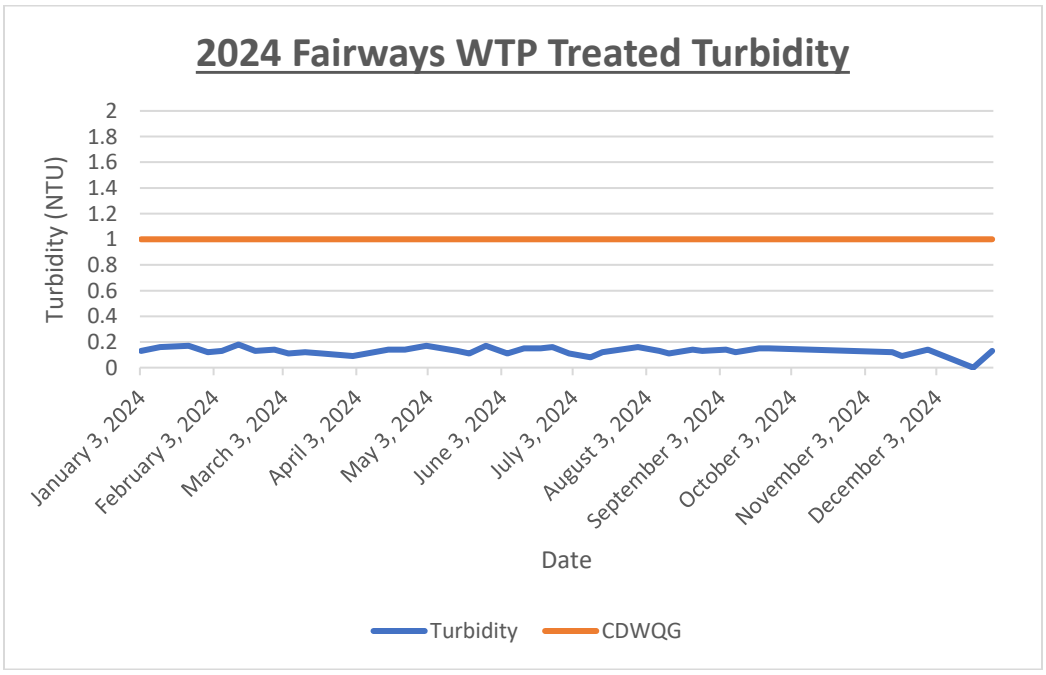

Figure 45

Village Water Treatment Plant Readings

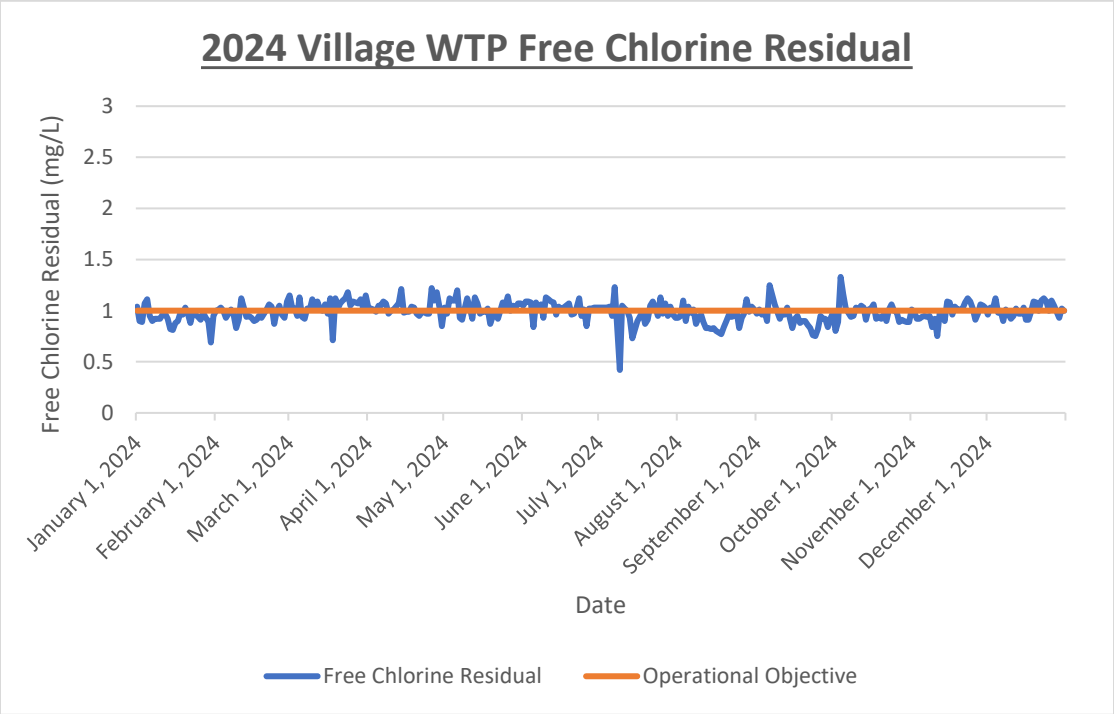

Figure 56

