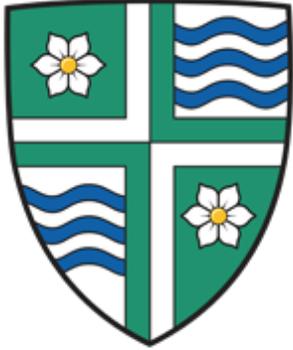


Township of
Langley



Est. 1873

2021 Annual Water Quality Report



June 2022

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EXECUTIVE SUMMARY

The Township of Langley has a population of approximately 145,100 and provides water to approximately 123,395 of these residents. Residents not serviced by the Township of Langley's water utility, typically access water from private or community wells. The Township's water is currently sourced from 9 groundwater wells and via the Greater Vancouver Water District (GVWD). There are an additional 5 wells which are inactive and awaiting treatment in Brookwood and Murrayville.

In 2021, source water quality met the requirements of British Columbia Drinking Water Protection Regulations (DWPR) and the Guidelines for Drinking Water Quality (GCDWQ) for microbial parameters. There was no E. coli detected in source water samples. One sample from Aldergrove Well #4 tested positive for Total Coliform; the well was flushed, resampled, and the subsequent sample returned negative for Total Coliforms.

Some source water samples exceeded the health based Maximum Acceptable Concentration (MAC) and Aesthetic Objective (AO) guidelines for semi annual routine parameters. The MAC for Nitrate as nitrogen was exceeded in Aldergrove well 10. The MAC for Turbidity and AO for Iron was exceeded in both Brookwood wells and Murrayville well 1. Several wells in Acadia, Aldergrove, Brookwood and Murrayville exceeded the MAC and AO for Manganese, however the Brookwood and Murrayville wells have been offline since 2019 pending treatment to counteract the exceeded parameters and the water from the Aldergrove well is treated at the AWTP. The water filters at the AWTP were replaced in 2022 to bring the finished water quality in compliance with the latest health standards. In the Acadia water system, exceedances have not been found in the water distribution system due to the chlorine interaction causing the Manganese to precipitate and settle inside the onsite clear well.

To alleviate concerns regarding manganese related aesthetics of the water, all wells in the Brookwood and Murrayville areas were taken offline in fall 2019 and remained offline in 2020 and 2021. Township staff, with the assistance of a qualified professional, conducted a study, which recommended new localized water treatment plants to treat the Brookwood and Murrayville wells to bring the parameters within compliance. Council approved the plan to build three localized water treatment plants that will filter for the exceeded parameters. The construction of these water treatment plants is expected to begin in Fall 2022.

In the distribution system, there was a total of 14 samples that tested positive for Total Coliforms. There were no E. coli positive samples. The positive test results were communicated to Fraser Health and the Township flushed and resampled until two consecutive negative samples for the presence of Total Coliform were received, in compliance with the Township's Water Emergency Response Plan.

The Township follows the GCDWQ recommended pH operational guideline of 7.0 to 10.5 for finished water. In the distribution system the Township's pH had an average of 7.52. In the source water samples the recommended pH range was under the operational guideline at Aldergrove Well #9, Brookwood Well #7 and Fort Langley Well #2. Township staff are currently working with a qualified professional consultant on a detailed design and procurement of equipment and materials for the pH adjustment facility at Fort Langley well #2, with a targeted commissioning date of fall 2022. In June 2021 the pH of water supplied by Metro Vancouver was increased from 7.3-7.5 up to 8.3.

In 2020/21 an engineering consultant for the Township completed structural assessment of the Aldergrove East, Aldergrove West, Brookwood East, Brookwood West, Willoughby, Murrayville, and Strawberry reservoirs. As a result of this assessment, Murrayville reservoir was taken offline due to its deteriorating condition. A temporary repair to extend the useful life of the Strawberry reservoir was completed in 2022. Additional remediation work will be required to extend the useful life of the remaining reservoirs with the required funding to be included in future budgets for Council's consideration. Township staff will prioritize the reservoirs with care being given to reservoirs that show signs of continued deterioration or leaks.

The 2021 water quality monitoring results indicate that the Township water is potable and safe for consumption. Township staff continue to seek improvements to the water supply and distribution systems. The Township will continue to work closely with Fraser Health, GVWD, and the public to continue providing high quality water to our residents.

This report is prepared according to the BC DWPR (Section 11) which requires all water suppliers publish an annual water quality report and ensure that the information be made public.

ACRONYMS

AC	Asbestos Cement
ALARA	As low as reasonably achievable
AO	Aesthetic Objective
AWTP	Aldergrove Water Treatment Plant
BTEX	Benzene, Toluene, Ethyl benzene, Xylene
CCCP	Cross Connection Control Program
cfu/mL	Coliform forming units per milliliter
DWPR	Drinking Water Protection Regulation
EMS	Environmental Monitoring System
EOCP	Environmental Operators Certification Program
GARP	Ground Water at Risk of Containing Pathogens
GCDWQ	Health Canada (September 2020) Guidelines for Canadian Drinking Water Quality
GVRD	Greater Vancouver Regional District
GVWD	Greater Vancouver Water District
HAA	Halo Acetic Acid
HPC	Heterotrophic Plate Count
MAC	Maximum Acceptable Concentration
MDL	Minimum Detectable Level
mg/L	Milligram per Litre
mL	Millilitre
ML	Megalitre
MLD	Megalitre per Day
MPN	Most Probable Number
NTA	Nitritotriacetic Acid
NTU	Nephelometric Turbidity Unit
PAH	Polycyclic Aromatic Hydrocarbon
pH	Measure of water acidity, pH of 7 is neutral
PRV	Pressure Reducing Valve
SCADA	Supervisory Control and Data Acquisition
SRU	Salmon River Uplands
THM	Trihalomethane
TOC	Total Organic Carbon
TOL	Township of Langley
VOC	Volatile Organic Carbon
WERP	Water Emergency Response Plan
WQMRP	Water Quality Monitoring and Reporting Plan (for GVRD and member municipalities)

INTRODUCTION

The Township of Langley is home to approximately 145,100 residents and provides water to approximately 123,395 of these residents. The residents not serviced by the Township access water from private or community wells. Township water is currently sourced from 9 groundwater wells and via the Greater Vancouver Water District (GVWD). There are an additional 5 wells which are inactive and awaiting treatment in the Brookwood and Murrayville areas.

The BC Drinking Water Protection Regulation (DWPR) (Section 11) requires all water suppliers to produce and make public an annual water quality report. This report, along with previous annual reports, is available in hard copy at the Township's Civic Facility, 20338 – 65 Avenue, Langley, BC or in PDF format at www.tol.ca. This report provides an overview of the Township's water system and documents the test results of its well water and distribution water quality monitoring program.

1.0 SYSTEM DESCRIPTION

The Township encompasses a 316 km² area bounded by the Fraser River to the north, 196 Street to the west, 0 Avenue to the south, and 276 Street to the east. Excluded from this area is the City of Langley which is situated on the western boundary. The Township also borders the Kwantlen, Katzie and Matsqui First Nations communities and provides water to the Kwantlen and Katzie communities.

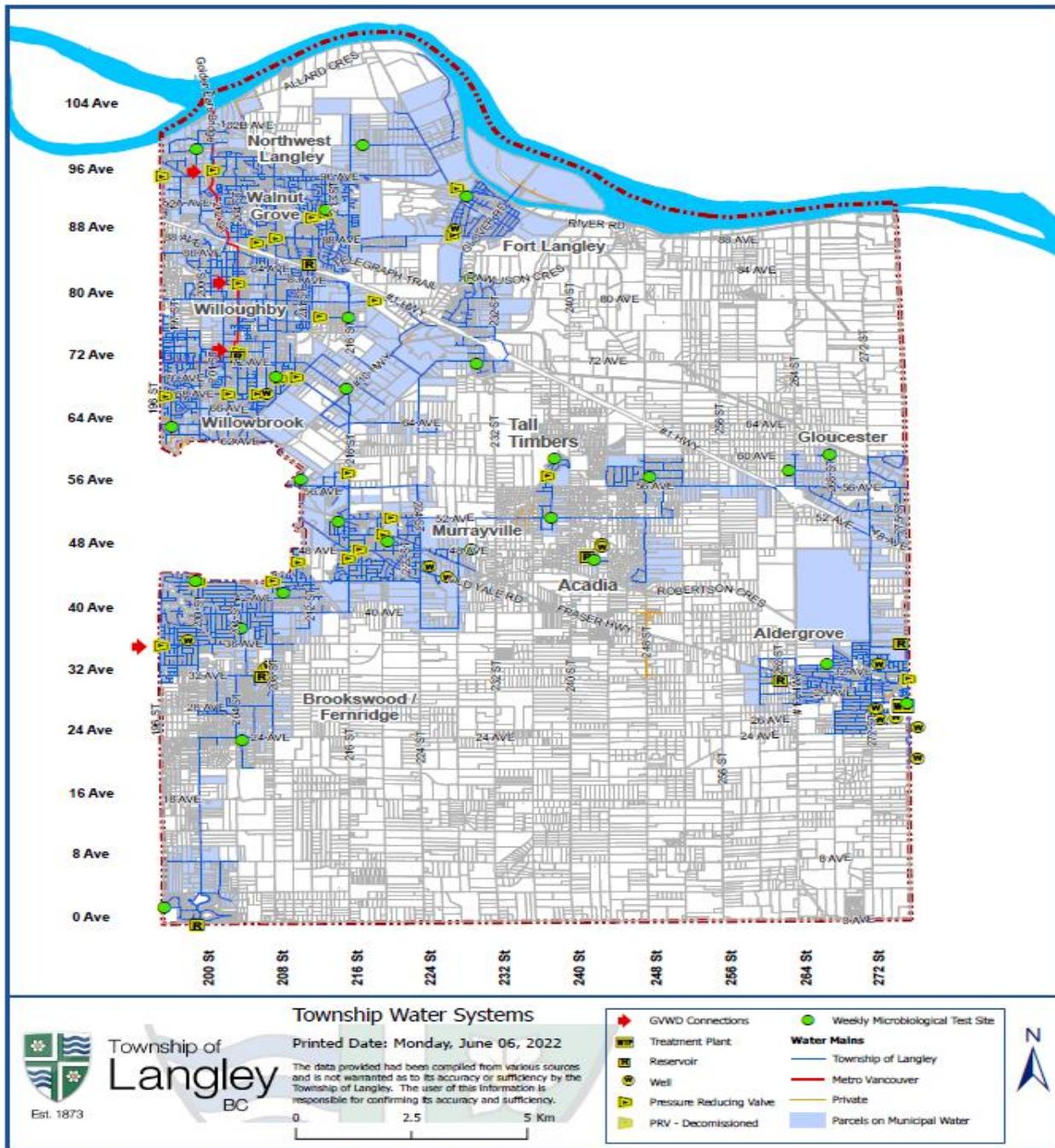


Figure 1.0 All Water Systems

2.0 WATER – THE BIG PICTURE

The Township supplements its groundwater sources with potable water from GVWD (mainly Coquitlam Lake) transmission mains. Most of the Township is supplied water by a combination of GVWD water and municipal groundwater wells. The central community of Acadia is only supplied water by the municipal groundwater wells. Some farming properties have both a municipal water connection for domestic consumption and a private well for irrigation purposes. The remaining properties obtain water from private wells. In 2021, GVWD provided 70% of the Township's water supply and municipal groundwater wells provided the other 30%.

In case of an emergency there are water inter-connections between the Township of Langley, Langley City, City of Abbotsford, and City of Surrey.

There are four separate municipal water systems in the Township:

- Northwest Langley ([Figure 2.0.1](#)),
- Southwest Langley ([Figure 2.0.2](#)),
- East Langley ([Figure 2.0.3](#)), and
- Acadia ([Figure 2.0.3](#))

In 2016, the completion of the East Langley Water Supply (ELWS) project connected the Gloucester Industrial Estates, Salmon River Uplands, and Aldergrove to the GVWD water source. In fall of 2020, the Tall Timber system was also connected to ELWS. [Table 2.0.1](#) provides location information for these municipal water systems and [Figures 2.0.1](#), [2.0.2](#) and [2.0.3](#) map the individual water systems.

Northwest Langley consists of the communities and neighbourhoods of Walnut Grove, Fort Langley, University District, Milner, Willoughby, Willowbrook, and Forest Knolls. The GVWD Barnston Island Water Main runs north-south through Northwest Langley and delivers water through one point in northern Walnut Grove and two points in Willoughby. Northwest Langley also receives potable water year-round from the municipal Fort Langley Well 2. Emergency storage for this area is provided at Strawberry Reservoir located in Walnut Grove and at Willoughby Reservoir. The Willoughby Pump Station, located adjacent to the Willoughby Reservoir, draws from the GVWD main and adjusts pressure to meet system requirements. In 2021 Metro Vancouver completed the Jericho Reservoir, which provides additional storage and supply points for the Township.

The Southwest communities and neighbourhoods of Brookwood, Fernridge, High Point, and Murrayville blend water from the GVWD main near 36 Avenue and 196 Street, and from Township operated wells in Brookwood (Brookwood Wells 7, 9, and 10) and Murrayville (Murrayville Wells 1 and 2). The Murrayville area is also supplied by the ELWS. It should be noted that the Murrayville and Brookwood wells remained offline in 2021 awaiting installation of treatment facilities to address aesthetic water concerns.

The Brookwood Pump Station, located at the 36 Avenue GVWD connection, is operated as a booster station when adequate system pressures cannot be maintained directly from the GVWD main. The distribution system also includes above grade reservoirs in Brookwood (2), Murrayville (1) which is currently offline since Fall 2020, and High Point (1), and booster stations in Murrayville, Brookwood/Fernridge, and High Point.

The East Langley system consists of the communities and neighbourhoods of Salmon River Uplands, Gloucester Industrial Estates, Tall Timber, and Aldergrove. Water is supplied from GVWD through the ELWS via the Brawn Pump Station, and from 6 groundwater wells in Aldergrove via the Aldergrove Water Treatment Plant (AWTP).

The AWTP provides a multi-barrier treatment approach to improve water quality to East Langley by filtration of manganese and iron aesthetic parameters. AWTP was designed to meet or exceed the GCDWQ (in 1997) and for a maximum day design capacity of 10 MLD. The AWTP during normal operation supplies 6 MLD of water. The filter tanks at the AWTP are due for replacement in 2022. The current filter tanks have reached the end of their service life.



Aldergrove Water Treatment Plant

Acadia systems is a small water system run by the Township. The Acadia community consists of 29 homes, served by Acadia Well 1 and Acadia Well 2.

The Township does not operate the private Otter Road and Last Chance community systems.

The Annual Water Demand was 17,556.2ML; 5,231.1ML or 30% was supplied from Township wells and 12,325.1 ML or 70% from GVWD. An increase of 8% in water demand from 2020 is mainly attributed to construction, population growth, record heat and notable firefighting requirements. The average daily residential per capita water consumption was approximately 260 L. There was a slight increase in the average daily residential per capita water consumption which can be attributed to residents working from home due to Covid-19 and record high temperatures during the summer. Production from all sources is summarized in [Table 2.0.2](#); well depths, rated capacity, and rehabilitation schedules are shown in [Table 2.0.3](#).

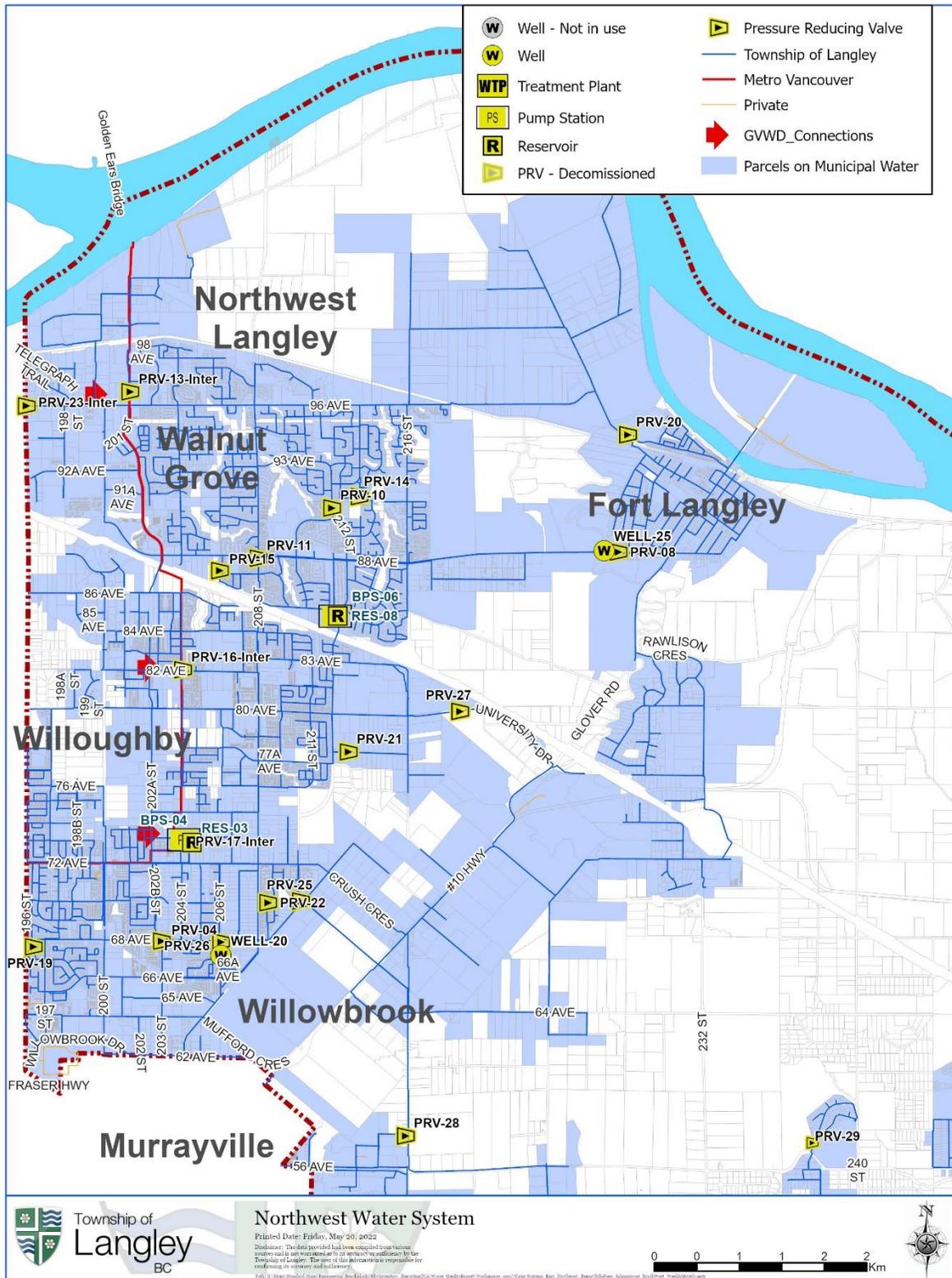


Figure 2.0.1 Northwest Water System

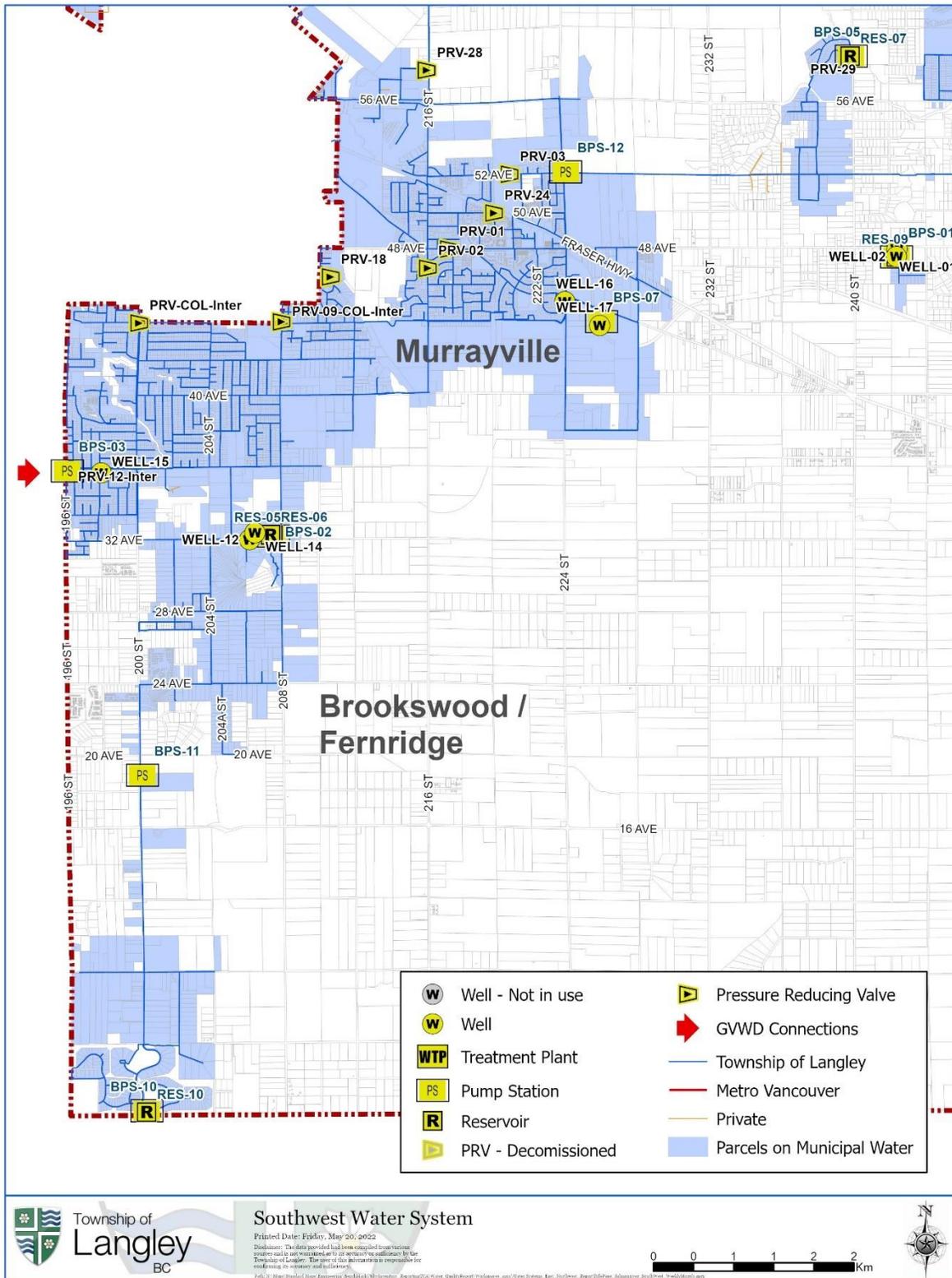


Figure 2.0.2 Southwest Water System

Table 2.0.1 Locations for Figures 2.0.1, 2.0.2, and 2.0.3.

Name	Location	Name	Location
PRV - 52 Ave, MV71	22132 52 Ave	Pump Stn. - Murrayville	22566 Old Yale Rd
PRV - 196B St, WB81	6739 196B Pl	Pump Stn & Res.-Strawberry Hill	21212 85 Ave
PRV - 203 St, WB81	20302 68 Ave	Pump - Acadia Well #2	4791 242A St
PRV - 206 St, WB81	6795 206 St	Pump Station & Reservoir- W. Aldergrove	3120 262B St
PRV - 208 St, WG81	8790 208 St	Booster Stn – Brawn	5202 224 St
PRV - 212 St, WG81	9045 212 St	Booster Stn – Acadia	4745 242A St
PRV - 213 St, WG81	9120 213 St	Res & B. Stn - Brookwood	20771 32 Ave
PRV - 216 St, MV71	4681 - 216 St	Res & B. Stn – High Point	20020 1st Ave
PRV - 48 Ave, MV71	21720 48 Ave	Reservoir - Brookwood	20771 32 Avenue
PRV - 78 Ave, WB111	21282 78 Ave	Reservoir – Willoughby Booster	20438 73A Ave
PRV - 87 Ave, WG81	8749 206 St	AWTP	2799 276 Street
PRV - 88 Ave, FL63	22779 88 Ave	Well - Murrayville 2	22566 Old Yale Rd
PRV – Billy Brown, FL63	22862 Billy Brown Rd	Well - Aldergrove 10	2071 Lefevre St
PRV - Maysfield Cr, MV71	4604 Maysfield Cr	Well - Aldergrove 4	3210 272 St
PRV(GVRD) - 201 St, WG81	9650 201 St	Well – Aldergrove 6	2520 272 St
PRV(GVRD) - 82Ave, WB111	20415 82 Ave	Well - Aldergrove 7	27186 25 St
PRV - 50 Ave, MV71	4994 220 St	Well - Aldergrove 8	2623 271A St
PRV – 70 Ave, MV71	7000 208A St	Well - Aldergrove 9	27598 Simpson Rd
PRV – Tall Timber	23990 58A Ave	Well - Brookwood 10	19810 36 Ave
PRV – McLeod, MV81	21574 58 Ave	Well - Brookwood 7	20650 32 Ave
PRV – Labonte, WB81	21840 University Dr	Well - Brookwood 9	20679 32 Ave
PRV - 70 Ave	7000 208A St	Well - Fort Langley 2	22721 88 Ave
PRV – Worrell, WB81	6990 210 St	Well - Murrayville 1	4505 244 St
Pump - 19th Ave Booster Stn	1898 200 St	Well - SRU 3 - Not in use	5975 252 St
Pump - Brookwood B. Stn/PRV	19638 36 Ave	Well - Tall Timber 2 – Not in use	6099 237A St
Pump Stn & PRV - Willoughby B. Stn	20400 73a Ave	Well - Willoughby 1 – Not in use	6725 206 St
Pump Stn & Res. - E. Aldergrove	27595 Quinton Rd	Well & System - Tall Timber 1 & 3 – Not in use	23990 58A Ave
Pump Stn & Res. - High Point	20020 1 Ave	Well - Acadia Water System 1	4791 242A St

Table 2.0.2 Annual Water Volume by Source (m³)

Source	2018	2019	2020	2021
Aldergrove 3	-	-	-	-
Aldergrove 4	106,909	51,540	125,177	140,091
Aldergrove 6	250,323	224,549	168,898	248,969
Aldergrove 7	215,530	200,766	209,055	232,776
Aldergrove 8	407,365	432,792	486,339	508,196
Aldergrove 9	259,393	147,954	233,285	259,429
Aldergrove 10	349,346	272,124	336,660	447,150
Brawn PS GVWD*	1,055,432	1,182,241	1,094,289	1,217,429
AWTP Inflow	1,729,882	1,473,316	1,708,965	1,999,495
AWTP Outflow	1,686,125	1,412,210	1,633,667	1,939,095
Aldergrove Total	2,644,298	2,511,966	2,653,702	3,054,040
Brookwood 7	415,558	359,945	9195**	254**
Brookwood 9	357,000	317,000	-	-
Brookwood 10	395,509	304,125	206**	242**
Brookwood PRV	1,413,540	1,515,101	2,949,104	2,954,226
Murrayville 1	119,538	160,365	185**	284**
Murrayville 2	602,615	498,994	398**	766**
McLeod PRV*	-	87,675	166,802	365,716
Brookwood and Murrayville Total	3,303,760	3,243,205	3,125,889	3,319,942
Willoughby 1	838	-	1607	0
Fort Langley 2	2,963,240	2,936,626	3,156,730	3,281,477
201 St GVWD	1,750,710	1,898,698	1,610,412	1,915,343
82 Ave GVWD	2,492,562	2,622,151	2,871,504	2,958,726
73 A Ave GVWD	1,568,340	1,484,806	2,041,145	2,028,795
Willoughby Pumped GVWD	643,245	796,545	528,626	636,928
72B Ave GVWD*	1,532,240	1,681,819	1,426,460	1,831,138
Worrell PRV *	476,808	354,820	343,136	247,993
West Langley Total	10,951,175	11,420,645	11,636,484	12,652,407
Tall Timber 1	6,796	6,876	6,979	0
Tall Timber 2	12,008	9,504	7,739	0
Tall Timber 3	7,014	7,070	4,928	0
Tall Timber Total	25,818	23,450	19,646	0
Acadia Total	8,743	7,389	7,443	10,509
Total Langley Well Production	6,574,984	6,020,104	4,819,093	5,231,081
Total GVWD	9,400,637	9,999,121	11,427,250	12,325,156
Combined Total	15,975,621	16,019,225	16,256,327	17,556,236

*Aldergrove outflow meter at AWTP is used in the Combined Total calculations in the table above. Also, readings for the GVWD main running from Willoughby to Aldergrove is read at 72B Ave GVWD, Brawn PRV, Worrell PRV, and McLeod PRV. Only the reading at 72B Ave is used in the Combined Total calculations for 2018 to 2020. This meter was disconnected due to work at the Jericho Reservoir and the total readings of Brawn PRV, Worrell PRV, and McLeod PRV meters are used in the Combined Total calculations for 2021.

