

WATER QUALITY ANNUAL REPORT

2023



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Executive Summary

The City of Langley (City) is a distributor of water that is supplied and treated by Metro Vancouver from its Coquitlam Lake source. In 2023, the City supplied water to approximately 30,084 residents.

In accordance with the requirements of the BC Drinking Water Protection Regulation, the City sends weekly drinking water samples from 14 locations to Metro Vancouver's testing laboratory in Burnaby for analysis. The City takes 51 samples per month, more than double the 26 samples stipulated in the regulation. Test results are communicated to the City and the Fraser Health Authority every week and documented in this annual report.

In 2023, the City met the following requirements for drinking water quality set in the BC *Drinking Water Protection Regulation*:

- No samples tested positive for *E. coli*
- No detectable total coliform bacteria per 100 ml.

The following Health Canada water quality objectives were met:

- Turbidity was low in 2023, with average turbidity values below 1.0 NTU at all sample stations.
- All measured metal concentrations were below the limits recommended by Health Canada and the USEPA.
- The concentration of vinyl chloride was tested in 6 samples during 2023, all results were non-detectable (less than <1 µg/L), less than the Health Canada Guideline of 2 µg/L (0.002 mg/L).
- Health Canada indicates that an acceptable pH range for drinking water is 6.5 - 8.5 pH units. four samples were tested for pH in 2023, test results ranged of 7.7 to 7.9 pH Units.

The chlorine residual and water temperature objectives suggested by Health Canada were *not* met in the following instance:

- 89 samples (at 6 sampling stations) had free chlorine residuals of less than 0.2 mg/L. Sampling stations having low chlorine concentrations had no indication of microbiological impairment. This is an increase from 2022 when 49 samples (at 4 sampling stations) had free chlorine residuals of less than 0.2 mg/L. To improve the level of free chlorine, the City has been implementing the following ongoing programs: increased flushing and installation of auto-flushers; watermain looping, replacing aging AC water mains, eliminating water pipe redundancy where not needed, and increasing the rate of turn-over in the reservoir.
- Health Canada sets an aesthetic objective of 15 degrees Celsius for drinking water. This objective was met for 9 of 12 months however the average monthly water temperature was between 15.6 and 18.0 degrees Celsius for the months of July, August, and September in 2023.

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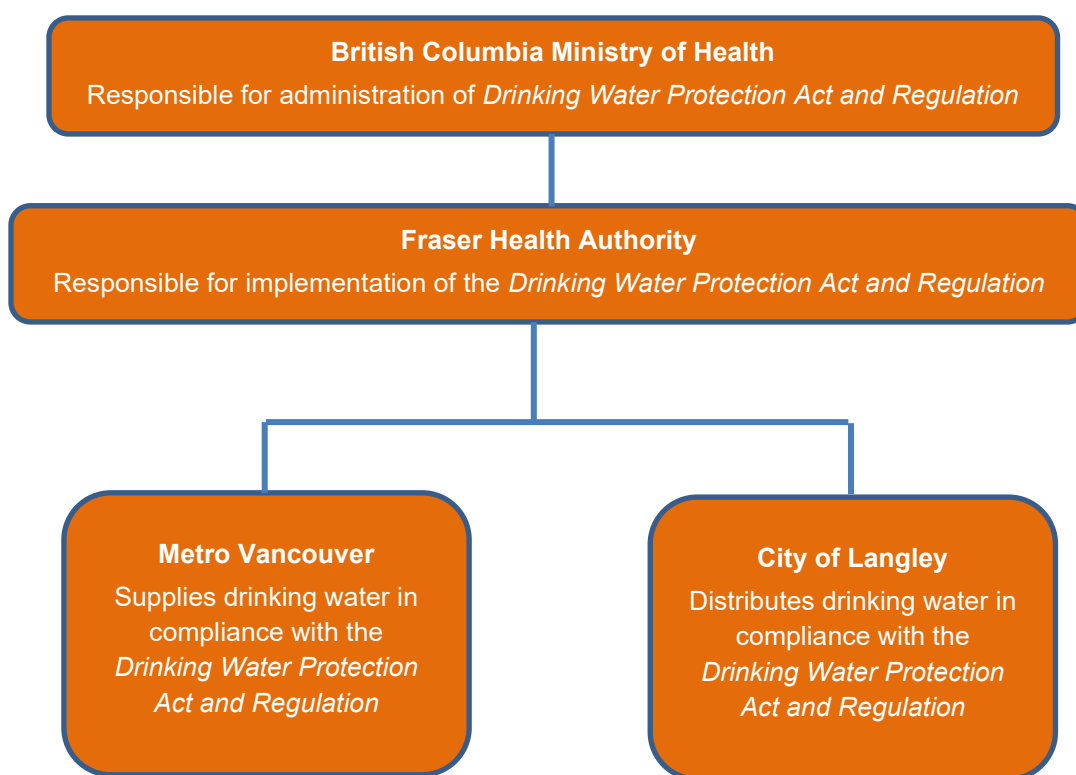
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1 INTRODUCTION

The main legislation governing the provision of drinking water in British Columbia are the *BC Drinking Water Protection Act* and the *BC Drinking Water Protection Regulation*. The BC Ministry of Health is responsible for the administration of these laws and local health authorities are responsible for their implementation. The Greater Vancouver Water District (Metro Vancouver) and the City of Langley (City) supply and distribute drinking water in compliance with this Provincial legislation, as shown in the diagram below.



This report is provided in fulfillment of the City’s obligations under the Provincial Drinking Water Protection Act and associated regulations, as well as the terms and conditions of the City’s Water System Operating Permit. Enforcement of the regulations and issuance of water system permits is the responsibility of the Fraser Health Authority’s Drinking Water Officer.

The City monitors drinking water quality regularly to ensure regulatory compliance. Moreover, the City checks a wide range of non-regulated water quality parameters to ensure residents are provided with water that is both safe to drink and aesthetically pleasing. Results for both regulated and unregulated parameters are presented in this report.

For detailed information on drinking water regulations and health guidelines, the following web sites are suggested:

BC Ministry of Health – Maintaining Water Quality - BC Drinking Water Protection Act:

<http://www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/laws-related-to-health-in-bc/drinking-water-protection-act>

Health Canada:

<http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/index-eng.php>

US EPA:

<https://www.epa.gov/ground-water-and-drinking-water>

World Health Organization:

http://www.who.int/water_sanitation_health/publications/2011/dwg_guidelines/en/index.html

2 BACKGROUNDS

2.1 SOURCE WATER

Metro Vancouver supplies water to the City through a series of trunk mains owned by the Metro's Water Services Department (formerly known as Greater Vancouver Water District - GVWD) from the Coquitlam reservoir.



FIGURE 1 - COQUITLAM RESERVOIR

The Coquitlam Water Treatment Plant (CWTP) uses ozonation, ultraviolet treatment, soda ash and chlorination to treat water from the Coquitlam source.

Ozonation provides pre-treatment and helps remove micro-organisms from the water, reduces disinfection by-products and improves water clarity, which increases the efficiency of the subsequent ultraviolet process. Soda ash is then added for pH and alkalinity adjustment for corrosion control.

Metro Vancouver completed construction of an ultraviolet (UV) light disinfection plant at the Coquitlam reservoir in 2014. Ultraviolet treatment provides for primary disinfection and then, Chlorination is used for secondary disinfection at the source as well as at a secondary disinfection station in the Clayton Hill area in the City of Surrey. The Clayton Hill station enhances the disinfection capability of Coquitlam water treatment facility.

The City distribution system is connected to the GVWD trunk main at Fraser Highway and 196 Street. The physical and chemical properties of the water supply at the Coquitlam Reservoir in 2023 are found in Appendix A.

For more information about the source water quality and treatment process, visit the Metro Vancouver Water Quality and Treatment Facilities webpage:

[HTTP://WWW.METROVANCOUVER.ORG/SERVICES/WATER/ABOUT/REPORTS/PAGES/DEFAULT.ASPX](http://www.metrovancouver.org/services/water/about/reports/pages/default.aspx)

2.2 DISTRIBUTION SYSTEM

The City of Langley distributes water to businesses, institutions and approximately 30,084 residents. The City owns approximately 100 km of water mains, 4599 metered service connections, 1057 valves, 92 blow off valves, 19 air valves, 11 zone valves, 569 fire hydrants, 5 auto-flushers, 14 sampling stations, 3 pressure reducing valves, and one reservoir with four pumps and a diesel generator.

See attached plan (Appendix B) of the City of Langley- Water Distribution System and Water Sample Test Stations.

The type of water pipes that were installed in the City of Langley in the past was predominately Asbestos Cement (AC). Since the 1980's, all replacement water pipe has been PVC or Ductile Iron (DI) pipe, depending on the soil conditions. Currently the City network consists of 49.5% AC mains, 39.5% PVC mains, 9.7% DI mains, 1.0% steel, 0.07% Copper mains, and one (1) HDPE main. It is noted that AC pipes do not pose a health risk and replacement is based solely on age and the vulnerability of AC pipe to breakage.

The City's water distribution system is managed by a team of professionals within the Engineering Operations and Engineering Services departments, under the leadership of Director of Engineering, Parks & Environment. The system is also regulated by the City of Langley's Waterworks Regulation Bylaw, 2004, No. 2550.

Expenditures within the waterworks encompass both capital and operating programs. The capital program finances the installation, replacement, and enhancement of infrastructure, while the operating program covers the procurement of bulk water from Metro Vancouver and all associated costs for the upkeep and management of the City's water system.

2.3 CAPITAL PROGRAM

In 2023, the capital investment in the water system totaled approximately \$6.1M. The investment funded twelve (12) sub-programs, which supported the installation of new infrastructure primarily replacing aged water mains, upsizing the watermains due to deficiencies in the system identified in *Water Servicing Plan*, services, hydrants, and meters.

Distribution main construction, funded through the Distribution Main Replacement, and Development Cost Charges (DCC) programs, is the largest component of the Waterworks capital budget. In 2023, a total of approximately 450m of distribution main were constructed at a cost of \$875,000. The rest of the watermain replacements for 2023 are currently under construction.

Water quantity, quality, and reliability can be improved through the repair and strategic replacement of water mains. Computer modeling and asset management analyses are carried out to identify future deficiencies in the system and plan improvements. The Engineering team ensures the water system remains reliable by identifying replacement candidates and setting a target replacement rate for each capital plan. The replacement rate trend is shown in Figure 2.

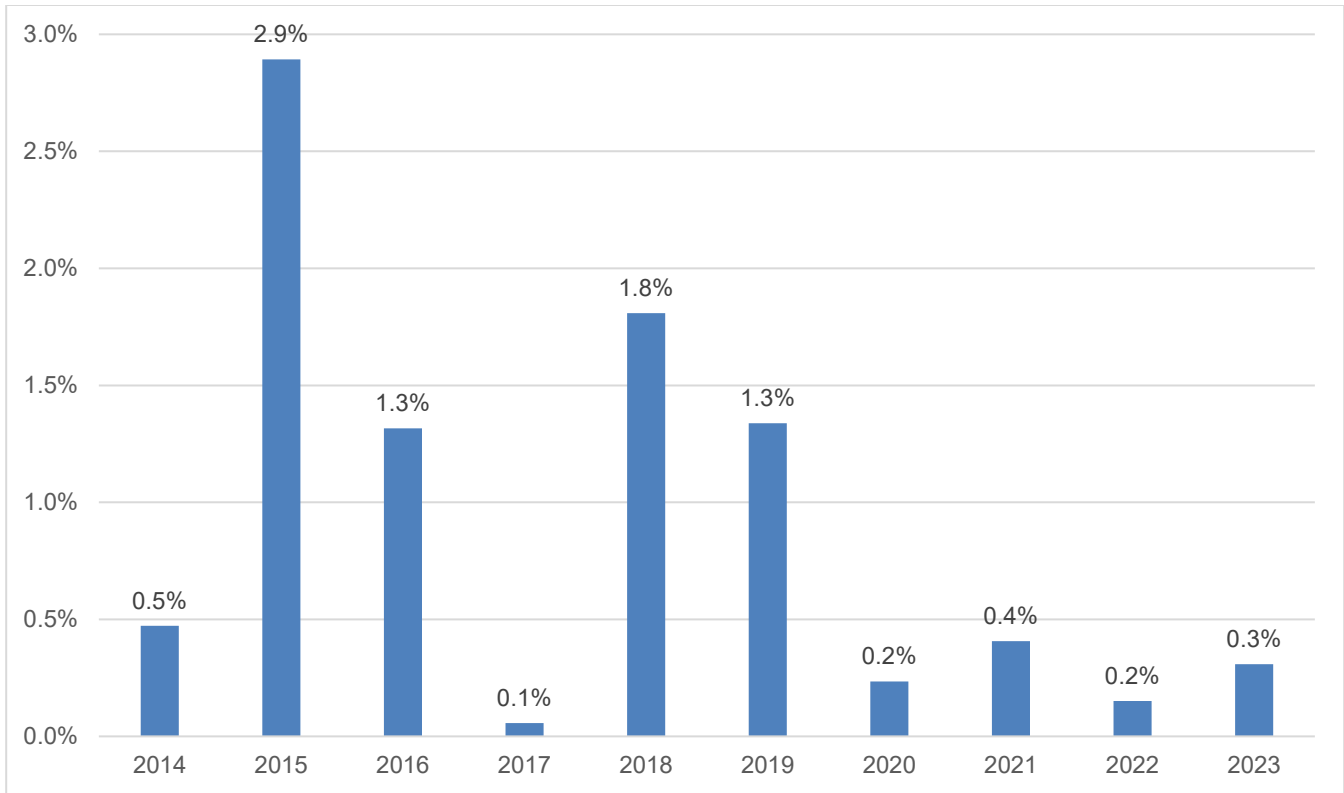


FIGURE 2 - ANNUAL WATERMAIN REPLACEMENT RATE (2014-2023)

Customers potentially impacted by upcoming work will be notified by letter and the City’s website.

2.4 OPERATIONS AND MAINTENANCE

Water quality is influenced by water system maintenance and improvement strategies that are implemented by the City’s Engineering Operations and Engineering Services Divisions. The City budget for water system operation and maintenance for 2023 was \$803,510.

The City responds quickly to problems involving turbidity issues, leaking services or mains, and loss of water pressure. A standby person is on call at night and on weekends; and during normal working hours the City maintenance crew will respond immediately to any water complaints. In 2023, the City received 8 low water pressure calls, 7 watermain breaks, 8 water service breaks, and 5 calls relating to dirty water.

Turbidity events from source-water quality are dealt with in conjunction with Metro Vancouver and Fraser Health, ensuring that the public is notified if conditions exist that may be a risk to health. Similar notification plans are in place if an area of the City’s system was experiencing high turbidity due to construction or a watermain break.

The City has an ongoing preventative maintenance program, including valve exercising, hydrant inspections and servicing, and flushing of mains.

2.4.1 WATER METERS

In 2023, the capital funding designated for replacing aging meters was utilized to swap out 75 water meters. The expected lifespan of the city’s water meters is 15 years. As part of capital watermain projects, the age

of the water meters will be assessed. If they are nearing the end of their lifespan, replacement will be integrated into the watermain replacement capital project.

2.4.2 HYDRANTS

The City has 569 fire hydrants. In 2023, 260 hydrants were given an “A” service (complete tear downs), the remaining hydrants were given a “B” service (operation and pressure checks) – these were completed during the flushing program.

2.4.3 FLUSHING

Water main flushing has long been considered an effective method to remove unwanted tastes, odors or discolorations of the water, and to improve chlorine residual.

In 2023, City Operations staff completed Uni-Directional Flushing (UDF) to 50% of the water network to remove any accumulated settlement in the pipes. Uni-directional flushing is an effective flushing method as it results in higher velocity of the water flowing through the mains, thus removing more sediment. In support of summer water conservation efforts, flushing activities for the purpose of cleaning water mains are performed in October to December and April to May each year.

Within the City, there are several cul-de-sacs, most of the cul-de-sacs have a short section of watermain that is not looped, the City refers to these watermains as dead end watermains. All have either a fire hydrant or blow-off valve. The City schedules the flushing of dead-end mains annually, or more often as needed to ensure water quality in these areas. The City flushes blow-off valves twice per year. The City currently has 6 auto-flushers in our system to help maintain a high level of water quality in areas with low circulation.

If the City receives a complaint with regards to the quality of the water (i.e., dirty water), the City will investigate and resolve the situation as quickly as possible. If the problem persists, the City will flush the watermain and if required, will have the water tested by an independent laboratory.

2.4.4 RESERVOIRS

Water reservoirs are cleaned to remove sediment and algae which may serve as nutrients to microorganisms. The City currently cleans and inspects its reservoir on a 5-year cycle as a best practice to ensure water quality and to ensure maintenance of the reservoir structure. The City reservoir was inspected in 2018, where the result showed an accumulation of 1-2 cm of sediment. In 2019, the City used a remote-controlled vacuum to clean one cell of the water reservoir, the other cell was cleaned in 2020. The next scheduled time for reservoir inspection and cleaning is scheduled for 2025.

2.4.5 WATER MAIN AND SERVICE BREAKS

Water main break repairs are conducted according to procedures based on American Water Works Association (AWWA) Standards and Best Management Practices. Each repair is documented on a water service/main break form throughout the year. Reports for any water main breaks larger than 150mm in diameter are submitted to Fraser Health.

Operation staff collect data to track and report on program and system performance. The number of main breaks per 100 km of pipe is used as an indicator of the overall condition of a water distribution system. Figure 3 shows the number of water main and services breaks per 100km of pipe in the past 10 years with an average of 12 main breaks per 100km of pipe.