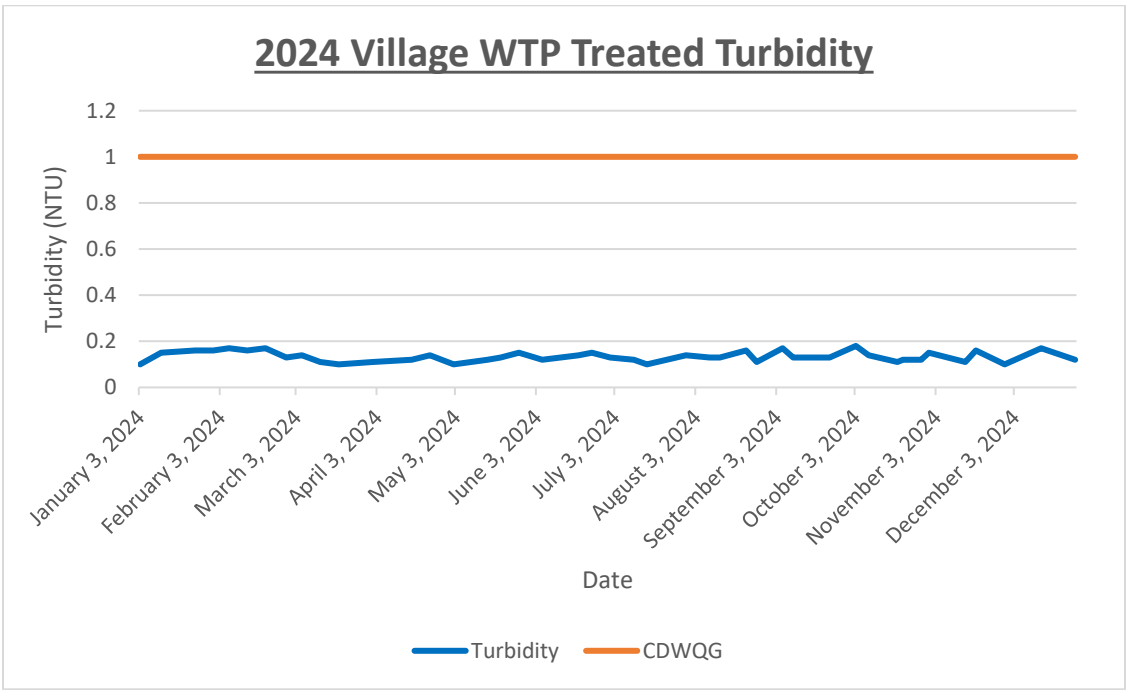

Figure 67

Water Quality Report
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Platter Surface Water Treatment Plant