**Water production displayed for wells in Murrayville and Brookswood were run to waste for testing purposes and not pumped into the distribution system.

It should also be noted that [Table 2.0.2](#) has been corrected for this year and for the past three years. The table from this report supersedes past years' reports.

Table 2.0.3 Municipal Well Data

Well Name	EMS #	Year Drilled	Rated Capacity (L/s)	Depth (m)	Year Redevelopment
Acadia Well 1	E243968	1973	4.5	49	2001/2011
Acadia Well 2	E218073	2008	3.5	43	
Aldergrove Well 3	E218080	1972	19	39	Decommissioned in 2019
Aldergrove Well 4	E218079	1977	13	31	2000/2010
Aldergrove Well 6	E244334	1995	44	34	2007/2010/2013/2015
Aldergrove Well 7	E218082	1978	44	34	2004/2010/2014
Aldergrove Well 8	E218081	1985	57	44	2002/2003/2009
Aldergrove Well 9	E259837	2004	30	41	2009
Aldergrove Well 10	E259838	2005	45	50	2012
Brookswood Well 7	E218071	1977	32	59	2001/2003/2011
Brookswood Well 9	E218072	1988	30	43	2001/2003/2010/2013
Brookswood Well 10	E244194	1960	22	31	1998/2008/2012
Murrayville Well 1	E218084	1978	15	117	2006
Murrayville Well 2	E218085	1978	26	68	2007
SRU Well 3	EMS # unavailable	1989	-		Disconnected, not in production
Willoughby Well 1	E218083	1978	19	120	Back up well, not in production
Tall Timber Well 1	E218074	1980	3.8	72	Disconnected in fall 2020
Tall Timber Well 2	E218075	1983	2	60	Disconnected in fall 2020
Tall Timber Well 3	EMS # unavailable	2008	4.1	73	Disconnected in fall 2020
Fort Langley Well 1	E218065				Disconnected, not in production
Fort Langley Well 2	E218066	1976	136	21	2005/2013/2015/2017

2.1 System Inventory

Water is supplied through 559.1km of water main. Approximately 3.4km of new water main was installed in 2021. Of the various pipe materials PVC represents 66%. A breakdown is found below in Table 2.1.1.

Table 2.1.1 Distribution Pipe Inventory

Years	Diameter (m)	Asbestos Cement (m)	Cast Iron (m)	Ductile Iron (m)	HDPE (m)	Perma (m)	PVC (m)	PVCO (m)	Steel (m)	Unknown (m)	Grand Total (m)
1960 - 1969	50	57					141				198
1960 - 1969	100	1,717									1,717
1960 - 1969	150	3,616									3,616
1960 - 1969	200	7									7
1960 - 1969	250	138									138
1960 - 1969	Total	5,535					141				5,675
1970 - 1979	25	54									54
1970 - 1979	50	76					40				116
1970 - 1979	100	2,678					770				3,448
1970 - 1979	150	50,700		9,364			23,846			3	83,913
1970 - 1979	200	7,244		7,615		105	6,094				21,058
1970 - 1979	250	5,755		5,594		187	3,502				15,038
1970 - 1979	300	2,975		7,638		831	2,480				13,925
1970 - 1979	350	67	2,504	1,713							4,285
1970 - 1979	400	2,900	1,231	1,526	2						5,659
1970 - 1979	450				253						253
1970 - 1979	500		2,547	1,357							3,904
1970 - 1979	Unknown						2				2
1970 - 1979	Total	72,450	6,282	34,808	255	1,124	36,734			3	151,656
1980 - 1989	25						1				1
1980 - 1989	50						175				175
1980 - 1989	100			259			3,249				3,508
1980 - 1989	150	5,818		8,598	17	62	44,706				59,201
1980 - 1989	200			848		12	24,051				24,911
1980 - 1989	250	95		2,491		128	15,861				18,575
1980 - 1989	300	3		1,109		1,177	4,438				6,726
1980 - 1989	350			2,337			632				2,969
1980 - 1989	400	1,510		1,265			401				3,177
1980 - 1989	450	2,082									2,082
1980 - 1989	500			3,602							3,602
1980 - 1989	600			632					795		1,427
1980 - 1989	Unknown						304				304

Years	Diameter (m)	Asbestos Cement (m)	Cast Iron (m)	Ductile Iron (m)	HDPE (m)	Perma (m)	PVC (m)	PVCO (m)	Steel (m)	Unknown (m)	Grand Total (m)
1980 - 1989	Total	9,508		21,141	17	1,378	93,818		795		126,657
1990 - 1999	50				208		154				362
1990 - 1999	100			391			2,762				3,154
1990 - 1999	150	134		119			24,221				24,474
1990 - 1999	200						30,947				30,947
1990 - 1999	250	212		3,055			21,023			22	24,313
1990 - 1999	300			3,526			14,773				18,299
1990 - 1999	350			178			1,159				1,337
1990 - 1999	400			3,363			6,948				10,311
1990 - 1999	450			1,157			938				2,095
1990 - 1999	500			118							118
1990 - 1999	600			2					831		834
1990 - 1999	750								21		21
1990 - 1999	Unknown									4	4
1990 - 1999	Total	346		11,911	208		102,925		852	26	116,267
2000 - 2009	50						143				143
2000 - 2009	100			48			3,075			131	3,254
2000 - 2009	150			54	1,045		8,212				9,311
2000 - 2009	200			820	9		35,888			118	36,836
2000 - 2009	250			155			13,952		6		14,075
2000 - 2009	300			566	779	324	13,529				15,197
2000 - 2009	350				920		1,265				2,185
2000 - 2009	400			116			5,010				5,126
2000 - 2009	450			279							279
2000 - 2009	Unknown									4	4
2000 - 2009	Total			2,039	2,752	324	81,074		6	253	86,410
2010 - 2019	25						18				18
2010 - 2019	100				59		931	316			1,306
2010 - 2019	150			14			1,414	102		2	1,532
2010 - 2019	200			5	3		31,623	1,123		4	32,758
2010 - 2019	250			39	1,173		7,536				8,748
2010 - 2019	300			1,078	103		5,221				6,402
2010 - 2019	350			1,048			36				1,084
2010 - 2019	400			1,104			416				1,519
2010 - 2019	450			123							123
2010 - 2019	500			147							147
2010 - 2019	600			2,913							2,913
2010 - 2019	750			3,247							3,247

Years	Diameter (m)	Asbestos Cement (m)	Cast Iron (m)	Ductile Iron (m)	HDPE (m)	Perma (m)	PVC (m)	PVCO (m)	Steel (m)	Unknown (m)	Grand Total (m)
2010 - 2019	900								7,424		7,424
2010 - 2019	Unknown						3			113	116
2010 - 2019	Total			9,718	1,337		47,198	1,541	7,424	118	67,337
2020 - 2029	100						52				52
2020 - 2029	150			2			137				139
2020 - 2029	200						2,209				2,209
2020 - 2029	250						1,460				1,460
2020 - 2029	300						704				704
2020 - 2029	350			80							80
2020 - 2029	400						347				347
2020 - 2029	Unknown									69	69
2020 - 2029	Total			82			4,907			69	5,059
Grand Total (m)	Grand Total (m)	87,838	6,282	79,699	4,569	2,825	366,798	1,541	9,078	470	559,100

*Perma is Fiberglass reinforced concrete pipe

2.2 Cross Connection Control Program



A Cross Connection Control Program (CCCP) mitigates the risk of introducing potentially contaminated water into the drinking water system. The introduction of contaminated water could result from either excessive pressure in the private water system or a loss of pressure in the municipal water system. Many solutions exist to protect the Township's safe drinking water including widespread education, assessing backflow risks, and installing backflow preventers. The

Township has successfully implemented the first stage of its CCCP and is transitioning into the implementation of an effective and leading-edge program.

The Township is tracking 5,251 active backflow preventers as of the end of 2021. Of these devices, 442 were new installations. Some 109 backflow preventers failed their annual test and required follow-up cleaning or repairs and retesting. Backflow preventers are installed in new Industrial/Commercial/Institutional (ICI) facilities, during plumbing upgrades or changes in occupancy, or because of inspection requirements. Backflow preventer test reports are submitted by the Owner or Certified Backflow Preventer Tester annually as required by the Township of Langley Waterworks Regulation Bylaw 2008 No. 4697, as amended.

In 2021, there were no events warranting further investigation for potential backflow.

The DWPR (Section 15) states,

“For the purpose of section 22(3) of the Act, an assessment response plan must include provisions to identify, eliminate and prevent cross connections with non-potable water sources”.

The Township’s CCCP derives its authority from the Langley Waterworks Regulation Bylaw 2008 No. 4697, as amended. As an evolving field, developing a CCCP includes updating the bylaws and policies while considering the recommendations of the B.C. Water and Waste Association’s Cross Connection Control Committee. The Water Emergency Response Plan (WERP) contains an action plan in the case of an unknown contamination and potential backflow. The action plan lists when to activate the plan, appropriate persons to contact, and appropriate water sampling plan to monitor the water quality.

Next steps in implementing a leading edge CCCP include:

- develop and update policies and procedures;
- continue to perform inspections and surveys;
- mitigate risk and provide solutions;
- investigate actual or potential cross connections; and
- implement strategic asset management initiatives.

2.3 System Maintenance

The Township has a team of six exempt staff and 22 full time personnel assigned to the municipal water system. The 2021 staff complement was 18 regular full time (RFT) field staff, 4 RFT technical staff, 7 temporary full time (TFT) field staff, and 2 TFT technical staff assigned to the operations management, maintenance, monitoring, and repair of the water utility system. Along with the Utilities Operations staff which perform operational and maintenance works, Water Resources and Environment staff help to design and plan new capital works and large-scale projects.

Programs geared to enhancing water quality include:

- water main looping in areas of new construction which reduces the amount of low circulation areas, bacterial re-growth, and areas of stagnant water.
- preventative pump and system maintenance such as reservoir cleaning, PRV maintenance, air valve maintenance, etc.; and
- operation of Auto Flushers on dead end water mains.
- a leak detection program

Flushing



The Township water distribution staff performs an annual uni-directional flushing program to maintain high water quality throughout the distribution system. Regular water main flushing is an important component of a comprehensive water management program to prevent bacterial re-growth and stagnation in low circulation areas of the distribution system. The program aims to flush the entire water system, approximately 550km of mains, prior to and following seasonal water restrictions. In 2019, the Walnut Grove flushing plan was reviewed by an engineering consultant to confirm the adequacy of the plan.

In addition to flushing the Township ensures that in areas of new construction water mains are looped to reduce the number of areas with low circulation, bacterial re-growth, and stagnant water.

Operations staff also perform preventative and reactive maintenance which includes:

- maintaining pumps, PRVs, reservoirs, chlorinators, and air valves;
- monitoring water quality;
- responding to resident service requests;
- monitoring flow and pressure;
- monitoring chlorine residuals;
- conducting station inspections with health authorities;
- maintaining operations at the water treatment plant.

Pipe replacement

Approximately 2.7km of new water main was installed in 2021. Approximately 695m of pipe was replaced in a watermain rehabilitation project at 262 Street and 30A Ave.

Storage reservoir cleaning and inspection

Reservoirs are useful for fire protection/emergency as well as daily storage to equalize peak daytime demand, amongst various other benefits. The cleaning and inspection process ensures the reservoirs are structurally sound, sealed, and not exposed to external contamination



including wildlife. The benefits of routine reservoir cleaning include decreasing microbial growth and turbidity in the water.

In 2021, High Point cell #1 was cleaned by Township of Langley staff.

In 2022, Highpoint reservoir cell #2 and East Aldergrove reservoir are scheduled to be cleaned.

In 2020/21 an engineering consultant for the Township completed structural assessment on seven Township water reservoirs based on a 2020 water stations condition assessment. The

consultant conducted a post tensioning assessment by carefully chipping out concrete around the horizontal tendons at selected locations to expose the tendons and visually review the condition, followed by tape repair of the tendon sheathing and concrete patching.

The consultant recommended the following repairs for the reservoirs:

The Brookwood West reservoir was assessed to be in fair condition. The post tensioning system appears to be functional and there is no indication of significant loss of structural capacity. The consultant recommended that Township periodically re-assess the condition of the reservoir.

The Aldergrove East reservoir is determined to be in poor condition. The consultant recommended that the maximum water level of the reservoir be lowered to avoid any further deterioration. The reservoir is recommended to be put on a quarterly monitoring program for any leaks or further deterioration.

The Aldergrove West and Brookwood East Reservoirs were assessed to be in very poor condition. The consultant recommended to operate these reservoirs at a reduced water level until the structures are removed, repaired, or replaced.

The Strawberry reservoir is assessed to be in very poor condition and exhibiting signs of ongoing failure. The consultant recommended to complete repairs on this reservoir to avoid any further deterioration. A temporary repair to extend the useful life of the reservoir was completed in 2022.

Murrayville reservoir was determined to be in very poor condition. The consultant recommended to take the reservoir offline due to its excessive deteriorating condition. The Murrayville reservoir was disconnected from the distribution system in fall 2020.

The Willoughby Reservoir appears to be in generally fair condition. The consultant recommended that Township periodically re-assess the condition of the reservoir.

Leak Detection Program



A Leak Detection Pilot Project was implemented in the latter part of 2017, became a full program in 2018. The purpose of the program is to use leak detection equipment in a systematic manner to determine which water mains and appurtenances have the potential to cause disruption of service and/or require repair/replacement. By proactively looking for water loss and water theft, the Township strives to eliminate unaccounted for water and water waste, as well as reduce potential infrastructure damage. Over the coming years, this leak data will be correlated with the facility

condition data using asset maintenance planning software, to build a capital works planning budget.

The Township of Langley water system infrastructure is maintained by a well-trained staff. Staff carry out several maintenance programs to keep the infrastructure in optimal operation.

2.4 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 Township’s water distribution systems as Levels I through IV and the water treatment plant as Level II. In addition to meeting the DWPR requirements, the Permit to Operate requires the Township to have a water system Operator with a certification level equivalent to the designated EOCP level. The Township 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 three Level IV Operators, three Level III Operators, nine Level II Operators, eight Level I Operator, and one Operator in Training (OIT) for a total of 23 Certified Water Distribution Operators and one OIT. The Township also has five Level II, three level I, and one OIT Water Treatment Operators. Furthermore, four Applied Science Technologists and Technicians of BC (ASCTT BC) technical staff and one Professional Engineer with in-depth knowledge of the water system to complement and support the Utilities Operations team.

2.5 Emergency Response and Contingency Plan

The WERP as part of an overall Engineering Department Emergency Plan, addresses potential hazards such as earthquakes, floods, severe storms, and water security. Outlined in the plan are procedures dealing with the effects of various scenarios: loss of water supply, loss of power, contamination, or damage to any pipelines or facilities. Currently, this is a standalone document to deal with a water emergency that is managed by Utilities Operations staff.

Activation of the plan occurs when information is received that an emergency exists, either through staff or external agencies. Staff is directed to determine the event location and nature, isolate, or eliminate the hazard in collaboration with other agencies if applicable, and ultimately restore normal water service. The plan encompasses risks and responses, problem indicators, and restoration plans.

The WERP is reviewed and updated as needed on an ongoing basis.

2.6 Murrayville Aesthetic Water Issues

In 2019, the Murrayville area experienced a high number of aesthetic water related incidents. The Township received complaints from Murrayville residents regarding brown or yellow coloured water. The Township engaged in water main flushing of the hotspots where these issues were reported and upon an increase in the number of aesthetic water incidents a full water system flush of the Murrayville area was completed in fall 2019.

The aesthetic issues in the Murrayville water supply are caused by the reaction of chlorine with the manganese and iron that is present in all water sourced from the groundwater wells in the area. The chlorine reacts with the manganese and iron and causes it to precipitate out of solution resulting in a yellow or brown tint to the water. Under normal operation the water is consumed before this reaction can fully take place; but if the water remains in the distribution system for a longer period of time or if there is spike in the chlorine concentration the manganese and iron can precipitate. Additionally, when the temperature increases bacterial growth in the water main can also increase which requires more chlorine to fight the bacteria, resulting in even more manganese and iron precipitating out. It should be noted that with the exception of Brookwood well #10, all of the wells servicing Murrayville are within the health-based MAC guideline. The issue is solely with the aesthetic based AO guideline. As per the GCDWQ technical document on manganese:

Concerns regarding the presence of manganese in drinking water are often related to consumer complaints regarding discoloured water. The aesthetic objective (AO) of 0.02 mg/L (20 µg/L) is intended to minimize the occurrence of discoloured water complaints based on the presence of manganese oxides and to improve consumer confidence in drinking water quality.

In May 2019, Health Canada established a health-based Maximum Acceptable Concentration (MAC) value for manganese in drinking water of 0.12 mg/L and lowered the Aesthetic Objective (AO) to 0.02 mg/L. The water in Murrayville is sourced via the local groundwater wells and from GVWD. The groundwater wells in the Murrayville and Brookwood area which supply the Murrayville area, all exceed the AO limit for Manganese.

All the wells supplying Murrayville were subsequently turned off and taken out of production to combat the AO limit exceedance. The water from Brookwood wells is also conveyed into Murrayville and subsequently those wells were also turned off. Brookwood well #10 was taken out of production in October 2019. Murrayville well #2 was taken out of production in November 2019. Murrayville well #1 was taken out of production in December 2019. Brookwood well #7 and #9 were taken out of production in January 2020. The Murrayville and Brookwood areas are currently being supplied with water only from GVWD. The Township has conducted a study with an engineering consultant, which recommended new localized water treatment plants to

resolve the water quality issues in Murrayville and Brookwood. Mayor and Council approved the plan to install localized water treatment plants in May 2021.

The Township of Langley have retained a consultant to start design work on treatment plants and associated pipe work for manganese removal. Currently, there are two treatment plants under design in the Brookwood area, and one under design in Murrayville. The treatment plants will filter manganese and iron and bring the well water into the most current parameters. Construction of these localized water treatment plants is expected to start in Fall 2022.

2.7 Auditor General for Local Government Audit Report Summary, Action Items and Updates

In August 2017, the Township was informed that the Auditor General for Local Government (AGLG) was going to undertake an audit of the Township' water utility system. The Township was selected based on risks, potential relevance of findings to other local governments, the size, geographic location, and complexity of the water supply system. The overall goal of the audit was identified as providing an objective and independent examination of drinking water services in the Township to determine whether clean and safe drinking water is being provided to the users on the Township's water utility system.

The AGLG report focused on four key audit objectives:

1. The local government's governance structure and activities supported the provision of clean and safe drinking water where and when needed.
2. The local government managed its drinking water supplies to meet current and expected future demand.
3. The local government ensured the safety and reliability of drinking water provided through its treatment and distribution systems.
4. Managing water supply infrastructure to meet current and future demand.

The AGLG developed the following action plan template with respect to the first three audit objectives. It lists the recommendation of the AGLG, the steps taken by the Township to meet the objective as well as a target date to meet the objective:

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVES 1-3			
Recommendations	Description	Steps Taken	Target Date
	Audit Objective One:	How the local government's governance structure and activities supported the provision of clean and safe drinking water where and when needed.	

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVES 1-3			
Recommendations	Description	Steps Taken	Target Date
Recommendation One	Consider drinking water strategies that focus on sustainability, protecting water sources, explore rainwater capture as a long-term solution and assess land use applications that might impact groundwater sources.	The Township is currently developing a long-term drinking water supply plan to supplement the many existing related programs, plans, studies and strategies related to water conservation, groundwater protection and sustainable water management planning. The Township is currently in discussion with Fraser Health regarding long term source water protection planning.	TBD
Recommendation Two	Consider a cost recovery approach to its water service planning that focuses on costs associated with water delivery to residents and long-term capital planning.	The Township has established a water utility reserve fund to address replacement of aging infrastructure and will explore ways to further a full cost recovery approach building on existing practices.	Underway
Recommendation Three	Develop a formal framework for risk identification, mitigation and reporting that includes regular re-assessment and reporting of organizational risks with respect to drinking water.	The Township has established a water emergency response plan and commits to regular practice exercise. The Township will also consider conducting a risk hazard assessment related to the municipal water system as it has done with other areas of the services it provides.	TBD
Recommendation Four	Seek to improve data collection, analysis, monitoring and reporting on its water services as part of a continual improvement process.	Township staff currently reports to Council, and the public on key aspects of its water system, including quantity and quality, with senior management staff fully engaged in the reporting and aware of any concerns. This information is reported annually in the water quality reports and is made available on the Township's website. Staff will examine opportunities for improvements related to performance	Ongoing

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVES 1-3			
Recommendations	Description	Steps Taken	Target Date
		measures, monitoring and reporting.	
Recommendation Five	Improve its tracking and reporting on service requests and enquiries from the public relating to its water systems.	The Township is utilizing a new system for tracking and reporting on service requests. The Township will conduct an evaluation of this system on a regular basis to ensure it is meeting the needs of the municipality and its customers.	Ongoing
Recommendation Six	Improve the workflow of its water infrastructure work-order system to enhance its efficiency.	The Township has a tracking system that helps manage the workflow of the water infrastructure work-order system. The Township is currently exploring alternatives to the current system in order to improve efficiency.	Ongoing
Recommendation Seven	Retain a record of its management team meetings in order to track organizational decisions.	Water related departments not already doing so, have implemented recording team meeting minutes as of 2019. Records will be retained.	Ongoing
Recommendation Eight	Enhance its human resource policies by reviewing and updating its ethical policies and by developing a whistle blower policy.	The Township will continue to enhance HR policies, procedures and practices in keeping with the overall goals of the organization, applicable legislation and to ensure employee related issues are appropriately addressed.	Ongoing
Recommendation Nine	Consider a more formal approach to measuring employee workplace engagement.	The Township will continue to evaluate opportunities for engagement through the involvement of employees in programs and initiatives as appropriate and applicable.	Ongoing

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVES 1-3			
Recommendations	Description	Steps Taken	Target Date
Recommendation Ten	Enhance its emergency and business continuity planning by ensuring its emergency plan is updated and tested regularly and completing business continuity planning for critical services,	The Township's water emergency response plan was recently completed. The plan will be updated periodically with regular practice to ensure relevant staff are versed and practiced.	Ongoing
	Audit Objective Two:	How the local government managed its drinking water supplies to meet current and expected future demand.	
Recommendation Eleven	Township should improve its water conservation and demand management efforts by developing a long term approach that focuses on residents' water use habits, water conservation, draught response, water supply shortages, water reuse application, bylaw compliance and a leak detection program.	The Township continues to utilize community based social marketing to identify barriers to water conservation and design programs to reduce overall and per capita water use. Water conservation programs continue to evolve and the water conservation bylaw is reviewed and revised regularly.	Ongoing
	Audit Objective Three:	How the local government ensured the safety and reliability of drinking water provided through its treatment and distribution systems.	
Recommendation Twelve	Continue to improve its water quality reporting processes by reviewing its annual water quality report and reporting changes in practice due to water quality issues.	The Township meets all Fraser Health reporting requirements and continues to endeavor to ensure accuracy and error free reporting. Staff will examine opportunities for improvements related to reporting.	Ongoing

With respect to objective # 4 the AGLG audited the East Langley Water Supply project. During this audit the AGLG noted the successes of the Township of Langley in delivering the project as well as gaps in the Township of Langley's approach to managing water supply infrastructure. The Township has developed a Quality Management Manual (the manual). The manual addresses audit objective 4 recommendations 1, 3, 6, 7, 8, 12, and 14. The table below summarizes the list of recommendations with respect to objective #4:

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVE 4			
Recommendations	Description	Steps Taken	Target Date
	Audit Objective Four:	How the Township of Langley is managing water supply infrastructure to meet current and future demand.	
Recommendation One	Develop and follow standards for project governance, defining when a project needs a project board, roles and responsibilities of the participants, guidelines related to stage gate review process, evaluate the project delivery method and meeting protocols.	The Township will look to further develop and expand on its 'Capital Project Procedure' document related to project governance especially for complex projects and projects over a certain size/threshold.	Covered under Section 2.3 of the manual
Recommendation Two	Develop a documented planning procedure to identify and assess the specific staff resources required for capital projects based on the scope and complexity of each project	Project teams are built based on specific project needs and internal resourcing. The Township will consider development of a formal planning procedure document for projects over a certain size/threshold.	TBD
Recommendation Three	Ensure project charters are complete and kept up to date throughout the project.	Project charters will be developed, monitored, and kept current for projects, especially for projects of size and/or complexity exceeding a pre-determined threshold.	Covered under Section 2.3 of the manual
Recommendation Four	Develop a project plan template as a tool for leading projects of high-value, high risk and/or public significance.	This is already being done on a case-by-case basis and through the Township's Capital Project Procedure' document; however, a standard template could be developed and utilized for projects exceeding a pre-determined threshold.	TBD

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVE 4			
Recommendations	Description	Steps Taken	Target Date
Recommendation Five	Broaden and formalize an approach to capital project risk management. This policy should be based on risk identification, risk assessment, monitoring of risks and ensuring project contingency is tied to risk management.	Risk management is currently considered on a project-by-project basis and contingencies are built into project budgets and schedules. Formal policies related to capital project risk management will be considered.	TBD
Recommendation Six	Develop guidance for how project scope is defined and how project scope change is authorized and implemented.	Project scope and scope change is managed internally via internally developed procedures and policy, and externally via contracts (typically MMCD contracts). The Township will look at developing and expanding internal procedure for projects of size and/or complexity that exceed a pre-determined threshold.	Covered under Section 2.3 of the manual
Recommendation Seven	Develop a policy and procedure that outlines the process for development, approval, management and reporting of budgets for capital projects that includes guidance on financial contingencies, budgets, and other financial control procedures.	A formal document to provide guidance on the process for development, approval, management and reporting of budgets will be considered along side a project plan template as per recommendation four.	Covered under Section 2.3 of the manual

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVE 4			
Recommendations	Description	Steps Taken	Target Date
Recommendation Eight	Develop a baseline schedule at the time of project chartering, create a process of managing project schedules, and review progress reports against the baseline schedule.	Project timing needs are varied and schedules are often dependant on multiple factors including budget approval, regulatory agency permitting, development needs, land requirement considerations, contractor availability and other factors outside of the Township control. Schedules are typically set via contract with construction contractors and managed according to the terms of the contract. It should be noted that worldwide supply chain issues have delayed many project schedules beyond the control of the municipality or the contractor.	Covered under Section 2.3 of the manual
Recommendation Nine	Review and update its procurement policy to align with evolving procurement practices and relevant trade agreements.	A regular review and update of the Township's procurement policy to be undertaken.	Ongoing
Recommendation Ten	Township of Langley's purchasing department should monitor its procurement activities and ensure they are well documented and comply with its purchasing policies and procedures.	Monitoring of the Township's procurement activities to ensure they are well documented and comply with its purchasing policies and procedures is an ongoing effort.	Ongoing
Recommendation Eleven	Develop and implement a policy and related processes and tools to formally and systematically evaluate vendor performance.	The Township will explore the development and implementation of a policy and related processes and tools to formally and	TBD

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVE 4			
Recommendations	Description	Steps Taken	Target Date
		systematically evaluate vendor performance.	
Recommendation Twelve	Define reporting requirements for capital projects to ensure that those accountable for the performance of a project receive regular and consistent status updates.	Internal reporting to project sponsors, etc. occurs regularly with frequency depending on project size and complexity. A formal document to provide guidance on reporting will be considered along side a project plan template as per recommendation four.	Covered under Section 2.3 of the manual
Recommendation Thirteen	Develop a stakeholder engagement plan and procedures for its capital projects.	Stakeholder engagement is currently considered on a project-by-project basis and is dependant on potential impacts to stakeholders. A formal plan and procedures document could be considered for projects meeting pre-determined thresholds.	Ongoing and TBD
Recommendation Fourteen	Develop a project close-out procedure and related checklist	Review and improvements to the Township's 'Capital Projects Procedures' document will be considered in conjunction with checklist.	Covered under Section 2.4 of the manual

AUDITOR GENERAL FOR LOCAL GOVERNMENT REPORT: SUMMARY OF RECOMMENDATIONS FOR OBJECTIVE 4			
Recommendations	Description	Steps Taken	Target Date
Recommendation Fifteen	Further develop its asset management practices for water infrastructure.	Asset management is a continuous process at the Township of Langley. The Township is developing the water asset management program by updating the water asset management plan and integrating it along with the Asset Management Policy and the Water Master Plan. The Township is also integrating its Risk and Criticality model with current data on watermain breaks and the leak detection program.	TBD
Recommendation Sixteen	Improve its tracking of infrastructure maintenance, renewal and replacement activities by internally reporting on the status of work orders relative to its maintenance schedule.	The Township is reviewing the current level of service and work management practices including a review of current workflows and the current procedures for collecting and reporting on work related data as part of its continuous improvement process. This review would include establishing KPI's for both work management processes and the major asset systems.	Underway

The Township will consider all the remaining AGLG recommendations and develop a plan of action to improve its governance structure and practices to support the provision of clean and safe drinking water to its residents, meet current and future water supply demands, ensure the safety and reliability of drinking water sources and manage water supply infrastructure projects to meet future water demands.