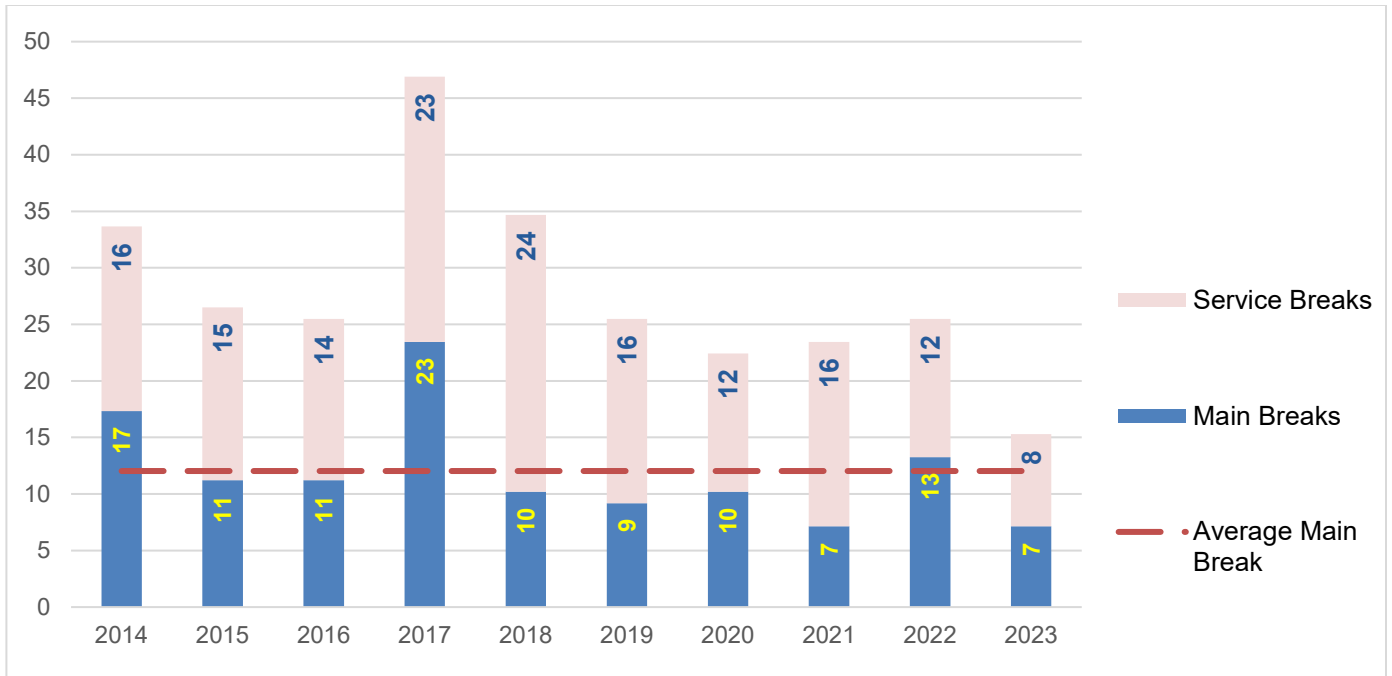


FIGURE 3 - WATER MAIN/SERVICE BREAKS HISTORY

2.4.6 NON-REVENUE WATER ESTIMATION

Non-Revenue Water (NRW) is water that has been treated and released into the distribution system but is not metered or billed and does not contribute to municipal revenues. Sources of “Real” NRW include system leakage, irrigation of public properties, unmetered water usage, flow/flushing tests, and hydrant water. NRW can also be calculated due to errors in data collection and meter readings.

Typically, NRW is expressed as the water “lost” in the system as a percentage of net water supplied. NRW consists of water used for City operations (i.e., Hydrant flushing program) and water leakage. The lower the NRW percentage the more efficiently the system operates. NRW rates can range based on the municipality or regional district, but NRW rates between 20-30% are considered high, between 10-20% are considered average, and under 10% are ideal.

The City of Langley has calculated the NRW in 2021 as part of the Water Servicing Plan. This calculation is based on the Metro Vancouver bulk water meter and total COL Water consumption which is presented in Table 1.

TABLE 1 - NON-REVENUE WATER ESTIMATION

Data Source	Data Period	Average Day demand (L/s)
Metro Vancouver bulk water meter	August 22, 2018, to August 22, 2021	113.7 L/s
COL Water consumption	April 2018 to March 2021	98.6 L/s
Non-Revenue Water		15.1 L/s (13.3%)

As shown above, the NRW percentage for the City of Langley is 13.3%, which is relatively low compared to other local municipalities. However, opportunities are still there to decrease NRW, including pressure zone monitoring and management, active leak control programs, and public education and outreach.

2.4.7 STAFF TRAINING AND OPERATION LEVELS

The DWPR (Section 12) states:

“a person is qualified to operate, maintain or repair a water supply system if the person is certified by the Environmental Operators Certification Program for that class of system as classified under the Environmental Operators Certification Program.”

The Environmental Operators Certification Program (EOCP) classified the City’s water distribution systems as Levels III and the wastewater collection system as Level II. In addition to meeting the DWPR requirements, the Permit to Operate requires the City to have a water system Operator with a certification level equivalent to the designated EOCP level.

The City continuously trains Operators to maximize the performance of the water system, minimize health and environmental risks, and raise the level of certifications achieved. The highest level of EOCP Certifications attained are the followings:

- One (1) Level III Operator in both water distribution and wastewater collection system
- One (1) Level III Operator in water distribution and Level II wastewater collection system
- Two (1) Level II Operators in both water distribution system and wastewater collection system
- Three (3) Level II Operator in water distribution and Level I wastewater collection system

3 REGULATED DRINKING WATER QUALITY PARAMETERS

Metro Vancouver and the City are responsible for monitoring water quality in different parts of the drinking water system. Metro Vancouver is responsible for monitoring the quality of water leaving the treatment plants and within their transmission mains. The City is responsible for monitoring water quality in distribution pipes throughout the City of Langley.

The quality of water distributed within the City is monitored in accordance with requirements set out in provincial regulations. This section describes the monitoring program and water quality results for 2023.

3.1 WATER QUALITY SAMPLING AND MONITORING

Water sampling is being done every Tuesday of the week, 51 times a year. The City maintains 14 sampling stations strategically positioned across its territory for collecting water samples for the Water Services Department (formerly GVWD). For further reference, please refer to the attached map in Appendix B. These stations are distributed as follows: Five (5) are situated at low flow mains, one (1) is located at the reservoir, four (4) are positioned at medium flow locations, and one (1) is designated for high flow sampling. Table 2 provides a detailed breakdown of the station numbers and corresponding addresses.

TABLE 2 – SAMPLING STATOPNS

Sample Station ID	Address	Additional Tests
COL-450	206 Street and 44A Avenue	
COL-451	202A Street and 50 Avenue	Disinfection By-Products (DBP) and Vinyl Chloride
COL-452	19618 Fraser Highway	Vinyl Chloride
COL-453	204 Street and Langley Bypass	
COL-455	20200 Blk. of Michaud Crescent	Metals
COL-456	196 Street and 46 Avenue	
COL-457	5700 Blk 203A Street	Disinfection By-Products (DBP)
COL-458	5400 Blk. of Brydon Crescent	Metals
COL-459	19700 Blk. of 48A Avenue	
COL-480	209 Street and 51B Avenue	Disinfection By-Products (DBP) and Vinyl Chloride
COL-481	20400 Blk. of 54 Avenue	Metals
COL-482	4740 200A Street (Reservoir 200A Street and 47A Avenue)	
COL-483	20894 57 Avenue	
COL-484	48 Avenue and 207 Street	

Every week each location is sampled for chlorine residual, E.coli, HPC, temperature, total coliform, and turbidity. The City’s Engineering Operations staff samples from each station and these samples are tested by Metro Vancouver the same day at their laboratory in Burnaby. Metro Vancouver staff analyzes the samples and communicates the results weekly to City and Fraser Health staff for review. Responses to unacceptable results would vary between flushing water mains to possibly issuing a boil water advisory, depending on the significance of the parameter of concern.

Testing indicates that water quality issues such as higher summer temperatures, low disinfection residual and fluctuating/high Heterotrophic plate counts (HPC) occur in areas with minimal water looping. These areas have been identified for future capital upgrades and are included on a hydrant flushing program.

The City has at least 49 water samples tested every month, almost twice as many samples as is required under the BC Drinking Water Protection Regulations. Weekly sample results by station are tabulated in Appendix E.

The testing of disinfection by-products and metals at three (3) testing sites are also done by Metro Vancouver – these results are attached in Appendix C and Appendix D respectively.

The monitoring program provides a representative picture of drinking water quality within the municipal water mains. However, it does not provide a definitive picture of drinking water quality within buildings, where water quality can change significantly due to pipe materials, standing times, temperature, and other factors. It can be assumed that samples taken within buildings will be of different quality than those taken from municipal mains.

3.2 BACTERIOLOGICAL MONITORING AND RESULTS

The BC *Drinking Water Protection Regulation* requires the City to carry out routine sampling and testing for *Escherichia coli* and total coliform bacteria. These are considered “indicator organisms,” because their presence or absence can provide a good indication of microbial water quality.

3.2.1 *ESCHERICHIA COLI*

In 2023, no samples tested positive for *Escherichia coli* (*E. coli*). *E. coli* are a type of coliform bacteria present exclusively in the feces of humans and other animals. The existence of *E. coli* in water samples indicate recent fecal contamination and the possible presence of intestinal disease-causing bacteria, viruses, and protozoa. The BC *Drinking Water Protection Regulation* standard for *E. coli* is none detectable per 100 ml.

3.2.2 *TOTAL COLIFORM*

The total coliform group of bacteria is composed of various types with similar characteristics. The natural places for members of this group range from being fecal-specific, such as *E. coli*, to being widely distributed in the water, soil, and vegetation. The BC *Drinking Water Protection Regulation* standards for total coliform are described in Table 2. In 2023, no samples tested positive for total coliform.

TABLE 3 – BC DRINKING WATER PROTECTION REGULATION STANDARDS FOR TOTAL COLIFORM OCCURRENCE

	Standard
1 sample in a 30-day period	No detectable total coliform per 100mL
More than 1 sample in a 30-day period	At least 90% of samples have 0 total coliform per 100mL and no sample has more than 10 total coliforms per 100mL

3.3 FREQUENCY OF MONITORING SAMPLES

The monitoring frequency for the detection of *E. coli* and total coliforms is stipulated by the BC *Drinking Water Protection Regulation*. Current requirements are identified in Table 3. With a total of 14 weekly sampling sites at various points in the City’s water distribution system, the average number of monthly

samples (51) is approximately double the stipulated value of 30 (based on a directly serviced population of approximately 30,084); Metro Vancouver samples within the City provide an additional point of reference. As the City's population grows, additional sampling sites will be added.

TABLE 4 – MONITORING FREQUENCY FOR THE DETECTION OF E.COLI AND TOTAL COLIFORMS

Population Served	Target No. of Samples per Month
Less than 5,000	4
5,000 to 90,000	1 per 1,000 of population
More than 90,000	90 plus 1 per 10,000 of population in excess of 90,000

4 EMERGING CONTAMINANTS PARAMETERS IN DRINKING WATER

In monitoring emerging or unregulated drinking water quality parameters, the City exceeds the standards set by the *Water Quality Monitoring and Reporting Plan for the GVRD and Member Municipalities*. This section reports on the City's non-regulatory monitoring.

4.1 HETEROTROPHIC PLATE COUNT (HPC)

HPC is a useful operational tool for monitoring general bacteriological water quality through the treatment process and in the distribution system. HPC results are not an indicator of water safety and should not be used as an indicator of potential adverse human health effects.

Samples are tested for the presence of heterotrophic bacteria to detect possible changes such as the bacterial quality of the finished water entering the distribution system, temperature, residence time (i.e., stagnation), the presence or absence of a disinfectant residual, and the availability of nutrients for growth.

Health Canada does not suggest a maximum acceptable concentration for heterotrophs. Instead, it recommends that increases in heterotrophic plate count (HPC) concentrations above baseline levels be considered undesirable. In the event HPC count's test at or above this 500 CFU/mL, the City Operation's procedure is to flush the water mains. In 2023, there were two (2) sample results with HPC's over 500 CFU/mL. The City Operation's staff flushed the water mains and HPC levels returned to normal quickly. HPC data for each sample taken in 2023 is provided in Appendix E.

4.2 FREE CHLORINE

Health Canada's *Guidelines for Canadian Drinking Water Quality* recommends a minimum free chlorine residual of 0.2 mg/L to limit the growth of biofilm, provide an indication of distribution system water quality, and to guard against microbiological contamination.

Detailed free chlorine residual data is charted in Appendix E and shown on the sample station map in Appendix F. The data indicates that 89 samples (at 6 sampling stations) had free chlorine residuals of less than 0.2 mg/L. Table 4 – Number of Samples with <0.2mg/L shows the occurrences where the sample results showed free chlorine less than 0.2 mg/L and the percentages for total samples for each station. Sampling stations having low chlorine concentrations had no indication of microbiological impairment.

TABLE 5 – NUMBER OF SAMPLES WITH <0.2MG/L FREE CHLORINE

Sample Station	Chlorine Free <0.2 mg/L Count	% of Total Samples
COL-450	35	69%
COL-451	2	4%
COL-456	20	39%
COL-459	2	4%
COL-480	29	57%
COL-481	1	2%

Variations in the concentration of free chlorine residual may be associated with various issues such as chemical reactions between the chlorine and organic and inorganic chemicals. Residual chlorine concentrations are also affected by water age and fluctuate daily based on demand and water turn-over in the reservoir. To improve the level of free chlorine in the distribution system the City has been implementing the following since 2017: increased flushing and installation of auto-flushers; watermain looping, replacing aging AC water mains, and increasing the rate of turn-over in the reservoir. The City has investigated the addition of chlorine at the reservoir site however at this time has decided against it as the current measures, noted above, have been effective and there is a concern that additional chlorine may increase THMs and HAAs (see below). This will be regularly monitored and assessed.

4.3 DISINFECTION BY-PRODUCTS

Disinfection by-products such as trihalomethanes (THMs) and haloacetic acids (HAAs) can form when the chlorine used to disinfect drinking water reacts with naturally occurring organic matter. Health Canada considers certain HAA's and THMS's to probably be carcinogenic to humans.

In 2023, 12 samples were analyzed for trihalomethanes (THM) and haloacetic acids (HAA). These sample results are shown in Appendix C. The running average annual THM results ranged by location from 29 to 56 parts per billion (ppb), less than the Health Canada guidelines of 100 ppb. The running annual average total HAA results ranged by location from 32 to 50 ppb, less than the Health Canada's guideline of 80 ppb. Bromodichloromethane (a particular type of THM for which Health Canada publishes a standard) concentrations were 2 ppb or less, meeting the Health Canada guideline of 16 ppb.

4.4 TURBIDITY

Turbidity, measured in Nephelometric Turbidity Units (NTU) is a measure of water clarity. There is no safe/unsafe level of turbidity, but Health Canada guidelines recommend that turbidity average around 1.0 NTU and not exceed 5.0 NTU for more than 2 days in a 12-month period. Turbidity levels from the Metro Vancouver source water of Capilano, Seymour and Coquitlam are reported on the Metro Vancouver web site on a daily basis. Turbidity was generally low in 2023, with average turbidity values below 1.0 NTU at all sample stations (Table 5). There were one (1) incident which caused high turbidity in only one (1) station; COL-458, on February 14, 2023, due to the construction in the area. In the event that high turbidity is detected in a sample, the City will check system records for possible causes and carry out watermain flushing at the sample location.

TABLE 6 – AVERAGE TURBIDITY BY SAMPLE STATION

Sample Station	Average Turbidity (NTU)
COL-450	0.35
COL-451	0.46
COL-452	0.33
COL-453	0.62
COL-455	0.40
COL-456	0.34
COL-457	0.38

Sample Station	Average Turbidity (NTU)
COL-458	0.88
COL-459	0.38
COL-480	0.32
COL-481	0.36
COL-482	0.36
COL-483	0.37
COL-484	0.42

4.5 PH

pH is a measure of the acid-base equilibrium of water. pH is of concern in a water distribution system because at low values water becomes corrosive while at high values chlorine disinfection is less efficient.

In early June 2021, Greater Vancouver Water District (GVWD) increased the pH of the region’s drinking water supply from 7.7 to a new target range of 8.3 to 8.5. This increase was to preserve pipe condition and reduce corrosion. Health Canada indicates that an acceptable pH range for drinking water is 7.0-10.5 pH units.

Four samples were tested for pH in 2023, test results ranged of 7.7 to 7.9 pH Units. The lower pH values in these test results, when compared with the Metro’s target pH range of 8.3 to 8.5, is due to the time lapse between taking the samples and transferring them to Metro’s laboratory for measurement.

4.6 METALS

The City tested samples at 3 monitoring sites for concentrations of various metals twice in 2023. Test results are shown in Appendix D, along with maximum concentration limits suggested by Health Canada and the U.S. Environmental Protection Agency (USEPA). USEPA values are referenced only where Health Canada does not recommend a limit. As shown in Appendix D, almost all measured metal concentrations were below the limits recommended by Health Canada and the USEPA. There were one (1) high Iron result at station COL-458. Neither Health Canada nor the USEPA suggest drinking water quality guidelines for calcium, cobalt, magnesium, molybdenum, nickel, potassium, and silver.

4.7 TEMPERATURE

Health Canada sets an aesthetic objective of 15 degrees Celsius for drinking water. Water temperatures exceeding this objective can result in consumer complaints and the growth of nuisance organisms that could lead to unpleasant tastes and odours. The average monthly temperature of 15 degrees Celsius was exceeded in July, August, and September of 2023 with an average temperature of 15.6 to 17.6 degrees Celsius.

Figure 2 (2023 Average Monthly Water Temperatures) shows the average monthly drinking water temperature in Langley. Detailed temperature information is provided in Appendix E.

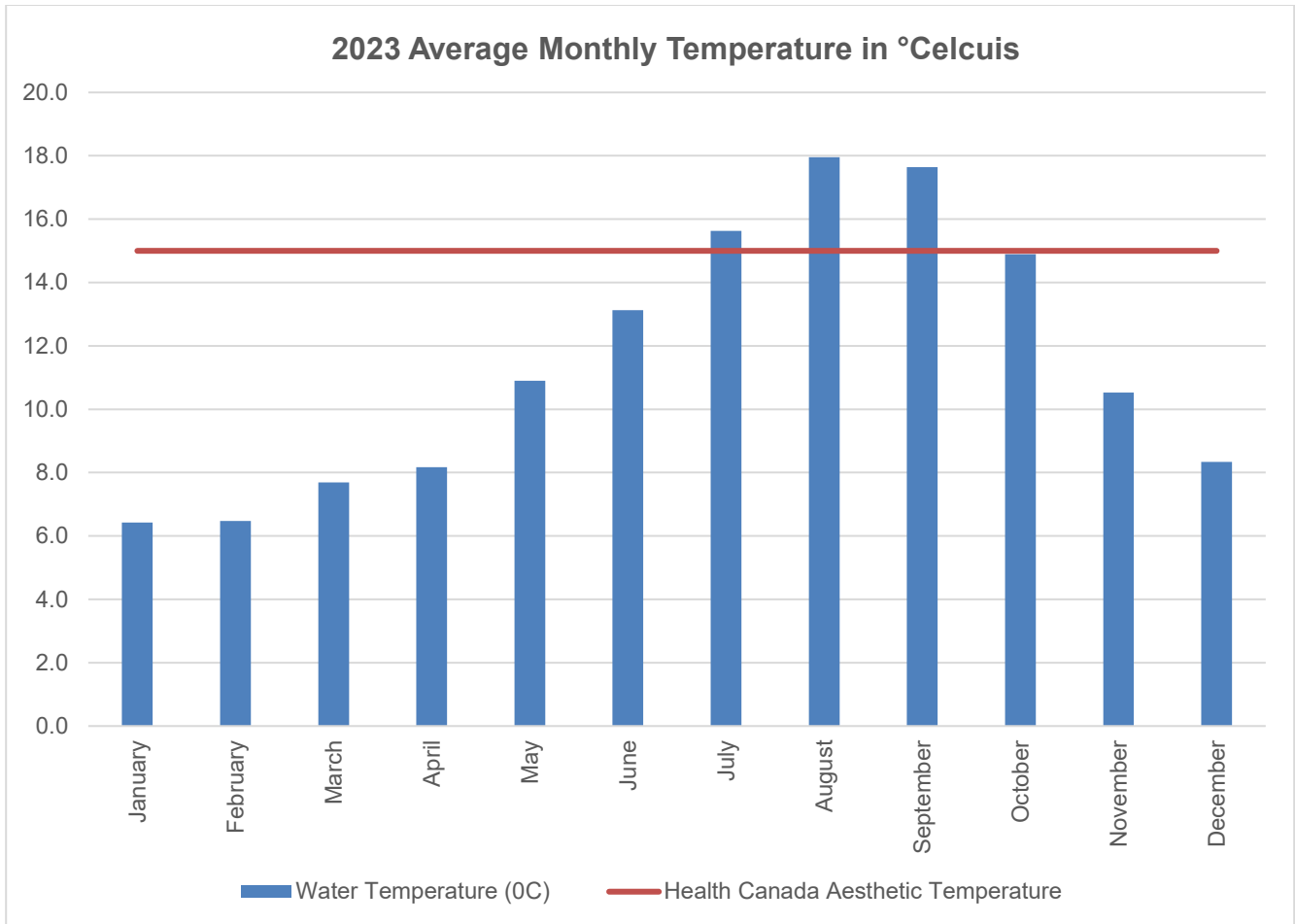


FIGURE 4 - 2023 AVERAGE MONTHLY WATER TEMPERATURES

4.8 VINYL CHLORIDE

Vinyl chloride is being monitored in drinking water due to health concerns associated with its presence. Exposure to vinyl chloride has been linked to various health issues, including cancer. Long-term exposure to vinyl chloride primarily occurs through contaminated drinking water.