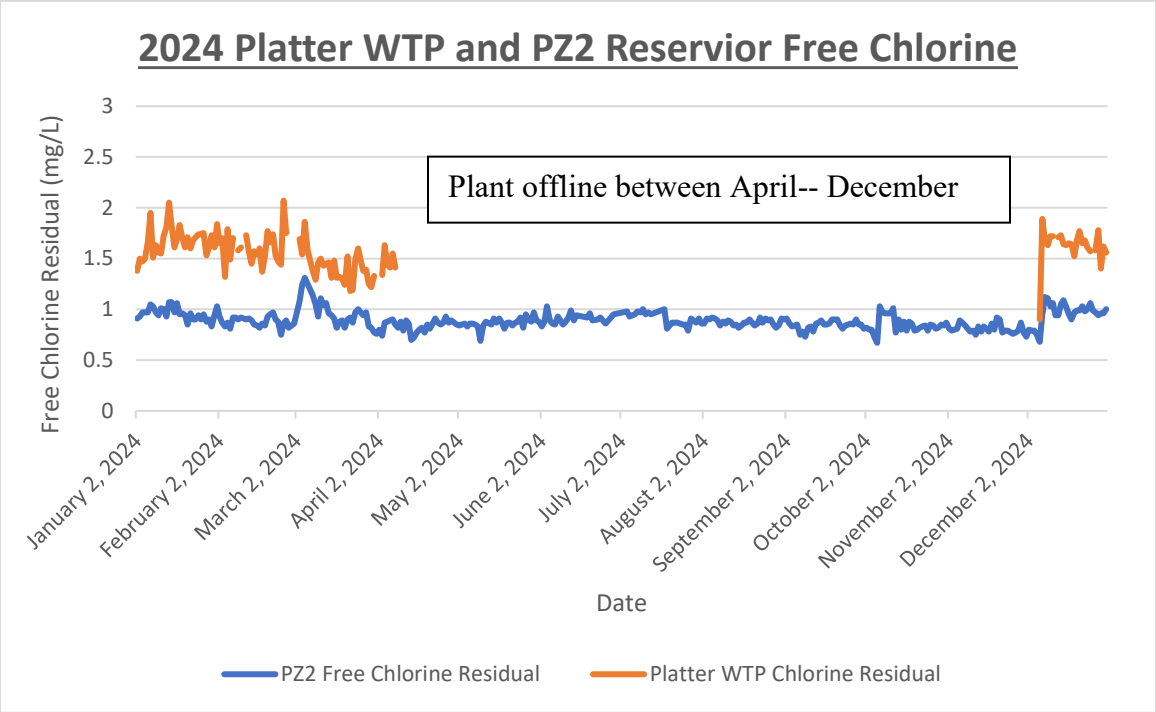
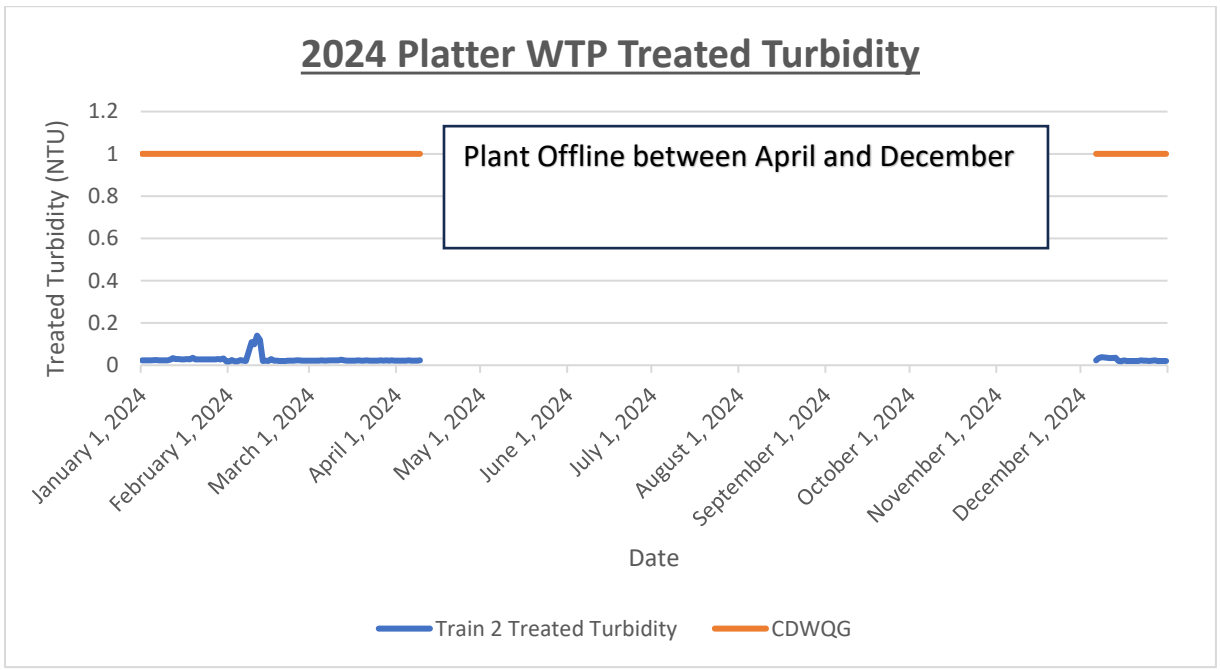