2.8 Operational Highlights for 2021

The Township achieved the following operational milestones:

- Changed drinking water analysis contractor per new contract
- Put Metro Vancouver Jericho Reservoir into service
- Brawn Pump station connection of 8" bypass to Murrayville via the East Langley Water System main
- Completed Phase 1 installation of a trunk main to Murrayville Booster Station from Brawn Station
- Installed Fort Langley well #2 chlorine contact loop pipe and put into service
- Performed reservoir cleaning at High Point cell #1
- Installed online chlorine residuals analyzers at 206 Street PRV and Worrell PRV
- Installed watermain on Mary Avenue, improving water circulation and fire protection to Fort Langley
- Completed water main upgrades on 30A Avenue between 260 Street and 262 Street

2.9 Planned Works for 2022

The Township plans to achieve the following works:

- Replace water filters at AWTP and install pH adjustment facility
- Install pH adjustment facility at Fort Langley well #2
- Decommission Fort Langley well #1
- Construction of Brookwood and Murrayville water treatment plants for manganese removal with the possibility of pH adjustment facility
- Complete Phase 2 of the Murrayville water main improvements with pump installation at Brawn Station
- Installation of hypo generation system and dosing pumps at Brawn Station
- Seismic upgrades at Strawberry Reservoir
- Highpoint reservoir cell #2 cleaning
- East Aldergrove reservoir cleaning
- Installation of chlorine dosing pump and commence dosing into the reservoir on fill cycles at the West Aldergrove reservoir.
- Installation of chlorine residuals analyzers at 201 ST PRV and at the West Aldergrove reservoir
- Completion of dedicated connection between AWTP and East Aldergrove Reservoir
- Installation of twin trunk main on 56 Avenue between 250 Street and Highway 1
- Design of Jericho Booster Station
- Installation of additional fire hydrants along 88 Avenue east of 217A Street
- Connection of Acadia Water System to the East Langley system
- Design and construction of Brookwood Heights Booster Station
- Tall Timber water system swabbing
- Installation of auto flushers to improve water quality in areas of concern

3.0 WATER SAMPLING AND TESTING PROGRAM

The Township follows a routine BC DWPR water sampling and testing program to maintain the delivery of safe, high quality drinking water to its residents. EOCP certified Water Distribution Operators take samples and test water at local supply sources and various points throughout the water distribution system. Weekly water samples are tested at Bureau Veritas labs and GVWD Labs both of which are Canadian Association for Laboratory Accreditation (CALA) certified labs for routine physical and microbiological parameters; and quarterly, summer and winter for microbial parameters, chemical and/or physical parameters. The GVWD also samples water prior to it entering the Township’s distribution system.

The BC DWPR below outlines the minimum number of water samples based on the Township’s serviced population of 123,395. Based on Schedule B of the regulation, the Township’s monthly sampling of 112 exceeds the required 94.

Table 3.0.1 Drinking Water Protection Regulations: Schedule A

Schedule A	
Water Quality Standards for Potable Water	
Parameter:	Standard:
Fecal coliform bacteria	No detectable fecal coliform bacteria per 100 ml
Escherichia coli	No detectable Escherichia coli per 100 ml
Total coliform bacteria:	
(a) 1 sample in a 30-day period	No detectable total coliform bacteria per 100 ml
(b) more than 1 sample in a 30-day period	At least 90% of samples have no detectable total coliform bacteria per 100 ml and no sample has more than 10 total coliform bacteria per 100 ml

Table 3.0.2 Drinking Water Protection Regulations: Schedule B

Schedule B	
Frequency of Monitoring Samples for Prescribed Water Supply Systems	
Population Served by the Prescribed Water Supply System:	Number 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

Water sampling, as described in [Table 3.0.3](#), and [Table 5.0.1](#) met regulatory requirements as set by the GCDWQ and the Water Quality Monitoring and Reporting Plan (WQMRP) (September 2008) for municipalities in the GVWD. There was one indication of positive coliforms in the groundwater wells and 14 samples in the distribution system indicating the presence of total coliform. Four additional samples tested positive for Total Coliforms but the water from this section of pipe was not conveyed into the municipal water system. A further breakdown of the events is provided in [Section 5.2](#).

Of the 28 sampling locations, 17 weekly samples are sent to a CALA Lab and 11 samples are tested by GVWD. The weekly samples are tested for the following chemical, physical, and microbiological parameters:

- colour
- pH
- turbidity
- free chlorine
- temperature
- conductivity
- HPC
- total coliforms and
- E. coli.



Sampling Station

The GCDWQ promotes ‘*the use of a multi-barrier approach that includes source water protection, adequate treatment, including disinfection, and a well maintained distribution system can reduce microorganisms to levels that have not been associated with illness, as well as meet the guidelines...*’

Table 3.0.3 Water Sampling and Testing Schedule

Water Type	Parameter	Frequency
Township Source Water	E. coli, Total Coliforms, HPC	Quarterly
	Alkalinity, Colour, Chloride, Fluoride, Hardness, Nitrite, Nitrate, pH, Sulfate, Turbidity	Summer/Winter
	Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Potassium, Silicon, Sodium, Uranium, Zinc	
	Nitritotriacetic Acid (NTA)	Summer/Winter
	BTEXs, MCPA, PAHs, Phenols, VOCs	
	Ammonia, Chlorate, Cyanide, Dissolved Organic Carbon, Sulphide, Total Dissolved Solids, Total Organic Carbon	
	Beryllium, Bismuth, Cobalt, Mercury, Molybdenum, Nickel, Phosphorous, Selenium, Silver, Strontium, Sulphur, Thallium, Tin, Titanium, Vanadium, Zirconium	
	Pesticide and Herbicide Scan, Radionuclides	Summer
Township Distribution System	Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Zinc	Summer/Winter at five locations
	E. coli, Total Coliforms, HPC	Weekly
	Free Chlorine	
	Turbidity	
	pH, Temperature, Conductivity	Quarterly at selected sites by GVWD and by TOL quarterly at five locations
THM, HAAs, pH, Vinyl Chloride, TOC, Conductivity		

3.1 GCDWQ Updates

Health Canada publishes the GCDWQ on behalf of the Federal-Provincial-Territorial Committee on Drinking Water (CDW). Guidelines are systematically reviewed to assess the need for updates; several chemical, physical, and microbiological parameters are new or have been revised since the publication of the Sixth Edition of the Guidelines for GCDWQ in 1996. This report references Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment, September 2020, which supersedes the GCDWQ, 6th edition.

In 2019, Health Canada updated its health-based MAC guideline for copper to 2 mg/L. Short term exposure to copper may result in gastrointestinal tract issues and long-term issues may

result in liver and kidney effects. Copper is naturally occurring in water but a big component of high copper levels in water is due to copper pipes. All the township source samples were below both the copper MAC and AO guidelines.

The MAC guideline for lead was updated to 0.005 mg/L (ALARA). High levels of lead in water can lead to reduced IQ levels. Health Canada has prescribed that this guideline should be kept as low as possible as there are no known safe levels of lead exposure. A large contributor of high lead level is due to lead service lines, lead solder, and brass fittings inside residential homes. All the Township source samples were below the lead MAC guidelines.

The MAC guideline was established for manganese at 0.12 mg/L. The AO guideline for manganese was updated to 0.02 mg/L. Manganese is naturally occurring in water and at higher levels can lead to discoloration of water and staining of laundry. The current MAC guideline of 0.12 mg/L and AO of 0.02 mg/L was exceeded in Acadia, Aldergrove, Brookwood, and Murrayville wells. Acadia will be connected to the ELWS in the future and the wells will be disconnected. The raw water in the Aldergrove wells is filtered to reduce the manganese levels to acceptable levels before being conveyed into the distribution system. Localized water treatment plants are currently being designed to bring the manganese parameter to within acceptable levels at the Brookwood and Murrayville wells.

A MAC guideline was also established for strontium of 7 mg/L. Strontium is also naturally occurring in water due to erosion and weathering of rocks. Strontium may lead to bone defects. All the Township source samples were below the lead MAC guidelines.

The MAC guideline for Barium was updated to 2.0 mg/L. Barium is naturally occurring but can also releases from industrial uses. High levels of barium can lead to kidney effects. All the Township source samples were below the lead MAC guidelines.

The MAC guideline for Cadmium was updated to 0.007 mg/L. The contribution of cadmium in drinking water is generally from the galvanized steel used in pipes and well components. High levels of cadmium can lead to kidney damage and decreased bone density. All the Township source samples were below the lead MAC guidelines.

3.2 Fraser Health Updates

Fraser Health requests that the following message be included in the 2021 Annual Water Quality Report:

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 especially 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.

4.0 SOURCE WATER QUALITY

Source water quality is an important indicator of the level of treatment required to produce a water supply that is safe for consumption and aesthetically pleasing. The source water quality monitoring program ensures that source water quality remains high and it provides analytical data required by the GCDWQ for ongoing confirmation of water quality.

As detailed in [Table 3.0.3](#), the Township's source water is sampled on a quarterly basis for microbial parameters, semi-annually for routine parameters, and annually for complex parameters. Source samples were collected from wellheads in March, June, August/September, and December of 2021 for microbial testing. Each sample collected in August/September (summer) and December (winter) was additionally analyzed for routine parameters; the August samples were also analyzed for complex parameters.

The 2021 source water sampling program is detailed in [sub-sections 4.1, 4.2 and 4.3](#). The MAC represent health related guidelines. AO apply to certain substances that may affect acceptance by consumers but are not a direct health concern. As low as reasonably achievable (ALARA) is MAC within reason. ALARA is used as a guideline in parameters such as Arsenic, Lead, and Disinfection Byproducts.

It should also be noted that where the Aldergrove well tests were outside of acceptable limits, these sources were treated and blended at the Aldergrove Water Treatment Plant with the approval of Fraser Health until the desired MAC or AO was achieved. For details on the water quality coming out of the treatment plant, see sample site AD AWTP in the charts in section 4.2.

4.1 Quarterly Microbial Testing

Quarterly microbial testing sets out to sample for E. coli and total coliform bacteria.

From the GCDWQ:

“Total coliforms are naturally found in both fecal and non-fecal environments, so they are commonly present in both surface water and groundwater under the direct influence of surface water sources. Consequently, monitoring total coliforms in these sources does not provide information on the quality of the source water from the perspective of health risk. Protected groundwater systems, on the other hand, should not contain total coliforms. As their presence indicates that the groundwater may be vulnerable to contamination from the surrounding environment, detection of total coliforms in the water leaving the well should trigger further actions... This MAC does not apply to distribution systems, where total coliforms are used to indicate changes in water quality... In municipal-scale systems, the detection of more than 10% of samples in a given sampling period, or of consecutive samples from the same site, that are positive for total coliforms indicates changes in the quality of the water and a need for follow-up actions to be initiated.”

Total coliforms are an important indicator of the degree of contamination, low flow/stagnant water, and the treatment required to ensure a safe, potable water supply. [Table 3.0.1](#) outlines Schedule A of the BC DWPR, which provides quality standards for potable water. For the Township water supply points which originate from wells, quarterly microbiological testing has been carried out. If problems were to develop, it is expected that they would appear in the distribution system's weekly testing (see section 5.0). Additionally, Fort Langley Well 2, Acadia Booster Station, are treated using sodium hypochlorite.

Table C.1 in the Appendix lists results for the 2021 quarterly microbiological analysis of the source water for total coliforms and E. coli.

The December quarterly microbial testing coincides with the Winter Annual source sampling. An additional fifth set of microbial samples were taken as routine with the summer annual sampling.

4.2 Semi-Annual Routine Parameter Testing

Source water sampling for routine parameters provides the Township with valuable information on water quality and enables Water Operators to plan treatment options based on historical trends. Parameters highlighted in this section have either exceeded the GCDWQ for MAC or AO or they are discussed for public information. Presented in *Appendix A: Source Water Test Results* are parameters that have health-based or aesthetic guidelines for chemical and physical parameters in the GCDWQ. For common parameters of interest, see further details in *Appendix B: Raw Data*

It should be noted that the semi-annual metal samples are typically done in September and December of each calendar year. The Township of Langley's lab contractor experienced a cyber-attack in December 2021 and the samples had to be delayed to January 2022.

4.2.1 Manganese

Manganese is naturally occurring in the environment and normally arises due to erosion and weathering of rocks and minerals. MAC parameters are based on high manganese levels effecting neurological development and deficits leading to memory problems, attention, and motor skills issues. AO concerns are due to high levels staining laundry and plumbing fixtures. Manganese releases with Iron during certain pH conditions.

The current MAC guideline of 0.12 mg/L was exceeded in Acadia well #2, AWTP, Aldergrove well #4, Aldergrove well #6, Aldergrove well #7, Aldergrove well #8, Brookwood well #7, Brookwood well #9, and Brookwood well #10. In addition, the AO guideline of 0.02 mg/L was also exceeded in Acadia well #1, Murrayville well #1, and Murrayville well #2.

The levels in Aldergrove wells were reduced to acceptable levels during the treatment process at the AWTP prior to distribution. The Township conducts weekly tests at its Distribution sample stations to mitigate the effects of high manganese levels. No action taken to counteract the high levels in the Acadia as plans include a connection to the East Langley system and decommissioning of the wells. The manganese levels in Acadia wells are higher than the MAC guideline but the levels are below the MAC in the distribution

system. This is possibly due to settling in the Acadia clear well or due to the manganese precipitating out of solution due to chlorine interaction.

Brookwood and Murrayville wells were turned off in 2019 due to the aesthetic water issues caused by manganese. Township of Langley has hired an engineering consultant to start design work on three treatment plants and associated pipe work to reduce manganese and iron levels below Aesthetic Objective criteria. The project is currently in its design phase with two water treatment plants being designed for the Brookwood wells and one being designed for the Murrayville wells. The construction work is planned to start in Fall 2022.

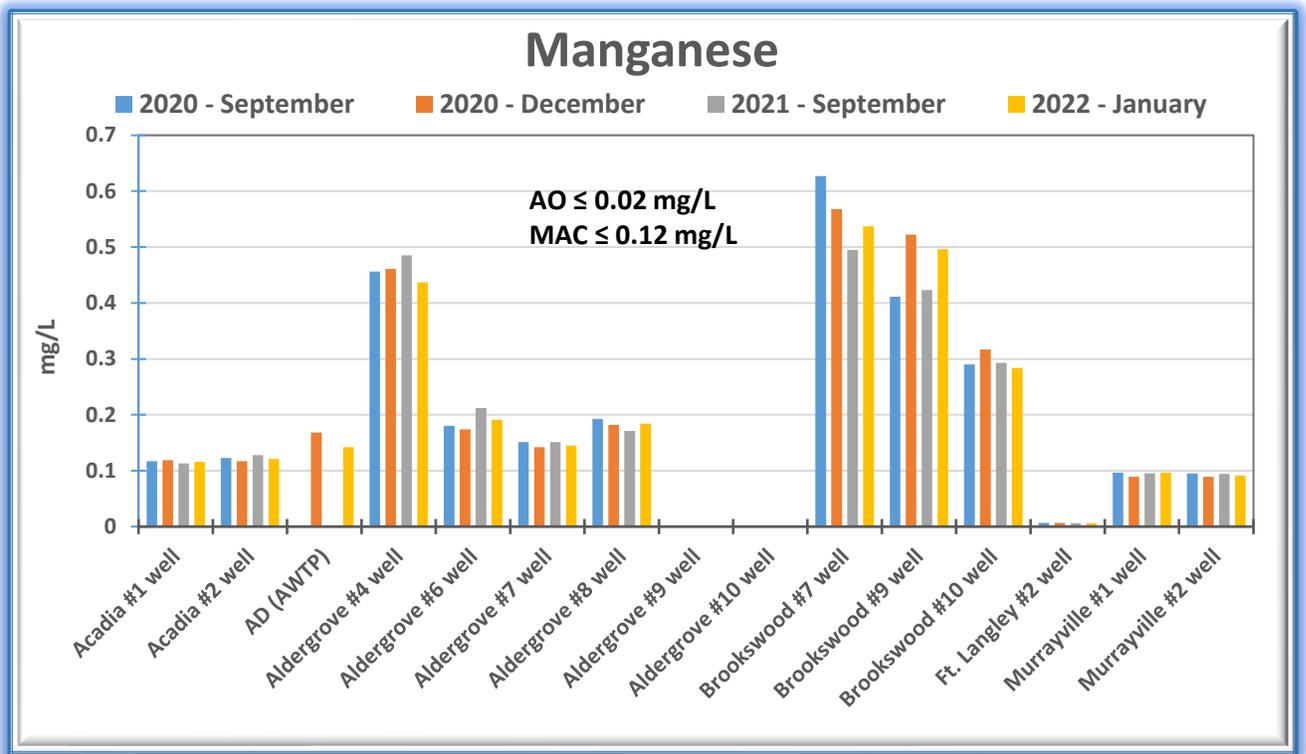


Figure 4.2.1 Manganese

Due to the Brookwood well shutdown a sharp increase in manganese levels was noticed in the Brookwood wells. This could be due to a combination of factors including anoxic conditions formed over time due to wells not pumping, or manganese settling in and around the pump and metal casing resulting in higher concentrations when the samples were taken. It should be noted that the water from Brookwood and Murrayville wells was not conveyed into the distribution system but was flushed to waste instead.

4.2.2 Nitrate as Nitrogen

At Aldergrove Well 10 Nitrate was above the MAC level of 10 mg/L. With the approval of Fraser Health, prior to distribution, the Township blends high and low nitrate content water at the AWTP. The blending results in an acceptable nitrate level of less than 10 mg/L, measured weekly at sample stations to ensure treated water meets regulatory compliance.

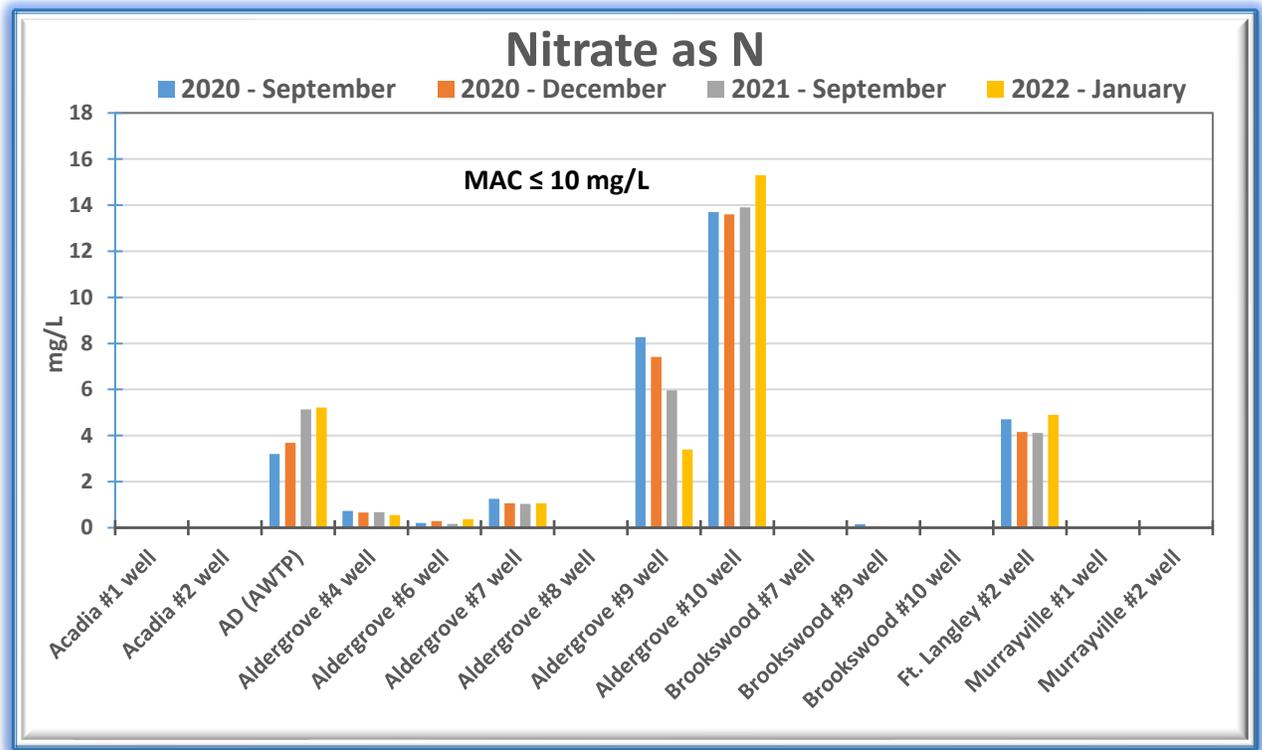


Figure 4.2.2 Nitrate as N

4.2.3 pH

pH is a measure of acidity/basicity of water. pH does not have a MAC or AO guideline instead Health Canada recommends an operational guideline of 7.0 – 10.5. pH within the operational guideline maximizes water treatment effectiveness, controls corrosion, and reduces leaching from distribution system and plumbing. As mentioned previously, Aldergrove sources are blended at the Aldergrove Water Treatment Plant prior to distribution, which raises low pH levels. (See AD AWTP for treatment plant results).

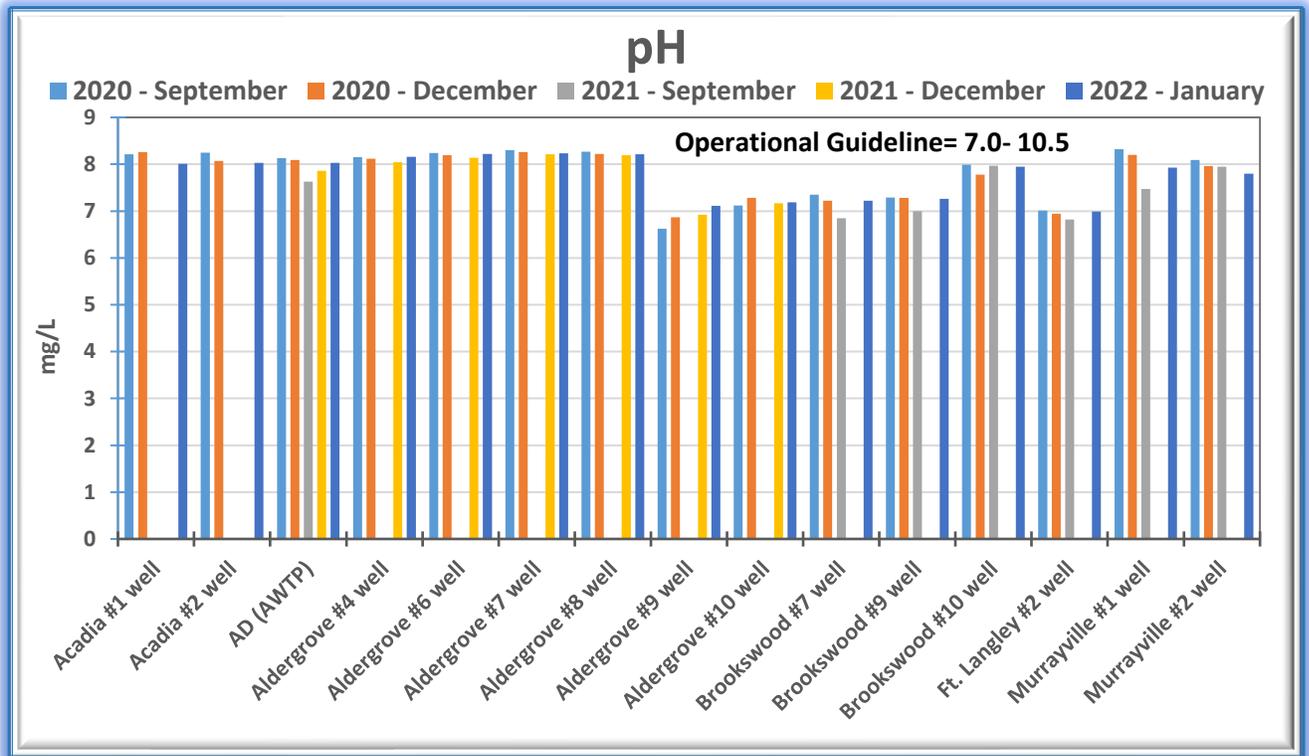


Figure 4.2.3 pH

As a part of its Corrosion Control Program: Copper Pipes Protection Initiative Metro Vancouver has increased the pH of its finished water from 7.7 to 8.3-8.5. This pH change commenced in June. Metro Vancouver will be using natural minerals to achieve the higher pH which will:

- Reduce the release of copper from pipes in buildings caused by low pH in the region’s water
- Reduce leaks in pipes caused by copper corrosion
- Help preserve the lifespan of pipes and hot water tanks, and
- Reduce green stains on tubs, sinks, and grout

Older buildings and homes can have plumbing and fittings that have brass components that contain copper. This change may prompt some water users, such as health care facilities and breweries, to adjust and calibrate their operations to the change in pH.