Ingesting vinyl chloride can lead to several health problems, including liver damage, respiratory issues, neurological effects, and an increased risk of developing certain types of cancer, such as liver cancer and angiosarcoma of the liver.

Because of these health risks, Health Canada closely monitor the levels of vinyl chloride in drinking water to ensure that it remains within safe limits to protect public health. Regular monitoring and adherence to strict guidelines help to mitigate the risks associated with vinyl chloride exposure in drinking water.

The concentration of vinyl chloride was tested in 6 samples during 2023. As indicated in Table 6, all results were non-detectable (less than 1 µg/L), less than the Health Canada Guideline of 2 µg/L.

TABLE 7 – VINYL CHLORIDE RESULTS - WATER DISTRIBUTION SYSTEM

Sample Station Number	Sample Reported Name	Sample date	Vinyl Chloride µg/L
COL-451	202A St. & 50 Ave.	20-June-2023	<1
COL-452	19618 Fraser Hwy.	04-July-2023	<1
COL-480	209 St. & 51B Ave.	20-June-2023	<1
COL-451	202A St. & 50 Ave.	05-Dec-2023	<1
COL-452	19618 Fraser Hwy.	05-Dec-2023	<1
COL-480	209 St. & 51B Ave.	05-Dec-2023	<1

5 WATER SYSTEM SECURITY

In the event that contaminants are detected in the water distribution system, a series of protocols would be carried out to communicate the event to City and Fraser Health Authority staff. The City and Fraser Health would then work together to confirm the incident, determine the nature of the risk to public health and issue public notices and advisories as required. Depending on the level of risk, a water quality advisory, boil water notice, or do-not-use water notice could be issued. Public notices would be communicated through various media. The City's contamination response plan is embedded in emergency planning documents.

The reservoir building has a monitored security system including external security lighting, surveillance cameras and alarms. The site is also secured with fencing, locked access doors and ground hatches to prevent unauthorized entry to the facility.

The City's Building and Plumbing Bylaw No. 2498 ensures all new construction and renovations include backflow prevention on the potable water supply.

The City is working on a Water System Emergency Response and Continuity Plan to following the British Columbia Emergency Response Management System. The plan focuses on the loss of Metro Vancouver source water supply, water quality degradation, seismic hazards, and flooding. The following sections indicate the current City procedures in place to deal with emergency response and water continuity.

5.1 EMERGENCY RESPONSE PLAN

The City has an emergency response plan in case our water supply is interrupted for any reason. There are procedures that Engineering Operations crews follow whether it is a major or minor problem. The Emergency Plan involves activating four distinct stages:

- 1) ALERT situation.
- 2) EMERGENCY RESPONSE eliminate hazard, isolate contamination, minimize water loss
- 3) RECOVERY/RESTORATION to reinstate our water supply.
- 4) DEBRIEFING would take place when recovery operations are underway.

5.2 WATER CONTINUITY PLAN

The City reservoir is equipped with an automatic shut off valve, which will close if a large earthquake takes place. This will retain the water that exists in the reservoir, which then will be available for domestic and firefighting use. It can serve a population of 55,000 and provide adequate firefighting requirements for several hours. If necessary, it could provide adequate supply for a population of 70,000. The City of Langley has an agreement with the Township of Langley that will allow us to open one of five operating interconnect valves along the municipal boundary to share water if there is a disruption from our source or distribution system preventing us from supplying water. The City Engineering Operations staff coordinates with the Township of Langley Operations staff to ensure regular operation and flushing of these valves to ensure emergency operability.

6 WATER CONSUMPTION

The total water consumption for 2023 in the City was 4,095,223 cubic meters, up 5% from 3,898,020 cubic meters in 2022. Figure 3 shows the water consumption in 2021, 2022, and 2023 by month, and Figure 4 shows the yearly total water consumption over the past 10 years. The increase in consumption in 2023 was mainly due to the population growth and the extreme heat period that Metro Vancouver experienced during the month of July as well as longer summer which is due to the climate change.

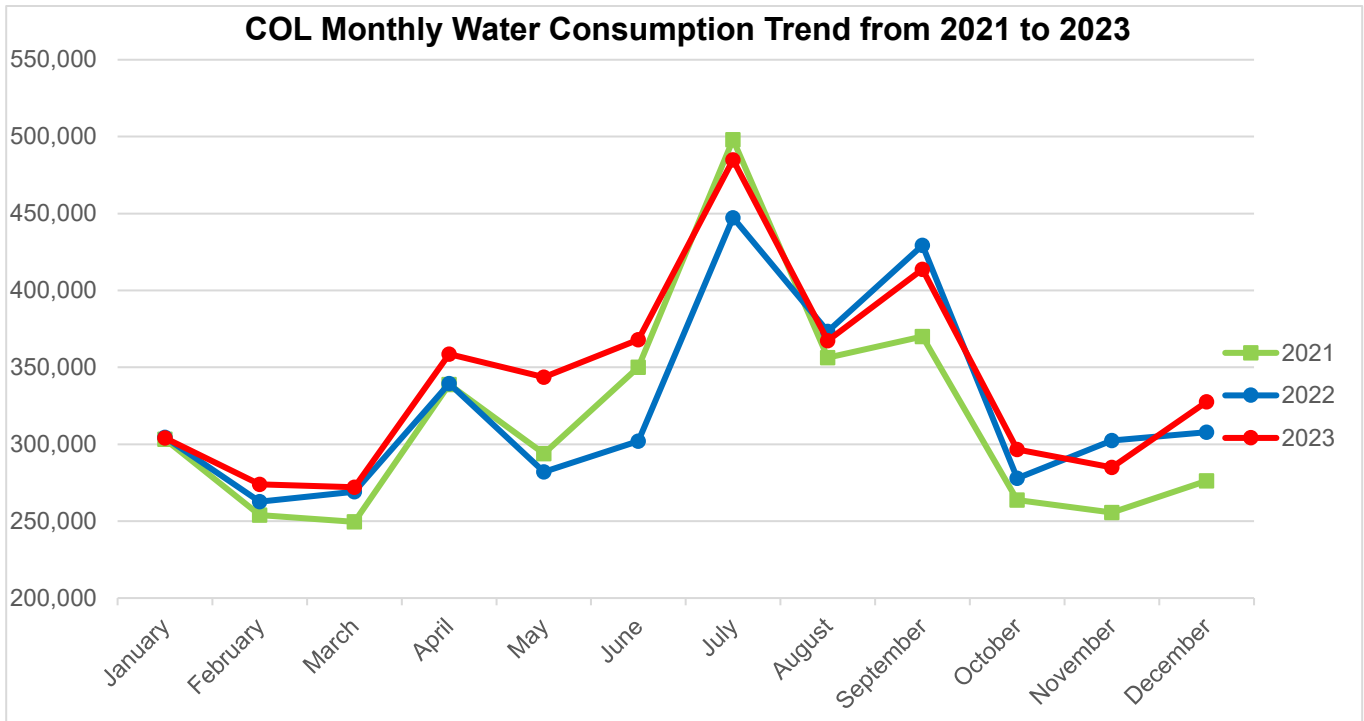


FIGURE 5 - WATER CONSUMPTION 2021 TO 2023 - MONTHLY TOTALS

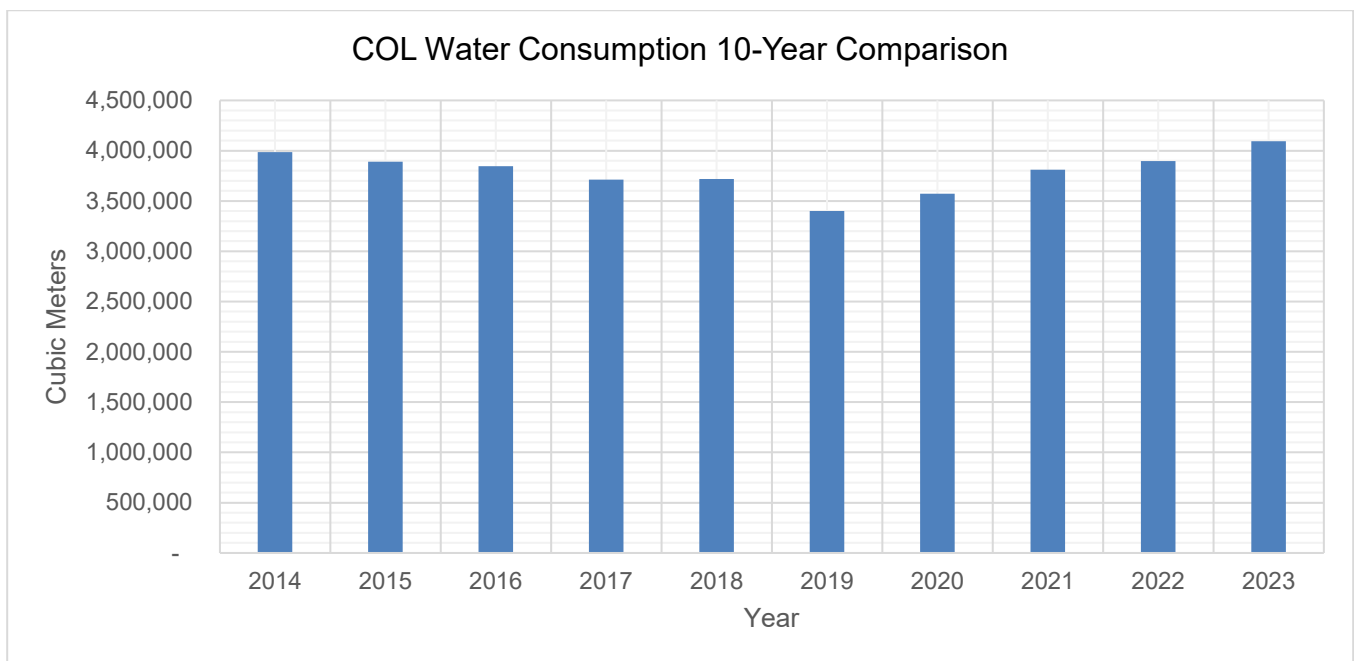


FIGURE 6 - WATER CONSUMPTION - 10 YEAR COMPARISON

7 PUBLIC HEALTH LEAD MESSAGE

Anytime the water in a particular faucet has not been used for six hours or longer, "flush" your cold-water pipes by running the water until you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home's pipes, the more lead it may contain. Use only water from the cold tap for drinking, cooking, and specially making baby formula. Hot water is likely to contain higher levels of lead. The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply. Conserving water is still important. Rather than just running the water down the drain you could use the water for things such as watering your plants.

8 CONCLUSIONS

The City of Langley monitored drinking water quality in 2023 in accordance with provincial regulations. 707 drinking water samples were obtained from the municipal water distribution system at 14 sites throughout the City of Langley. Metro Vancouver Laboratory testing indicated that all samples met Provincial Drinking Water Protection Regulation standards.

If you have any question about this report or concerns about the drinking water quality in City of Langley, please contact (604) 514 - 2910.

APPENDIX A:

PHYSICAL AND CHEMICAL ANALYSIS OF WATER SUPPLY - GREATER VANCOUVER WATER DISTRICT - 2023 - COQUITLAM WATER SYSTEM

Physical and Chemical Analysis of Water Supply

2023 – Coquitlam Water System

Parameter	Untreated ¹	Treated ²		Canadian Guideline		
	Average	Average	Range	Days Exceeded	Limit ³	Reason Established
Alkalinity as CaCO ₃ (mg/L)	1.9	21	18-24	N/A	None	N/A
Aluminum Dissolved (µg/L)	55	59	45-65	N/A	None	N/A
Aluminum Total (µg/L)	75	76	61-85	0	2,900	Health
Antimony Total (µg/L)	<0.5	<0.5	<0.5	0	6	Health
Arsenic Total (µg/L)	<0.5	<0.5	<0.5	0	10 (ALARA)	Health
Barium Total (µg/L)	2.2	2.2	2.0-2.4	0	2,000	Health
Boron Total (µg/L)	<10	<10	<10	0	5,000	Health
Bromate (µg/L)	<10	<10	<10	0	10	Health
Bromide (µg/L)	<10	<10	<10	N/A	None	N/A
Cadmium Total (µg/L)	<0.2	<0.2	<0.2	0	7	Health
Calcium Total (µg/L)	838	838	790-905	N/A	None	N/A
Carbon Organic - Dissolved (mg/L)	1.4	1.4	1.1-1.8	N/A	None	N/A
Carbon Organic - Total (mg/L)	1.5	1.4	1.0-1.8	N/A	None	N/A
Chlorate (µg/L)	<10	49	36-73	0	1,000	Health
Chloride (mg/L)	<0.5	2.2	2.0-2.7	0	≤ 250	Aesthetic
Chromium Total (µg/L)	<0.06	<0.05	<0.05-0.05	0	50	Health
Cobalt Total (µg/L)	<0.5	<0.5	<0.5	N/A	None	N/A
Colour - Apparent (ACU)	11	<3	<2-5	N/A	None	N/A
Colour - True (TCU)	7	<1	<1-2	0	≤ 15	Aesthetic
Conductivity (µmhos/cm)	8	48	42-54	N/A	None	N/A
Copper Total (µg/L)	5.1	<0.5	<0.5	0	2,000/1,000	Health/Aesthetic
Cyanide Total (mg/L)	<0.02	<0.02	<0.02	0	0.2	Health
Cyanobacterial Toxins – Microcystin – LR (µg/L)	<0.20	N/A	N/A	0	1.5	Health
Fluoride (mg/L)	<0.05	<0.05	<0.05	0	1.5	Health
Halooacetic Acids Total (µg/L)	<1	5	4-6	0	80 (ALARA)	Health
Hardness as CaCO ₃ (mg/L)	2.5	2.5	2.3-2.7	N/A	None	N/A
Iron Dissolved (µg/L)	18	19	14-31	N/A	None	N/A
Iron Total (µg/L)	49	49	32-91	0	≤ 300	Aesthetic
Lead Total (µg/L)	<0.5	<0.5	<0.5	0	5 (ALARA)	Health
Magnesium Total (µg/L)	98	98	86-112	N/A	None	N/A
Manganese Dissolved (µg/L)	3.8	2.4	1.7-3.2	N/A	None	N/A
Manganese Total (µg/L)	4.2	3.5	2.5-6.6	0	120/20	Health/Aesthetic
Mercury Total (µg/L)	<0.05	<0.05	<0.05	0	1	Health
Molybdenum Total (µg/L)	<0.5	<0.5	<0.5	N/A	None	N/A
Nickel Total (µg/L)	<0.5	<0.5	<0.5	N/A	None	N/A
Nitrogen - Ammonia as N (mg/L)	<0.02	<0.02	<0.02	N/A	None	N/A
Nitrogen - Nitrate as N (mg/L)	0.08	0.08	0.04-0.10	0	10	Health
Nitrogen - Nitrite as N (mg/L)	<0.01	<0.01	<0.01	0	1	Health
pH (pH units)	6.4	8.2	7.7-8.7	0	7.0-10.5	Aesthetic
Phenol (mg/L)	<0.006	<0.003	<0.005	N/A	None	N/A
Potassium Total (µg/L)	122	124	113-138	N/A	None	N/A
Residue Total (mg/L)	12	35	32-40	N/A	None	N/A
Residue Total Dissolved (TDS) (mg/L)	10	30	30-40	0	≤ 500	Aesthetic
Residue Total Fixed (mg/L)	<5	22	20-24	N/A	None	N/A
Residue Total Volatile (mg/L)	7	13	11-19	N/A	None	N/A
Selenium Total (µg/L)	<0.5	<0.5	<0.5	0	50	Health
Silica as SiO ₂ (mg/L)	2.5	2.5	2.3-2.6	N/A	None	N/A
Silver Total (µg/L)	<0.5	<0.5	<0.5	N/A	None	N/A
Sodium Total (µg/L)	470	10,300	9,600-10,500	0	≤ 200,000	Aesthetic
Trihalomethanes Total (µg/L)	<4	8	6-12	0	100	Health
Turbidity (NTU)	0.46	0.39	0.19-2.9	N/A	None ⁴	N/A
Uranium Total (µg/L)	0.0482	N/A	N/A	0	50	Health
UV 254 - Apparent (Abs/cm)	0.062	0.022	0.014-0.052	N/A	None	N/A
UV Absorbance 254 nm (Abs/cm)	0.055	0.017	0.010-0.022	N/A	None	N/A
Zinc Total (µg/L)	<3	<3	<3	0	≤ 5,000	Aesthetic

¹Untreated water is sampled from the source intake.

²Treated water is sampled prior to entering the Coquitlam transmission system.