*Figure 8-Note*Treated water from the Platter WTP is discharged directly into PZ2 Reservoir, where further contact time and mixing is achieved, prior to entering the distribution system.*



Sun Peaks Mountain Resort Municipality
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Appendix H-Iron and Manganese Treated Water Test results

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

Sun Peaks
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2024 Iron and Manganese Concentration in WTP Treated Water

Sample Name	Sampling Date	Iron, total mg/L	Manganese, total mg/L
Platter Plant (Treated)	02-01-2024	0.041	0.0119
Burfield WTP (Treated)	17-01-2024	0.073	0.0485
Fairways WTP (Treated)	17-01-2024	<0.010	0.00057
Village WTP (Treated)	17-01-2024	<0.010	0.00284
Platter Plant (Treated)	31-01-2024	0.011	0.0140
Burfield WTP (Treated)	13-02-2024	0.093	0.0468
Fairways WTP (Treated)	13-02-2024	<0.010	0.00024
Village WTP (Treated)	13-02-2024	<0.010	0.00273
Burfield WTP (Treated)	12-03-2024	0.066	0.0298
Fairways WTP (Treated)	12-03-2024	<0.010	0.00046
Village WTP (Treated)	12-03-2024	<0.010	0.00216
Platter WTP (Treated)	26-03-2024	0.015	0.0125
Burfield WTP (Treated)	09-04-2024	0.066	0.0296
Fairways WTP (Treated)	09-04-2024	<0.010	0.00036
Village WTP (Treated)	09-04-2024	<0.010	0.00176
Platter WTP (Treated)	09-04-2024	0.137	0.0258
Burfield WTP (Treated)	07-05-2024	0.047	0.0222
Fairways WTP (Treated)	07-05-2024	<0.010	0.00050
Village WTP (Treated)	07-05-2024	<0.010	0.00246
Burfield WTP (Treated)	05-06-2024	0.019	0.00651
Fairway WTP (Treated)	05-06-2024	<0.010	0.00017
Village WTP (Treated)	05-06-2024	<0.010	0.00052
Burfield WTP (Treated)	01-07-2024	0.020	0.00698
Fairway WTP (Treated)	01-07-2024	<0.010	0.00044
Village WTP (Treated)	01-07-2024	<0.010	0.00054
Burfield WTP (Treated)	30-07-2024	0.023	0.00651
Fairways WTP (Treated)	30-07-2024	<0.010	0.00046
Village WTP (Treated)	30-07-2024	<0.010	0.00063
Burfield WTP (Treated)	09-09-2024	0.024	0.00734
Fairways WTP (Treated)	09-09-2024	<0.010	0.00024
Village WTP (Treated)	09-09-2024	<0.010	0.00160
Burfield WTP (Treated)	08-10-2024	0.023	0.00712
Village WTP (Treated)	08-10-2024	<0.010	0.00066
Burfield WTP (Treated)	05-11-2024	0.024	0.00687
Village WTP (Treated)	05-11-2024	<0.010	0.00073
Burfield WTP (Treated)	03-12-2024	0.021	0.00608

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Fairways WTP (Treated)	03-12-2024	<0.010	0.00053
Village WTP (Treated)	03-12-2024	<0.010	0.00058
Platter Plant (Treated)	03-12-2024	<0.010	0.0102
Burfield WTP (Treated)	29-12-2024	0.013	0.00334
Fairways WTP (Treated)	29-12-2024	<0.010	0.00043
Village WTP (Treated)	29-12-2024	<0.010	0.00187
Platter WTP (Treated)	29-12-2024	0.064	0.0100

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Appendix I-Iron and Manganese Distribution System Test Results