The pH of Fort Langley well #2 is not within the operation guideline. Township staff are currently conducting detailed design of a pH adjustment facility at Fort Langley well #2 that will use Sodium Hydroxide to raise the pH levels to match the Metro Vancouver target of 8.3 to 8.5. The first phase of the pH adjustment facility is expected to be operational in summer 2022. The second phase is currently in design and may include a larger dosing tank.

4.2.4 Turbidity

Turbidity above the MAC of 1NTU was exceeded in Aldergrove well 4, Brookwood well 7, Brookwood well 9, and Murrayville well 1. The water from all Aldergrove wells is filtered at the AWTP to ensure that turbidity levels are lowered. The wells in Brookwood and Murrayville have been taken out of production. Township of Langley staff have conducted a study, which recommended new localized water treatment plants to bring the parameters within compliance.

It should also be noted that minerals present in the water and holding time can reflect negatively on the turbidity results. The Ground Water at Risk of Containing Pathogen (GARP) study in [section 4.5](#) has indicated that higher level of turbidity can lead to increased risk of groundwater containing pathogens.

The GCDWQ states: *“To ensure effectiveness of disinfection and for good operation of the distribution system, it is recommended that water entering the distribution system have turbidity levels of 1.0 NTU or less. For systems that use groundwater, turbidity should generally be below 1.0 NTU.”*

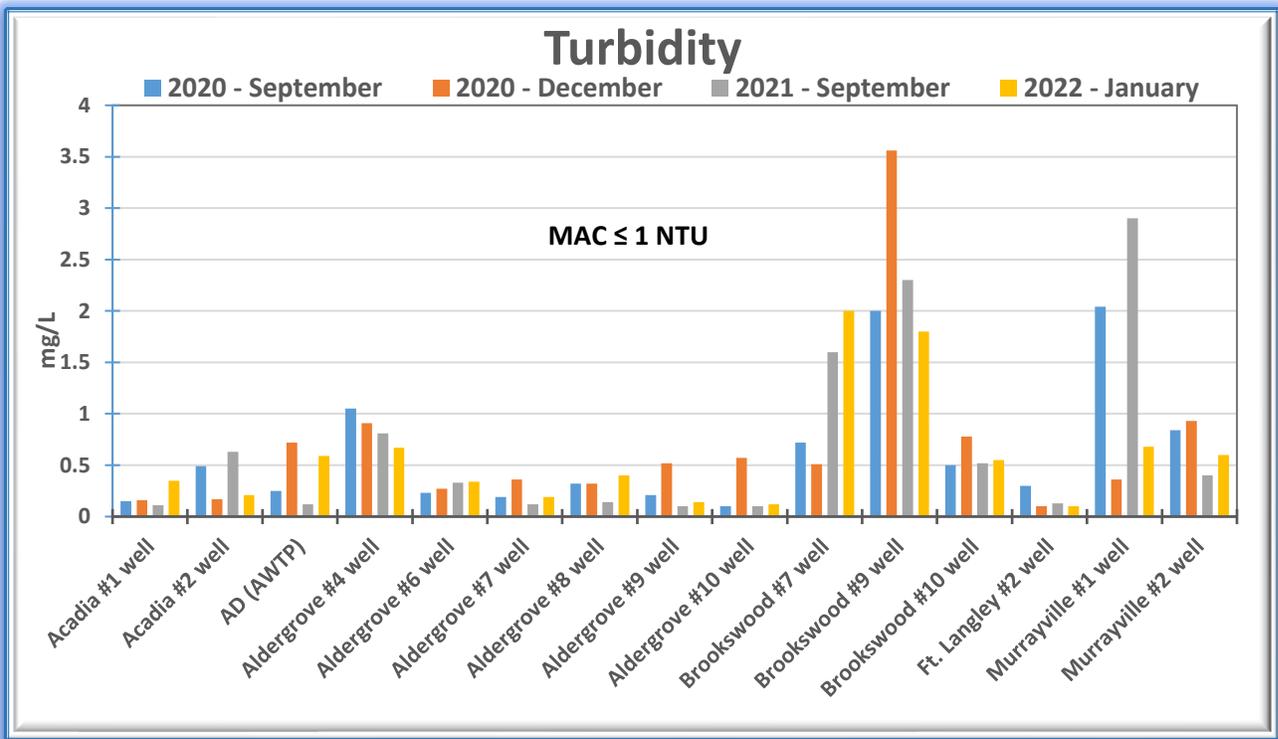


Figure 4.2.4 Turbidity

4.2.5 Iron

The AO for Iron was exceeded at Brookswood well 7, Brookswood well 9 and Murrayville well 1. The wells in Brookswood and Murrayville were not in production during 2021. The proposed localized water treatment plants will reduce iron levels to below the AO.

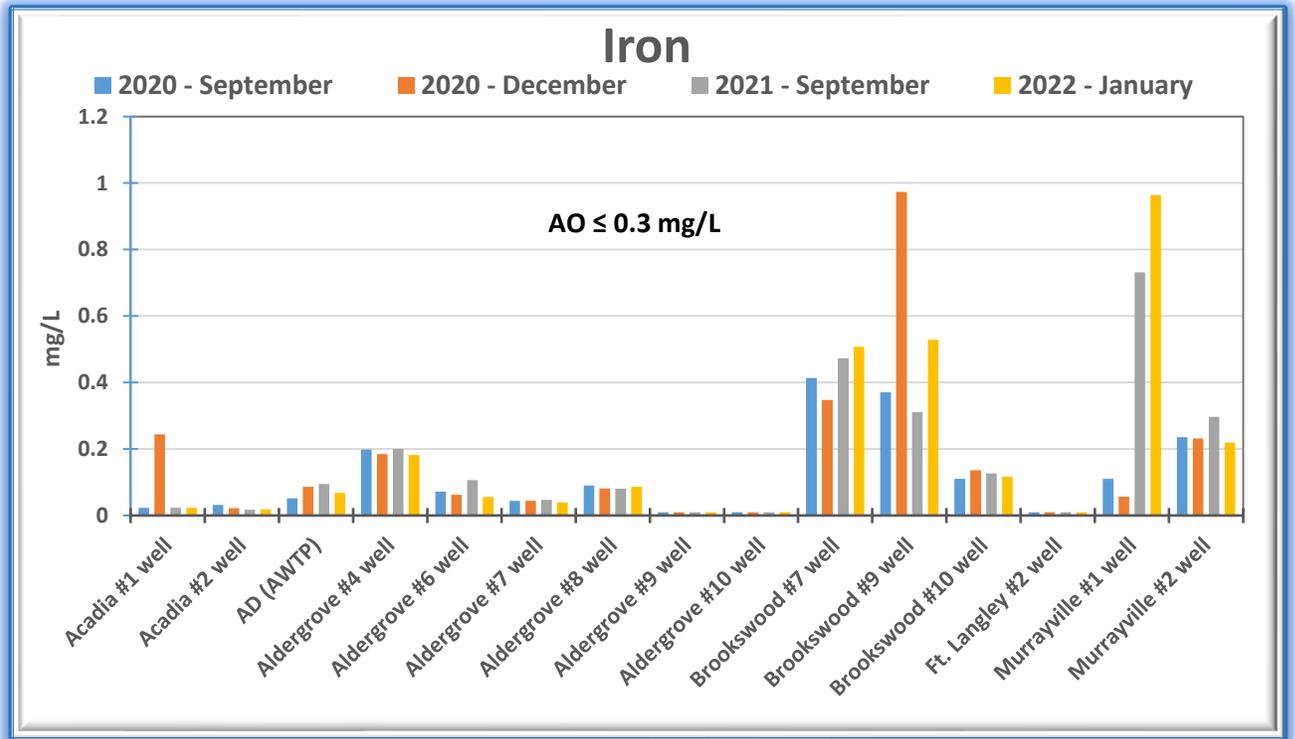


Figure 4.2.5 Iron

4.2.6 Lead

Health Canada has set the MAC associated with health concerns at 0.005 mg/L for lead. Health Canada also recognizes that most of the lead concentration is due to plumbing, leaching lead service lines, and lead solder. During the 2021 semi-annual chemical and physical parameter testing, all the distribution and source samples in the Township were below the MAC of 0.005 mg/L.

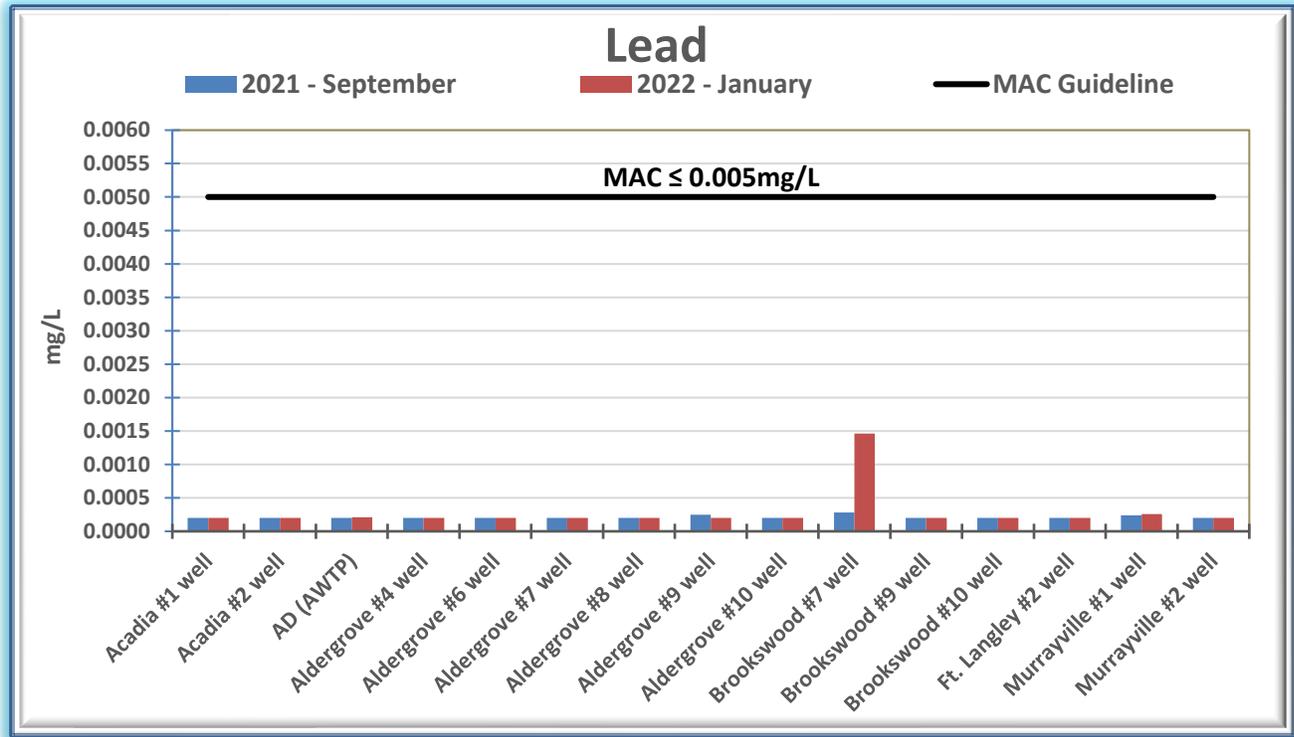


Figure 4.2.6 Lead

All the source samples tested in 2021 tested below the MAC guideline for lead.

4.3 Annual Complex Parameter Testing

Source water sampling for complex parameters complies with the GCDWQ and provides the Township with information on water quality for a given well. All annually tested parameters (refer to [Table 3.0.3](#)) in 2021 were within acceptable limits of the GCDWQ.

4.4 Source Water Protection

A Water Demand Management Strategy to assist with long term management of municipal water supplies was completed in 2007. Since completing this strategy, Township staff has been working to implement its recommendations. The Township also completed work with the Province to develop a water management plan in 2009, which aims to provide safe and sustainable groundwater for our community. Implementation of recommendations from the Water Management Plan has included a contaminant inventory of potential threats to municipal well capture zones, and a pesticide awareness campaign. The Water Wise program has been

in place for nearly 15 years and continues to provide education and incentives to the public to protect groundwater from contamination and to conserve water.

As of February 2016, the Water Sustainability Act came into force. This Act replaced the Water Act and ensures a commitment to secure and healthy water for current and future generations by protecting water flows for ecosystems and fish and including requirements for groundwater use and licensing, well construction and maintenance, dam safety, and compliance.

4.5 GARP – Hazard Screening and Preliminary Assessment of Potential Groundwater at Risk of Containing Pathogens

The Township has conducted a preliminary study with an engineering consultant to determine wells that may be at risk of containing pathogens. The preliminary GARP assessment was done in accordance with the procedure outlined in the BC Ministry of Health (BC MoH) “Guidance Document for Determining Ground Water at Risk of Containing Pathogens.” The consultant provided a list of recommendations to support development and implementation of a strategy to manage the potential risk of pathogens to the Township wells. These recommendations are listed below:

- Determine if the contact time from when chlorine is injected into the groundwater supply to when it reaches the first resident is sufficient to neutralize bacteria and to review potential options if the contact time is not sufficient as outlined in the BC MoH Drinking Water Treatment Objectives.
- Compare the reported detection of total coliform bacteria with the operational records to confirm if the results reflect normal operating conditions. If results identify samples that are not representative of operating conditions the results of the GARP study should be revisited.
- Turbidity should also be monitored when source samples are collected for microbiological analyses. The results should be reviewed to determine if there is any correlation between high turbidity levels and microbiological levels.
- Cross contamination prevention procedures should be monitored and reviewed and if possible, expanded to control the potential of cross-contamination of samples.
- A formal well protection plan (WPP) should be developed for the Township’s production wells and the WPP should be prioritized for wells that are at a higher risk of being GARP.

In the preliminary GARP assessment Fort Langley well #2 was recognized as groundwater at risk of containing pathogens. The well was monitored and sampled weekly for bacteriological analysis and alkalinity. The results of the bacteriological samples can be found in Appendix B [Table B.1](#). All the bacteriological samples for Fort Langley well #2 tested negative for Total Coliform and E. coli for any water that was conveyed into the municipal water system. Township assessed the current chlorination practices at Fort Langley well #2. In the study it was determined that the current chlorination practices do not meet the 99.99% (4-log) virus inactivation before the water is delivered to the first residential connection. The study recommended a large diameter pipe to increase the chlorine contact to allow for 4-log virus inactivation. This contact pipe was put into operation in February 2021.

The Township is taking steps to bring its wells into compliance with GARP regulations based on the recommendations of the consultant.

5.0 DISTRIBUTION SYSTEM WATER QUALITY

Water in the Township of Langley’s distribution system is tested weekly as outlined in [Table 3.0.3](#). A map of the weekly sampling sites and list of the map labels by location can be seen in [Table 5.0.1](#) and [Figure 5.0.1](#), respectively. Distribution system microbial and physical parameter results are highlighted in Appendix B.

Table 5.0.1 Weekly Water Distribution Test Site Addresses

Map Label	Location	Map Label	Location
AB	5679 211 St	K	19966 44 Ave
AC	2340 204A St	L	6350 197 St
AD	AWTP	M	9844 199A St
AJ	19620 3A Ave	N	22870 96 Ave
AK	22930 48 Ave	O	21575 Crush Cr
AM	23752 52 Ave	P	26342 58 Ave
C	21484 51B Ave	R	26829 60 Ave
D	7175 230 St	S	4649 242A St
E	23740 60 Ave	T	9163 213 St
F	24919 57 Ave	U	7025 208 St
G	3133 262 St	V	22020 49 Ave
H	23000 Rawlison Cr	W	4257 209 St
I	21736 100 Ave	X	21584 78 Ave
J	3781 204A St	Y	26736 33 Ave

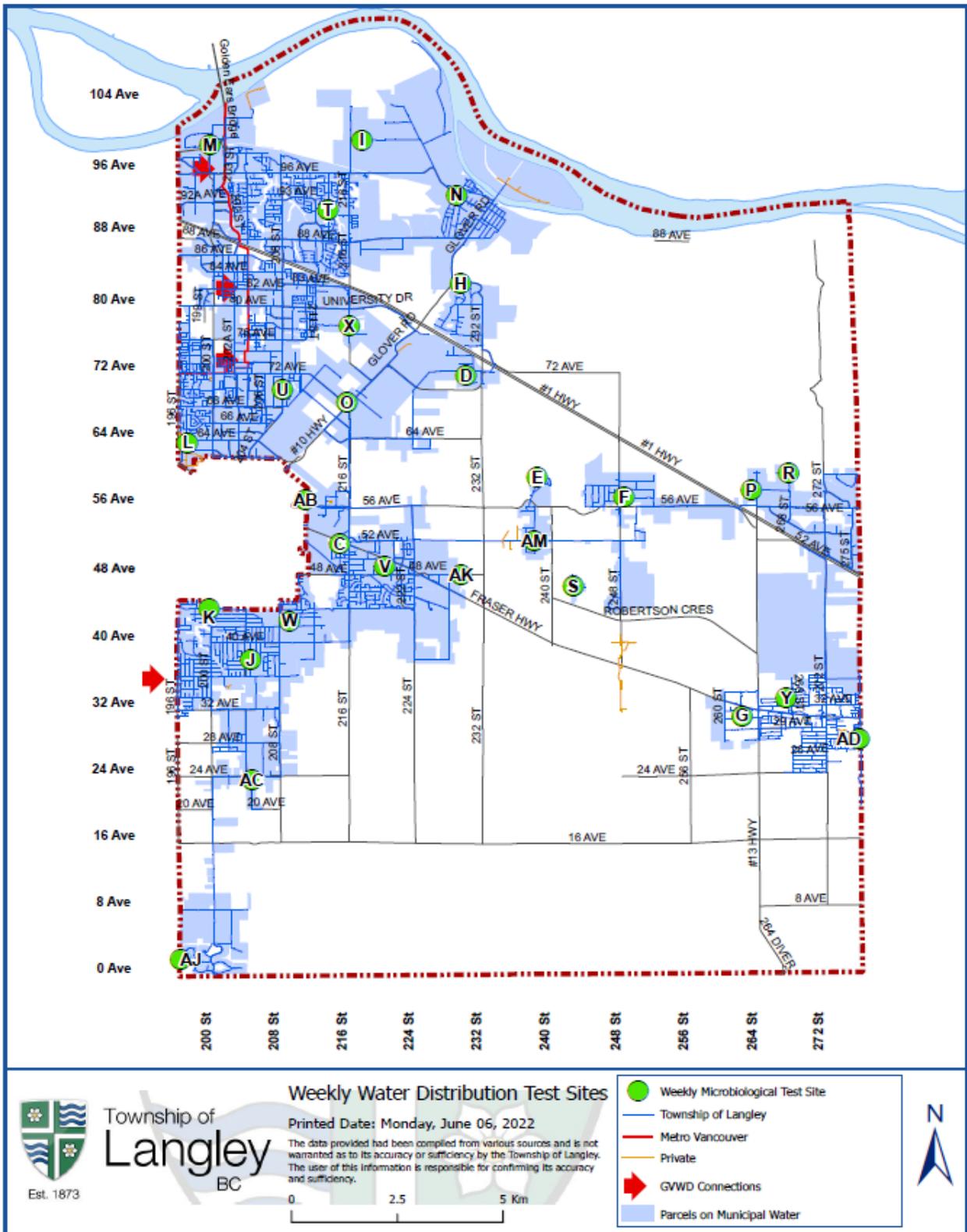


Figure 5.0.1 Weekly Water Distribution Sample Sites

5.1 Distribution System Microbial Testing

Total coliforms and E. coli testing indicate the effectiveness of system disinfection and ensures that the water supply system meets the microbial guidelines. HPCs are naturally occurring and their presence in drinking water is not indicative of a public health risk. No MAC is specified for HPC bacteria in drinking water but increases in HPC concentration above site baseline levels are considered undesirable.

As previously mentioned in section 3.0, [Table 3.0.2: BC DWPR](#) provides microbial water quality standards for potable water which aligns with Health Canada guidelines for water sampling frequency of microbiological contaminants.

For a population of approximately 123,395 being served by Township water supplies, the required number of samples should be on the order of 94 per month. Currently the Township exceeds the requirement by testing an average of 112 samples per month to address low flow areas and community growth.

5.2 Microbial Results for 2021

As an extra water quality indicator, the Township collects weekly Heterotrophic bacteria samples to monitor the general bacteriological water quality in the distribution system. Although the GCDWQ state that “HPC results are not an indicator of water quality and should not be used as an indicator of potential adverse human health effects”, the sampling site tests results which detected high or increased HPC were monitored and/or flushed and resampled.

Distribution water system sample for E. coli and Total Coliform are collected and analyzed weekly.

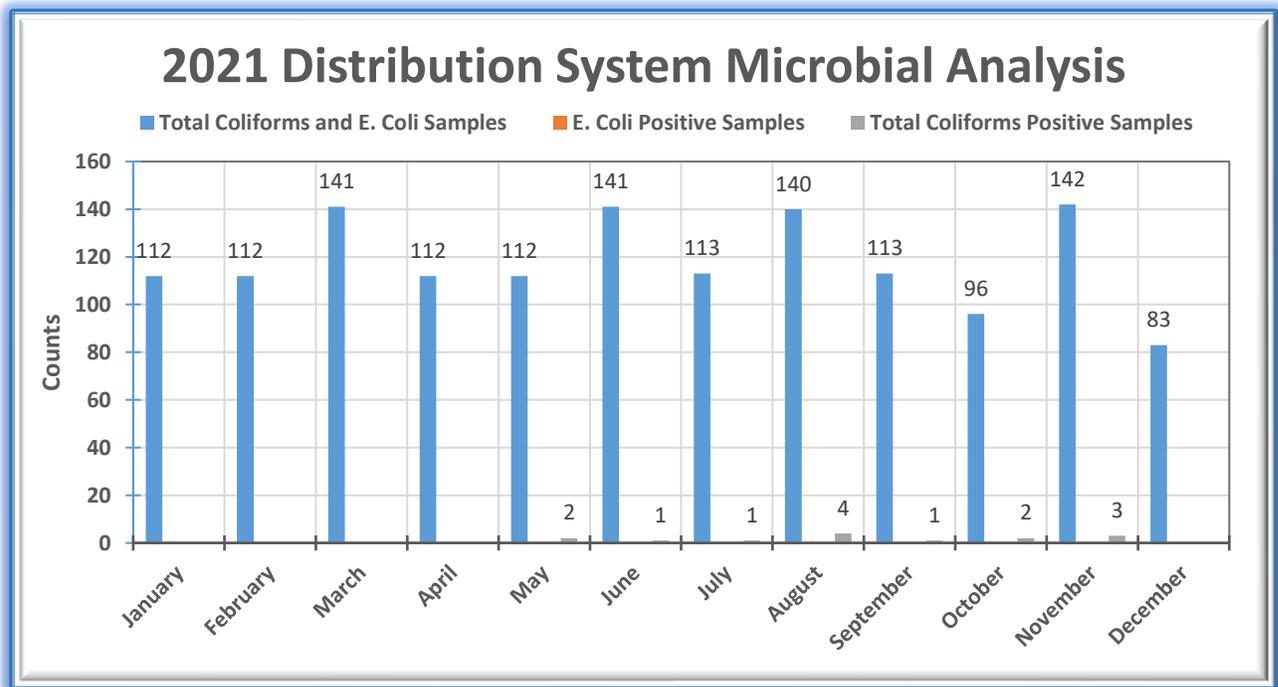


Figure 5.2.1 2021 Distribution System Microbial Analysis

On May 11, 2021, sample station T, had a positive total coliform sample. The station was resampled, and the subsequent sample was negative for total coliforms.

On May 18, 2021, sample station AK tested positive for total coliforms. The station was resampled, and the subsequent sample was negative for total coliforms.

On June 29, 2021, sample station J tested positive for total coliforms. The station was resampled, and the subsequent sample was negative for total coliforms.

On July 6, 2021, sample station H tested positive for total coliforms. The station was resampled, and the subsequent sample was negative for total coliforms.

On August 10, 17, 24, and 31, sample station AK tested positive for total coliforms. After these subsequent weekly sample failures, it was determined to move the sampling line to the watermain off the hydrant lead. The sample station was also put on a weekly water main flushing program.

Sample station AK had a Total Coliform hit on September 28, 2021. Township staff conduct a low flow flush at the sample station. The station was resampled, and the results were negative for total coliforms.

Sample station K had a Total Coliform hit on October 19, 2021. The station was resampled, and the subsequent results were negative for Total Coliforms.

Sample station AK tested positive for total coliforms on October 26, and November 2, 2021. The station was resampled on November 4, 2021, which also resulted in a positive total coliforms sample. The sample station was flushed and resampled which returned a negative sample for the presence of total coliforms. Sample station AK again tested positive for total coliforms on November 16. The station was again resampled, and the subsequent sample was negative for total coliforms.

Sample Station AK is located on a dead-end water main. Due to the ongoing Covid-19 Pandemic leading to workplace shutdowns the water main is experiencing less water exchange than anticipated. Township of Langley crews flushed the water main to introduce fresh water to the area. The sample station line is located on a fire hydrant line which may lead to more stagnant water in the line contributing to more total coliforms bacteria growth. In Fall 2021, the sample station was relocated from the fire hydrant line to the water main. The Township has plans to install an auto flusher on this main that will consistently introduce fresh water to the main. With the easing of the Covid-19 pandemic restrictions expected in 2022 and more resident returning to working in the workplace it is expected that water usage in this area will return to normal levels.

Fort Langley well #2 had Total Coliforms samples on February 2, 16, 23 and March 10, 2021. Fort Langley well #2 was under a work zone where a pipe loop to increase chlorine contact time was being installed. This increase in chlorine contact timing allows for further bacteriological disinfection. Decreasing the chances of a potential bacteriological outbreak by bringing the well into 4-log bacterial removal. The positive coliform samples were on the contact pipe loop and not on the municipal water main. Any potential contaminated water did not make its way into the drinking water system.

Aldergrove well #4 had a Total Coliforms positive sample on March 10, 2021. The well was resampled, and the subsequent sample was negative for Total Coliforms.