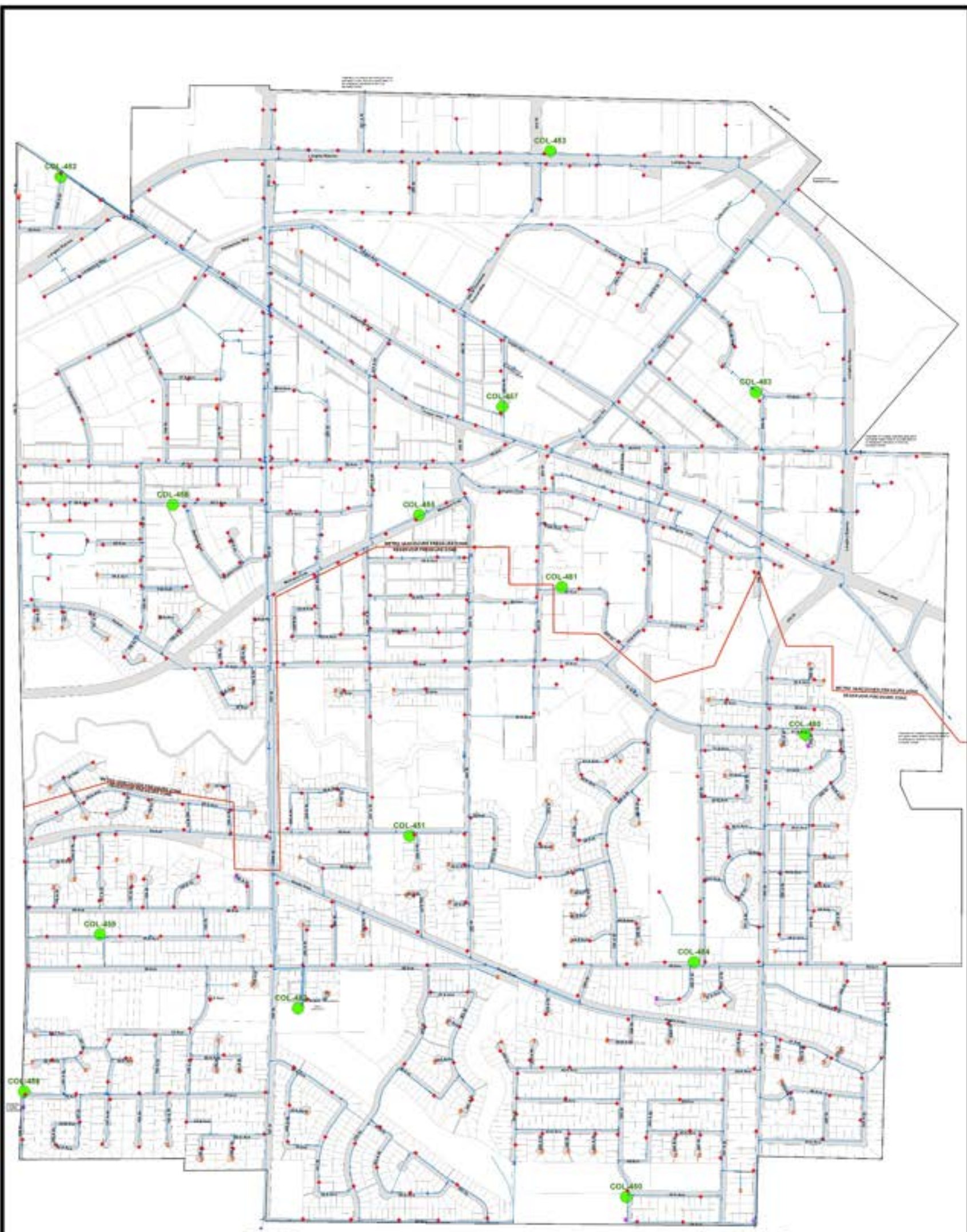
³Limits are taken from the *Guidelines for Canadian Drinking Water Quality*.

⁴*Guidelines for Canadian Drinking Water Quality* recommends that water entering the distribution system have turbidity levels of 1.0 NTU or less.

APPENDIX B:

CITY OF LANGLEY WATER SYSTEM MAP

CITY OF LANGLEY SAMPLE STATIONS



- Legend**
- Valve
 - Zone Valve
 - Auto Flusher
 - Blowoff
 - Air Valve
 - Pressure Reducing Valve
 - Hydrants
 - Test Stations
 - Water Reservoir
 - Water Mains
 - Private Mains
 - Pressure Zones



APPENDIX C:

CITY OF LANGLEY WATER DISINFECTION BY-PRODUCT RESULTS – 2023

Disinfection By-product Results – 2023

Sampling Site	Location	Date Sampled	THM (ppb)					HAA (ppb)						Extras
			Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	pH units pH
COL-451	202A St. & 50 Ave.	31-Jan-2023	<1	<1	<1	47	48	<0.5	9.1	<0.5	<0.5	26	35	7.8
COL-457	5700 Blk 203A St.	31-Jan-2023	<1	<1	<1	36	37	<0.5	12	<0.5	<0.5	18	30	
COL-480	209 St. & 51B Ave.	31-Jan-2023	<1	<1	<1	56	57	<0.5	4.9	<0.5	<0.5	28	33	
COL-451	202A St. & 50 Ave.	30-May-2023	1	<1	<1	31	34	<0.5	8.4	<0.5	<0.5	28	37	7.7
COL-457	5700 Blk 203A St.	30-May-2023	1	<1	<1	27	30	<0.5	14	<0.5	<0.5	20	34	
COL-480	209 St. & 51B Ave.	30-May-2023	1	<1	<1	38	41	<0.5	2.9	<0.5	<0.5	24	27	
COL-451	202A St. & 50 Ave.	22-Aug-2023	2	<1	<1	34	37	<0.5	9.4	<0.5	0.9	31	41	7.9
COL-457	5700 Blk 203A St.	22-Aug-2023	1	<1	<1	24	27	<0.5	18	<0.5	1.0	23	42	
COL-480	209 St. & 51B Ave.	22-Aug-2023	1	<1	<1	34	37	<0.5	1.3	<0.5	<0.5	26	28	
COL-451	202A St. & 50 Ave.	28-Nov-2023	<1	<1	<1	33	35	<0.5	12	<0.5	<0.5	29	41	7.7
COL-457	5700 Blk 203A St.	28-Nov-2023	<1	<1	<1	32	34	<0.5	17	<0.5	0.9	27	45	
COL-480	209 St. & 51B Ave.	28-Nov-2023	1	<1	<1	45	47	<0.5	7.6	<0.5	<0.5	37	45	

APPENDIX D:

CITY OF LANGLEY – METALS – 2023

Sample type	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Grab sample	Canadian Guideline Limit	Reason Guideline Established
Customer	COL	COL	COL	COL	COL	COL		
Sample Name	COL-455	COL-458	COL-481	COL-455	COL-458	COL-481		
Sample Description	20200 Blk. of Michaud Crescent	5400 Blk of Brydon Crescent	20400 Blk of 54 Ave.	20200 Blk. of Michaud Crescent	5400 Blk of Brydon Crescent	20400 Blk of 54 Ave.		
Sampled date	2023-02-14 11:00	2023-02-14 11:12	2023-02-14 10:48	2023-09-12 10:00	2023-09-12 10:12	2023-09-12 9:48		
Aluminum Total (µg/L)	81	617	76	61	63	68	2900	Health
Antimony Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6	Health
Arsenic Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	10 (ALARA)	Health
Barium Total (µg/L)	2.2	8.1	2.2	2.2	2.2	2.1	2000	Health
Boron Total (µg/L)	<10	<10	<10	<10	<10	<10	5000	Health
Cadmium Total (µg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	7	Health
Calcium Total (µg/L)	1020	1190	1170	910	924	1010	none	
Chromium Total (µg/L)	0.06	0.27	0.08	0.06	<0.05	0.06	50	Health
Cobalt Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	none	
Copper Total (µg/L)	0.9	2.8	1.4	1.0	1.5	1.6	2000	Health
Iron Total (µg/L)	60	751	49	57	59	57	≤ 300	Aesthetic
Lead Total (µg/L)	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	5 (ALARA)	Health
Magnesium Total (µg/L)	96	196	89	83	83	72	none	
Manganese Total (µg/L)	3.2	58.3	1.7	3.8	4.0	3.7	120	Health
Mercury Total (µg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	1.0	Health
Molybdenum Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	none	
Nickel Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	none	
Potassium Total (µg/L)	121	168	123	136	136	139	none	
Selenium Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	50	Health
Silver Total (µg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	none	
Sodium Total (µg/L)	10800	10800	10900	10500	10500	10600	≤ 200,000	Aesthetic
Zinc Total (µg/L)	<3.0	5	<3.0	<3.0	<3.0	<3.0	≤ 5000	Aesthetic

*Guidelines Checked October 3, 2023

ALARA= As Low As Reasonably Achievable

APPENDIX E:

WEEKLY SAMPLE LAB RESULTS – 2023

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-450	GRAB	206 St. & 44A Ave.	2023-01-03 10:00	0.26	<1	<2	5.6	<1	0.78
COL-450	GRAB	206 St. & 44A Ave.	2023-01-10 10:00	0.25	<1	<2	6.2	<1	0.36
COL-450	GRAB	206 St. & 44A Ave.	2023-01-17 10:00	0.33	<1	<2	6.5	<1	0.31
COL-450	GRAB	206 St. & 44A Ave.	2023-01-24 10:00	0.28	<1	<2	7.5	<1	0.28
COL-450	GRAB	206 St. & 44A Ave.	2023-01-31 10:00	0.2	<1	<2	6.4	<1	0.27
COL-450	GRAB	206 St. & 44A Ave.	2023-02-07 10:00	0.16	<1	<2	6.6	<1	0.27
COL-450	GRAB	206 St. & 44A Ave.	2023-02-14 10:00	0.29	<1	<2	6.4	<1	0.3
COL-450	GRAB	206 St. & 44A Ave.	2023-02-21 10:00	0.26	<1	<2	6.7	<1	0.24
COL-450	GRAB	206 St. & 44A Ave.	2023-02-28 10:00	0.25	<1	<2	5.8	<1	0.38
COL-450	GRAB	206 St. & 44A Ave.	2023-03-07 09:47	0.17	<1	<2	7.4	<1	0.25
COL-450	GRAB	206 St. & 44A Ave.	2023-03-14 10:00	0.15	<1	<2	6.5	<1	0.32
COL-450	GRAB	206 St. & 44A Ave.	2023-03-21 09:48	0.16	<1	<2	9.5	<1	0.25
COL-450	GRAB	206 St. & 44A Ave.	2023-03-28 10:00	0.17	<1	<2	8.2	<1	0.29
COL-450	GRAB	206 St. & 44A Ave.	2023-04-04 10:00	0.2	<1	<2	8.2	<1	0.64
COL-450	GRAB	206 St. & 44A Ave.	2023-04-11 09:00	0.13	<1	<2	8.2	<1	0.4
COL-450	GRAB	206 St. & 44A Ave.	2023-04-18 09:00	0.14	<1	4	8.3	<1	0.53
COL-450	GRAB	206 St. & 44A Ave.	2023-04-25 09:00	0.17	<1	<2	8.6	<1	0.41
COL-450	GRAB	206 St. & 44A Ave.	2023-05-02 09:00	0.18	<1	<2	10.2	<1	0.37
COL-450	GRAB	206 St. & 44A Ave.	2023-05-09 09:00	0.21	<1	18	11.2	<1	0.33
COL-450	GRAB	206 St. & 44A Ave.	2023-05-16 09:00	0.18	<1	<2	12.3	<1	0.41
COL-450	GRAB	206 St. & 44A Ave.	2023-05-23 09:00	0.28	<1	<2	14.2	<1	0.35
COL-450	GRAB	206 St. & 44A Ave.	2023-05-30 09:00	0.28	<1	2	14	<1	0.47
COL-450	GRAB	206 St. & 44A Ave.	2023-06-06 09:00	0.28	<1	<2	13.9	<1	0.25
COL-450	GRAB	206 St. & 44A Ave.	2023-06-13 09:00	0.22	<1	<2	15.5	<1	0.48
COL-450	GRAB	206 St. & 44A Ave.	2023-06-20 09:00	0.07	<1	6	15.3	<1	0.43
COL-450	GRAB	206 St. & 44A Ave.	2023-06-28 08:45	0.15	<1	2	14.8	<1	0.28
COL-450	GRAB	206 St. & 44A Ave.	2023-07-04 09:00	0.13	<1	<2	16.1	<1	0.34
COL-450	GRAB	206 St. & 44A Ave.	2023-07-11 09:00	0.14	<1	20	17.2	<1	0.25
COL-450	GRAB	206 St. & 44A Ave.	2023-07-18 09:00	0.15	<1	4	17.9	<1	0.29
COL-450	GRAB	206 St. & 44A Ave.	2023-07-25 09:20	0.23	<1	<2	18.3	<1	0.27

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-450	GRAB	206 St. & 44A Ave.	2023-08-01 09:00	0.16	<1	8	18.7	<1	0.24
COL-450	GRAB	206 St. & 44A Ave.	2023-08-08 09:00	0.15	<1	20	19.6	<1	0.33
COL-450	GRAB	206 St. & 44A Ave.	2023-08-15 09:00	0.15	<1	4	19.3	<1	0.27
COL-450	GRAB	206 St. & 44A Ave.	2023-08-22 09:00	0.18	<1	8	19.8	<1	0.24
COL-450	GRAB	206 St. & 44A Ave.	2023-08-29 09:00	0.11	<1	14	19.3	<1	0.29
COL-450	GRAB	206 St. & 44A Ave.	2023-09-05 09:00	0.15	<1	6	18.9	<1	0.3
COL-450	GRAB	206 St. & 44A Ave.	2023-09-12 09:00	0.19	<1	30	18.5	<1	0.39
COL-450	GRAB	206 St. & 44A Ave.	2023-09-19 09:00	0.16	<1	<2	18.4	<1	0.39
COL-450	GRAB	206 St. & 44A Ave.	2023-09-26 08:45	0.03	<1	26	17.6	<1	0.32
COL-450	GRAB	206 St. & 44A Ave.	2023-10-03 08:30	0.14	-	40	17	-	0.3
COL-450	GRAB	206 St. & 44A Ave.	2023-10-10 10:00	0.09	-	4	16.2	-	0.3
COL-450	GRAB	206 St. & 44A Ave.	2023-10-17 10:00	0.02	-	10	15.4	-	0.34
COL-450	GRAB	206 St. & 44A Ave.	2023-10-24 10:00	0.03	-	10	15	-	0.34
COL-450	GRAB	206 St. & 44A Ave.	2023-10-31 10:00	0.17	-	80	12.3	-	0.39
COL-450	GRAB	206 St. & 44A Ave.	2023-11-07 10:00	0.14	<1	100	12.4	<1	0.37
COL-450	GRAB	206 St. & 44A Ave.	2023-11-14 10:00	0.01	<1	10	11.8	<1	0.32
COL-450	GRAB	206 St. & 44A Ave.	2023-11-21 09:30	0.05	<1	50	11.1	<1	0.31
COL-450	GRAB	206 St. & 44A Ave.	2023-11-28 09:20	0.15	<1	<2	9.7	<1	0.31
COL-450	GRAB	206 St. & 44A Ave.	2023-12-05 10:00	0.15	<1	60	9	<1	0.28
COL-450	GRAB	206 St. & 44A Ave.	2023-12-12 10:00	0.17	<1	20	8.7	<1	0.33
COL-450	GRAB	206 St. & 44A Ave.	2023-12-19 09:20	0.25	<1	NA	9	<1	0.46
COL-451	GRAB	202A St. & 50 Ave.	2023-01-03 09:48	0.33	<1	<2	6.3	<1	0.57
COL-451	GRAB	202A St. & 50 Ave.	2023-01-10 09:48	0.72	<1	<2	6.7	<1	0.3
COL-451	GRAB	202A St. & 50 Ave.	2023-01-17 09:48	0.51	<1	<2	6.7	<1	0.27
COL-451	GRAB	202A St. & 50 Ave.	2023-01-24 09:48	0.44	<1	<2	6.9	<1	0.33
COL-451	GRAB	202A St. & 50 Ave.	2023-01-31 09:48	0.45	<1	<2	6.7	<1	0.28
COL-451	GRAB	202A St. & 50 Ave.	2023-02-07 09:48	0.55	<1	<2	6.4	<1	0.4
COL-451	GRAB	202A St. & 50 Ave.	2023-02-14 09:48	0.48	<1	<2	6.8	<1	0.33
COL-451	GRAB	202A St. & 50 Ave.	2023-02-21 09:48	0.47	<1	<2	6.9	<1	0.27
COL-451	GRAB	202A St. & 50 Ave.	2023-02-28 09:48	0.45	<1	2	6.5	<1	0.42

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-451	GRAB	202A St. & 50 Ave.	2023-03-07 09:30	0.49	<1	<2	7.6	<1	0.29
COL-451	GRAB	202A St. & 50 Ave.	2023-03-14 09:48	0.55	<1	<2	6.5	<1	0.38
COL-451	GRAB	202A St. & 50 Ave.	2023-03-21 09:33	0.78	<1	2	7.8	<1	0.26
COL-451	GRAB	202A St. & 50 Ave.	2023-03-28 09:48	0.71	<1	<2	7.5	<1	0.44
COL-451	GRAB	202A St. & 50 Ave.	2023-04-04 09:48	0.59	<1	2	8.5	<1	0.43
COL-451	GRAB	202A St. & 50 Ave.	2023-04-11 08:48	0.21	<1	<2	8.6	<1	0.36
COL-451	GRAB	202A St. & 50 Ave.	2023-04-18 08:48	0.6	<1	10	8.5	<1	4.9
COL-451	GRAB	202A St. & 50 Ave.	2023-04-25 08:48	0.4	<1	4	8.4	<1	0.47
COL-451	GRAB	202A St. & 50 Ave.	2023-05-02 08:48	0.36	<1	2	9.3	<1	0.39
COL-451	GRAB	202A St. & 50 Ave.	2023-05-09 08:48	0.61	<1	24	9.9	<1	0.35
COL-451	GRAB	202A St. & 50 Ave.	2023-05-16 08:48	0.44	<1	4	11.7	<1	0.55
COL-451	GRAB	202A St. & 50 Ave.	2023-05-23 08:48	0.62	<1	96	12.1	<1	0.64
COL-451	GRAB	202A St. & 50 Ave.	2023-05-30 08:48	0.4	<1	70	13.5	<1	0.56
COL-451	GRAB	202A St. & 50 Ave.	2023-06-06 08:48	0.54	<1	12	12.9	<1	0.32
COL-451	GRAB	202A St. & 50 Ave.	2023-06-13 08:48	0.63	<1	90	13.8	<1	0.58
COL-451	GRAB	202A St. & 50 Ave.	2023-06-20 08:48	0.09	<1	120	15.2	<1	0.4
COL-451	GRAB	202A St. & 50 Ave.	2023-06-28 08:30	0.3	<1	130	13.4	<1	0.37
COL-451	GRAB	202A St. & 50 Ave.	2023-07-04 08:48	0.33	<1	22	15.5	<1	0.36
COL-451	GRAB	202A St. & 50 Ave.	2023-07-11 08:48	0.31	<1	250	15.2	<1	0.25
COL-451	GRAB	202A St. & 50 Ave.	2023-07-18 08:48	0.38	<1	62	17.6	<1	0.26
COL-451	GRAB	202A St. & 50 Ave.	2023-07-25 09:00	0.37	<1	<2	16	<1	0.25
COL-451	GRAB	202A St. & 50 Ave.	2023-08-01 08:48	0.35	<1	6	17.3	<1	0.27
COL-451	GRAB	202A St. & 50 Ave.	2023-08-08 08:48	0.35	<1	150	17.4	<1	0.29
COL-451	GRAB	202A St. & 50 Ave.	2023-08-15 08:48	0.28	<1	70	18.1	<1	0.3
COL-451	GRAB	202A St. & 50 Ave.	2023-08-22 08:48	0.36	<1	90	18.2	<1	0.34
COL-451	GRAB	202A St. & 50 Ave.	2023-08-29 08:48	0.28	<1	110	19	<1	0.28
COL-451	GRAB	202A St. & 50 Ave.	2023-09-05 08:48	0.35	<1	14	19	<1	0.31
COL-451	GRAB	202A St. & 50 Ave.	2023-09-12 08:48	0.39	<1	60	18.4	<1	0.38
COL-451	GRAB	202A St. & 50 Ave.	2023-09-19 08:48	0.32	<1	12	18.2	<1	0.29
COL-451	GRAB	202A St. & 50 Ave.	2023-09-26 08:30	0.25	<1	50	17.6	<1	0.39