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

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2024

2024 Distribution System Iron and Manganese Test Results			
Sample Name	**Sampling Date**	**Iron, total mg/L**	**Manganese, total mg/L**
Sewage Treatment Plant	02-01-2024	0.045	0.0337
Fire Hall	02-01-2024	0.053	0.0273
Rec Center	02-01-2024	0.032	0.00407
Lookout Ridge Booster Stn (PZ3/4)	02-01-2024	0.029	0.00848
PZ2 Reservoir	02-01-2024	0.036	0.0108
Village Day Lodge	02-01-2024	<0.010	0.00150
Sun Peaks Day Care	02-01-2024	0.032	0.00885
Sewage Treatment Plant	31-01-2024	0.063	0.0338
Fire Hall	31-01-2024	0.024	0.00559
Rec Center	31-01-2024	0.024	0.00638
Lookout Ridge Booster Stn (PZ3/4)	31-01-2024	0.014	0.00768
PZ2 Reservoir	31-01-2024	0.013	0.0122
Village Day Lodge	31-01-2024	0.014	0.0111
Sun Peaks Day Care	31-01-2024	0.014	0.00756
Sewage Treatment Plant (STP)	28-02-2024	0.043	0.0313
Fire Hall	28-02-2024	0.049	0.0348
Rec Centre	28-02-2024	0.024	0.00653
Lookout Ridge Booster	28-02-2024	0.013	0.00880
PZ2-Reservoir	28-02-2024	0.012	0.0104
Village Day Lodge	28-02-2024	<0.010	0.00539
Sun Peaks DayCare	28-02-2024	0.014	0.00920
Sewage Treatment Plant	26-03-2024	0.060	0.0246
Rec. Center	26-03-2024	0.019	0.00366
Village Day Lodge	26-03-2024	0.013	0.00612
Lookout Ridge Booster Station	26-03-2024	0.014	0.00679
PZ2 Reservoir	26-03-2024	0.016	0.0109
Sun Peaks Daycare	26-03-2024	0.015	0.00578
Fire Hall	26-03-2024	0.044	0.0186
Sewage Treatment Plant (STP)	22-04-2024	0.034	0.0169
Fire Hall	22-04-2024	0.038	0.0206
Rec Center	22-04-2024	0.030	0.00213
Lookout Ridge Booster Station	22-04-2024	0.022	0.00670
PZ2 Reservoir	22-04-2024	0.020	0.00774
Village Day Lodge	22-04-2024	0.016	0.00549
Day Care	22-04-2024	0.024	0.00657
Sewage Treatment Plant	22-05-2024	0.018	0.00724

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Fire Hall	22-05-2024	0.026	0.00969
Rec Center	22-05-2024	0.068	0.00119
Lookout Ridge Booster Station	22-05-2024	0.019	0.00547
PZ2 Reservoir	22-05-2024	0.013	0.00483
Village Day Lodge	22-05-2024	0.013	0.00326
Day Care	22-05-2024	0.021	0.00644
Sewage Treatment Plant (STP)	19-06-2024	<0.010	0.00232
Fire Hall	19-06-2024	<0.010	0.00022
Rec Center	19-06-2024	0.035	0.00122
Lookout Ridge Booster Station	19-06-2024	0.016	0.00394
PZ2 Reservoir	19-06-2024	<0.010	0.00170
Village Day Lodge	19-06-2024	<0.010	0.00198
Day Care	19-06-2024	0.013	0.00352
Sewage Tratment Plant (STP)	16-07-2024	0.011	0.00289
Fire Hall	16-07-2024	0.015	0.00303
Rec Center	16-07-2024	<0.010	0.00076
Lookout Ridge Booster Station	16-07-2024	0.014	0.00278
PZ2 Reservoir	16-07-2024	<0.010	0.00118
Village Day Lodge	16-07-2024	0.012	0.00203
Day Care	16-07-2024	<0.010	0.00116
Sewage Treatment Plant (STP)	13-08-2024	0.011	0.00268
Fire Hall	13-08-2024	0.014	0.00294
Rec Center	13-08-2024	0.021	0.00106
Lookout Ridge Booster Station	13-08-2024	0.013	0.00143
PZ2 Reservoir	13-08-2024	<0.010	0.00127
Village Day Lodge	13-08-2024	<0.010	0.00055
Daycare	13-08-2024	0.011	0.00127
Sewage Treatment Plant (STP)	27-08-2024	0.012	0.00267
Fire Hall	27-08-2024	0.015	0.00264
Rec Center	27-08-2024	0.072	0.00174
Lookout Ridge Booster Station	27-08-2024	0.020	0.00161
PZ2 Reservoir	27-08-2024	<0.010	0.00144
Village Day Lodge	27-08-2024	<0.010	0.00107
Day Care	27-08-2024	<0.010	0.00135
Sewage Treatment Plant	22-10-2024	0.014	0.00318
Fire Hall	22-10-2024	0.027	0.00350
Rec Center	22-10-2024	0.046	0.00126
Lookout Ridge Booster Stn (PZ3/4)	22-10-2024	<0.010	0.00195
PZ2 Reservoir	22-10-2024	<0.010	0.00209