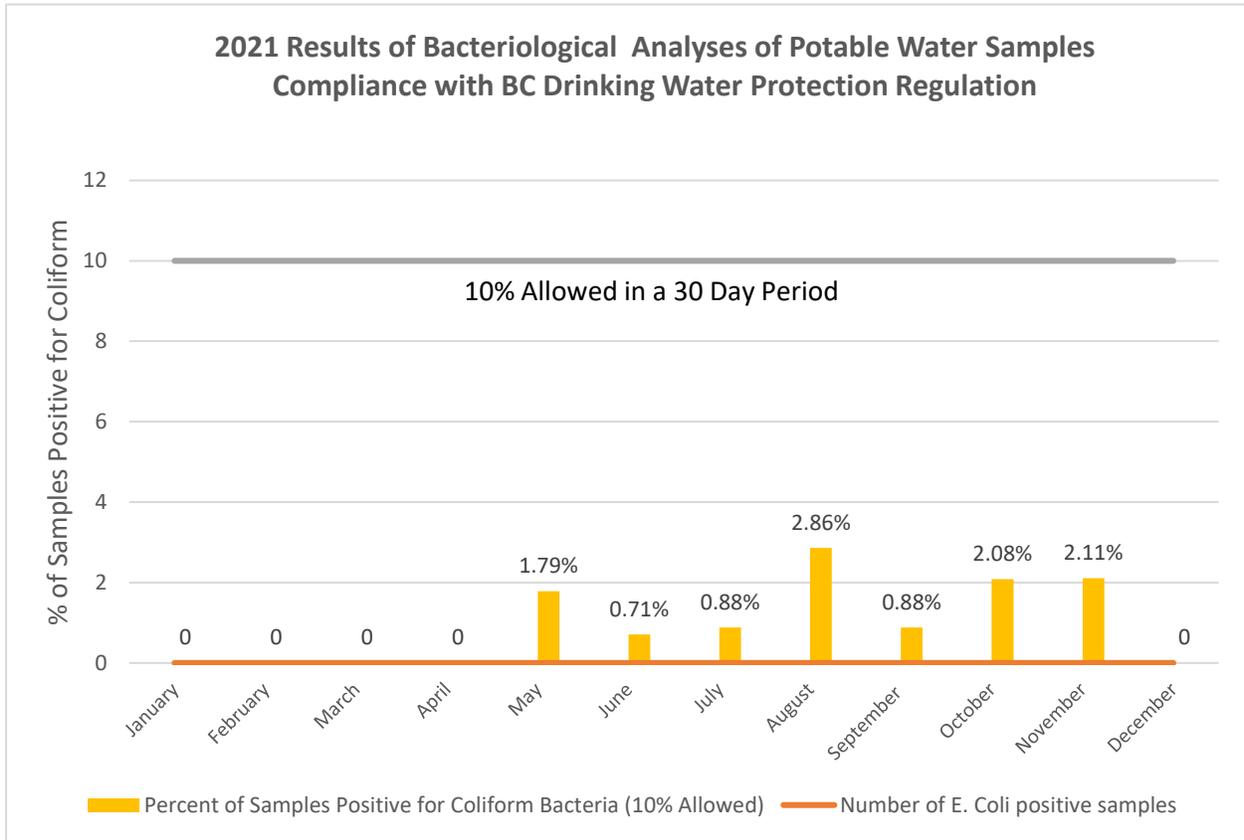


Figure 5.2.2 2021 Bacteriological Analysis in Compliance with Drinking Water Protection Regulation

The MAC for total coliform is 90% of samples taken have no detectable total coliform bacteria. In 2021, less than 1.0% of distribution system samples tested positive for total coliform bacteria. Weekly testing of distribution water resulted in 14 total coliform samples out of the 1417 samples tested.

5.3 Distribution System Physical Parameters Analysis

Weekly evaluation of the turbidity, pH, conductivity, and free chlorine levels of the distribution system provides an indication of baseline levels for each distribution point, as well as ensuring system compliance with provincial and federal guidelines. Conductivity is a new parameter as of 2017. Although some degree of fluctuation in a system is standard, the distribution water levels at sampling points tested as follows:

- **Turbidity:** 10 of 1402 samples or 0.71% of samples exceeded 1.0 NTU with an average turbidity of 0.33 NTU, within a range of 0.07-3.1NTU, the isolated occurrence of high Turbidity is thought to be due to flushing in the area
- **pH:** 1558 samples taken, average pH of 7.52
- **Conductivity:** 776 samples taken, average of 179 uS/cm, within a range of 16-2225.00 uS/cm
- **Free Chlorine:** 1346 samples taken, average free chlorine was 0.466 mg/L with 958 of distribution samples being greater than 0.2 mg/L of free chlorine

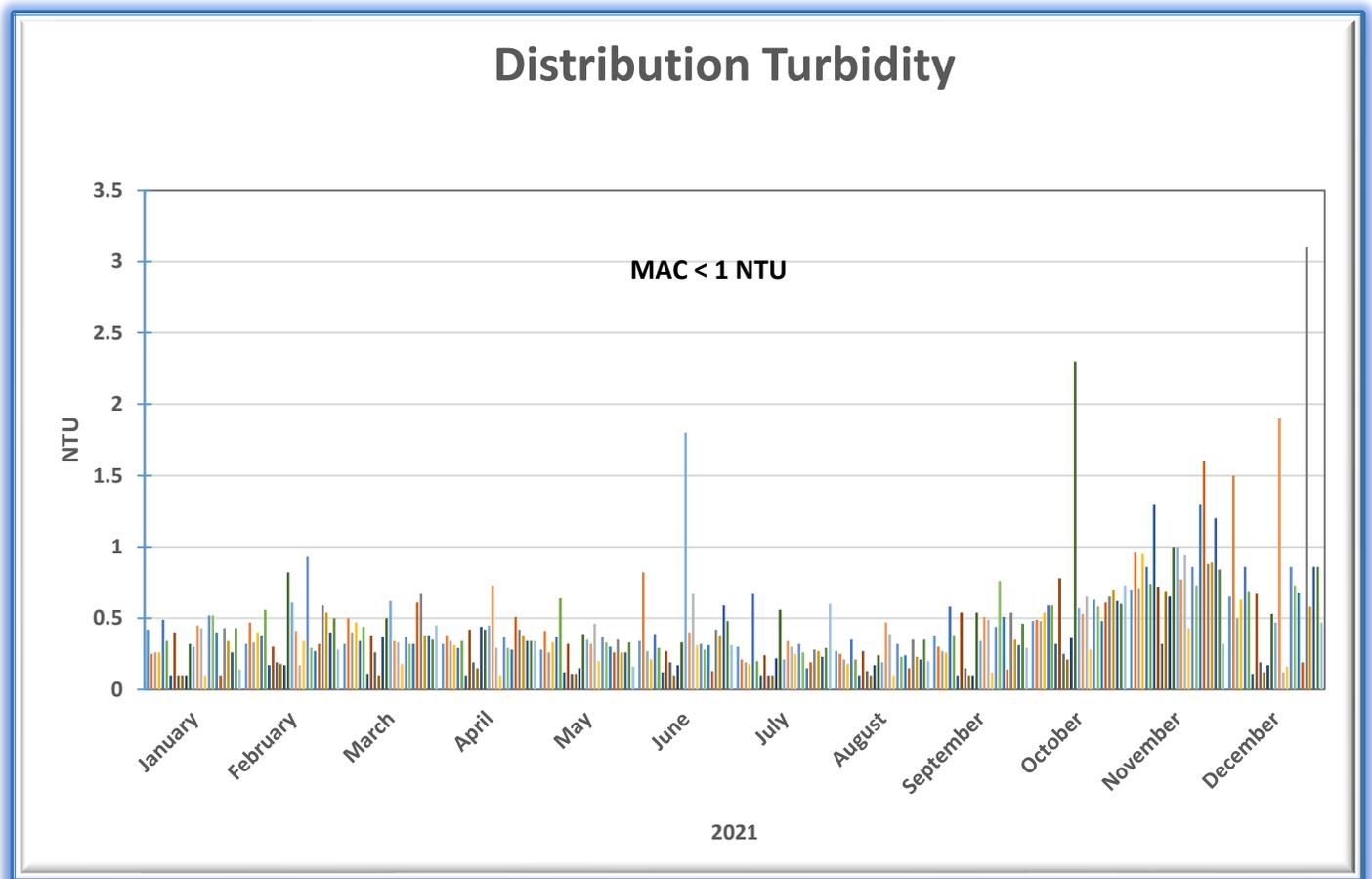


Figure 5.3.1 Distribution Turbidity

Turbidity is the cloudiness or transparency of water due to naturally occurring particles such as clay, silts and decomposed plant and animal debris in the water. Turbidity can harbour

microorganisms and entrap heavy metals, negatively affecting the disinfection rate of chlorine. High levels of turbidity in the distribution system are likely a result of nearby construction or flushing in the area of sampling.

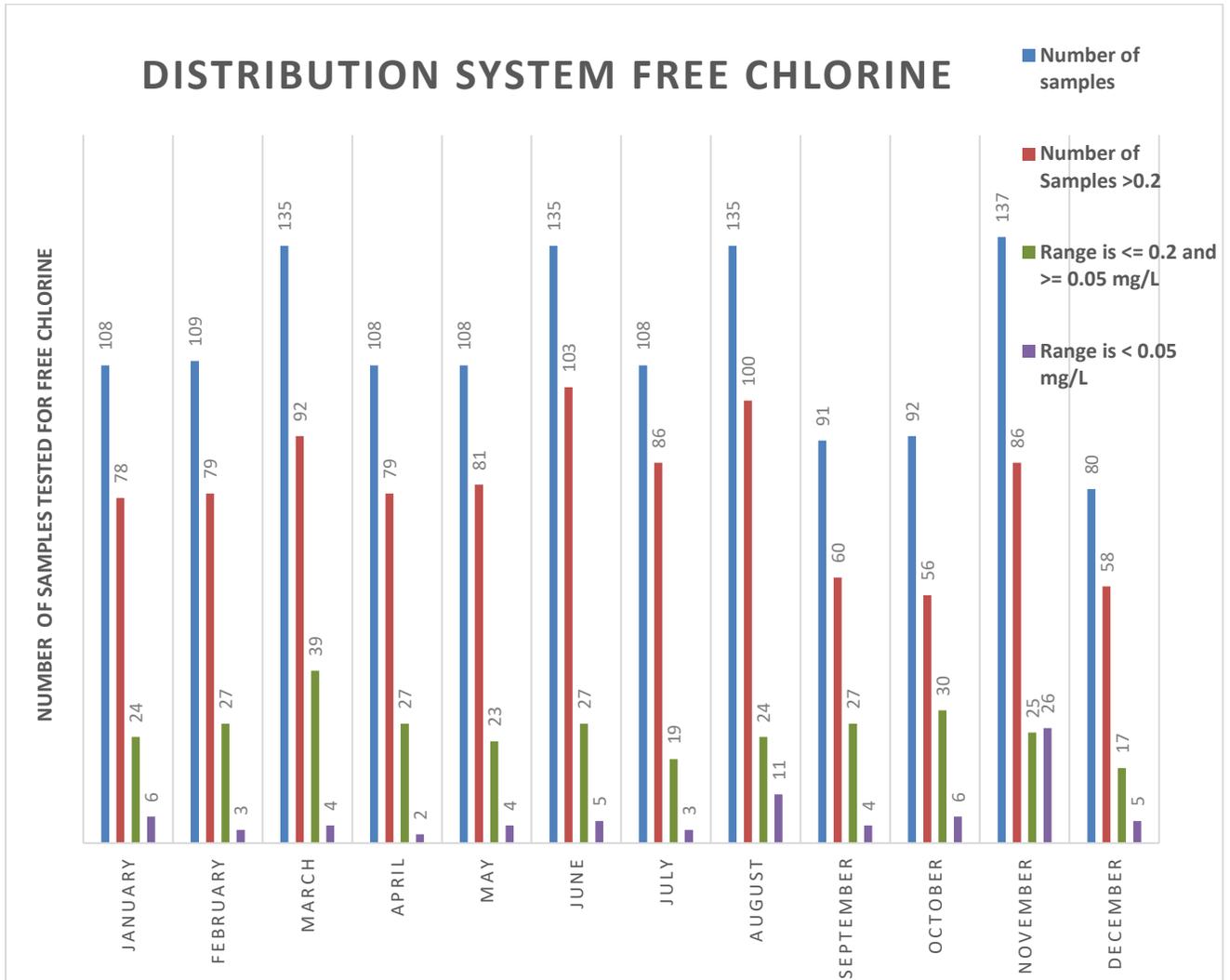


Figure 5.3.2 Free Chlorine

Sodium hypochlorite is used as secondary disinfectant in the water treatment process to maintain a free chlorine residual in the distribution system. Free chlorine residual is one measure to reduce potential microbiological regrowth and contamination while monitoring operational efficiencies. Another aspect of maintaining a free chlorine residual includes limiting the growth of biofilm buildup, and its accompanying taste and odour problems.

Though the GCDWQ does not have a MAC for chlorine, the suggested range is between 0.04-2.0 mg/L. In the Township, any reading below 0.05 mg/L (purple bar) resulted in the senior operator being informed which led to a further investigation and a possible mitigation via resampling or flushing.

On average, there were 30 weekly samples, with no samples taken during the annual winter shutdown. The yellow bar above indicates the ideal free chlorine range of 0.05-0.2 mg/L.

5.4 Distribution System Chemical Parameters Analysis

The Township conducts quarterly chemical analysis. For detailed information see [Table B.4.1](#) and [Table B.4.2](#) in Appendix B.

6.0 CONCLUSION

The 2021 water quality monitoring results indicate that Township water is potable and safe for consumption. Township staff continue to seek improvements to the water supply and distribution systems. The Township will continue to work closely with Fraser Health, GVWD and the public to provide high quality water to its residents.