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-451	GRAB	202A St. & 50 Ave.	2023-10-03 08:15	0.21	-	80	17	-	0.29
COL-451	GRAB	202A St. & 50 Ave.	2023-10-10 09:48	0.34	-	12	15.6	-	0.32
COL-451	GRAB	202A St. & 50 Ave.	2023-10-17 09:48	0.39	-	40	14.7	-	0.91
COL-451	GRAB	202A St. & 50 Ave.	2023-10-24 09:48	0.18	-	2	14.6	-	0.35
COL-451	GRAB	202A St. & 50 Ave.	2023-10-31 09:48	0.31	-	56	12.7	-	0.46
COL-451	GRAB	202A St. & 50 Ave.	2023-11-07 09:48	0.35	<1	42	12.1	<1	0.33
COL-451	GRAB	202A St. & 50 Ave.	2023-11-14 09:48	0.61	<1	26	11.3	<1	0.31
COL-451	GRAB	202A St. & 50 Ave.	2023-11-21 09:15	0.46	<1	68	10.3	<1	0.37
COL-451	GRAB	202A St. & 50 Ave.	2023-11-28 09:00	0.39	<1	10	9.3	<1	0.32
COL-451	GRAB	202A St. & 50 Ave.	2023-12-05 09:48	0.4	<1	34	9.1	<1	0.27
COL-451	GRAB	202A St. & 50 Ave.	2023-12-12 09:48	0.55	<1	24	8.7	<1	0.29
COL-451	GRAB	202A St. & 50 Ave.	2023-12-19 09:00	0.55	<1	NA	8.2	<1	0.49
COL-452	GRAB	19618 Fraser Hwy.	2023-01-03 11:48	0.93	<1	6	6.6	<1	0.42
COL-452	GRAB	19618 Fraser Hwy.	2023-01-10 11:48	1.24	<1	<2	7.6	<1	0.26
COL-452	GRAB	19618 Fraser Hwy.	2023-01-17 11:48	1.01	<1	8	7.6	<1	0.29
COL-452	GRAB	19618 Fraser Hwy.	2023-01-24 11:48	1.08	<1	12	7.3	<1	0.39
COL-452	GRAB	19618 Fraser Hwy.	2023-01-31 11:48	0.93	<1	38	6.9	<1	0.24
COL-452	GRAB	19618 Fraser Hwy.	2023-02-07 11:48	0.97	<1	14	6.6	<1	0.42
COL-452	GRAB	19618 Fraser Hwy.	2023-02-14 11:48	1.06	<1	<2	7.2	<1	0.26
COL-452	GRAB	19618 Fraser Hwy.	2023-02-21 11:48	1	<1	<2	7.2	<1	0.29
COL-452	GRAB	19618 Fraser Hwy.	2023-02-28 11:48	0.95	<1	30	6.7	<1	0.33
COL-452	GRAB	19618 Fraser Hwy.	2023-03-07 11:49	0.86	<1	2	8.2	<1	0.23
COL-452	GRAB	19618 Fraser Hwy.	2023-03-14 11:48	0.84	<1	<2	7.5	<1	0.31
COL-452	GRAB	19618 Fraser Hwy.	2023-03-21 11:59	0.87	<1	2	10.5	<1	0.25
COL-452	GRAB	19618 Fraser Hwy.	2023-03-28 11:48	0.99	<1	8	9.2	<1	0.42
COL-452	GRAB	19618 Fraser Hwy.	2023-04-04 11:48	0.96	<1	<2	8.8	<1	0.36
COL-452	GRAB	19618 Fraser Hwy.	2023-04-11 10:48	1.06	<1	<2	9.3	<1	0.35
COL-452	GRAB	19618 Fraser Hwy.	2023-04-18 10:48	0.86	<1	4	9.6	<1	0.52
COL-452	GRAB	19618 Fraser Hwy.	2023-04-25 10:48	0.93	<1	2	9.8	<1	0.37
COL-452	GRAB	19618 Fraser Hwy.	2023-05-02 10:48	0.71	<1	2	10.4	<1	0.3

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-452	GRAB	19618 Fraser Hwy.	2023-05-09 10:48	0.83	<1	<2	12.5	<1	0.33
COL-452	GRAB	19618 Fraser Hwy.	2023-05-16 10:48	0.57	<1	4	12.6	<1	0.52
COL-452	GRAB	19618 Fraser Hwy.	2023-05-23 10:48	0.68	<1	8	15	<1	0.3
COL-452	GRAB	19618 Fraser Hwy.	2023-05-30 10:48	0.68	<1	24	14.5	<1	0.34
COL-452	GRAB	19618 Fraser Hwy.	2023-06-06 10:48	0.64	<1	12	16.4	<1	0.22
COL-452	GRAB	19618 Fraser Hwy.	2023-06-13 10:48	0.74	<1	18	15	<1	0.4
COL-452	GRAB	19618 Fraser Hwy.	2023-06-20 10:48	0.55	<1	160	16.6	<1	0.32
COL-452	GRAB	19618 Fraser Hwy.	2023-06-28 11:00	0.7	<1	160	16.3	<1	0.29
COL-452	GRAB	19618 Fraser Hwy.	2023-07-04 10:48	0.58	<1	46	17.2	<1	0.34
COL-452	GRAB	19618 Fraser Hwy.	2023-07-11 10:48	0.35	<1	46	18.8	<1	0.18
COL-452	GRAB	19618 Fraser Hwy.	2023-07-18 10:48	0.31	<1	100	19.6	<1	0.32
COL-452	GRAB	19618 Fraser Hwy.	2023-07-25 12:25	0.51	<1	<2	21.1	<1	0.23
COL-452	GRAB	19618 Fraser Hwy.	2023-08-01 10:48	0.42	<1	86	19.8	<1	0.26
COL-452	GRAB	19618 Fraser Hwy.	2023-08-08 10:48	0.35	<1	36	20.6	<1	0.32
COL-452	GRAB	19618 Fraser Hwy.	2023-08-15 10:48	0.63	<1	30	19.7	<1	0.28
COL-452	GRAB	19618 Fraser Hwy.	2023-08-22 10:48	0.55	<1	62	21.6	<1	0.28
COL-452	GRAB	19618 Fraser Hwy.	2023-08-29 10:48	0.52	<1	26	21.2	<1	0.35
COL-452	GRAB	19618 Fraser Hwy.	2023-09-05 10:48	0.62	<1	56	19.9	<1	0.28
COL-452	GRAB	19618 Fraser Hwy.	2023-09-12 10:48	0.53	<1	14	20.1	<1	0.42
COL-452	GRAB	19618 Fraser Hwy.	2023-09-19 10:48	0.64	<1	20	19.6	<1	0.35
COL-452	GRAB	19618 Fraser Hwy.	2023-09-26 11:00	0.64	<1	36	18.6	<1	0.38
COL-452	GRAB	19618 Fraser Hwy.	2023-10-03 10:15	0.86	-	100	17	-	0.36
COL-452	GRAB	19618 Fraser Hwy.	2023-10-10 11:48	0.54	-	38	17.8	-	0.27
COL-452	GRAB	19618 Fraser Hwy.	2023-10-17 11:48	0.42	-	60	16.6	-	0.22
COL-452	GRAB	19618 Fraser Hwy.	2023-10-24 11:48	0.53	-	70	15.2	-	0.45
COL-452	GRAB	19618 Fraser Hwy.	2023-10-31 11:48	0.57	-	56	13.8	-	0.34
COL-452	GRAB	19618 Fraser Hwy.	2023-11-07 11:48	0.79	<1	8	13.2	<1	0.27
COL-452	GRAB	19618 Fraser Hwy.	2023-11-14 11:48	1	<1	8	12.1	<1	0.39
COL-452	GRAB	19618 Fraser Hwy.	2023-11-21 11:45	0.81	<1	10	10.6	<1	0.3
COL-452	GRAB	19618 Fraser Hwy.	2023-11-28 12:25	0.76	<1	<2	9.6	<1	0.38

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-452	GRAB	19618 Fraser Hwy.	2023-12-05 11:48	0.78	<1	18	9	<1	0.25
COL-452	GRAB	19618 Fraser Hwy.	2023-12-12 11:48	1.14	<1	<2	8.6	<1	0.46
COL-452	GRAB	19618 Fraser Hwy.	2023-12-19 12:25	1.01	<1	NA	8.3	<1	0.42
COL-453	GRAB	204 St. Langley Bypass	2023-01-03 11:36	1.29	<1	<2	6.1	<1	4.5
COL-453	GRAB	204 St. Langley Bypass	2023-01-24 11:36	1.15	<1	8	5.9	<1	0.43
COL-453	GRAB	204 St. Langley Bypass	2023-01-31 11:36	1.13	<1	8	6.4	<1	0.29
COL-453	GRAB	204 St. Langley Bypass	2023-02-07 11:36	1.12	<1	<2	6.5	<1	0.91
COL-453	GRAB	204 St. Langley Bypass	2023-02-14 11:36	1.1	<1	<2	6.7	<1	0.33
COL-453	GRAB	204 St. Langley Bypass	2023-02-21 11:36	1.15	<1	<2	7.3	<1	0.27
COL-453	GRAB	204 St. Langley Bypass	2023-02-28 11:36	0.99	<1	4	5.5	<1	0.38
COL-453	GRAB	204 St. Langley Bypass	2023-03-07 11:40	1.08	<1	<2	10.1	<1	0.29
COL-453	GRAB	204 St. Langley Bypass	2023-03-14 11:36	1.01	<1	2	6.3	<1	0.45
COL-453	GRAB	204 St. Langley Bypass	2023-03-21 11:45	1.04	<1	2	9.4	<1	0.27
COL-453	GRAB	204 St. Langley Bypass	2023-03-28 11:36	1.11	<1	2	7.9	<1	0.37
COL-453	GRAB	204 St. Langley Bypass	2023-04-04 11:36	1.07	<1	4	7.5	<1	0.55
COL-453	GRAB	204 St. Langley Bypass	2023-04-11 10:36	1.26	<1	2	8.2	<1	2.9
COL-453	GRAB	204 St. Langley Bypass	2023-04-18 10:36	1.2	<1	2	7.8	<1	0.81
COL-453	GRAB	204 St. Langley Bypass	2023-04-25 10:36	1.1	<1	2	8.2	<1	0.41
COL-453	GRAB	204 St. Langley Bypass	2023-05-02 10:36	0.99	<1	<2	9.2	<1	2.8
COL-453	GRAB	204 St. Langley Bypass	2023-05-09 10:36	1.12	<1	<2	10.4	<1	0.4
COL-453	GRAB	204 St. Langley Bypass	2023-05-16 10:36	0.98	<1	2	10.2	<1	0.42
COL-453	GRAB	204 St. Langley Bypass	2023-05-23 10:36	1.08	<1	<2	10.5	<1	0.33
COL-453	GRAB	204 St. Langley Bypass	2023-05-30 10:36	1.08	<1	<2	11.1	<1	1.9
COL-453	GRAB	204 St. Langley Bypass	2023-06-06 10:36	0.93	<1	6	12.2	<1	0.26
COL-453	GRAB	204 St. Langley Bypass	2023-06-13 10:36	1	<1	<2	12.2	<1	0.54
COL-453	GRAB	204 St. Langley Bypass	2023-06-20 10:36	0.83	<1	4	12.3	<1	0.23
COL-453	GRAB	204 St. Langley Bypass	2023-06-28 10:45	1.11	<1	<2	11.5	<1	0.3
COL-453	GRAB	204 St. Langley Bypass	2023-07-04 10:36	0.88	<1	<2	14.3	<1	0.43
COL-453	GRAB	204 St. Langley Bypass	2023-07-11 10:36	0.76	<1	4	14.5	<1	0.26
COL-453	GRAB	204 St. Langley Bypass	2023-07-18 10:36	0.83	<1	<2	15.6	<1	0.38

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-453	GRAB	204 St. Langley Bypass	2023-07-25 12:00	0.94	<1	<2	15.3	<1	0.21
COL-453	GRAB	204 St. Langley Bypass	2023-08-01 10:36	0.8	<1	<2	16.2	<1	0.35
COL-453	GRAB	204 St. Langley Bypass	2023-08-08 10:36	0.84	<1	2	16.5	<1	0.44
COL-453	GRAB	204 St. Langley Bypass	2023-08-15 10:36	0.76	<1	<2	17.8	<1	0.41
COL-453	GRAB	204 St. Langley Bypass	2023-08-22 10:36	0.86	<1	<2	17.6	<1	0.38
COL-453	GRAB	204 St. Langley Bypass	2023-08-29 10:36	0.83	<1	<2	17.5	<1	0.34
COL-453	GRAB	204 St. Langley Bypass	2023-09-05 10:36	0.96	<1	2	17.1	<1	0.35
COL-453	GRAB	204 St. Langley Bypass	2023-09-12 10:36	0.96	<1	2	17.2	<1	0.37
COL-453	GRAB	204 St. Langley Bypass	2023-09-19 10:36	0.94	<1	<2	17	<1	0.48
COL-453	GRAB	204 St. Langley Bypass	2023-09-26 10:45	0.94	<1	2	16.3	<1	0.38
COL-453	GRAB	204 St. Langley Bypass	2023-10-03 10:00	1.1	-	14	16	-	0.31
COL-453	GRAB	204 St. Langley Bypass	2023-10-10 11:36	0.84	-	8	16.3	-	0.63
COL-453	GRAB	204 St. Langley Bypass	2023-10-17 11:36	0.71	-	14	14.9	-	0.39
COL-453	GRAB	204 St. Langley Bypass	2023-10-24 11:36	0.88	-	12	13.4	-	0.82
COL-453	GRAB	204 St. Langley Bypass	2023-10-31 11:36	0.95	-	2	12.6	-	0.4
COL-453	GRAB	204 St. Langley Bypass	2023-11-07 11:36	1.09	<1	2	11.8	<1	0.36
COL-453	GRAB	204 St. Langley Bypass	2023-11-14 11:36	1.34	<1	8	10.8	<1	0.49
COL-453	GRAB	204 St. Langley Bypass	2023-11-21 11:30	0.96	<1	8	9.4	<1	0.39
COL-453	GRAB	204 St. Langley Bypass	2023-11-28 12:00	1.12	<1	6	8.2	<1	0.25
COL-453	GRAB	204 St. Langley Bypass	2023-12-05 11:36	1.11	<1	2	8.2	<1	0.25
COL-453	GRAB	204 St. Langley Bypass	2023-12-12 11:36	0.97	<1	2	8.5	<1	0.59
COL-453	GRAB	204 St. Langley Bypass	2023-12-19 12:00	1.21	<1	NA	7.6	<1	0.57
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-01-03 11:00	1.13	<1	<2	5.7	<1	0.74
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-01-10 11:00	1.21	<1	<2	6.5	<1	0.3
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-01-17 11:00	1.1	<1	<2	7.2	<1	0.29
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-01-24 11:00	1.13	<1	10	6.3	<1	0.39
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-01-31 11:00	1.12	<1	<2	6.4	<1	0.3
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-02-07 11:00	0.98	<1	<2	6.4	<1	0.54
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-02-14 11:00	1.03	<1	<2	6.8	<1	0.35
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-02-21 11:00	1.23	<1	<2	7.2	<1	0.27

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-02-28 11:00	1.02	<1	<2	5.5	<1	0.32
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-03-07 10:50	1.07	<1	<2	7.4	<1	0.34
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-03-14 11:00	0.89	<1	<2	6.8	<1	0.34
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-03-21 10:57	1.11	<1	<2	9.2	<1	0.28
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-03-28 11:00	1.03	<1	<2	7.7	<1	0.36
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-04-04 11:00	1.12	<1	6	7.9	<1	0.37
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-04-11 10:00	1.36	<1	<2	7.6	<1	0.53
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-04-18 10:00	1.09	<1	<2	8.5	<1	0.57
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-04-25 10:00	0.86	<1	<2	8.3	<1	0.36
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-05-02 10:00	0.91	<1	<2	9	<1	0.39
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-05-09 10:00	0.94	<1	2	9.7	<1	0.37
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-05-16 10:00	0.95	<1	2	10.2	<1	0.37
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-05-23 10:00	1.2	<1	12	10.8	<1	0.35
COL-455	GRAB	20200 Blk. of Michaud Crescent	2023-05-30 10:00	1.02	<1	10	10.8	<1	0.73
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-06-06 10:00	1.09	<1	12	12.2	<1	0.29
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-06-13 10:00	1.08	<1	10	12.4	<1	0.43
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-06-20 10:00	0.82	<1	8	11.9	<1	0.26
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-06-28 10:00	1.17	<1	6	11.9	<1	0.31
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-07-04 10:00	0.93	<1	2	14.2	<1	0.33
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-07-11 10:00	0.68	<1	8	14.4	<1	0.28
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-07-18 10:00	0.86	<1	4	14.9	<1	0.35
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-07-25 11:00	0.93	<1	<2	15.1	<1	0.2
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-08-01 10:00	0.81	<1	4	16	<1	0.49
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-08-08 10:00	0.87	<1	<2	16.7	<1	0.47
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-08-15 10:00	0.69	<1	2	17.7	<1	0.4
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-08-22 10:00	0.87	<1	2	17.6	<1	0.36
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-08-29 10:00	0.87	<1	<2	17.4	<1	0.49
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-09-05 10:00	0.88	<1	<2	16.9	<1	0.35
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-09-12 10:00	0.81	<1	<2	17.4	<1	0.43
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-09-19 10:00	0.78	<1	2	16.9	<1	0.48