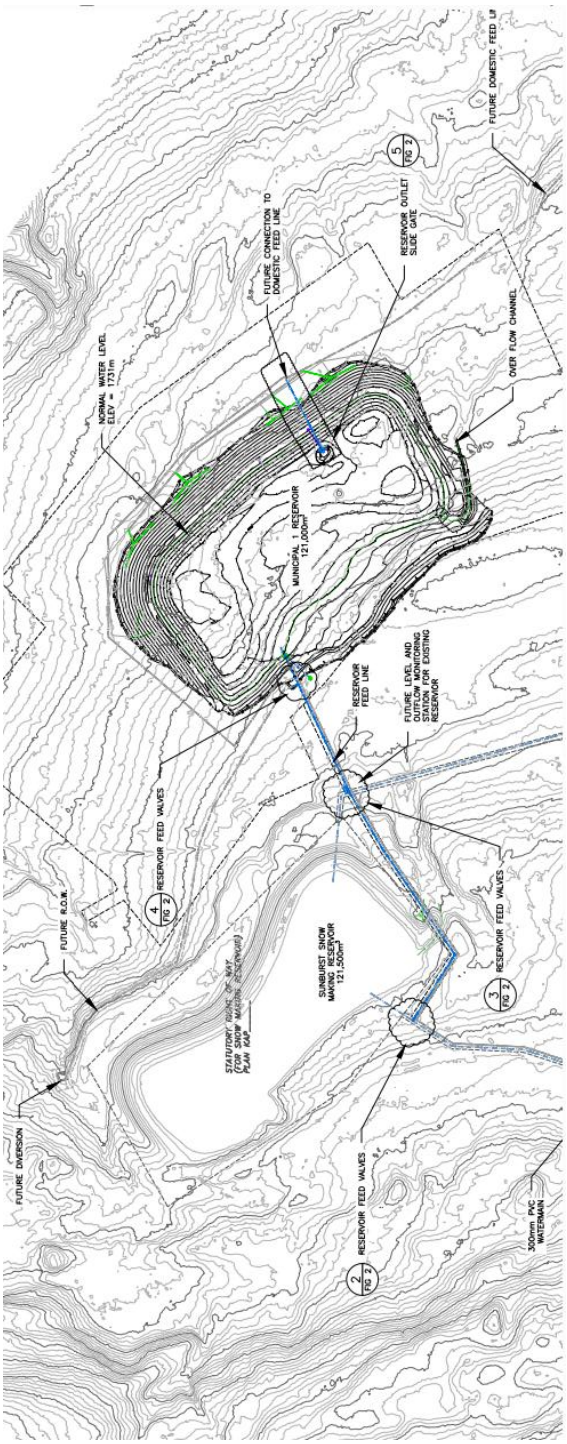
Village Day Lodge	22-10-2024	<0.010	0.00112
Day Care	22-10-2024	<0.010	0.00211
Sewage Treatment Plant (STP)	19-11-2024	0.013	0.00340
Fire Hall	19-11-2024	<0.010	0.00036
Rec Center	19-11-2024	0.066	0.00157
Lookout Ridge Booster Station	19-11-2024	<0.010	0.00163
PZ2 Reservoir	19-11-2024	<0.010	0.00176
Village Day Lodge	19-11-2024	<0.010	0.00069
Day Care	19-11-2024	<0.010	0.00177
Sewage Treatment Plant (STP)	18-12-2024	<0.010	0.00160
Fire Hall	18-12-2024	0.032	0.00244
Rec Center	18-12-2024	0.029	0.00357
Lookout Ridge Booster Station	18-12-2024	<0.010	0.00153
PZ2 Reservoir	18-12-2024	0.030	0.00543
Day Care	18-12-2024	0.016	0.00309