7.0 References

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Township of
Langley



Est. 1873

Water Quality Report 2021

Appendix A: Source Water Test Results

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Figure A. 1 Cadmium

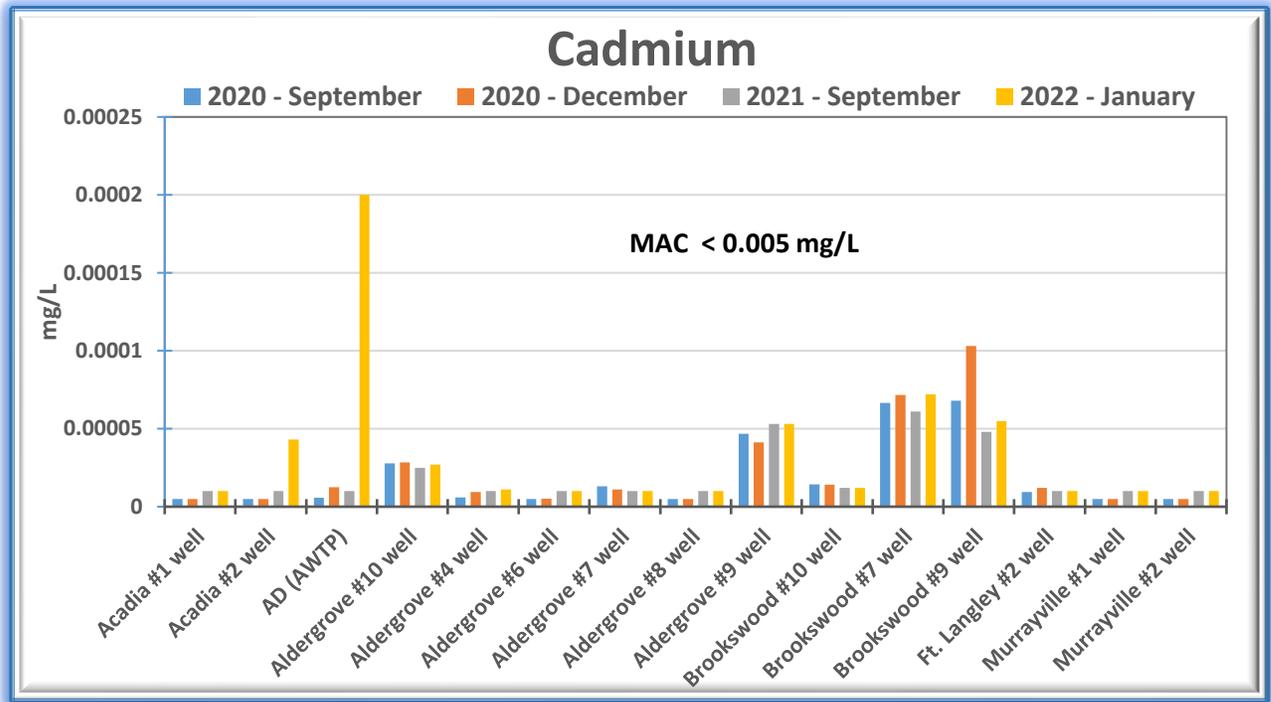


Figure A. 2 Copper

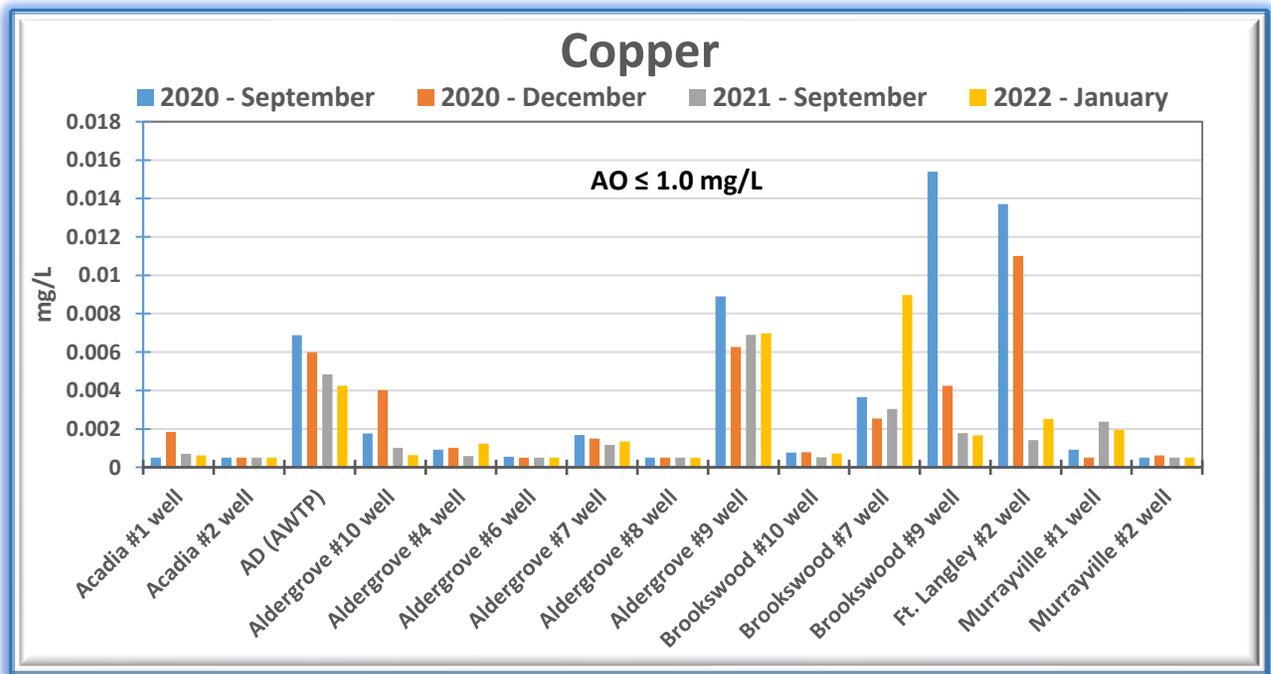


Figure A. 3 Fluoride

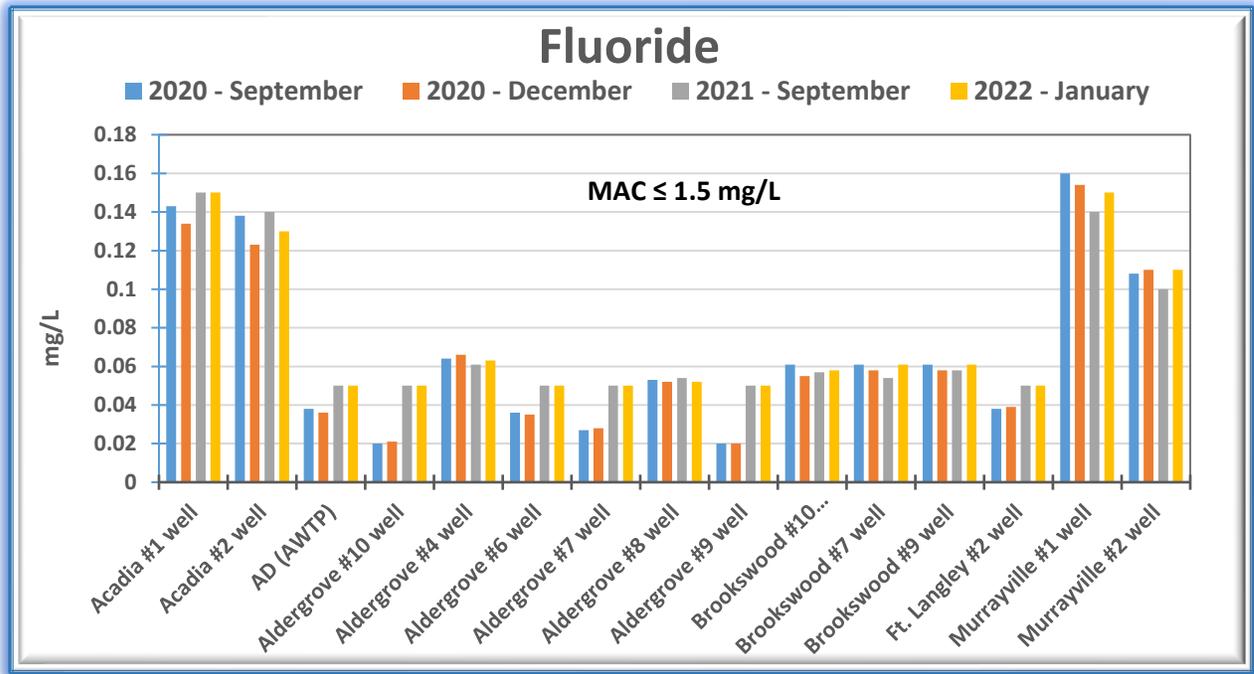


Figure A. 4 Hardness

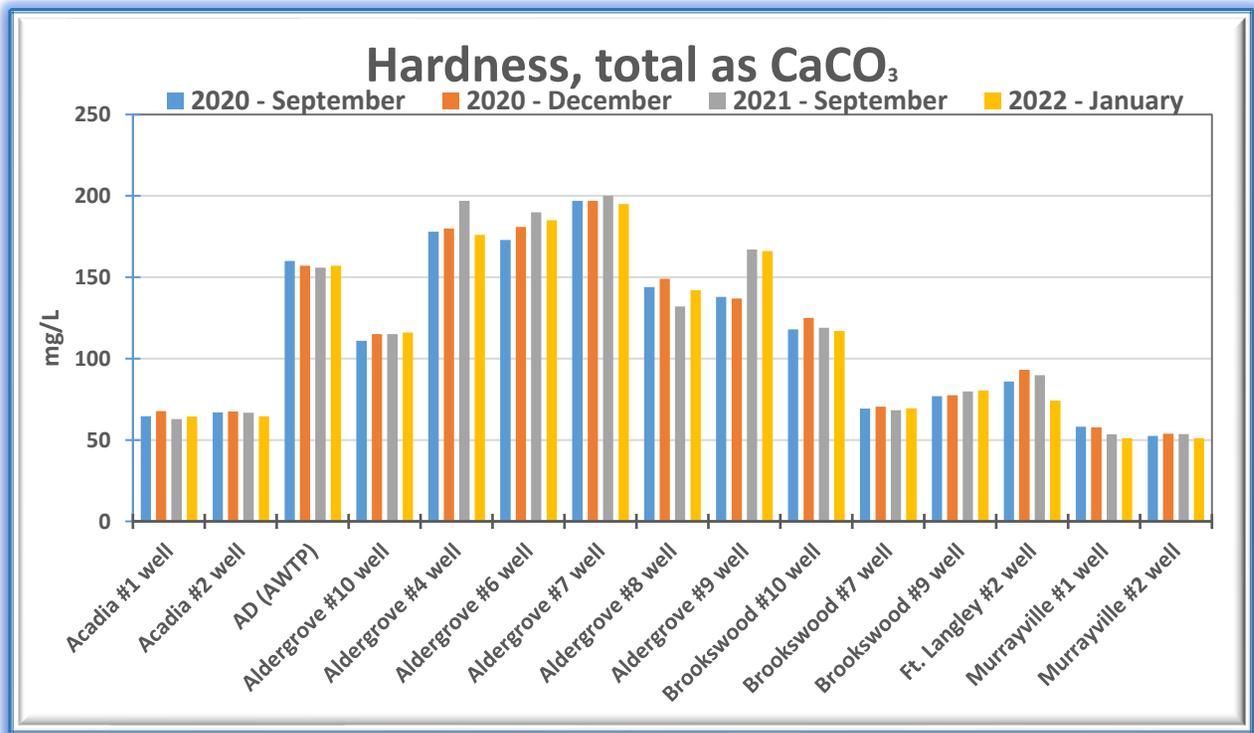


Figure A. 5 Arsenic

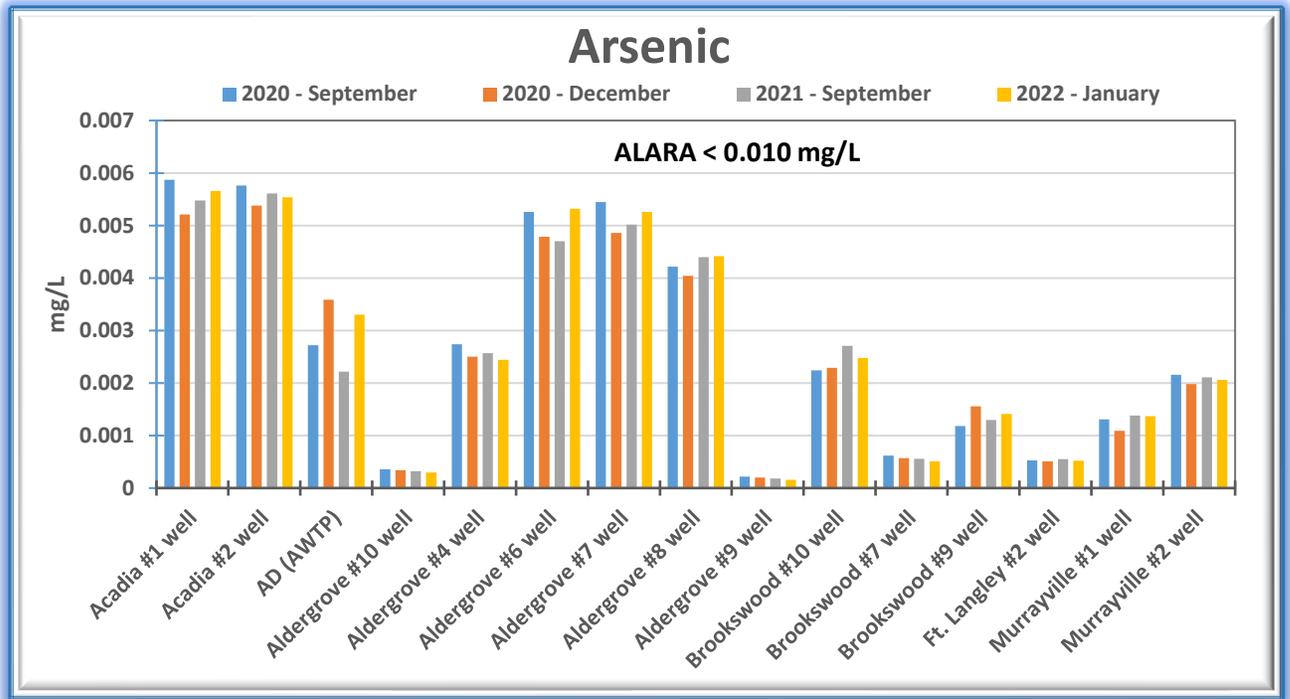


Figure A. 6 Nitrite as Nitrogen

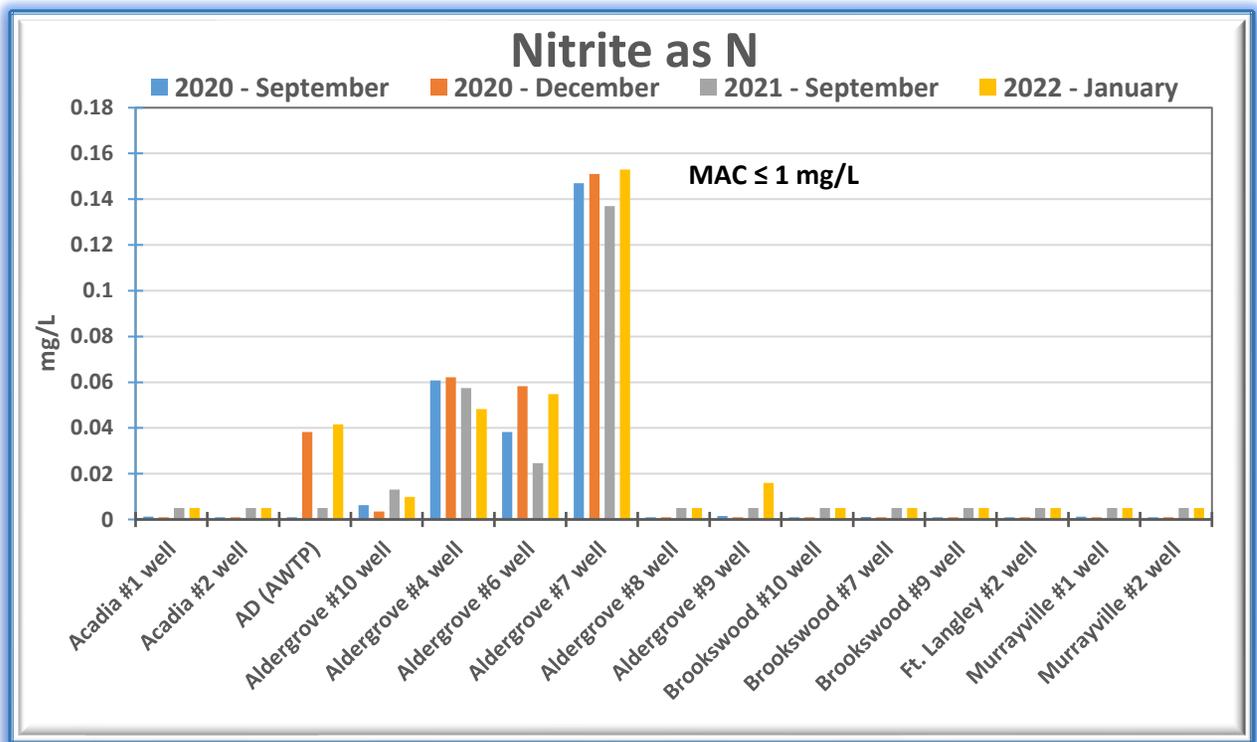


Figure A. 7 Sodium

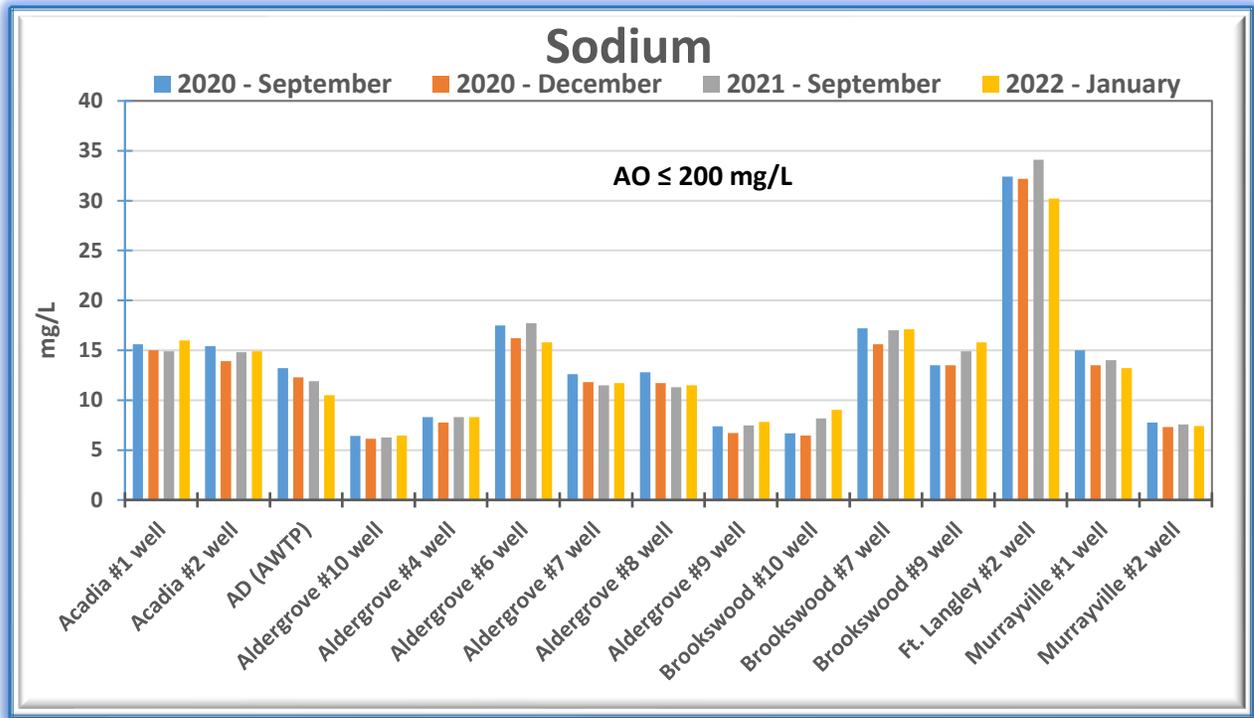


Figure A. 8 Sulphate

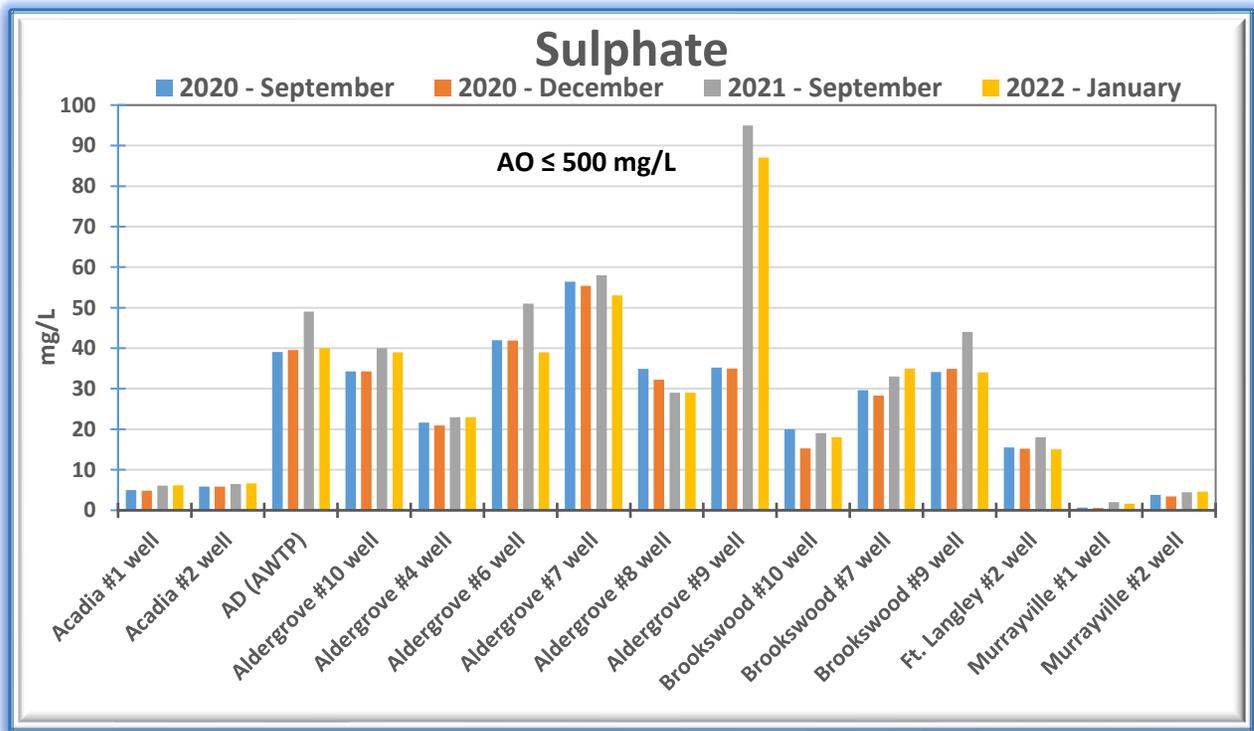
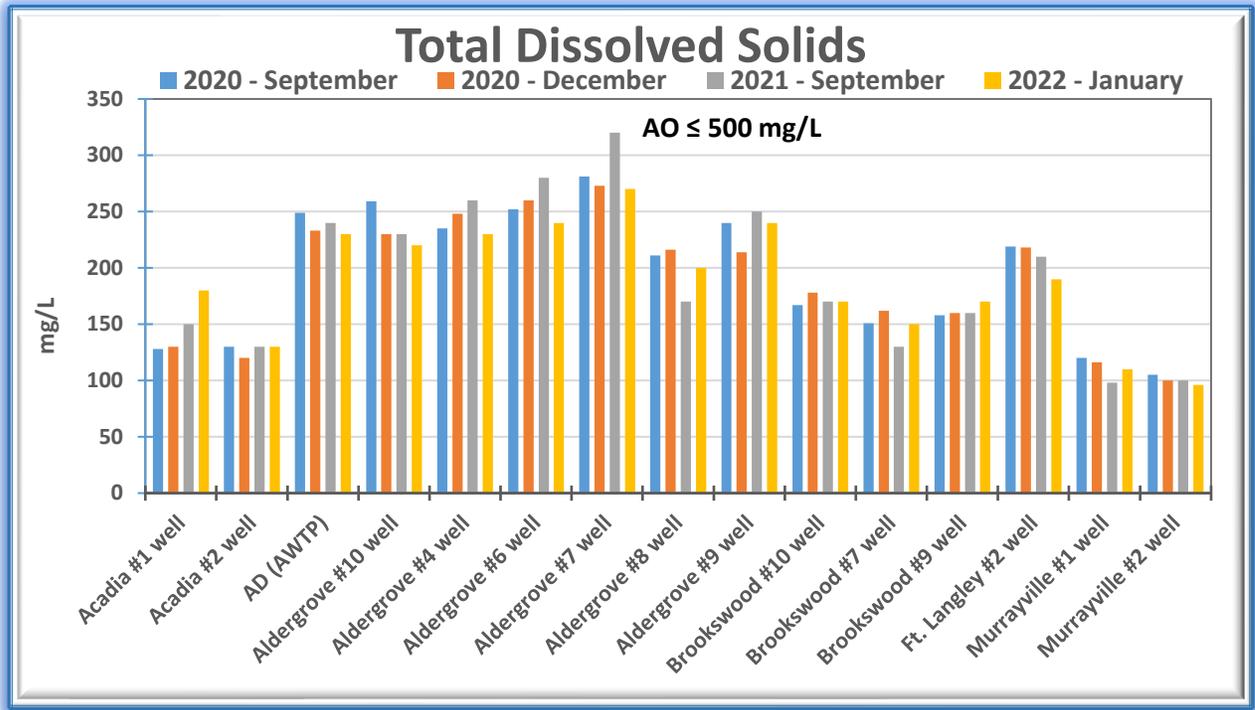


Figure A. 9 Total Dissolved Solids



Township of
Langley



Est. 1873

Water Quality Report 2021

Appendix B: Raw Data

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Table B.1 Source Water Bacteriological Results 2021

Water System	Facility	Sampling Point	Collection Date	E. Coli (CFU/100ml)	Total Coliforms (CFU/100ml)
Acadia	Wells	Acadia #1 well	03/10/2021	0	0
Acadia	Wells	Acadia #1 well	06/16/2021	0	0
Acadia	Wells	Acadia #1 well	09/16/2021	0	0
Acadia	Wells	Acadia #1 well	01/12/2022	0	0
Acadia	Wells	Acadia #2 well	03/10/2021	0	0
Acadia	Wells	Acadia #2 well	06/16/2021	0	0
Acadia	Wells	Acadia #2 well	09/16/2021	0	0
Acadia	Wells	Acadia #2 well	01/12/2022	0	0
East Langley	Wells	Aldergrove #10 well	03/10/2021	0	0
East Langley	Wells	Aldergrove #10 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #10 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #4 well	03/10/2021	0	1
East Langley	Wells	Aldergrove #4 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #4 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #4 well	01/12/2022	0	0
East Langley	Wells	Aldergrove #6 well	03/10/2021	0	0
East Langley	Wells	Aldergrove #6 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #6 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #6 well	01/12/2022	0	0
East Langley	Wells	Aldergrove #7 well	03/10/2021	0	0
East Langley	Wells	Aldergrove #7 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #7 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #7 well	01/12/2022	0	0
East Langley	Wells	Aldergrove #8 well	03/10/2021	0	0
East Langley	Wells	Aldergrove #8 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #8 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #8 well	01/12/2022	0	0
East Langley	Wells	Aldergrove #9 well	03/10/2021	0	0
East Langley	Wells	Aldergrove #9 well	06/16/2021	0	0
East Langley	Wells	Aldergrove #9 well	09/16/2021	0	0
East Langley	Wells	Aldergrove #9 well	01/12/2022	0	0
Southwest Langley	Wells	Brookwood #10 well	03/10/2021	0	0
Southwest Langley	Wells	Brookwood #10 well	06/16/2021	0	0
Southwest Langley	Wells	Brookwood #10 well	09/16/2021	0	0
Southwest Langley	Wells	Brookwood #10 well	01/12/2022	0	0
Southwest Langley	Wells	Brookwood #7 well	03/10/2021	0	0
Southwest Langley	Wells	Brookwood #7 well	06/16/2021	0	0
Southwest Langley	Wells	Brookwood #7 well	09/16/2021	0	0
Southwest Langley	Wells	Brookwood #7 well	01/19/2022	0	0
Southwest Langley	Wells	Brookwood #9 well	03/10/2021	0	0
Southwest Langley	Wells	Brookwood #9 well	06/16/2021	0	0
Southwest Langley	Wells	Brookwood #9 well	09/16/2021	0	0

Water System	Facility	Sampling Point	Collection Date	E. Coli (CFU/100ml)	Total Coliforms (CFU/100ml)
Southwest Langley	Wells	Brookwood #9 well	01/12/2022	0	0
Southwest Langley	Wells	Murrayville #1 well	03/10/2021	0	0
Southwest Langley	Wells	Murrayville #1 well	06/16/2021	0	0
Southwest Langley	Wells	Murrayville #1 well	09/16/2021	0	0
Southwest Langley	Wells	Murrayville #1 well	01/12/2022	0	0
Southwest Langley	Wells	Murrayville #2 well	03/10/2021	0	0
Southwest Langley	Wells	Murrayville #2 well	06/16/2021	0	0
Southwest Langley	Wells	Murrayville #2 well	09/16/2021	0	0
Southwest Langley	Wells	Murrayville #2 well	01/12/2022	0	0
Northwest Langley	Wells	Ft. Langley #2 well	01/05/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	01/12/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	01/19/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	01/26/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	02/02/2021	0	1
Northwest Langley	Wells	Ft. Langley #2 well	02/09/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	02/16/2021	0	1
Northwest Langley	Wells	Ft. Langley #2 well	02/23/2021	0	1
Northwest Langley	Wells	Ft. Langley #2 well	03/02/2021	0	0
Northwest Langley	Wells	Ft. Langley #2 well	03/10/2021	0	3
Northwest Langley	Wells	Ft. Langley #2 well	06/16/2021	0	0