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-09-26 10:00	0.77	<1	8	16.3	<1	0.37
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-10-03 09:15	0.8	-	30	16	-	0.34
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-10-10 11:00	0.87	-	8	15.3	-	0.56
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-10-17 11:00	0.61	-	4	16.2	-	0.45
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-10-24 11:00	0.68	-	<2	13.2	-	0.97
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-10-31 11:00	0.63	-	10	12.2	-	0.36
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-11-07 11:00	0.88	<1	<2	11.4	<1	0.36
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-11-14 11:00	1.23	<1	<2	11.1	<1	0.59
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-11-21 10:45	0.94	<1	6	9.2	<1	0.31
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-11-28 11:00	1.04	<1	8	8.3	<1	0.3
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-12-05 11:00	0.83	<1	<2	8.1	<1	0.25
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-12-12 11:00	1.16	<1	<2	7.8	<1	0.57
COL-455	GRAB	20229 Blk. of Michaud Crescent	2023-12-19 11:00	1.17	<1	NA	7.9	<1	0.43
COL-456	GRAB	196 St. and 46 Ave.	2023-01-03 09:24	0.26	<1	<2	5.6	<1	0.56
COL-456	GRAB	196 St. and 46 Ave.	2023-01-10 09:24	0.17	<1	2	5.9	<1	0.31
COL-456	GRAB	196 St. and 46 Ave.	2023-01-17 09:24	0.27	<1	<2	6.7	<1	0.32
COL-456	GRAB	196 St. and 46 Ave.	2023-01-24 09:24	0.32	<1	<2	6.8	<1	0.25
COL-456	GRAB	196 St. and 46 Ave.	2023-01-31 09:24	0.31	<1	<2	6.6	<1	0.26
COL-456	GRAB	196 St. and 46 Ave.	2023-02-07 09:24	0.31	<1	<2	5.8	<1	0.29
COL-456	GRAB	196 St. and 46 Ave.	2023-02-14 09:24	0.66	<1	<2	6.8	<1	0.3
COL-456	GRAB	196 St. and 46 Ave.	2023-02-21 09:24	0.36	<1	4	7.1	<1	0.29
COL-456	GRAB	196 St. and 46 Ave.	2023-02-28 09:24	0.27	<1	<2	6.1	<1	0.27
COL-456	GRAB	196 St. and 46 Ave.	2023-03-07 08:59	0.21	<1	<2	8.3	<1	0.29
COL-456	GRAB	196 St. and 46 Ave.	2023-03-14 09:24	0.26	<1	2	6.3	<1	0.27
COL-456	GRAB	196 St. and 46 Ave.	2023-03-21 09:03	0.21	<1	<2	7.2	<1	0.25
COL-456	GRAB	196 St. and 46 Ave.	2023-03-28 09:24	0.27	<1	<2	7.8	<1	0.25
COL-456	GRAB	196 St. and 46 Ave.	2023-04-04 09:24	0.24	<1	2	7.8	<1	0.3
COL-456	GRAB	196 St. and 46 Ave.	2023-04-11 08:24	0.25	<1	<2	8	<1	0.33
COL-456	GRAB	196 St. and 46 Ave.	2023-04-18 08:24	0.35	<1	<2	8.8	<1	0.46
COL-456	GRAB	196 St. and 46 Ave.	2023-04-25 08:24	0.28	<1	20	9.3	<1	0.4

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-456	GRAB	196 St. and 46 Ave.	2023-05-02 08:24	0.34	<1	<2	10	<1	0.58
COL-456	GRAB	196 St. and 46 Ave.	2023-05-09 08:24	0.03	<1	30	10.9	<1	0.31
COL-456	GRAB	196 St. and 46 Ave.	2023-05-16 08:24	0.37	<1	<2	11.1	<1	0.48
COL-456	GRAB	196 St. and 46 Ave.	2023-05-23 08:24	0.21	<1	86	12.8	<1	0.27
COL-456	GRAB	196 St. and 46 Ave.	2023-05-30 08:24	0.27	<1	<2	12.1	<1	0.48
COL-456	GRAB	196 St. and 46 Ave.	2023-06-06 08:24	0.42	<1	<2	12.6	<1	0.28
COL-456	GRAB	196 St. and 46 Ave.	2023-06-13 08:24	0.28	<1	90	14	<1	0.4
COL-456	GRAB	196 St. and 46 Ave.	2023-06-20 08:24	0.09	<1	100	14	<1	0.4
COL-456	GRAB	196 St. and 46 Ave.	2023-06-28 08:00	0.23	<1	40	12.9	<1	0.32
COL-456	GRAB	196 St. and 46 Ave.	2023-07-04 08:24	0.31	<1	<2	14.9	<1	0.44
COL-456	GRAB	196 St. and 46 Ave.	2023-07-11 08:24	0.18	<1	150	15.6	<1	0.2
COL-456	GRAB	196 St. and 46 Ave.	2023-07-18 08:24	0.27	<1	50	15.5	<1	0.28
COL-456	GRAB	196 St. and 46 Ave.	2023-07-25 08:20	0.21	<1	<2	17.4	<1	0.25
COL-456	GRAB	196 St. and 46 Ave.	2023-08-01 08:24	0.17	<1	<2	17	<1	0.37
COL-456	GRAB	196 St. and 46 Ave.	2023-08-08 08:24	0.14	<1	50	18.1	<1	0.48
COL-456	GRAB	196 St. and 46 Ave.	2023-08-15 08:24	0.14	<1	80	17.4	<1	0.28
COL-456	GRAB	196 St. and 46 Ave.	2023-08-22 08:24	0.14	<1	18	18.3	<1	0.29
COL-456	GRAB	196 St. and 46 Ave.	2023-08-29 08:24	0.06	<1	2	18.5	<1	0.28
COL-456	GRAB	196 St. and 46 Ave.	2023-09-05 08:24	0.2	<1	<2	18.5	<1	0.32
COL-456	GRAB	196 St. and 46 Ave.	2023-09-12 08:24	0.18	<1	30	17.9	<1	0.33
COL-456	GRAB	196 St. and 46 Ave.	2023-09-19 08:24	0.28	<1	<2	17.9	<1	0.55
COL-456	GRAB	196 St. and 46 Ave.	2023-09-26 08:00	0.07	<1	60	18.1	<1	0.44
COL-456	GRAB	196 St. and 46 Ave.	2023-10-03 07:45	0.13	-	6	17	-	0.26
COL-456	GRAB	196 St. and 46 Ave.	2023-10-10 09:24	0.12	-	<2	15.9	-	0.32
COL-456	GRAB	196 St. and 46 Ave.	2023-10-17 09:24	0.03	-	8	15.5	-	0.28
COL-456	GRAB	196 St. and 46 Ave.	2023-10-24 09:24	0.09	-	<2	14.3	-	0.3
COL-456	GRAB	196 St. and 46 Ave.	2023-10-31 09:24	0.13	-	16	12.4	-	0.41
COL-456	GRAB	196 St. and 46 Ave.	2023-11-07 09:24	0.17	<1	30	12.3	<1	0.3
COL-456	GRAB	196 St. and 46 Ave.	2023-11-14 09:24	0.61	<1	<2	11	<1	0.36
COL-456	GRAB	196 St. and 46 Ave.	2023-11-21 08:45	0.1	<1	24	10.6	<1	0.29

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-456	GRAB	196 St. and 46 Ave.	2023-11-28 08:20	0.19	<1	4	9.6	<1	0.27
COL-456	GRAB	196 St. and 46 Ave.	2023-12-05 09:24	0.28	<1	<2	8.7	<1	0.27
COL-456	GRAB	196 St. and 46 Ave.	2023-12-12 09:24	0.14	<1	6	8.2	<1	0.26
COL-456	GRAB	196 St. and 46 Ave.	2023-12-19 08:20	0.29	<1	NA	8.9	<1	0.44
COL-457	GRAB	5700 Blk 203A St.	2023-01-03 11:24	1.11	<1	<2	6.1	<1	0.55
COL-457	GRAB	5700 Blk 203A St.	2023-01-10 11:24	1.28	<1	<2	6.1	<1	0.28
COL-457	GRAB	5700 Blk 203A St.	2023-01-17 11:24	1.15	<1	<2	6.5	<1	0.27
COL-457	GRAB	5700 Blk 203A St.	2023-01-24 11:24	1.16	<1	<2	6	<1	0.29
COL-457	GRAB	5700 Blk 203A St.	2023-01-31 11:24	1.28	<1	<2	6.2	<1	0.28
COL-457	GRAB	5700 Blk 203A St.	2023-02-07 11:24	1.1	<1	<2	6.4	<1	0.3
COL-457	GRAB	5700 Blk 203A St.	2023-02-14 11:24	1.16	<1	<2	6.5	<1	0.31
COL-457	GRAB	5700 Blk 203A St.	2023-02-21 11:24	1.12	<1	<2	7	<1	0.25
COL-457	GRAB	5700 Blk 203A St.	2023-02-28 11:24	1.02	<1	<2	6	<1	0.3
COL-457	GRAB	5700 Blk 203A St.	2023-03-07 11:25	1.09	<1	4	7.3	<1	0.28
COL-457	GRAB	5700 Blk 203A St.	2023-03-14 11:24	1.2	<1	<2	7.2	<1	0.32
COL-457	GRAB	5700 Blk 203A St.	2023-03-21 11:28	1.1	<1	<2	9.4	<1	0.26
COL-457	GRAB	5700 Blk 203A St.	2023-03-28 11:24	1.15	<1	<2	8.6	<1	0.33
COL-457	GRAB	5700 Blk 203A St.	2023-04-04 11:24	1.16	<1	<2	7.2	<1	0.38
COL-457	GRAB	5700 Blk 203A St.	2023-04-11 10:24	1.4	<1	<2	8	<1	0.47
COL-457	GRAB	5700 Blk 203A St.	2023-04-18 10:24	1.31	<1	<2	8.2	<1	0.63
COL-457	GRAB	5700 Blk 203A St.	2023-04-25 10:24	1.11	<1	4	8.5	<1	0.34
COL-457	GRAB	5700 Blk 203A St.	2023-05-02 10:24	0.9	<1	<2	9.5	<1	0.38
COL-457	GRAB	5700 Blk 203A St.	2023-05-09 10:24	1.18	<1	4	9.5	<1	0.35
COL-457	GRAB	5700 Blk 203A St.	2023-05-16 10:24	0.98	<1	2	11	<1	0.39
COL-457	GRAB	5700 Blk 203A St.	2023-05-23 10:24	1.06	<1	<2	11.4	<1	0.33
COL-457	GRAB	5700 Blk 203A St.	2023-05-30 10:24	1.05	<1	<2	11.1	<1	2.4
COL-457	GRAB	5700 Blk 203A St.	2023-06-06 10:24	1.1	<1	2	12	<1	0.23
COL-457	GRAB	5700 Blk 203A St.	2023-06-13 10:24	0.99	<1	<2	13	<1	0.41
COL-457	GRAB	5700 Blk 203A St.	2023-06-20 10:24	0.88	<1	2	13.1	<1	0.39
COL-457	GRAB	5700 Blk 203A St.	2023-06-28 10:30	1.03	<1	28	12.3	<1	0.33

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-457	GRAB	5700 Blk 203A St.	2023-07-04 10:24	0.92	<1	16	14.2	<1	0.29
COL-457	GRAB	5700 Blk 203A St.	2023-07-11 10:24	0.8	<1	10	13.7	<1	0.34
COL-457	GRAB	5700 Blk 203A St.	2023-07-18 10:24	0.96	<1	<2	15.6	<1	0.36
COL-457	GRAB	5700 Blk 203A St.	2023-07-25 11:40	0.91	<1	<2	16.3	<1	0.21
COL-457	GRAB	5700 Blk 203A St.	2023-08-01 10:24	0.9	<1	10	16.5	<1	0.38
COL-457	GRAB	5700 Blk 203A St.	2023-08-08 10:24	0.89	<1	8	16.7	<1	0.36
COL-457	GRAB	5700 Blk 203A St.	2023-08-15 10:24	0.84	<1	12	18.2	<1	0.29
COL-457	GRAB	5700 Blk 203A St.	2023-08-22 10:24	1.03	<1	40	18.3	<1	0.29
COL-457	GRAB	5700 Blk 203A St.	2023-08-29 10:24	0.88	<1	12	18.4	<1	0.35
COL-457	GRAB	5700 Blk 203A St.	2023-09-05 10:24	0.93	<1	54	18.2	<1	0.31
COL-457	GRAB	5700 Blk 203A St.	2023-09-12 10:24	0.94	<1	20	17.4	<1	0.3
COL-457	GRAB	5700 Blk 203A St.	2023-09-19 10:24	0.81	<1	2	17.9	<1	0.31
COL-457	GRAB	5700 Blk 203A St.	2023-09-26 10:30	0.8	<1	<2	16.7	<1	0.32
COL-457	GRAB	5700 Blk 203A St.	2023-10-03 09:45	0.87	-	2	16	-	0.28
COL-457	GRAB	5700 Blk 203A St.	2023-10-10 11:24	0.79	-	8	16	-	0.29
COL-457	GRAB	5700 Blk 203A St.	2023-10-17 11:24	0.78	-	18	15.1	-	0.27
COL-457	GRAB	5700 Blk 203A St.	2023-10-24 11:24	0.87	-	2	14.2	-	0.6
COL-457	GRAB	5700 Blk 203A St.	2023-10-31 11:24	1.06	-	2	12	-	0.47
COL-457	GRAB	5700 Blk 203A St.	2023-11-07 11:24	1.16	<1	20	11.4	<1	0.34
COL-457	GRAB	5700 Blk 203A St.	2023-11-14 11:24	1.47	<1	4	10.9	<1	0.35
COL-457	GRAB	5700 Blk 203A St.	2023-11-21 11:15	1.11	<1	16	9.3	<1	0.38
COL-457	GRAB	5700 Blk 203A St.	2023-11-28 11:40	0.97	<1	<2	8.8	<1	0.25
COL-457	GRAB	5700 Blk 203A St.	2023-12-05 11:24	0.93	<1	8	8.1	<1	0.25
COL-457	GRAB	5700 Blk 203A St.	2023-12-12 11:24	1.23	<1	6	7.8	<1	0.52
COL-457	GRAB	5700 Blk 203A St.	2023-12-19 11:40	1.09	<1	NA	7.9	<1	0.47
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-01-03 11:12	0.27	<1	<2	5.8	<1	1.6
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-01-10 11:12	1.23	<1	<2	5.7	<1	0.5
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-01-17 11:12	1.14	<1	<2	6	<1	0.57
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-01-24 11:12	1.2	<1	<2	5.8	<1	0.47
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-02-07 11:12	1.08	<1	<2	5.8	<1	0.61

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-02-14 11:12	1.32	-	<2	6.7	-	20
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-02-21 11:12	1.21	<1	<2	7.1	<1	2.1
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-03-07 11:03	1.1	<1	<2	8	<1	0.3
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-03-14 11:12	1.11	<1	<2	6.5	<1	1.3
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-03-21 11:15	1.11	<1	<2	9.5	<1	0.26
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-03-28 11:12	1.1	<1	<2	7.2	<1	0.34
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-04-04 11:12	1.17	<1	<2	6.8	<1	0.51
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-04-11 10:12	1.36	<1	<2	7.2	<1	0.53
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-04-18 10:12	1.13	<1	2	7.7	<1	0.58
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-04-25 10:12	1.11	<1	<2	8.4	<1	0.41
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-05-02 10:12	0.8	<1	2	9.1	<1	0.33
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-05-09 10:12	1.24	<1	2	9.4	<1	0.37
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-05-16 10:12	0.92	<1	<2	9.7	<1	0.42
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-05-23 10:12	1.14	<1	2	10.7	<1	0.35
COL-458	GRAB	5400 Blk of Brydon Crescent	2023-05-30 10:12	1.09	<1	<2	10.5	<1	0.41
COL-458	GRAB	5521 of Brydon Crescent	2023-06-06 10:12	1.07	<1	<2	12.1	<1	0.27
COL-458	GRAB	5521 of Brydon Crescent	2023-06-13 10:12	1.03	<1	<2	11.9	<1	0.41
COL-458	GRAB	5521 of Brydon Crescent	2023-06-20 10:12	0.93	<1	<2	11.9	<1	0.28
COL-458	GRAB	5521 of Brydon Crescent	2023-06-28 10:15	1.1	<1	<2	11.9	<1	0.28
COL-458	GRAB	5521 of Brydon Crescent	2023-07-04 10:12	0.89	<1	<2	13.9	<1	0.39
COL-458	GRAB	5521 of Brydon Crescent	2023-07-11 10:12	0.79	<1	<2	14.3	<1	0.28
COL-458	GRAB	5521 of Brydon Crescent	2023-07-18 10:12	0.95	<1	<2	15.2	<1	0.31
COL-458	GRAB	5521 of Brydon Crescent	2023-07-25 11:20	0.89	<1	<2	15.3	<1	0.25
COL-458	GRAB	5521 of Brydon Crescent	2023-08-01 10:12	0.81	<1	<2	16.6	<1	0.41
COL-458	GRAB	5521 of Brydon Crescent	2023-08-08 10:12	0.88	<1	<2	17.2	<1	0.44
COL-458	GRAB	5521 of Brydon Crescent	2023-08-15 10:12	0.66	<1	<2	18	<1	0.29
COL-458	GRAB	5521 of Brydon Crescent	2023-08-22 10:12	0.89	<1	<2	17.2	<1	0.3
COL-458	GRAB	5521 of Brydon Crescent	2023-08-29 10:12	0.86	<1	<2	17.6	<1	0.38
COL-458	GRAB	5521 of Brydon Crescent	2023-09-05 10:12	0.95	<1	<2	16.9	<1	0.37
COL-458	GRAB	5521 of Brydon Crescent	2023-09-12 10:12	0.98	<1	8	17.6	<1	0.37

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-458	GRAB	5521 of Brydon Crescent	2023-09-19 10:12	0.91	<1	2	16.8	<1	0.42
COL-458	GRAB	5521 of Brydon Crescent	2023-09-26 10:15	1.02	<1	<2	16.2	<1	0.41
COL-458	GRAB	5521 of Brydon Crescent	2023-10-03 09:30	1.1	-	<2	16	-	0.32
COL-458	GRAB	5521 of Brydon Crescent	2023-10-10 11:12	0.92	-	<2	15.3	-	0.6
COL-458	GRAB	5521 of Brydon Crescent	2023-10-17 11:12	0.7	-	4	14.5	-	0.32
COL-458	GRAB	5521 of Brydon Crescent	2023-10-24 11:12	0.96	-	<2	12.8	-	0.54
COL-458	GRAB	5521 of Brydon Crescent	2023-10-31 11:12	1.08	-	<2	11.5	-	0.85
COL-458	GRAB	5521 of Brydon Crescent	2023-11-07 11:12	1.16	<1	<2	10.7	<1	0.34
COL-458	GRAB	5521 of Brydon Crescent	2023-11-14 11:12	1.36	<1	<2	10.1	<1	0.45
COL-458	GRAB	5521 of Brydon Crescent	2023-11-21 11:00	1.08	<1	140	9	<1	0.34
COL-458	GRAB	5521 of Brydon Crescent	2023-11-28 11:20	1.1	<1	<2	8.2	<1	0.31
COL-458	GRAB	5521 of Brydon Crescent	2023-12-05 11:12	0.92	<1	<2	7.9	<1	0.27
COL-458	GRAB	5521 of Brydon Crescent	2023-12-12 11:12	1.02	<1	2	7.8	<1	0.65
COL-458	GRAB	5521 of Brydon Crescent	2023-12-19 11:20	1.19	<1	NA	7.4	<1	0.47
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-01-03 09:36	0.38	<1	14	5.8	<1	0.68
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-01-10 09:36	0.8	<1	10	6.8	<1	0.26
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-01-17 09:36	0.62	<1	14	6.5	<1	0.3
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-01-24 09:36	0.52	<1	22	6.7	<1	0.25
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-01-31 09:36	0.55	<1	<2	6.3	<1	0.26
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-02-07 09:36	0.75	<1	22	5.9	<1	0.35
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-02-14 09:36	0.65	<1	22	6.8	<1	0.41
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-02-21 09:36	0.38	<1	32	6.8	<1	0.31
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-02-28 09:36	0.43	<1	18	6.6	<1	0.38
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-03-07 09:10	0.7	<1	40	5.9	<1	0.37
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-03-14 09:36	0.41	<1	8	6.4	<1	0.35
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-03-21 09:20	0.46	<1	10	7.9	<1	0.25
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-03-28 09:36	0.67	<1	<2	7.4	<1	0.33
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-04-04 09:36	0.71	<1	14	7.5	<1	0.41
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-04-11 08:36	0.42	<1	20	7.8	<1	0.3
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-04-18 08:36	0.52	<1	6	7.9	<1	0.55