Water Quality Report
2024

Appendix J-Surface Water Reservoir Location

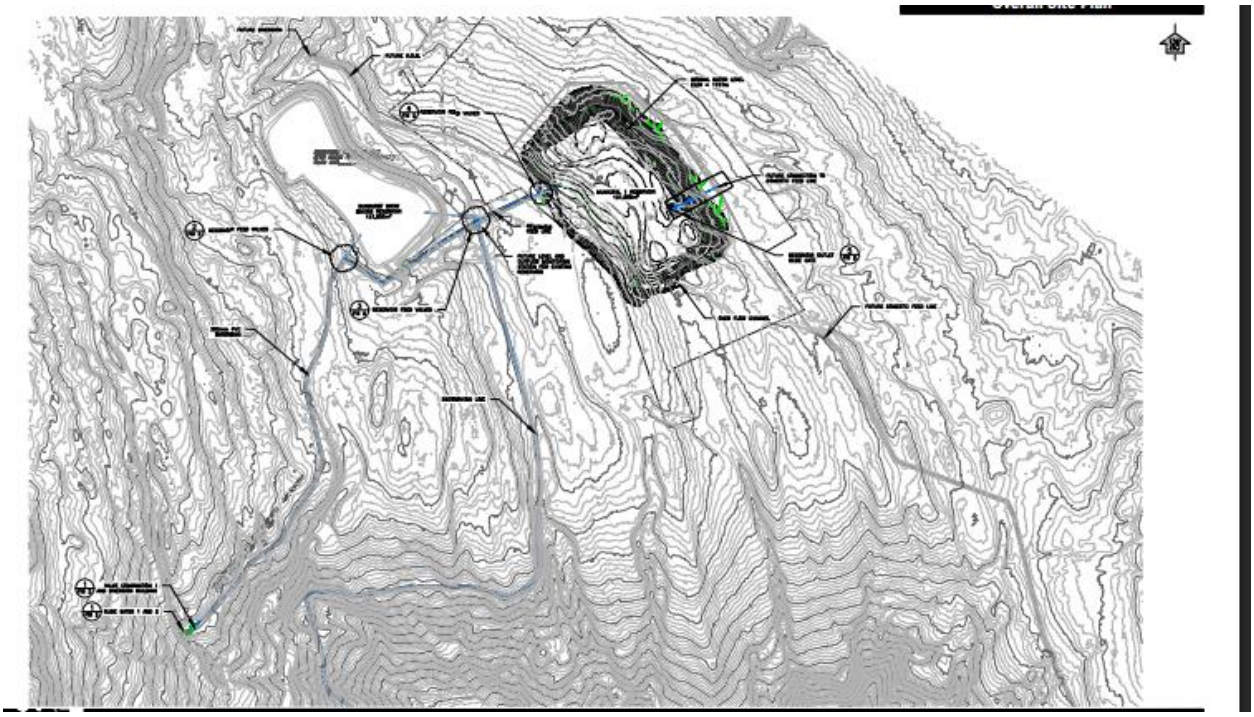
Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024



Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024



Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Water Quality Report
2024

Appendix K-2024 Well Pumping Summary

Sun Peaks Mountain Resort Municipality
106-3270 Village Way, Sun Peaks, British Columbia, V0E 5N0
Tel: 250-578-2020

Table 6-1 2024 pumping summary and comparison to 2023 budgeted volumes and sustainable limit.

Well ID	2024			2023 Comparison		Sustainable Limit				Figures
	Volume Extracted (m^3)	Budgeted Volume (m^3)	% of Budgeted Volume Extracted	Volume Extracted (m^3)	% of 2023 Volume Extracted in 2024	Estimated Sustainable Limit Range (m^3/year)[2]			% of Average Estimated Sustainable Limit Extracted in 2024	
						Lower	Upper	Average[3]		
PW1A	74,585	80,000	93	78,015	96	70,000	80,000	75,000	99	6-2 6-3 6-4
PW1B	60,226	65,000	93	65,398	92	50,000	60,000	55,000	110	6-5 6-6 6-7
PW2D	53,999	50,000	108	55,308	98	50,000	60,000	55,000	98	6-8 6-9 6-10
PW2E	9,030	12,000	75	12,998	69	12,000	12,000	12,000	75	6-11 6-12 6-13
Total	197,840	207,000	96	211,719	93	180,000[4]	210,000[4]	195,000[4]	101	6-14

Notes:

1. Estimated sustainable limits for each well were determined previously in BGC (December 20, 2019).
2. The methodology for determining the revised estimated sustainable limit for each well is presented in previous BGC deliverables (December 20, 2019, and January 20, 2023).
3. The average is taken as the mid-point value between the lower and upper limits.
4. Budgeted volumes and sustainable limits totals are rounded to the nearest 5,000 m^3/year.