Table B.2 Distribution System Water Bacteriological Results 2021

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Acadia	Distribution	S	01/05/2021	< 1	< 1
Acadia	Distribution	S	01/12/2021	< 1	< 1
Acadia	Distribution	S	01/19/2021	< 1	< 1
Acadia	Distribution	S	01/26/2021	< 1	< 1
Acadia	Distribution	S	02/02/2021	0	0
Acadia	Distribution	S	02/09/2021	0	0
Acadia	Distribution	S	02/16/2021	0	0
Acadia	Distribution	S	02/23/2021	0	0
Acadia	Distribution	S	03/02/2021	0	0
Acadia	Distribution	S	03/09/2021	0	0
Acadia	Distribution	S	03/16/2021	0	0
Acadia	Distribution	S	03/23/2021	0	0
Acadia	Distribution	S	03/30/2021	0	0
Acadia	Distribution	S	04/06/2021	0	0
Acadia	Distribution	S	04/13/2021	0	0
Acadia	Distribution	S	04/20/2021	0	0
Acadia	Distribution	S	04/27/2021	0	0
Acadia	Distribution	S	05/04/2021	0	0
Acadia	Distribution	S	05/11/2021	0	0
Acadia	Distribution	S	05/18/2021	0	0
Acadia	Distribution	S	05/25/2021	0	0
Acadia	Distribution	S	06/01/2021	0	0
Acadia	Distribution	S	06/08/2021	0	0
Acadia	Distribution	S	06/15/2021	0	0
Acadia	Distribution	S	06/22/2021	0	0
Acadia	Distribution	S	06/29/2021	0	0
Acadia	Distribution	S	07/06/2021	0	0
Acadia	Distribution	S	07/13/2021	0	0
Acadia	Distribution	S	07/20/2021	0	0
Acadia	Distribution	S	07/27/2021	0	0
Acadia	Distribution	S	08/03/2021	0	0
Acadia	Distribution	S	08/10/2021	0	0
Acadia	Distribution	S	08/17/2021	0	0
Acadia	Distribution	S	08/24/2021	0	0
Acadia	Distribution	S	08/31/2021	0	0
Acadia	Distribution	S	09/07/2021	0	0
Acadia	Distribution	S	09/14/2021	0	0
Acadia	Distribution	S	09/21/2021	0	0
Acadia	Distribution	S	09/28/2021	0	0
Acadia	Distribution	S	10/05/2021	0	0
Acadia	Distribution	S	10/19/2021	0	0
Acadia	Distribution	S	10/26/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Acadia	Distribution	S	11/02/2021	0	0
Acadia	Distribution	S	11/09/2021	0	0
Acadia	Distribution	S	11/16/2021	0	0
Acadia	Distribution	S	11/23/2021	0	0
Acadia	Distribution	S	11/30/2021	0	0
Acadia	Distribution	S	12/07/2021	0	0
Acadia	Distribution	S	12/14/2021	0	0
Acadia	Distribution	S	12/21/2021	0	0
East Langley	Distribution	AM (694)	01/05/2021	< 1	< 1
East Langley	Distribution	AM (694)	01/12/2021	< 1	< 1
East Langley	Distribution	AM (694)	01/19/2021	< 1	< 1
East Langley	Distribution	AM (694)	01/26/2021	< 1	< 1
East Langley	Distribution	AM (694)	02/02/2021	< 1	< 1
East Langley	Distribution	AM (694)	02/09/2021	< 1	< 1
East Langley	Distribution	AM (694)	02/16/2021	< 1	< 1
East Langley	Distribution	AM (694)	02/23/2021	< 1	< 1
East Langley	Distribution	AM (694)	03/02/2021	< 1	< 1
East Langley	Distribution	AM (694)	03/09/2021	< 1	< 1
East Langley	Distribution	AM (694)	03/16/2021	< 1	< 1
East Langley	Distribution	AM (694)	03/23/2021	< 1	< 1
East Langley	Distribution	AM (694)	03/30/2021	< 1	< 1
East Langley	Distribution	AM (694)	04/06/2021	< 1	< 1
East Langley	Distribution	AM (694)	04/13/2021	< 1	< 1
East Langley	Distribution	AM (694)	04/20/2021	< 1	< 1
East Langley	Distribution	AM (694)	04/27/2021	< 1	< 1
East Langley	Distribution	AM (694)	05/04/2021	< 1	< 1
East Langley	Distribution	AM (694)	05/11/2021	< 1	< 1
East Langley	Distribution	AM (694)	05/18/2021	< 1	< 1
East Langley	Distribution	AM (694)	05/25/2021	< 1	< 1
East Langley	Distribution	AM (694)	06/01/2021	< 1	< 1
East Langley	Distribution	AM (694)	06/08/2021	< 1	< 1
East Langley	Distribution	AM (694)	06/15/2021	< 1	< 1
East Langley	Distribution	AM (694)	06/22/2021	< 1	< 1
East Langley	Distribution	AM (694)	06/29/2021	< 1	< 1
East Langley	Distribution	AM (694)	07/06/2021	< 1	< 1
East Langley	Distribution	AM (694)	07/13/2021	< 1	< 1
East Langley	Distribution	AM (694)	07/20/2021	< 1	< 1
East Langley	Distribution	AM (694)	07/27/2021	< 1	< 1
East Langley	Distribution	AM (694)	08/03/2021	< 1	< 1
East Langley	Distribution	AM (694)	08/10/2021	< 1	< 1
East Langley	Distribution	AM (694)	08/17/2021	< 1	< 1
East Langley	Distribution	AM (694)	08/24/2021	< 1	< 1
East Langley	Distribution	AM (694)	08/31/2021	< 1	< 1
East Langley	Distribution	AM (694)	09/07/2021	< 1	< 1
East Langley	Distribution	AM (694)	09/14/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	AM (694)	09/21/2021	< 1	< 1
East Langley	Distribution	AM (694)	09/28/2021	< 1	< 1
East Langley	Distribution	AM (694)	10/05/2021	< 1	< 1
East Langley	Distribution	AM (694)	10/12/2021	< 1	< 1
East Langley	Distribution	AM (694)	10/19/2021	< 1	< 1
East Langley	Distribution	AM (694)	10/26/2021	< 1	< 1
East Langley	Distribution	AM (694)	11/02/2021	< 1	< 1
East Langley	Distribution	AM (694)	11/09/2021	< 1	< 1
East Langley	Distribution	AM (694)	11/16/2021	< 1	< 1
East Langley	Distribution	AM (694)	11/23/2021	< 1	< 1
East Langley	Distribution	AM (694)	11/30/2021	< 1	< 1
East Langley	Distribution	AM (694)	12/07/2021	< 1	< 1
East Langley	Distribution	AM (694)	12/14/2021	< 1	< 1
East Langley	Distribution	AM (694)	12/21/2021	< 1	< 1
East Langley	Distribution	F (690)	01/05/2021	< 1	< 1
East Langley	Distribution	F (690)	01/12/2021	< 1	< 1
East Langley	Distribution	F (690)	01/19/2021	< 1	< 1
East Langley	Distribution	F (690)	01/26/2021	< 1	< 1
East Langley	Distribution	F (690)	02/02/2021	< 1	< 1
East Langley	Distribution	F (690)	02/09/2021	< 1	< 1
East Langley	Distribution	F (690)	02/16/2021	< 1	< 1
East Langley	Distribution	F (690)	02/23/2021	< 1	< 1
East Langley	Distribution	F (690)	03/02/2021	< 1	< 1
East Langley	Distribution	F (690)	03/09/2021	< 1	< 1
East Langley	Distribution	F (690)	03/16/2021	< 1	< 1
East Langley	Distribution	F (690)	03/23/2021	< 1	< 1
East Langley	Distribution	F (690)	03/30/2021	< 1	< 1
East Langley	Distribution	F (690)	04/06/2021	< 1	< 1
East Langley	Distribution	F (690)	04/13/2021	< 1	< 1
East Langley	Distribution	F (690)	04/20/2021	< 1	< 1
East Langley	Distribution	F (690)	04/27/2021	< 1	< 1
East Langley	Distribution	F (690)	05/04/2021	< 1	< 1
East Langley	Distribution	F (690)	05/11/2021	< 1	< 1
East Langley	Distribution	F (690)	05/18/2021	< 1	< 1
East Langley	Distribution	F (690)	05/25/2021	< 1	< 1
East Langley	Distribution	F (690)	06/01/2021	< 1	< 1
East Langley	Distribution	F (690)	06/08/2021	< 1	< 1
East Langley	Distribution	F (690)	06/15/2021	< 1	< 1
East Langley	Distribution	F (690)	06/22/2021	< 1	< 1
East Langley	Distribution	F (690)	06/29/2021	< 1	< 1
East Langley	Distribution	F (690)	07/06/2021	< 1	< 1
East Langley	Distribution	F (690)	07/13/2021	< 1	< 1
East Langley	Distribution	F (690)	07/20/2021	< 1	< 1
East Langley	Distribution	F (690)	07/27/2021	< 1	< 1
East Langley	Distribution	F (690)	08/03/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	F (690)	08/10/2021	< 1	< 1
East Langley	Distribution	F (690)	08/17/2021	< 1	< 1
East Langley	Distribution	F (690)	08/24/2021	< 1	< 1
East Langley	Distribution	F (690)	08/31/2021	< 1	< 1
East Langley	Distribution	F (690)	09/07/2021	< 1	< 1
East Langley	Distribution	F (690)	09/14/2021	< 1	< 1
East Langley	Distribution	F (690)	09/21/2021	< 1	< 1
East Langley	Distribution	F (690)	09/28/2021	< 1	< 1
East Langley	Distribution	F (690)	10/05/2021	< 1	< 1
East Langley	Distribution	F (690)	10/12/2021	< 1	< 1
East Langley	Distribution	F (690)	10/19/2021	< 1	< 1
East Langley	Distribution	F (690)	10/26/2021	< 1	< 1
East Langley	Distribution	F (690)	11/02/2021	< 1	< 1
East Langley	Distribution	F (690)	11/09/2021	< 1	< 1
East Langley	Distribution	F (690)	11/16/2021	< 1	< 1
East Langley	Distribution	F (690)	11/23/2021	< 1	< 1
East Langley	Distribution	F (690)	11/30/2021	< 1	< 1
East Langley	Distribution	F (690)	12/07/2021	< 1	< 1
East Langley	Distribution	F (690)	12/14/2021	< 1	< 1
East Langley	Distribution	F (690)	12/21/2021	< 1	< 1
East Langley	Distribution	G	01/05/2021	< 1	< 1
East Langley	Distribution	G	01/12/2021	< 1	< 1
East Langley	Distribution	G	01/19/2021	< 1	< 1
East Langley	Distribution	G	01/26/2021	< 1	< 1
East Langley	Distribution	G	02/02/2021	0	0
East Langley	Distribution	G	02/09/2021	0	0
East Langley	Distribution	G	02/16/2021	0	0
East Langley	Distribution	G	02/23/2021	0	0
East Langley	Distribution	G	03/02/2021	0	0
East Langley	Distribution	G	03/09/2021	0	0
East Langley	Distribution	G	03/16/2021	0	0
East Langley	Distribution	G	03/23/2021	0	0
East Langley	Distribution	G	03/30/2021	0	0
East Langley	Distribution	G	04/06/2021	0	0
East Langley	Distribution	G	04/13/2021	0	0
East Langley	Distribution	G	04/20/2021	0	0
East Langley	Distribution	G	04/27/2021	0	0
East Langley	Distribution	G	05/04/2021	0	0
East Langley	Distribution	G	05/11/2021	0	0
East Langley	Distribution	G	05/18/2021	0	0
East Langley	Distribution	G	05/25/2021	0	0
East Langley	Distribution	G	06/01/2021	0	0
East Langley	Distribution	G	06/08/2021	0	0
East Langley	Distribution	G	06/15/2021	0	0
East Langley	Distribution	G	06/22/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	G	06/29/2021	0	0
East Langley	Distribution	G	07/06/2021	0	0
East Langley	Distribution	G	07/13/2021	0	0
East Langley	Distribution	G	07/20/2021	0	0
East Langley	Distribution	G	07/27/2021	0	0
East Langley	Distribution	G	08/03/2021	0	0
East Langley	Distribution	G	08/10/2021	0	0
East Langley	Distribution	G	08/17/2021	0	0
East Langley	Distribution	G	08/24/2021	0	0
East Langley	Distribution	G	08/31/2021	0	0
East Langley	Distribution	G	09/07/2021	0	0
East Langley	Distribution	G	09/14/2021	0	0
East Langley	Distribution	G	09/21/2021	0	0
East Langley	Distribution	G	09/28/2021	0	0
East Langley	Distribution	G	10/05/2021	0	0
East Langley	Distribution	G	10/19/2021	0	0
East Langley	Distribution	G	10/26/2021	0	0
East Langley	Distribution	G	11/02/2021	0	0
East Langley	Distribution	G	11/09/2021	0	0
East Langley	Distribution	G	11/16/2021	0	0
East Langley	Distribution	G	11/23/2021	0	0
East Langley	Distribution	G	11/30/2021	0	0
East Langley	Distribution	G	12/07/2021	0	0
East Langley	Distribution	G	12/14/2021	0	0
East Langley	Distribution	G	12/21/2021	0	0
East Langley	Distribution	P (692)	01/05/2021	< 1	< 1
East Langley	Distribution	P (692)	01/12/2021	< 1	< 1
East Langley	Distribution	P (692)	01/19/2021	< 1	< 1
East Langley	Distribution	P (692)	01/26/2021	< 1	< 1
East Langley	Distribution	P (692)	02/02/2021	< 1	< 1
East Langley	Distribution	P (692)	02/09/2021	< 1	< 1
East Langley	Distribution	P (692)	02/16/2021	< 1	< 1
East Langley	Distribution	P (692)	02/23/2021	< 1	< 1
East Langley	Distribution	P (692)	03/02/2021	< 1	< 1
East Langley	Distribution	P (692)	03/09/2021	< 1	< 1
East Langley	Distribution	P (692)	03/16/2021	< 1	< 1
East Langley	Distribution	P (692)	03/23/2021	< 1	< 1
East Langley	Distribution	P (692)	03/30/2021	< 1	< 1
East Langley	Distribution	P (692)	04/06/2021	< 1	< 1
East Langley	Distribution	P (692)	04/13/2021	< 1	< 1
East Langley	Distribution	P (692)	04/20/2021	< 1	< 1
East Langley	Distribution	P (692)	04/27/2021	< 1	< 1
East Langley	Distribution	P (692)	05/04/2021	< 1	< 1
East Langley	Distribution	P (692)	05/11/2021	< 1	< 1
East Langley	Distribution	P (692)	05/18/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	P (692)	05/25/2021	< 1	< 1
East Langley	Distribution	P (692)	06/01/2021	< 1	< 1
East Langley	Distribution	P (692)	06/08/2021	< 1	< 1
East Langley	Distribution	P (692)	06/15/2021	< 1	< 1
East Langley	Distribution	P (692)	06/22/2021	< 1	< 1
East Langley	Distribution	P (692)	06/29/2021	< 1	< 1
East Langley	Distribution	P (692)	07/06/2021	< 1	< 1
East Langley	Distribution	P (692)	07/13/2021	< 1	< 1
East Langley	Distribution	P (692)	07/20/2021	< 1	< 1
East Langley	Distribution	P (692)	07/27/2021	< 1	< 1
East Langley	Distribution	P (692)	08/03/2021	< 1	< 1
East Langley	Distribution	P (692)	08/10/2021	< 1	< 1
East Langley	Distribution	P (692)	08/17/2021	< 1	< 1
East Langley	Distribution	P (692)	08/24/2021	< 1	< 1
East Langley	Distribution	P (692)	08/31/2021	< 1	< 1
East Langley	Distribution	P (692)	09/07/2021	< 1	< 1
East Langley	Distribution	P (692)	09/14/2021	< 1	< 1
East Langley	Distribution	P (692)	09/21/2021	< 1	< 1
East Langley	Distribution	P (692)	09/28/2021	< 1	< 1
East Langley	Distribution	P (692)	10/05/2021	< 1	< 1
East Langley	Distribution	P (692)	10/12/2021	< 1	< 1
East Langley	Distribution	P (692)	10/19/2021	< 1	< 1
East Langley	Distribution	P (692)	10/26/2021	< 1	< 1
East Langley	Distribution	P (692)	11/02/2021	< 1	< 1
East Langley	Distribution	P (692)	11/09/2021	< 1	< 1
East Langley	Distribution	P (692)	11/16/2021	< 1	< 1
East Langley	Distribution	P (692)	11/23/2021	< 1	< 1
East Langley	Distribution	P (692)	11/30/2021	< 1	< 1
East Langley	Distribution	P (692)	12/07/2021	< 1	< 1
East Langley	Distribution	P (692)	12/14/2021	< 1	< 1
East Langley	Distribution	P (692)	12/21/2021	< 1	< 1
East Langley	Distribution	R (691)	01/05/2021	< 1	< 1
East Langley	Distribution	R (691)	01/12/2021	< 1	< 1
East Langley	Distribution	R (691)	01/19/2021	< 1	< 1
East Langley	Distribution	R (691)	01/26/2021	< 1	< 1
East Langley	Distribution	R (691)	02/02/2021	< 1	< 1
East Langley	Distribution	R (691)	02/09/2021	< 1	< 1
East Langley	Distribution	R (691)	02/16/2021	< 1	< 1
East Langley	Distribution	R (691)	02/23/2021	< 1	< 1
East Langley	Distribution	R (691)	03/02/2021	< 1	< 1
East Langley	Distribution	R (691)	03/09/2021	< 1	< 1
East Langley	Distribution	R (691)	03/16/2021	< 1	< 1
East Langley	Distribution	R (691)	03/23/2021	< 1	< 1
East Langley	Distribution	R (691)	03/30/2021	< 1	< 1
East Langley	Distribution	R (691)	04/06/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	R (691)	04/13/2021	< 1	< 1
East Langley	Distribution	R (691)	04/20/2021	< 1	< 1
East Langley	Distribution	R (691)	04/27/2021	< 1	< 1
East Langley	Distribution	R (691)	05/04/2021	< 1	< 1
East Langley	Distribution	R (691)	05/11/2021	< 1	< 1
East Langley	Distribution	R (691)	05/18/2021	< 1	< 1
East Langley	Distribution	R (691)	05/25/2021	< 1	< 1
East Langley	Distribution	R (691)	06/01/2021	< 1	< 1
East Langley	Distribution	R (691)	06/08/2021	< 1	< 1
East Langley	Distribution	R (691)	06/15/2021	< 1	< 1
East Langley	Distribution	R (691)	06/22/2021	< 1	< 1
East Langley	Distribution	R (691)	06/29/2021	< 1	< 1
East Langley	Distribution	R (691)	07/06/2021	< 1	< 1
East Langley	Distribution	R (691)	07/13/2021	< 1	< 1
East Langley	Distribution	R (691)	07/20/2021	< 1	< 1
East Langley	Distribution	R (691)	07/27/2021	< 1	< 1
East Langley	Distribution	R (691)	08/03/2021	< 1	< 1
East Langley	Distribution	R (691)	08/10/2021	< 1	< 1
East Langley	Distribution	R (691)	08/17/2021	< 1	< 1
East Langley	Distribution	R (691)	08/24/2021	< 1	< 1
East Langley	Distribution	R (691)	08/31/2021	< 1	< 1
East Langley	Distribution	R (691)	09/07/2021	< 1	< 1
East Langley	Distribution	R (691)	09/14/2021	< 1	< 1
East Langley	Distribution	R (691)	09/21/2021	< 1	< 1
East Langley	Distribution	R (691)	09/28/2021	< 1	< 1
East Langley	Distribution	R (691)	10/05/2021	< 1	< 1
East Langley	Distribution	R (691)	10/12/2021	< 1	< 1
East Langley	Distribution	R (691)	10/19/2021	< 1	< 1
East Langley	Distribution	R (691)	10/26/2021	< 1	< 1
East Langley	Distribution	R (691)	11/02/2021	< 1	< 1
East Langley	Distribution	R (691)	11/09/2021	< 1	< 1
East Langley	Distribution	R (691)	11/16/2021	< 1	< 1
East Langley	Distribution	R (691)	11/23/2021	< 1	< 1
East Langley	Distribution	R (691)	11/30/2021	< 1	< 1
East Langley	Distribution	R (691)	12/07/2021	< 1	< 1
East Langley	Distribution	R (691)	12/14/2021	< 1	< 1
East Langley	Distribution	R (691)	12/21/2021	< 1	< 1
East Langley	Distribution	Y	01/05/2021	< 1	< 1
East Langley	Distribution	Y	01/12/2021	< 1	< 1
East Langley	Distribution	Y	01/19/2021	< 1	< 1
East Langley	Distribution	Y	01/26/2021	< 1	< 1
East Langley	Distribution	Y	02/02/2021	0	0
East Langley	Distribution	Y	02/09/2021	0	0
East Langley	Distribution	Y	02/16/2021	0	0
East Langley	Distribution	Y	02/23/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
East Langley	Distribution	Y	03/02/2021	0	0
East Langley	Distribution	Y	03/09/2021	0	0
East Langley	Distribution	Y	03/16/2021	0	0
East Langley	Distribution	Y	03/23/2021	0	0
East Langley	Distribution	Y	03/30/2021	0	0
East Langley	Distribution	Y	04/06/2021	0	0
East Langley	Distribution	Y	04/13/2021	0	0
East Langley	Distribution	Y	04/20/2021	0	0
East Langley	Distribution	Y	04/27/2021	0	0
East Langley	Distribution	Y	05/04/2021	0	0
East Langley	Distribution	Y	05/11/2021	0	0
East Langley	Distribution	Y	05/18/2021	0	0
East Langley	Distribution	Y	05/25/2021	0	0
East Langley	Distribution	Y	06/01/2021	0	0
East Langley	Distribution	Y	06/08/2021	0	0
East Langley	Distribution	Y	06/15/2021	0	0
East Langley	Distribution	Y	06/22/2021	0	0
East Langley	Distribution	Y	06/29/2021	0	0
East Langley	Distribution	Y	07/06/2021	0	0
East Langley	Distribution	Y	07/13/2021	0	0
East Langley	Distribution	Y	07/20/2021	0	0
East Langley	Distribution	Y	07/27/2021	0	0
East Langley	Distribution	Y	08/03/2021	0	0
East Langley	Distribution	Y	08/10/2021	0	0
East Langley	Distribution	Y	08/17/2021	0	0
East Langley	Distribution	Y	08/24/2021	0	0
East Langley	Distribution	Y	08/31/2021	0	0
East Langley	Distribution	Y	09/07/2021	0	0
East Langley	Distribution	Y	09/14/2021	0	0
East Langley	Distribution	Y	09/21/2021	0	0
East Langley	Distribution	Y	09/28/2021	0	0
East Langley	Distribution	Y	10/05/2021	0	0
East Langley	Distribution	Y	10/19/2021	0	0
East Langley	Distribution	Y	10/26/2021	0	0
East Langley	Distribution	Y	11/02/2021	0	0
East Langley	Distribution	Y	11/09/2021	0	0
East Langley	Distribution	Y	11/16/2021	0	0
East Langley	Distribution	Y	11/23/2021	0	0
East Langley	Distribution	Y	11/30/2021	0	0
East Langley	Distribution	Y	12/07/2021	0	0
East Langley	Distribution	Y	12/14/2021	0	0
Northwest Langley	Distribution	D	01/05/2021	< 1	< 1
Northwest Langley	Distribution	D	01/12/2021	< 1	< 1
Northwest Langley	Distribution	D	01/19/2021	< 1	< 1
Northwest Langley	Distribution	D	01/26/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	D	02/02/2021	0	0
Northwest Langley	Distribution	D	02/09/2021	0	0
Northwest Langley	Distribution	D	02/16/2021	0	0
Northwest Langley	Distribution	D	02/23/2021	0	0
Northwest Langley	Distribution	D	03/02/2021	0	0
Northwest Langley	Distribution	D	03/09/2021	0	0
Northwest Langley	Distribution	D	03/16/2021	0	0
Northwest Langley	Distribution	D	03/23/2021	0	0
Northwest Langley	Distribution	D	03/30/2021	0	0
Northwest Langley	Distribution	D	04/06/2021	0	0
Northwest Langley	Distribution	D	04/13/2021	0	0
Northwest Langley	Distribution	D	04/20/2021	0	0
Northwest Langley	Distribution	D	04/27/2021	0	0
Northwest Langley	Distribution	D	05/04/2021	0	0
Northwest Langley	Distribution	D	05/11/2021	0	0
Northwest Langley	Distribution	D	05/18/2021	0	0
Northwest Langley	Distribution	D	05/25/2021	0	0
Northwest Langley	Distribution	D	06/01/2021	0	0
Northwest Langley	Distribution	D	06/08/2021	0	0
Northwest Langley	Distribution	D	06/15/2021	0	0
Northwest Langley	Distribution	D	06/22/2021	0	0
Northwest Langley	Distribution	D	06/29/2021	0	0
Northwest Langley	Distribution	D	07/06/2021	0	0
Northwest Langley	Distribution	D	07/13/2021	0	0
Northwest Langley	Distribution	D	07/20/2021	0	0
Northwest Langley	Distribution	D	07/27/2021	0	0
Northwest Langley	Distribution	D	08/03/2021	0	0
Northwest Langley	Distribution	D	08/10/2021	0	0
Northwest Langley	Distribution	D	08/17/2021	0	0
Northwest Langley	Distribution	D	08/24/2021	0	0
Northwest Langley	Distribution	D	08/31/2021	0	0
Northwest Langley	Distribution	D	09/07/2021	0	0
Northwest Langley	Distribution	D	09/14/2021	0	0
Northwest Langley	Distribution	D	09/21/2021	0	0
Northwest Langley	Distribution	D	09/28/2021	0	0
Northwest Langley	Distribution	D	10/05/2021	0	0
Northwest Langley	Distribution	D	10/19/2021	0	0
Northwest Langley	Distribution	D	10/26/2021	0	0
Northwest Langley	Distribution	D	11/02/2021	0	0
Northwest Langley	Distribution	D	11/09/2021	0	0
Northwest Langley	Distribution	D	11/16/2021	0	0
Northwest Langley	Distribution	D	11/23/2021	0	0
Northwest Langley	Distribution	D	11/30/2021	0	0
Northwest Langley	Distribution	D	12/14/2021	0	0
Northwest Langley	Distribution	D	12/21/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	H	01/05/2021	< 1	< 1
Northwest Langley	Distribution	H	01/12/2021	< 1	< 1
Northwest Langley	Distribution	H	01/19/2021	< 1	< 1
Northwest Langley	Distribution	H	01/26/2021	< 1	< 1
Northwest Langley	Distribution	H	02/02/2021	0	0
Northwest Langley	Distribution	H	02/09/2021	0	0
Northwest Langley	Distribution	H	02/16/2021	0	0
Northwest Langley	Distribution	H	02/23/2021	0	0
Northwest Langley	Distribution	H	03/02/2021	0	0
Northwest Langley	Distribution	H	03/09/2021	0	0
Northwest Langley	Distribution	H	03/16/2021	0	0
Northwest Langley	Distribution	H	03/23/2021	0	0
Northwest Langley	Distribution	H	03/30/2021	0	0
Northwest Langley	Distribution	H	04/06/2021	0	0
Northwest Langley	Distribution	H	04/13/2021	0	0
Northwest Langley	Distribution	H	04/20/2021	0	0
Northwest Langley	Distribution	H	04/27/2021	0	0
Northwest Langley	Distribution	H	05/04/2021	0	0
Northwest Langley	Distribution	H	05/11/2021	0	0
Northwest Langley	Distribution	H	05/18/2021	0	0
Northwest Langley	Distribution	H	05/25/2021	0	0
Northwest Langley	Distribution	H	06/01/2021	0	0
Northwest Langley	Distribution	H	06/08/2021	0	0
Northwest Langley	Distribution	H	06/15/2021	0	0
Northwest Langley	Distribution	H	06/22/2021	0	0
Northwest Langley	Distribution	H	06/29/2021	0	0
Northwest Langley	Distribution	H	07/06/2021	3	0
Northwest Langley	Distribution	H	07/08/2021	0	0
Northwest Langley	Distribution	H	07/13/2021	0	0
Northwest Langley	Distribution	H	07/20/2021	0	0
Northwest Langley	Distribution	H	07/27/2021	0	0
Northwest Langley	Distribution	H	08/03/2021	0	0
Northwest Langley	Distribution	H	08/10/2021	0	0
Northwest Langley	Distribution	H	08/17/2021	0	0
Northwest Langley	Distribution	H	08/24/2021	0	0
Northwest Langley	Distribution	H	08/31/2021	0	0
Northwest Langley	Distribution	H	09/07/2021	0	0
Northwest Langley	Distribution	H	09/14/2021	0	0
Northwest Langley	Distribution	H	09/21/2021	0	0
Northwest Langley	Distribution	H	09/28/2021	0	0
Northwest Langley	Distribution	H	10/05/2021	0	0
Northwest Langley	Distribution	H	10/19/2021	0	0
Northwest Langley	Distribution	H	10/26/2021	0	0
Northwest Langley	Distribution	H	11/02/2021	0	0
Northwest Langley	Distribution	H	11/09/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	H	11/16/2021	0	0
Northwest Langley	Distribution	H	11/23/2021	0	0
Northwest Langley	Distribution	H	11/30/2021	0	0
Northwest Langley	Distribution	H	12/07/2021	0**	0**
Northwest Langley	Distribution	H	12/14/2021	0	0
Northwest Langley	Distribution	H	12/21/2021	0	0
Northwest Langley	Distribution	I	01/05/2021	< 1	< 1
Northwest Langley	Distribution	I	01/12/2021	< 1	< 1
Northwest Langley	Distribution	I	01/19/2021	< 1	< 1
Northwest Langley	Distribution	I	01/26/2021	< 1	< 1
Northwest Langley	Distribution	I	02/02/2021	0	0
Northwest Langley	Distribution	I	02/09/2021	0	0
Northwest Langley	Distribution	I	02/16/2021	0	0
Northwest Langley	Distribution	I	02/23/2021	0	0
Northwest Langley	Distribution	I	03/02/2021	0	0
Northwest Langley	Distribution	I	03/09/2021	0	0
Northwest Langley	Distribution	I	03/16/2021	0	0
Northwest Langley	Distribution	I	03/23/2021	0	0
Northwest Langley	Distribution	I	03/30/2021	0	0
Northwest Langley	Distribution	I	04/06/2021	0	0
Northwest Langley	Distribution	I	04/13/2021	0	0
Northwest Langley	Distribution	I	04/20/2021	0	0
Northwest Langley	Distribution	I	04/27/2021	0	0
Northwest Langley	Distribution	I	05/04/2021	0	0
Northwest Langley	Distribution	I	05/11/2021	0	0
Northwest Langley	Distribution	I	05/18/2021	0	0
Northwest Langley	Distribution	I	05/25/2021	0	0
Northwest Langley	Distribution	I	06/01/2021	0	0
Northwest Langley	Distribution	I	06/08/2021	0	0
Northwest Langley	Distribution	I	06/15/2021	0	0
Northwest Langley	Distribution	I	06/22/2021	0	0
Northwest Langley	Distribution	I	06/29/2021	0	0
Northwest Langley	Distribution	I	07/06/2021	0	0
Northwest Langley	Distribution	I	07/13/2021	0	0
Northwest Langley	Distribution	I	07/20/2021	0	0
Northwest Langley	Distribution	I	07/27/2021	0	0
Northwest Langley	Distribution	I	08/03/2021	0	0
Northwest Langley	Distribution	I	08/10/2021	0	0
Northwest Langley	Distribution	I	08/17/2021	0	0
Northwest Langley	Distribution	I	08/24/2021	0	0
Northwest Langley	Distribution	I	08/31/2021	0	0
Northwest Langley	Distribution	I	09/07/2021	0	0
Northwest Langley	Distribution	I	09/14/2021	0	0
Northwest Langley	Distribution	I	09/21/2021	0	0
Northwest Langley	Distribution	I	09/28/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	I	10/05/2021	0	0
Northwest Langley	Distribution	I	10/19/2021	0	0
Northwest Langley	Distribution	I	10/26/2021	0	0
Northwest Langley	Distribution	I	11/02/2021	0	0
Northwest Langley	Distribution	I	11/09/2021	0	0
Northwest Langley	Distribution	I	11/16/2021	0	0
Northwest Langley	Distribution	I	11/23/2021	0	0
Northwest Langley	Distribution	I	11/30/2021	0	0
Northwest Langley	Distribution	I	12/07/2021	0	0
Northwest Langley	Distribution	I	12/14/2021	0	0
Northwest Langley	Distribution	I	12/21/2021	0	0
Northwest Langley	Distribution	L (465)	01/05/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	02/02/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	02/09/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	02/16/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	02/23/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	03/02/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	03/09/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	03/16/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	03/23/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	03/30/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	04/06/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	04/13/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	04/20/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	04/27/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	05/04/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	05/11/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	05/18/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	05/25/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	06/01/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	06/08/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	06/15/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	06/22/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	06/29/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	07/06/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	07/13/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	07/20/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	07/27/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	08/03/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	08/10/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	08/17/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	08/24/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	L (465)	08/31/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	09/07/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	09/14/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	09/21/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	09/28/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	10/05/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	10/12/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	10/19/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	10/26/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	11/02/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	11/09/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	11/16/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	11/23/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	11/30/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	12/07/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	12/14/2021	< 1	< 1
Northwest Langley	Distribution	L (465)	12/21/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	01/05/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	02/02/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	02/09/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	02/16/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	02/23/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	03/02/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	03/09/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	03/16/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	03/23/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	03/30/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	04/06/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	04/13/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	04/20/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	04/27/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	05/04/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	05/11/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	05/18/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	05/25/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	06/01/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	06/08/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	06/15/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	06/22/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	06/29/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	07/06/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	07/13/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	M (463)	07/20/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	07/27/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	08/03/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	08/10/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	08/17/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	08/24/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	08/31/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	09/07/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	09/14/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	09/21/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	09/28/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	10/05/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	10/12/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	10/19/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	10/26/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	11/02/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	11/09/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	11/16/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	11/23/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	11/30/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	12/07/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	12/14/2021	< 1	< 1
Northwest Langley	Distribution	M (463)	12/21/2021	< 1	< 1
Northwest Langley	Distribution	N (464)	01/05/2021	< 1	< 1
Northwest Langley	Distribution	N (464)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	N (464)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	N (464)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	N (464)	02/02/2021	0	0
Northwest Langley	Distribution	N (464)	02/09/2021	0	0
Northwest Langley	Distribution	N (464)	02/16/2021	0	0
Northwest Langley	Distribution	N (464)	02/23/2021	0	0
Northwest Langley	Distribution	N (464)	03/02/2021	0	0
Northwest Langley	Distribution	N (464)	03/09/2021	0	0
Northwest Langley	Distribution	N (464)	03/16/2021	0	0
Northwest Langley	Distribution	N (464)	03/23/2021	0	0
Northwest Langley	Distribution	N (464)	03/30/2021	0	0