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-04-25 08:36	0.31	<1	1200	8.3	<1	0.43
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-05-02 08:36	0.5	<1	80	8.6	<1	0.55
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-05-09 08:36	0.51	<1	540	9.9	<1	0.34
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-05-16 08:36	0.51	<1	<2	9.8	<1	0.52
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-05-23 08:36	0.42	<1	360	10.8	<1	0.98
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-05-30 08:36	0.46	<1	420	10.7	<1	0.78
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-06-06 08:36	0.44	<1	4	11.4	<1	0.28
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-06-13 08:36	0.65	<1	410	12.5	<1	0.59
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-06-20 08:36	0.19	<1	300	12.6	<1	0.29
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-06-28 08:15	0.34	<1	150	12.6	<1	0.28
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-07-04 08:36	0.34	<1	140	13.7	<1	0.33
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-07-11 08:36	0.32	<1	460	14	<1	0.22
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-07-18 08:36	0.5	<1	70	14.5	<1	0.38
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-07-25 08:40	0.35	<1	<2	15.7	<1	0.26
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-08-01 08:36	0.33	<1	14	15.9	<1	0.28
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-08-08 08:36	0.31	<1	230	16.8	<1	0.38
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-08-15 08:36	0.35	<1	140	16.8	<1	0.29
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-08-22 08:36	0.31	<1	240	17.2	<1	0.34
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-08-29 08:36	0.37	<1	58	17.6	<1	0.4
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-09-05 08:36	0.4	<1	74	17.4	<1	0.33
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-09-12 08:36	0.31	<1	140	17.2	<1	0.42
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-09-19 08:36	0.14	<1	6	17	<1	0.47
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-09-26 08:15	0.24	<1	200	16.9	<1	0.42
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-10-03 08:00	0.39	-	260	17	-	0.29
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-10-10 09:36	0.29	-	8	15.4	-	0.34
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-10-17 09:36	0.38	-	230	14.8	-	0.37
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-10-24 09:36	0.23	-	14	14	-	0.39
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-10-31 09:36	0.35	-	32	12.5	-	0.43
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-11-07 09:36	0.49	<1	170	11.7	<1	0.36
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-11-14 09:36	0.62	<1	70	11.1	<1	0.37

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-11-21 09:00	0.38	<1	140	10.2	<1	0.32
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-11-28 08:40	0.32	<1	34	9.4	<1	0.32
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-12-05 09:36	0.44	<1	60	8.7	<1	0.28
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-12-12 09:36	0.5	<1	20	8.5	<1	0.38
COL-459	GRAB	19700 Blk. of 48A Ave.	2023-12-19 08:40	0.41	<1	NA	8.2	<1	0.39
COL-480	GRAB	209 St. & 51B Ave.	2023-01-03 10:24	0.3	<1	<2	6.2	<1	0.62
COL-480	GRAB	209 St. & 51B Ave.	2023-01-10 10:24	0.36	<1	<2	6.8	<1	0.37
COL-480	GRAB	209 St. & 51B Ave.	2023-01-17 10:24	0.4	<1	<2	7.1	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-01-24 10:24	0.36	<1	<2	7.7	<1	0.25
COL-480	GRAB	209 St. & 51B Ave.	2023-01-31 10:24	0.17	<1	<2	7.3	<1	0.23
COL-480	GRAB	209 St. & 51B Ave.	2023-02-07 10:24	0.31	<1	20	7	<1	0.45
COL-480	GRAB	209 St. & 51B Ave.	2023-02-14 10:24	0.34	<1	2	7.2	<1	0.29
COL-480	GRAB	209 St. & 51B Ave.	2023-02-21 10:24	0.36	<1	<2	7.9	<1	0.26
COL-480	GRAB	209 St. & 51B Ave.	2023-02-28 10:24	0.33	<1	<2	6.9	<1	0.39
COL-480	GRAB	209 St. & 51B Ave.	2023-03-07 10:11	0.21	<1	2	7.9	<1	0.24
COL-480	GRAB	209 St. & 51B Ave.	2023-03-14 10:24	0.23	<1	<2	7.2	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-03-21 10:15	0.17	<1	<2	9.4	<1	0.23
COL-480	GRAB	209 St. & 51B Ave.	2023-03-28 10:24	0.17	<1	<2	8.8	<1	0.32
COL-480	GRAB	209 St. & 51B Ave.	2023-04-04 10:24	0.2	<1	<2	9	<1	0.3
COL-480	GRAB	209 St. & 51B Ave.	2023-04-11 09:24	0.09	<1	<2	9.4	<1	0.34
COL-480	GRAB	209 St. & 51B Ave.	2023-04-18 09:24	0.22	<1	<2	9.4	<1	0.45
COL-480	GRAB	209 St. & 51B Ave.	2023-04-25 09:24	0.18	<1	20	10	<1	0.39
COL-480	GRAB	209 St. & 51B Ave.	2023-05-02 09:24	0.06	<1	<2	11.4	<1	0.36
COL-480	GRAB	209 St. & 51B Ave.	2023-05-09 09:24	0.22	<1	<2	12.2	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-05-16 09:24	0.05	<1	<2	13.5	<1	0.45
COL-480	GRAB	209 St. & 51B Ave.	2023-05-23 09:24	0.14	<1	16	15.3	<1	0.27
COL-480	GRAB	209 St. & 51B Ave.	2023-05-30 09:24	0.21	<1	<2	15.7	<1	0.36
COL-480	GRAB	209 St. & 51B Ave.	2023-06-06 09:24	0.24	<1	4	16.6	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-06-13 09:24	0.19	<1	4	16.8	<1	0.29
COL-480	GRAB	209 St. & 51B Ave.	2023-06-20 09:24	0.08	<1	30	17	<1	0.3

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-480	GRAB	209 St. & 51B Ave.	2023-06-28 09:15	0.12	<1	200	15.5	<1	0.4
COL-480	GRAB	209 St. & 51B Ave.	2023-07-04 09:24	0.15	<1	<2	16.2	<1	0.27
COL-480	GRAB	209 St. & 51B Ave.	2023-07-11 09:24	0.31	<1	36	17.8	<1	0.19
COL-480	GRAB	209 St. & 51B Ave.	2023-07-18 09:24	0.05	<1	10	19.4	<1	0.23
COL-480	GRAB	209 St. & 51B Ave.	2023-07-25 10:00	0.22	<1	<2	18.1	<1	0.25
COL-480	GRAB	209 St. & 51B Ave.	2023-08-01 09:24	0.1	<1	<2	19.9	<1	0.24
COL-480	GRAB	209 St. & 51B Ave.	2023-08-08 09:24	0.07	<1	16	20.3	<1	0.32
COL-480	GRAB	209 St. & 51B Ave.	2023-08-15 09:24	0.03	<1	100	21.1	<1	0.24
COL-480	GRAB	209 St. & 51B Ave.	2023-08-22 09:24	0.1	<1	4	21.2	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-08-29 09:24	0.02	<1	2	20.8	<1	0.25
COL-480	GRAB	209 St. & 51B Ave.	2023-09-05 09:24	0.1	<1	10	20.5	<1	0.26
COL-480	GRAB	209 St. & 51B Ave.	2023-09-12 09:24	0.15	<1	24	20.3	<1	0.33
COL-480	GRAB	209 St. & 51B Ave.	2023-09-19 09:24	0.08	<1	<2	19.6	<1	0.31
COL-480	GRAB	209 St. & 51B Ave.	2023-09-26 09:15	0.03	<1	10	19.4	<1	0.47
COL-480	GRAB	209 St. & 51B Ave.	2023-10-03 08:30	0.11	-	2	19	-	0.34
COL-480	GRAB	209 St. & 51B Ave.	2023-10-10 10:24	0.09	-	4	17.2	-	0.36
COL-480	GRAB	209 St. & 51B Ave.	2023-10-17 10:24	0.02	-	2	17.5	-	0.33
COL-480	GRAB	209 St. & 51B Ave.	2023-10-24 10:24	0.05	-	<2	15.6	-	0.32
COL-480	GRAB	209 St. & 51B Ave.	2023-10-31 10:24	0.12	-	50	14.7	-	0.41
COL-480	GRAB	209 St. & 51B Ave.	2023-11-07 10:24	0.32	<1	80	13.1	<1	0.32
COL-480	GRAB	209 St. & 51B Ave.	2023-11-14 10:24	0.09	<1	70	12.5	<1	0.34
COL-480	GRAB	209 St. & 51B Ave.	2023-11-21 10:00	0.04	<1	70	12.3	<1	0.3
COL-480	GRAB	209 St. & 51B Ave.	2023-11-28 10:00	0.22	<1	2	9.5	<1	0.32
COL-480	GRAB	209 St. & 51B Ave.	2023-12-05 10:24	0.39	<1	8	9.2	<1	0.25
COL-480	GRAB	209 St. & 51B Ave.	2023-12-12 10:24	0.37	<1	<2	8.9	<1	0.28
COL-480	GRAB	209 St. & 51B Ave.	2023-12-19 10:00	0.22	<1	NA	9.1	<1	0.44
COL-481	GRAB	20400 Blk of 54 Ave.	2023-01-03 10:48	0.95	<1	<2	5.7	<1	0.46
COL-481	GRAB	20400 Blk of 54 Ave.	2023-01-10 10:48	1.18	<1	<2	7.2	<1	0.25
COL-481	GRAB	20400 Blk of 54 Ave.	2023-01-17 10:48	0.92	<1	<2	6.7	<1	0.33
COL-481	GRAB	20400 Blk of 54 Ave.	2023-01-24 10:48	0.87	<1	<2	6.9	<1	0.38

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-481	GRAB	20400 Blk of 54 Ave.	2023-01-31 10:48	0.99	<1	<2	6.2	<1	0.27
COL-481	GRAB	20400 Blk of 54 Ave.	2023-02-07 10:48	0.78	<1	<2	5.9	<1	0.33
COL-481	GRAB	20400 Blk of 54 Ave.	2023-02-14 10:48	1.11	<1	<2	6.6	<1	0.27
COL-481	GRAB	20400 Blk of 54 Ave.	2023-02-21 10:48	1.07	<1	<2	6.7	<1	0.25
COL-481	GRAB	20400 Blk of 54 Ave.	2023-02-28 10:48	1.06	<1	4	6.3	<1	0.35
COL-481	GRAB	20400 Blk of 54 Ave.	2023-03-07 10:37	0.98	<1	<2	7.6	<1	0.26
COL-481	GRAB	20400 Blk of 54 Ave.	2023-03-14 10:48	0.88	<1	<2	6.7	<1	0.28
COL-481	GRAB	20400 Blk of 54 Ave.	2023-03-21 10:43	0.98	<1	<2	9.7	<1	0.25
COL-481	GRAB	20400 Blk of 54 Ave.	2023-03-28 10:48	1.02	<1	<2	8.6	<1	0.37
COL-481	GRAB	20400 Blk of 54 Ave.	2023-04-04 10:48	1.03	<1	4	8.1	<1	0.38
COL-481	GRAB	20400 Blk of 54 Ave.	2023-04-11 09:48	1.14	<1	<2	8.2	<1	0.32
COL-481	GRAB	20400 Blk of 54 Ave.	2023-04-18 09:48	1.05	<1	<2	8.4	<1	0.55
COL-481	GRAB	20400 Blk of 54 Ave.	2023-04-25 09:48	0.96	<1	4	8.8	<1	0.31
COL-481	GRAB	20400 Blk of 54 Ave.	2023-05-02 09:48	0.99	<1	<2	10.6	<1	0.36
COL-481	GRAB	20400 Blk of 54 Ave.	2023-05-09 09:48	1.05	<1	6	9.9	<1	0.31
COL-481	GRAB	20400 Blk of 54 Ave.	2023-05-16 09:48	0.86	<1	10	11.6	<1	0.32
COL-481	GRAB	20400 Blk of 54 Ave.	2023-05-23 09:48	1.02	<1	30	13.1	<1	0.28
COL-481	GRAB	20400 Blk of 54 Ave.	2023-05-30 09:48	0.87	<1	2	12.7	<1	0.34
COL-481	GRAB	20400 Blk of 54 Ave.	2023-06-06 09:48	0.91	<1	32	12.6	<1	0.27
COL-481	GRAB	20400 Blk of 54 Ave.	2023-06-13 09:48	0.99	<1	20	13.5	<1	0.4
COL-481	GRAB	20400 Blk of 54 Ave.	2023-06-20 09:48	0.79	<1	20	14.1	<1	0.24
COL-481	GRAB	20400 Blk of 54 Ave.	2023-06-28 09:45	0.96	<1	14	13	<1	0.42
COL-481	GRAB	20400 Blk of 54 Ave.	2023-07-04 09:48	0.81	<1	22	14.3	<1	0.24
COL-481	GRAB	20400 Blk of 54 Ave.	2023-07-11 09:48	0.69	<1	60	16.5	<1	0.45
COL-481	GRAB	20400 Blk of 54 Ave.	2023-07-18 09:48	0.73	<1	10	16.1	<1	0.31
COL-481	GRAB	20400 Blk of 54 Ave.	2023-07-25 10:40	0.65	<1	2	18	<1	0.2
COL-481	GRAB	20400 Blk of 54 Ave.	2023-08-01 09:48	0.77	<1	6	16.8	<1	0.35
COL-481	GRAB	20400 Blk of 54 Ave.	2023-08-08 09:48	0.37	<1	6	19.6	<1	0.34
COL-481	GRAB	20400 Blk of 54 Ave.	2023-08-15 09:48	0.64	<1	20	18.5	<1	0.25
COL-481	GRAB	20400 Blk of 54 Ave.	2023-08-22 09:48	0.65	<1	10	18.8	<1	0.26

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-481	GRAB	20400 Blk of 54 Ave.	2023-08-29 09:48	0.62	<1	14	18.7	<1	0.28
COL-481	GRAB	20400 Blk of 54 Ave.	2023-09-05 09:48	0.6	<1	18	18.6	<1	0.29
COL-481	GRAB	20400 Blk of 54 Ave.	2023-09-12 09:48	0.71	<1	10	18.1	<1	0.4
COL-481	GRAB	20400 Blk of 54 Ave.	2023-09-19 09:48	0.74	<1	<2	17.9	<1	0.28
COL-481	GRAB	20400 Blk of 54 Ave.	2023-09-26 09:45	0.78	<1	6	14.3	<1	0.42
COL-481	GRAB	20400 Blk of 54 Ave.	2023-10-03 09:00	0.86	-	10	17	-	0.32
COL-481	GRAB	20400 Blk of 54 Ave.	2023-10-10 10:48	0.56	-	<2	16	-	0.27
COL-481	GRAB	20400 Blk of 54 Ave.	2023-10-17 10:48	0.67	-	2	15.7	-	0.29
COL-481	GRAB	20400 Blk of 54 Ave.	2023-10-24 10:48	0.17	-	6	14.2	-	0.39
COL-481	GRAB	20400 Blk of 54 Ave.	2023-10-31 10:48	0.63	-	32	13	-	1.9
COL-481	GRAB	20400 Blk of 54 Ave.	2023-11-07 10:48	0.72	<1	10	12.7	<1	0.29
COL-481	GRAB	20400 Blk of 54 Ave.	2023-11-14 10:48	0.74	<1	2	10.4	<1	0.32
COL-481	GRAB	20400 Blk of 54 Ave.	2023-11-21 10:30	0.76	<1	<2	10.3	<1	0.3
COL-481	GRAB	20400 Blk of 54 Ave.	2023-11-28 10:40	0.82	<1	2	9	<1	0.28
COL-481	GRAB	20400 Blk of 54 Ave.	2023-12-05 10:48	0.88	<1	4	8.8	<1	0.24
COL-481	GRAB	20400 Blk of 54 Ave.	2023-12-12 10:48	1.03	<1	<2	8.5	<1	0.49
COL-481	GRAB	20400 Blk of 54 Ave.	2023-12-19 10:40	1.11	<1	NA	8.3	<1	0.5
COL-482	GRAB	4740 200A St	2023-06-06 08:12	0.5	<1	<2	10.2	<1	0.34
COL-482	GRAB	4740 200A St	2023-06-13 08:12	0.56	<1	2	11.1	<1	0.35
COL-482	GRAB	4740 200A St	2023-06-20 08:12	0.54	<1	<2	11	<1	0.37
COL-482	GRAB	4740 200A St	2023-06-28 07:45	0.53	<1	<2	10.4	<1	0.36
COL-482	GRAB	4740 200A St	2023-07-04 08:12	0.52	<1	<2	12	<1	0.33
COL-482	GRAB	4740 200A St	2023-07-11 08:12	0.59	<1	<2	12.9	<1	0.21
COL-482	GRAB	4740 200A St	2023-07-18 08:12	0.59	<1	<2	13.5	<1	0.33
COL-482	GRAB	4740 200A St	2023-07-25 08:00	0.57	<1	<2	14.4	<1	0.27
COL-482	GRAB	4740 200A St	2023-08-01 08:12	0.51	<1	<2	14.8	<1	0.29
COL-482	GRAB	4740 200A St	2023-08-08 08:12	0.49	<1	2	15.7	<1	0.43
COL-482	GRAB	4740 200A St	2023-08-15 08:12	0.42	<1	<2	16.2	<1	0.25
COL-482	GRAB	4740 200A St	2023-08-22 08:12	0.46	<1	<2	16.7	<1	0.31
COL-482	GRAB	4740 200A St	2023-08-29 08:12	0.43	<1	<2	16.9	<1	0.48

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-482	GRAB	4740 200A St	2023-09-05 08:12	0.45	<1	<2	16.7	<1	0.35
COL-482	GRAB	4740 200A St	2023-09-12 08:12	0.55	<1	<2	16.5	<1	0.41
COL-482	GRAB	4740 200A St	2023-09-19 08:12	0.64	<1	<2	16.2	<1	0.39
COL-482	GRAB	4740 200A St	2023-09-26 07:45	0.55	<1	<2	16.3	<1	0.44
COL-482	GRAB	4740 200A St	2023-10-03 07:30	0.52	-	2	15	-	0.32
COL-482	GRAB	4740 200A St	2023-10-10 09:12	0.55	-	<2	14.9	-	0.34
COL-482	GRAB	4740 200A St	2023-10-17 09:12	0.57	-	<2	14.4	-	0.46
COL-482	GRAB	4740 200A St	2023-10-24 09:12	0.58	-	<2	13.4	-	0.4
COL-482	GRAB	4740 200A St	2023-10-31 09:12	0.6	-	2	12.3	-	0.38
COL-482	GRAB	4740 200A St	2023-11-07 09:12	0.74	<1	<2	11.3	<1	0.33
COL-482	GRAB	4740 200A St	2023-11-14 09:12	0.78	<1	<2	10.5	<1	0.34
COL-482	GRAB	4740 200A St	2023-11-21 08:30	0.56	<1	2	9.8	<1	0.32
COL-482	GRAB	4740 200A St	2023-11-28 08:00	0.57	<1	<2	9.4	<1	0.28
COL-482	GRAB	4740 200A St	2023-12-05 09:12	0.63	<1	<2	8.6	<1	0.27
COL-482	GRAB	4740 200A St	2023-12-12 09:12	0.68	<1	6	8.1	<1	0.3
COL-482	GRAB	4740 200A St	2023-12-19 08:00	0.62	<1	NA	7.9	<1	0.45
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-01-03 09:12	0.79	<1	2	6.2	<1	0.72
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-01-10 09:12	0.74	<1	2	6.7	<1	0.35
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-01-17 09:12	0.72	<1	<2	6.8	<1	0.3
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-01-24 09:12	0.79	<1	4	6.7	<1	0.3
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-01-31 09:12	0.69	<1	<2	6.3	<1	0.26
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-02-07 09:12	0.68	<1	<2	6.5	<1	0.28
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-02-14 09:12	0.79	<1	<2	6	<1	0.35
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-02-21 09:12	0.73	<1	4	6.2	<1	0.3
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-02-28 09:12	0.76	<1	<2	5.9	<1	0.36
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-03-07 08:30	0.657	<1	<2	5.5	<1	0.29
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-03-14 09:12	0.59	<1	<2	6.4	<1	0.33
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-03-21 08:45	0.611	<1	<2	6.3	<1	0.27
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-03-28 09:12	0.58	<1	<2	6.8	<1	0.31
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-04-04 09:12	0.57	<1	<2	7.2	<1	0.4

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-04-11 08:12	0.56	<1	<2	7.1	<1	0.34
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-04-18 08:12	0.65	<1	<2	7.3	<1	0.6
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-04-25 08:12	0.54	<1	<2	7.5	<1	0.44
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-05-02 08:12	0.56	<1	<2	7.8	<1	0.4
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-05-09 08:12	0.59	<1	<2	7.9	<1	0.33
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-05-16 08:12	0.54	<1	<2	9.1	<1	0.56
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-05-23 08:12	0.52	<1	<2	9.2	<1	0.3
COL-482	GRAB	Reservoir 200A St. & 47A Ave.	2023-05-30 08:12	0.53	<1	<2	9.2	<1	0.54
COL-483	GRAB	20894 - 57 Ave	2023-01-03 10:36	1.03	<1	<2	5.6	<1	0.51
COL-483	GRAB	20894 - 57 Ave	2023-01-10 10:36	1.16	<1	<2	6.3	<1	0.35
COL-483	GRAB	20894 - 57 Ave	2023-01-17 10:36	1.01	<1	2	6.2	<1	0.29
COL-483	GRAB	20894 - 57 Ave	2023-01-24 10:36	1.05	<1	16	6.1	<1	0.34
COL-483	GRAB	20894 - 57 Ave	2023-02-07 10:36	0.94	<1	10	5.9	<1	0.39
COL-483	GRAB	20894 - 57 Ave	2023-02-14 10:36	1.23	<1	12	6.3	<1	0.29
COL-483	GRAB	20894 - 57 Ave	2023-02-21 10:36	1.1	<1	<2	6.2	<1	0.26
COL-483	GRAB	20894 - 57 Ave	2023-02-28 10:36	1.09	<1	<2	5.6	<1	0.3
COL-483	GRAB	20894 - 57 Ave	2023-03-07 10:23	0.95	<1	40	6	<1	0.25
COL-483	GRAB	20894 - 57 Ave	2023-03-14 10:36	0.86	<1	<2	6.3	<1	0.3
COL-483	GRAB	20894 - 57 Ave	2023-03-21 10:28	1.08	<1	<2	8.7	<1	0.46
COL-483	GRAB	20894 - 57 Ave	2023-03-28 10:36	1.1	<1	<2	7.3	<1	0.3
COL-483	GRAB	20894 - 57 Ave	2023-04-04 10:36	1.08	<1	2	7.6	<1	0.5
COL-483	GRAB	20894 - 57 Ave	2023-04-11 09:36	1.13	<1	<2	7.7	<1	0.35
COL-483	GRAB	20894 - 57 Ave	2023-04-18 09:36	1.05	<1	<2	7.7	<1	0.51
COL-483	GRAB	20894 - 57 Ave	2023-04-25 09:36	1.01	<1	4	8.3	<1	0.36
COL-483	GRAB	20894 - 57 Ave	2023-05-02 09:36	0.97	<1	2	9	<1	0.34
COL-483	GRAB	20894 - 57 Ave	2023-05-09 09:36	1.23	<1	<2	9.8	<1	0.37
COL-483	GRAB	20894 - 57 Ave	2023-05-16 09:36	0.82	<1	<2	10.4	<1	0.38
COL-483	GRAB	20894 - 57 Ave	2023-05-23 09:36	0.92	<1	10	11.4	<1	0.29
COL-483	GRAB	20894 - 57 Ave	2023-05-30 09:36	0.95	<1	<2	11.4	<1	0.4
COL-483	GRAB	20894 - 57 Ave	2023-06-06 09:36	1.01	<1	2	12.1	<1	0.21

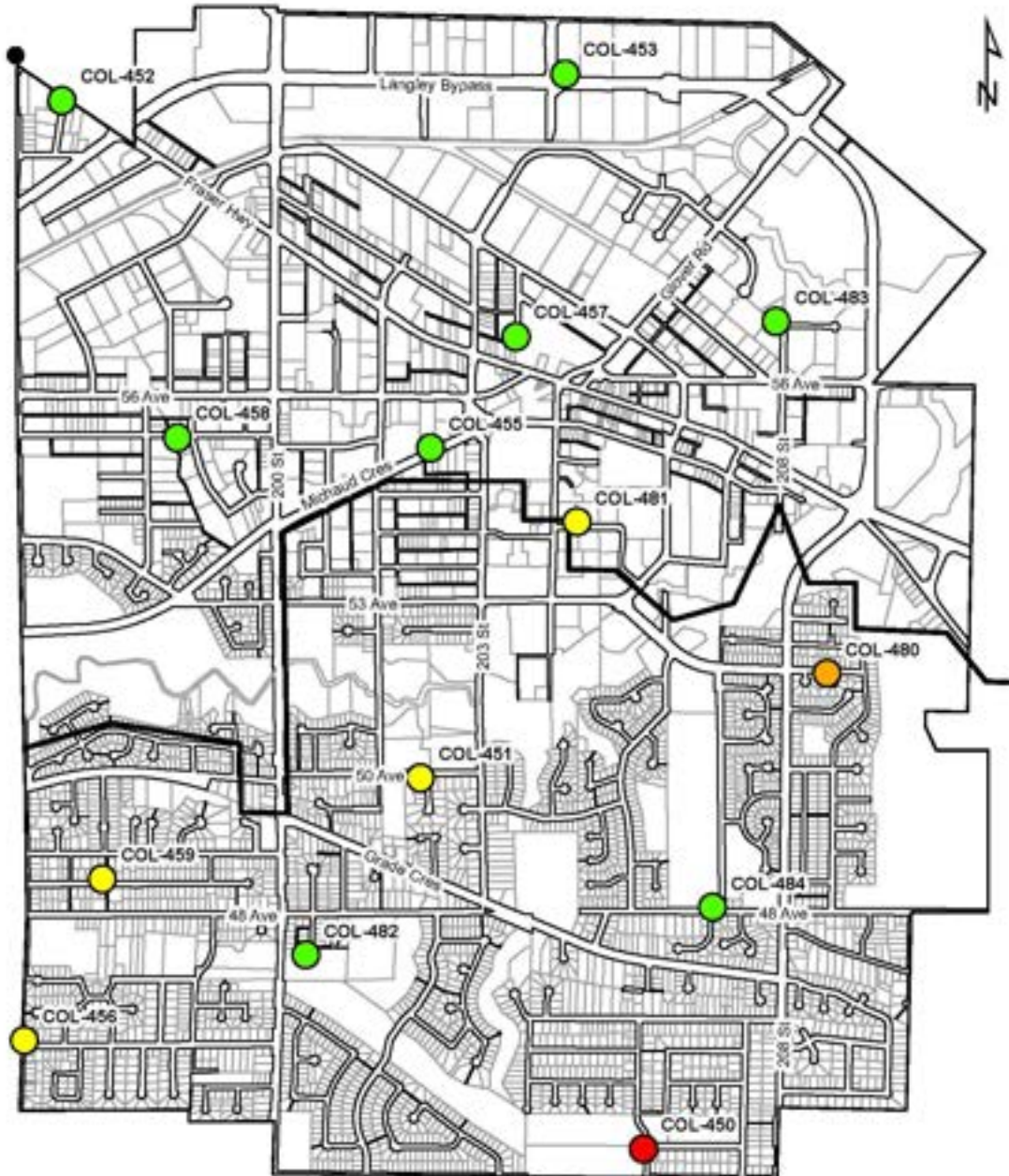
Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-483	GRAB	20894 - 57 Ave	2023-06-13 09:36	1.03	<1	<2	12.4	<1	0.33
COL-483	GRAB	20894 - 57 Ave	2023-06-20 09:36	0.87	<1	12	12.8	<1	0.71
COL-483	GRAB	20894 - 57 Ave	2023-06-28 09:30	0.97	<1	4	12.3	<1	0.29
COL-483	GRAB	20894 - 57 Ave	2023-07-04 09:36	0.82	<1	10	14.5	<1	0.31
COL-483	GRAB	20894 - 57 Ave	2023-07-11 09:36	0.66	<1	16	14.2	<1	0.51
COL-483	GRAB	20894 - 57 Ave	2023-07-18 09:36	0.7	<1	8	15.3	<1	0.25
COL-483	GRAB	20894 - 57 Ave	2023-07-25 10:20	0.85	<1	2	16.1	<1	0.21
COL-483	GRAB	20894 - 57 Ave	2023-08-01 09:36	0.74	<1	8	16.4	<1	0.28
COL-483	GRAB	20894 - 57 Ave	2023-08-08 09:36	0.77	<1	14	16.9	<1	0.48
COL-483	GRAB	20894 - 57 Ave	2023-08-15 09:36	0.67	<1	6	17.7	<1	0.33
COL-483	GRAB	20894 - 57 Ave	2023-08-22 09:36	0.78	<1	6	17.9	<1	0.3
COL-483	GRAB	20894 - 57 Ave	2023-08-29 09:36	0.66	<1	14	18.1	<1	0.34
COL-483	GRAB	20894 - 57 Ave	2023-09-05 09:36	0.84	<1	6	17.6	<1	0.29
COL-483	GRAB	20894 - 57 Ave	2023-09-12 09:36	0.73	<1	8	17.3	<1	0.39
COL-483	GRAB	20894 - 57 Ave	2023-09-19 09:36	0.86	<1	<2	17.3	<1	0.51
COL-483	GRAB	20894 - 57 Ave	2023-09-26 09:30	0.89	<1	6	16.7	<1	0.39
COL-483	GRAB	20894 - 57 Ave	2023-10-03 08:45	0.99	-	14	16	-	0.29
COL-483	GRAB	20894 - 57 Ave	2023-10-10 10:36	0.74	-	8	15.2	-	0.3
COL-483	GRAB	20894 - 57 Ave	2023-10-17 10:36	0.53	-	<2	14.9	-	0.43
COL-483	GRAB	20894 - 57 Ave	2023-10-24 10:36	0.81	-	2	13.4	-	0.42
COL-483	GRAB	20894 - 57 Ave	2023-10-31 10:36	0.9	-	10	12.2	-	0.53
COL-483	GRAB	20894 - 57 Ave	2023-11-07 10:36	0.97	<1	14	11.8	<1	0.51
COL-483	GRAB	20894 - 57 Ave	2023-11-14 10:36	1.22	<1	4	10.3	<1	0.37
COL-483	GRAB	20894 - 57 Ave	2023-11-21 10:15	0.91	<1	<2	9.5	<1	0.35
COL-483	GRAB	20894 - 57 Ave	2023-11-28 10:20	0.93	<1	<2	8.9	<1	0.31
COL-483	GRAB	20894 - 57 Ave	2023-12-05 10:36	1.04	<1	2	8.3	<1	0.25
COL-483	GRAB	20894 - 57 Ave	2023-12-12 10:36	1.22	<1	<2	7.9	<1	0.5
COL-483	GRAB	20894 - 57 Ave	2023-12-19 10:20	1.08	<1	NA	7.9	<1	0.44
COL-484	GRAB	48 Ave and 207 Street	2023-01-03 10:12	0.94	<1	2	5.8	<1	0.67
COL-484	GRAB	48 Ave and 207 Street	2023-01-10 10:12	0.62	<1	<2	6.3	<1	0.34

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-484	GRAB	48 Ave and 207 Street	2023-01-17 10:12	0.62	<1	2	6.1	<1	0.33
COL-484	GRAB	48 Ave and 207 Street	2023-01-24 10:12	0.87	<1	<2	6	<1	0.41
COL-484	GRAB	48 Ave and 207 Street	2023-01-31 10:12	0.82	<1	<2	5.5	<1	0.31
COL-484	GRAB	48 Ave and 207 Street	2023-02-07 10:12	0.69	<1	<2	5.9	<1	0.73
COL-484	GRAB	48 Ave and 207 Street	2023-02-14 10:12	0.59	<1	2	6	<1	0.32
COL-484	GRAB	48 Ave and 207 Street	2023-02-21 10:12	0.57	<1	<2	6.6	<1	0.27
COL-484	GRAB	48 Ave and 207 Street	2023-02-28 10:12	0.6	<1	4	5.5	<1	0.44
COL-484	GRAB	48 Ave and 207 Street	2023-03-07 09:58	0.53	<1	<2	6.6	<1	0.29
COL-484	GRAB	48 Ave and 207 Street	2023-03-14 10:12	0.74	<1	<2	6.2	<1	0.35
COL-484	GRAB	48 Ave and 207 Street	2023-03-21 10:02	0.83	<1	2	9.2	<1	0.27
COL-484	GRAB	48 Ave and 207 Street	2023-03-28 10:12	0.56	<1	<2	7.3	<1	0.34
COL-484	GRAB	48 Ave and 207 Street	2023-04-04 10:12	0.87	<1	<2	7.2	<1	0.41
COL-484	GRAB	48 Ave and 207 Street	2023-04-11 09:12	0.4	<1	<2	7.1	<1	0.34
COL-484	GRAB	48 Ave and 207 Street	2023-04-18 09:12	0.81	<1	<2	7.5	<1	0.92
COL-484	GRAB	48 Ave and 207 Street	2023-04-25 09:12	0.43	<1	6	8	<1	0.49
COL-484	GRAB	48 Ave and 207 Street	2023-05-02 09:12	0.38	<1	<2	8.6	<1	0.42
COL-484	GRAB	48 Ave and 207 Street	2023-05-09 09:12	0.71	<1	6	8.9	<1	0.39
COL-484	GRAB	48 Ave and 207 Street	2023-05-16 09:12	0.48	<1	<2	9.6	<1	0.51
COL-484	GRAB	48 Ave and 207 Street	2023-05-23 09:12	0.54	<1	8	10.4	<1	0.34
COL-484	GRAB	48 Ave and 207 Street	2023-05-30 09:12	0.55	<1	8	10.3	<1	0.57
COL-484	GRAB	48 Ave and 207 Street	2023-06-06 09:12	0.51	<1	12	11.5	<1	0.32
COL-484	GRAB	48 Ave and 207 Street	2023-06-13 09:12	0.38	<1	12	11.8	<1	0.64
COL-484	GRAB	48 Ave and 207 Street	2023-06-20 09:12	0.28	<1	10	12.6	<1	0.31
COL-484	GRAB	48 Ave and 207 Street	2023-06-28 09:00	0.46	<1	10	11.4	<1	0.39
COL-484	GRAB	48 Ave and 207 Street	2023-07-04 09:12	0.52	<1	8	13.3	<1	0.61
COL-484	GRAB	48 Ave and 207 Street	2023-07-11 09:12	0.32	<1	8	13.9	<1	0.23
COL-484	GRAB	48 Ave and 207 Street	2023-07-18 09:12	0.45	<1	20	14.4	<1	0.36
COL-484	GRAB	48 Ave and 207 Street	2023-07-25 09:40	0.45	<1	<2	15.5	<1	0.24
COL-484	GRAB	48 Ave and 207 Street	2023-08-01 09:12	0.36	<1	6	16.2	<1	0.3
COL-484	GRAB	48 Ave and 207 Street	2023-08-08 09:12	0.39	<1	40	16.7	<1	0.32

Sample Name	Sample Type	Sample reported named	Sampled date	Chlorine Free (mg/L)	Ecoli CFU/100mLs	HPC CFU/mL	Temperature (°C)	Total Coliform CFU/100mLs	Turbidity NTU
COL-484	GRAB	48 Ave and 207 Street	2023-08-15 09:12	0.42	<1	60	17.1	<1	0.36
COL-484	GRAB	48 Ave and 207 Street	2023-08-22 09:12	0.42	<1	60	17.5	<1	0.32
COL-484	GRAB	48 Ave and 207 Street	2023-08-29 09:12	0.61	<1	34	17.2	<1	0.38
COL-484	GRAB	48 Ave and 207 Street	2023-09-05 09:12	0.48	<1	16	17.1	<1	0.38
COL-484	GRAB	48 Ave and 207 Street	2023-09-12 09:12	0.38	<1	10	16.5	<1	0.37
COL-484	GRAB	48 Ave and 207 Street	2023-09-19 09:12	0.44	<1	32	16.3	<1	0.34
COL-484	GRAB	48 Ave and 207 Street	2023-09-26 09:00	0.39	<1	4	16.3	<1	0.44
COL-484	GRAB	48 Ave and 207 Street	2023-10-03 08:45	0.36	-	<2	16	-	0.33
COL-484	GRAB	48 Ave and 207 Street	2023-10-10 10:12	0.39	-	36	14.8	-	0.31
COL-484	GRAB	48 Ave and 207 Street	2023-10-17 10:12	0.35	-	90	15.8	-	1.5
COL-484	GRAB	48 Ave and 207 Street	2023-10-24 10:12	0.31	-	44	13.4	-	0.36
COL-484	GRAB	48 Ave and 207 Street	2023-10-31 10:12	0.43	-	82	11.6	-	0.49
COL-484	GRAB	48 Ave and 207 Street	2023-11-07 10:12	0.59	<1	60	11.7	<1	0.42
COL-484	GRAB	48 Ave and 207 Street	2023-11-14 10:12	0.47	<1	44	10.5	<1	0.36
COL-484	GRAB	48 Ave and 207 Street	2023-11-21 09:45	0.41	<1	40	9.5	<1	0.33
COL-484	GRAB	48 Ave and 207 Street	2023-11-28 09:40	0.51	<1	<2	8.3	<1	0.32
COL-484	GRAB	48 Ave and 207 Street	2023-12-05 10:12	0.7	<1	<2	8.3	<1	0.3
COL-484	GRAB	48 Ave and 207 Street	2023-12-12 10:12	0.66	<1	8	7.7	<1	0.35
COL-484	GRAB	48 Ave and 207 Street	2023-12-19 09:40	0.74	<1	NA	7.7	<1	0.46

APPENDIX F:

CITY OF LANGLEY SAMPLE STATIONS – PERCENTAGE OF SAMPLE RESULTS <0.2MG/L FREE CHLORINE



WATER SAMPLING SITES

2023 FREE CHLORINE

LEGEND

- 0% Percentages of total samples in 2023 where free chlorine is less than 0.2mg/L
- 1% - 39%
- 40% - 59%
- 60% - 100%