Northwest Langley	Distribution	N (464)	04/06/2021	0	0
Northwest Langley	Distribution	N (464)	04/13/2021	0	0
Northwest Langley	Distribution	N (464)	04/20/2021	0	0
Northwest Langley	Distribution	N (464)	04/27/2021	0	0
Northwest Langley	Distribution	N (464)	05/04/2021	0	0
Northwest Langley	Distribution	N (464)	05/11/2021	0	0
Northwest Langley	Distribution	N (464)	05/18/2021	0	0
Northwest Langley	Distribution	N (464)	05/25/2021	0	0
Northwest Langley	Distribution	N (464)	06/01/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	N (464)	06/08/2021	0	0
Northwest Langley	Distribution	N (464)	06/15/2021	0	0
Northwest Langley	Distribution	N (464)	06/22/2021	0	0
Northwest Langley	Distribution	N (464)	06/29/2021	0	0
Northwest Langley	Distribution	N (464)	07/06/2021	0	0
Northwest Langley	Distribution	N (464)	07/13/2021	0	0
Northwest Langley	Distribution	N (464)	07/20/2021	0	0
Northwest Langley	Distribution	N (464)	07/27/2021	0	0
Northwest Langley	Distribution	N (464)	08/03/2021	0	0
Northwest Langley	Distribution	N (464)	08/10/2021	0	0
Northwest Langley	Distribution	N (464)	08/17/2021	0	0
Northwest Langley	Distribution	N (464)	08/24/2021	0	0
Northwest Langley	Distribution	N (464)	08/31/2021	0	0
Northwest Langley	Distribution	N (464)	09/07/2021	0	0
Northwest Langley	Distribution	N (464)	09/14/2021	0	0
Northwest Langley	Distribution	N (464)	09/21/2021	0	0
Northwest Langley	Distribution	N (464)	09/28/2021	0	0
Northwest Langley	Distribution	N (464)	10/05/2021	0	0
Northwest Langley	Distribution	N (464)	10/19/2021	0	0
Northwest Langley	Distribution	N (464)	10/26/2021	0	0
Northwest Langley	Distribution	N (464)	11/02/2021	0	0
Northwest Langley	Distribution	N (464)	11/09/2021	0	0
Northwest Langley	Distribution	N (464)	11/16/2021	0	0
Northwest Langley	Distribution	N (464)	11/23/2021	0	0
Northwest Langley	Distribution	N (464)	11/30/2021	0	0
Northwest Langley	Distribution	N (464)	12/07/2021	0	0
Northwest Langley	Distribution	N (464)	12/14/2021	0	0
Northwest Langley	Distribution	N (464)	12/21/2021	0	0
Northwest Langley	Distribution	O (466)	01/05/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	02/02/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	02/09/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	02/16/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	02/23/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	03/02/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	03/09/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	03/16/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	03/23/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	03/30/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	04/06/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	04/13/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	04/20/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	04/27/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	O (466)	05/04/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	05/11/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	05/18/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	05/25/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	06/01/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	06/08/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	06/15/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	06/22/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	06/29/2021	< 1	0
Northwest Langley	Distribution	O (466)	07/06/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	07/13/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	07/20/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	07/27/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	08/03/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	08/10/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	08/17/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	08/24/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	08/31/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	09/07/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	09/14/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	09/21/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	10/05/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	10/12/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	10/19/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	10/26/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	11/02/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	11/09/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	11/16/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	11/23/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	11/30/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	12/07/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	12/14/2021	< 1	< 1
Northwest Langley	Distribution	O (466)	12/21/2021	< 1	< 1
Northwest Langley	Distribution	T	01/05/2021	< 1	< 1
Northwest Langley	Distribution	T	01/12/2021	< 1	< 1
Northwest Langley	Distribution	T	01/19/2021	< 1	< 1
Northwest Langley	Distribution	T	01/26/2021	< 1	< 1
Northwest Langley	Distribution	T	02/02/2021	0	0
Northwest Langley	Distribution	T	02/09/2021	0	0
Northwest Langley	Distribution	T	02/16/2021	0	0
Northwest Langley	Distribution	T	02/23/2021	0	0
Northwest Langley	Distribution	T	03/02/2021	0	0
Northwest Langley	Distribution	T	03/09/2021	0	0
Northwest Langley	Distribution	T	03/16/2021	0	0
Northwest Langley	Distribution	T	03/23/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	T	03/30/2021	0	0
Northwest Langley	Distribution	T	04/06/2021	0	0
Northwest Langley	Distribution	T	04/13/2021	0	0
Northwest Langley	Distribution	T	04/20/2021	0	0
Northwest Langley	Distribution	T	04/27/2021	0	0
Northwest Langley	Distribution	T	05/04/2021	0	0
Northwest Langley	Distribution	T	05/11/2021	1	0
Northwest Langley	Distribution	T	05/18/2021	0	0
Northwest Langley	Distribution	T	05/25/2021	0	0
Northwest Langley	Distribution	T	06/01/2021	0	0
Northwest Langley	Distribution	T	06/08/2021	0	0
Northwest Langley	Distribution	T	06/15/2021	0	0
Northwest Langley	Distribution	T	06/22/2021	0	0
Northwest Langley	Distribution	T	06/29/2021	0	0
Northwest Langley	Distribution	T	07/06/2021	0	0
Northwest Langley	Distribution	T	07/13/2021	0	0
Northwest Langley	Distribution	T	07/20/2021	0	0
Northwest Langley	Distribution	T	07/27/2021	0	0
Northwest Langley	Distribution	T	08/03/2021	0	0
Northwest Langley	Distribution	T	08/10/2021	0	0
Northwest Langley	Distribution	T	08/17/2021	0	0
Northwest Langley	Distribution	T	08/24/2021	0	0
Northwest Langley	Distribution	T	08/31/2021	0	0
Northwest Langley	Distribution	T	09/07/2021	0	0
Northwest Langley	Distribution	T	09/14/2021	0	0
Northwest Langley	Distribution	T	09/21/2021	0	0
Northwest Langley	Distribution	T	09/28/2021	0	0
Northwest Langley	Distribution	T	10/05/2021	0	0
Northwest Langley	Distribution	T	10/19/2021	0	0
Northwest Langley	Distribution	T	10/26/2021	0	0
Northwest Langley	Distribution	T	11/02/2021	0	0
Northwest Langley	Distribution	T	11/09/2021	0	0
Northwest Langley	Distribution	T	11/16/2021	0	0
Northwest Langley	Distribution	T	11/23/2021	0	0
Northwest Langley	Distribution	T	11/30/2021	0	0
Northwest Langley	Distribution	T	12/07/2021	0	0
Northwest Langley	Distribution	T	12/14/2021	0	0
Northwest Langley	Distribution	T	12/21/2021	0	0
Northwest Langley	Distribution	U (467)	01/05/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	02/02/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	02/09/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	02/16/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	U (467)	02/23/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	03/02/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	03/09/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	03/16/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	03/23/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	03/30/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	04/06/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	04/13/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	04/20/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	04/27/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	05/04/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	05/11/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	05/18/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	05/25/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	06/01/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	06/08/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	06/15/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	06/22/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	06/29/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	07/06/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	07/13/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	07/20/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	07/27/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	08/03/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	08/10/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	08/17/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	08/24/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	08/31/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	09/07/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	09/14/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	09/21/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	09/28/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	10/05/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	10/12/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	10/19/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	10/26/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	11/02/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	11/09/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	11/16/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	11/23/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	11/30/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	12/07/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	12/14/2021	< 1	< 1
Northwest Langley	Distribution	U (467)	12/21/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	01/05/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	X (468)	01/12/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	01/19/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	01/26/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	02/02/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	02/09/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	02/16/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	02/23/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	03/02/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	03/09/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	03/16/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	03/23/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	03/30/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	04/06/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	04/13/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	04/20/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	04/27/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	05/04/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	05/11/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	05/18/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	05/25/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	06/01/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	06/08/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	06/15/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	06/22/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	06/29/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	07/06/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	07/13/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	07/20/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	07/27/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	08/03/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	08/10/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	08/17/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	08/24/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	08/31/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	09/07/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	09/14/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	09/21/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	09/28/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	10/05/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	10/12/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	10/19/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	10/26/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	11/02/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	11/09/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	11/16/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Northwest Langley	Distribution	X (468)	11/23/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	11/30/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	12/07/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	12/14/2021	< 1	< 1
Northwest Langley	Distribution	X (468)	12/21/2021	< 1	< 1
South West Langley	Distribution	AB (469)	01/05/2021	< 1	< 1
South West Langley	Distribution	AB (469)	01/12/2021	< 1	< 1
South West Langley	Distribution	AB (469)	01/19/2021	< 1	< 1
South West Langley	Distribution	AB (469)	01/26/2021	< 1	< 1
South West Langley	Distribution	AB (469)	02/02/2021	< 1	< 1
South West Langley	Distribution	AB (469)	02/09/2021	< 1	< 1
South West Langley	Distribution	AB (469)	02/16/2021	< 1	< 1
South West Langley	Distribution	AB (469)	02/23/2021	< 1	< 1
South West Langley	Distribution	AB (469)	03/02/2021	< 1	< 1
South West Langley	Distribution	AB (469)	03/09/2021	< 1	< 1
South West Langley	Distribution	AB (469)	03/16/2021	< 1	< 1
South West Langley	Distribution	AB (469)	03/23/2021	< 1	< 1
South West Langley	Distribution	AB (469)	03/30/2021	< 1	< 1
South West Langley	Distribution	AB (469)	04/06/2021	< 1	< 1
South West Langley	Distribution	AB (469)	04/13/2021	< 1	< 1
South West Langley	Distribution	AB (469)	04/20/2021	< 1	< 1
South West Langley	Distribution	AB (469)	04/27/2021	< 1	< 1
South West Langley	Distribution	AB (469)	05/04/2021	< 1	< 1
South West Langley	Distribution	AB (469)	05/11/2021	< 1	< 1
South West Langley	Distribution	AB (469)	05/18/2021	< 1	< 1
South West Langley	Distribution	AB (469)	05/25/2021	< 1	< 1
South West Langley	Distribution	AB (469)	06/01/2021	< 1	< 1
South West Langley	Distribution	AB (469)	06/08/2021	< 1	< 1
South West Langley	Distribution	AB (469)	06/15/2021	< 1	< 1
South West Langley	Distribution	AB (469)	06/22/2021	< 1	< 1
South West Langley	Distribution	AB (469)	06/29/2021	< 1	< 1
South West Langley	Distribution	AB (469)	07/06/2021	< 1	< 1
South West Langley	Distribution	AB (469)	07/13/2021	< 1	< 1
South West Langley	Distribution	AB (469)	07/20/2021	< 1	< 1
South West Langley	Distribution	AB (469)	07/27/2021	< 1	< 1
South West Langley	Distribution	AB (469)	08/03/2021	< 1	< 1
South West Langley	Distribution	AB (469)	08/10/2021	< 1	< 1
South West Langley	Distribution	AB (469)	08/17/2021	< 1	< 1
South West Langley	Distribution	AB (469)	08/24/2021	< 1	< 1
South West Langley	Distribution	AB (469)	08/31/2021	< 1	< 1
South West Langley	Distribution	AB (469)	09/07/2021	< 1	< 1
South West Langley	Distribution	AB (469)	09/14/2021	< 1	< 1
South West Langley	Distribution	AB (469)	09/21/2021	< 1	< 1
South West Langley	Distribution	AB (469)	09/28/2021	< 1	< 1
South West Langley	Distribution	AB (469)	10/05/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	AB (469)	10/12/2021	< 1	0
South West Langley	Distribution	AB (469)	10/19/2021	< 1	< 1
South West Langley	Distribution	AB (469)	10/26/2021	< 1	< 1
South West Langley	Distribution	AB (469)	11/02/2021	< 1	< 1
South West Langley	Distribution	AB (469)	11/09/2021	< 1	< 1
South West Langley	Distribution	AB (469)	11/16/2021	< 1	< 1
South West Langley	Distribution	AB (469)	11/23/2021	< 1	< 1
South West Langley	Distribution	AB (469)	11/30/2021	< 1	< 1
South West Langley	Distribution	AB (469)	12/07/2021	< 1	< 1
South West Langley	Distribution	AB (469)	12/14/2021	< 1	< 1
South West Langley	Distribution	AB (469)	12/21/2021	< 1	< 1
South West Langley	Distribution	AC	01/05/2021	< 1	< 1
South West Langley	Distribution	AC	01/12/2021	< 1	< 1
South West Langley	Distribution	AC	01/19/2021	< 1	< 1
South West Langley	Distribution	AC	01/26/2021	< 1	< 1
South West Langley	Distribution	AC	02/02/2021	0	0
South West Langley	Distribution	AC	02/09/2021	0	0
South West Langley	Distribution	AC	02/16/2021	0	0
South West Langley	Distribution	AC	02/23/2021	0	0
South West Langley	Distribution	AC	03/02/2021	0	0
South West Langley	Distribution	AC	03/09/2021	0	0
South West Langley	Distribution	AC	03/16/2021	0	0
South West Langley	Distribution	AC	03/23/2021	0	0
South West Langley	Distribution	AC	03/30/2021	0	0
South West Langley	Distribution	AC	04/06/2021	0	0
South West Langley	Distribution	AC	04/13/2021	0	0
South West Langley	Distribution	AC	04/20/2021	0	0
South West Langley	Distribution	AC	04/27/2021	0	0
South West Langley	Distribution	AC	05/04/2021	0	0
South West Langley	Distribution	AC	05/11/2021	0	0
South West Langley	Distribution	AC	05/18/2021	0	0
South West Langley	Distribution	AC	05/25/2021	0	0
South West Langley	Distribution	AC	06/01/2021	0	0
South West Langley	Distribution	AC	06/08/2021	0	0
South West Langley	Distribution	AC	06/15/2021	0	0
South West Langley	Distribution	AC	06/22/2021	0	0
South West Langley	Distribution	AC	06/29/2021	0	0
South West Langley	Distribution	AC	07/06/2021	0	0
South West Langley	Distribution	AC	07/13/2021	0	0
South West Langley	Distribution	AC	07/20/2021	0	0
South West Langley	Distribution	AC	07/27/2021	0	0
South West Langley	Distribution	AC	08/03/2021	0	0
South West Langley	Distribution	AC	08/10/2021	0	0
South West Langley	Distribution	AC	08/17/2021	0	0
South West Langley	Distribution	AC	08/24/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	AC	08/31/2021	0	0
South West Langley	Distribution	AC	09/07/2021	0	0
South West Langley	Distribution	AC	09/14/2021	0	0
South West Langley	Distribution	AC	09/21/2021	0	0
South West Langley	Distribution	AC	09/28/2021	0	0
South West Langley	Distribution	AC	10/05/2021	0	0
South West Langley	Distribution	AC	10/19/2021	0	0
South West Langley	Distribution	AC	10/26/2021	0	0
South West Langley	Distribution	AC	11/02/2021	0	0
South West Langley	Distribution	AC	11/09/2021	0	0
South West Langley	Distribution	AC	11/16/2021	0	0
South West Langley	Distribution	AC	11/23/2021	0	0
South West Langley	Distribution	AC	11/30/2021	0	0
South West Langley	Distribution	AC	12/07/2021	0	0
South West Langley	Distribution	AC	12/14/2021	0	0
South West Langley	Distribution	AC	12/21/2021	0	0
South West Langley	Distribution	AJ	01/05/2021	< 1	< 1
South West Langley	Distribution	AJ	01/12/2021	< 1	< 1
South West Langley	Distribution	AJ	01/19/2021	< 1	< 1
South West Langley	Distribution	AJ	01/26/2021	< 1	< 1
South West Langley	Distribution	AJ	02/02/2021	0	0
South West Langley	Distribution	AJ	02/09/2021	0	0
South West Langley	Distribution	AJ	02/16/2021	0	0
South West Langley	Distribution	AJ	02/23/2021	0	0
South West Langley	Distribution	AJ	03/02/2021	0	0
South West Langley	Distribution	AJ	03/09/2021	0	0
South West Langley	Distribution	AJ	03/16/2021	0	0
South West Langley	Distribution	AJ	03/23/2021	0	0
South West Langley	Distribution	AJ	03/30/2021	0	0
South West Langley	Distribution	AJ	04/06/2021	0	0
South West Langley	Distribution	AJ	04/13/2021	0	0
South West Langley	Distribution	AJ	04/20/2021	0	0
South West Langley	Distribution	AJ	05/04/2021	0	0
South West Langley	Distribution	AJ	05/11/2021	0	0
South West Langley	Distribution	AJ	05/18/2021	0	0
South West Langley	Distribution	AJ	05/25/2021	0	0
South West Langley	Distribution	AJ	06/01/2021	0	0
South West Langley	Distribution	AJ	06/08/2021	0	0
South West Langley	Distribution	AJ	06/15/2021	0	0
South West Langley	Distribution	AJ	06/22/2021	0	0
South West Langley	Distribution	AJ	06/29/2021	0	0
South West Langley	Distribution	AJ	07/06/2021	0	0
South West Langley	Distribution	AJ	07/13/2021	0	0
South West Langley	Distribution	AJ	07/20/2021	0	0
South West Langley	Distribution	AJ	07/27/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	AJ	08/03/2021	0	0
South West Langley	Distribution	AJ	08/10/2021	0	0
South West Langley	Distribution	AJ	08/17/2021	0	0
South West Langley	Distribution	AJ	08/24/2021	0	0
South West Langley	Distribution	AJ	08/31/2021	0	0
South West Langley	Distribution	AJ	09/07/2021	0	0
South West Langley	Distribution	AJ	09/14/2021	0	0
South West Langley	Distribution	AJ	09/21/2021	0	0
South West Langley	Distribution	AJ	09/28/2021	0	0
South West Langley	Distribution	AJ	10/05/2021	0	0
South West Langley	Distribution	AJ	10/19/2021	0	0
South West Langley	Distribution	AJ	10/26/2021	0	0
South West Langley	Distribution	AJ	11/02/2021	0	0
South West Langley	Distribution	AJ	11/09/2021	0	0
South West Langley	Distribution	AJ	11/16/2021	0	0
South West Langley	Distribution	AJ	11/23/2021	0	0
South West Langley	Distribution	AJ	11/30/2021	0	0
South West Langley	Distribution	AJ	12/07/2021	0	0
South West Langley	Distribution	AJ	12/14/2021	0	0
South West Langley	Distribution	AJ	12/21/2021	0	0
South West Langley	Distribution	AK	01/05/2021	< 1	< 1
South West Langley	Distribution	AK	01/12/2021	< 1	< 1
South West Langley	Distribution	AK	01/19/2021	< 1	< 1
South West Langley	Distribution	AK	01/26/2021	< 1	< 1
South West Langley	Distribution	AK	02/02/2021	0	0
South West Langley	Distribution	AK	02/09/2021	0	0
South West Langley	Distribution	AK	02/16/2021	0	0
South West Langley	Distribution	AK	02/23/2021	0	0
South West Langley	Distribution	AK	03/02/2021	0	0
South West Langley	Distribution	AK	03/09/2021	0	0
South West Langley	Distribution	AK	03/16/2021	0	0
South West Langley	Distribution	AK	03/23/2021	0	0
South West Langley	Distribution	AK	03/30/2021	0	0
South West Langley	Distribution	AK	04/06/2021	0	0
South West Langley	Distribution	AK	04/13/2021	0	0
South West Langley	Distribution	AK	04/20/2021	0	0
South West Langley	Distribution	AK	04/27/2021	0	0
South West Langley	Distribution	AK	05/04/2021	0	0
South West Langley	Distribution	AK	05/11/2021	0	0
South West Langley	Distribution	AK	05/18/2021	1	0
South West Langley	Distribution	AK	05/25/2021	0	0
South West Langley	Distribution	AK	06/01/2021	0	0
South West Langley	Distribution	AK	06/08/2021	0	0
South West Langley	Distribution	AK	06/15/2021	0	0
South West Langley	Distribution	AK	06/22/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	AK	06/29/2021	0	0
South West Langley	Distribution	AK	07/06/2021	0	0
South West Langley	Distribution	AK	07/13/2021	0	0
South West Langley	Distribution	AK	07/20/2021	0	0
South West Langley	Distribution	AK	07/27/2021	0	0
South West Langley	Distribution	AK	08/03/2021	0	0
South West Langley	Distribution	AK	08/10/2021	1	0
South West Langley	Distribution	AK	08/17/2021	1	0
South West Langley	Distribution	AK	08/24/2021	130	0
South West Langley	Distribution	AK	08/31/2021	1	0
South West Langley	Distribution	AK	09/03/2021	0	0
South West Langley	Distribution	AK	09/07/2021	0	0
South West Langley	Distribution	AK	09/14/2021	0	0
South West Langley	Distribution	AK	09/21/2021	0	0
South West Langley	Distribution	AK	09/28/2021	1	0
South West Langley	Distribution	AK	10/05/2021	0	0
South West Langley	Distribution	AK	10/19/2021	0	0
South West Langley	Distribution	AK	10/26/2021	1	0
South West Langley	Distribution	AK	10/28/2021	0	0
South West Langley	Distribution	AK	11/02/2021	1	0
South West Langley	Distribution	AK	11/04/2021	1	0
South West Langley	Distribution	AK	11/09/2021	0	0
South West Langley	Distribution	AK	11/16/2021	57	0
South West Langley	Distribution	AK	11/19/2021	0	0
South West Langley	Distribution	AK	11/23/2021	0	0
South West Langley	Distribution	AK	11/30/2021	0	0
South West Langley	Distribution	AK	12/07/2021	0	0
South West Langley	Distribution	AK	12/14/2021	0	0
South West Langley	Distribution	AK	12/21/2021	0	0
South West Langley	Distribution	C	01/05/2021	< 1	< 1
South West Langley	Distribution	C	01/12/2021	< 1	< 1
South West Langley	Distribution	C	01/19/2021	< 1	< 1
South West Langley	Distribution	C	01/26/2021	< 1	< 1
South West Langley	Distribution	C	02/02/2021	0	0
South West Langley	Distribution	C	02/09/2021	0	0
South West Langley	Distribution	C	02/16/2021	0	0
South West Langley	Distribution	C	02/23/2021	0	0
South West Langley	Distribution	C	03/02/2021	0	0
South West Langley	Distribution	C	03/09/2021	0	0
South West Langley	Distribution	C	03/16/2021	0	0
South West Langley	Distribution	C	03/23/2021	0	0
South West Langley	Distribution	C	03/30/2021	0	0
South West Langley	Distribution	C	04/06/2021	0	0
South West Langley	Distribution	C	04/13/2021	0	0
South West Langley	Distribution	C	04/20/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	C	04/27/2021	0	0
South West Langley	Distribution	C	05/04/2021	0	0
South West Langley	Distribution	C	05/11/2021	0	0
South West Langley	Distribution	C	05/18/2021	0	0
South West Langley	Distribution	C	05/25/2021	0	0
South West Langley	Distribution	C	06/01/2021	0	0
South West Langley	Distribution	C	06/08/2021	0	0
South West Langley	Distribution	C	06/15/2021	0	0
South West Langley	Distribution	C	06/22/2021	0	0
South West Langley	Distribution	C	06/29/2021	0	0
South West Langley	Distribution	C	07/06/2021	0	0
South West Langley	Distribution	C	07/13/2021	0	0
South West Langley	Distribution	C	07/20/2021	0	0
South West Langley	Distribution	C	07/27/2021	0	0
South West Langley	Distribution	C	08/03/2021	0	0
South West Langley	Distribution	C	08/10/2021	0	0
South West Langley	Distribution	C	08/17/2021	0	0
South West Langley	Distribution	C	08/24/2021	0	0
South West Langley	Distribution	C	08/31/2021	0	0
South West Langley	Distribution	C	09/07/2021	0	0
South West Langley	Distribution	C	09/14/2021	0	0
South West Langley	Distribution	C	09/21/2021	0	0
South West Langley	Distribution	C	09/28/2021	0	0
South West Langley	Distribution	C	10/05/2021	0	0
South West Langley	Distribution	C	10/19/2021	0	0
South West Langley	Distribution	C	10/26/2021	0	0
South West Langley	Distribution	C	11/02/2021	0	0
South West Langley	Distribution	C	11/09/2021	0	0
South West Langley	Distribution	C	11/16/2021	0	0
South West Langley	Distribution	C	11/23/2021	0	0
South West Langley	Distribution	C	11/30/2021	0	0
South West Langley	Distribution	C	12/07/2021	0	0
South West Langley	Distribution	C	12/14/2021	0	0
South West Langley	Distribution	C	12/21/2021	0	0
South West Langley	Distribution	J (460)	01/05/2021	< 1	< 1
South West Langley	Distribution	J (460)	01/12/2021	< 1	< 1
South West Langley	Distribution	J (460)	01/19/2021	< 1	< 1
South West Langley	Distribution	J (460)	01/26/2021	< 1	< 1
South West Langley	Distribution	J (460)	02/02/2021	0	0
South West Langley	Distribution	J (460)	02/09/2021	0	0
South West Langley	Distribution	J (460)	02/16/2021	0	0
South West Langley	Distribution	J (460)	02/23/2021	0	0
South West Langley	Distribution	J (460)	03/02/2021	0	0
South West Langley	Distribution	J (460)	03/09/2021	0	0
South West Langley	Distribution	J (460)	03/16/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	J (460)	03/23/2021	0	0
South West Langley	Distribution	J (460)	03/30/2021	0	0
South West Langley	Distribution	J (460)	04/06/2021	0	0
South West Langley	Distribution	J (460)	04/13/2021	0	0
South West Langley	Distribution	J (460)	04/20/2021	0	0
South West Langley	Distribution	J (460)	04/27/2021	0	0
South West Langley	Distribution	J (460)	05/04/2021	0	0
South West Langley	Distribution	J (460)	05/11/2021	0	0
South West Langley	Distribution	J (460)	05/18/2021	0	0
South West Langley	Distribution	J (460)	05/25/2021	0	0
South West Langley	Distribution	J (460)	06/01/2021	0	0
South West Langley	Distribution	J (460)	06/08/2021	0	0
South West Langley	Distribution	J (460)	06/15/2021	0	0
South West Langley	Distribution	J (460)	06/22/2021	0	0
South West Langley	Distribution	J (460)	06/29/2021	1	0
South West Langley	Distribution	J (460)	07/06/2021	0	0
South West Langley	Distribution	J (460)	07/13/2021	0	0
South West Langley	Distribution	J (460)	07/20/2021	0	0
South West Langley	Distribution	J (460)	07/27/2021	0	0
South West Langley	Distribution	J (460)	08/03/2021	0	0
South West Langley	Distribution	J (460)	08/10/2021	0	0
South West Langley	Distribution	J (460)	08/17/2021	0	0
South West Langley	Distribution	J (460)	08/24/2021	0	0
South West Langley	Distribution	J (460)	08/31/2021	0	0
South West Langley	Distribution	J (460)	09/07/2021	0	0
South West Langley	Distribution	J (460)	09/14/2021	0	0
South West Langley	Distribution	J (460)	09/21/2021	0	0
South West Langley	Distribution	J (460)	09/28/2021	0	0
South West Langley	Distribution	J (460)	10/05/2021	0	0
South West Langley	Distribution	J (460)	10/19/2021	0	0
South West Langley	Distribution	J (460)	10/26/2021	0	0
South West Langley	Distribution	J (460)	11/02/2021	0	0
South West Langley	Distribution	J (460)	11/09/2021	0	0
South West Langley	Distribution	J (460)	11/16/2021	0	0
South West Langley	Distribution	J (460)	11/23/2021	0	0
South West Langley	Distribution	J (460)	11/30/2021	0	0
South West Langley	Distribution	J (460)	12/07/2021	0	0
South West Langley	Distribution	J (460)	12/14/2021	0	0
South West Langley	Distribution	J (460)	12/21/2021	0	0
South West Langley	Distribution	K (461)	01/05/2021	< 1	< 1
South West Langley	Distribution	K (461)	01/12/2021	< 1	< 1
South West Langley	Distribution	K (461)	01/19/2021	< 1	< 1
South West Langley	Distribution	K (461)	01/26/2021	< 1	< 1
South West Langley	Distribution	K (461)	02/02/2021	0	0
South West Langley	Distribution	K (461)	02/09/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	K (461)	02/16/2021	0**	0**
South West Langley	Distribution	K (461)	02/23/2021	0	0
South West Langley	Distribution	K (461)	03/02/2021	0	0
South West Langley	Distribution	K (461)	03/09/2021	0	0
South West Langley	Distribution	K (461)	03/16/2021	0	0
South West Langley	Distribution	K (461)	03/23/2021	0	0
South West Langley	Distribution	K (461)	03/30/2021	0	0
South West Langley	Distribution	K (461)	04/06/2021	0	0
South West Langley	Distribution	K (461)	04/13/2021	0	0
South West Langley	Distribution	K (461)	04/20/2021	0	0
South West Langley	Distribution	K (461)	04/27/2021	0**	0**
South West Langley	Distribution	K (461)	05/04/2021	0	0
South West Langley	Distribution	K (461)	05/11/2021	0	0
South West Langley	Distribution	K (461)	05/18/2021	0	0
South West Langley	Distribution	K (461)	05/25/2021	0	0
South West Langley	Distribution	K (461)	06/01/2021	0	0
South West Langley	Distribution	K (461)	06/08/2021	0	0
South West Langley	Distribution	K (461)	06/15/2021	0	0
South West Langley	Distribution	K (461)	06/22/2021	0	0
South West Langley	Distribution	K (461)	06/29/2021	0	0
South West Langley	Distribution	K (461)	07/06/2021	0	0
South West Langley	Distribution	K (461)	07/13/2021	0	0
South West Langley	Distribution	K (461)	07/20/2021	0	0
South West Langley	Distribution	K (461)	07/27/2021	0	0
South West Langley	Distribution	K (461)	08/03/2021	0	0
South West Langley	Distribution	K (461)	08/10/2021	0	0
South West Langley	Distribution	K (461)	08/17/2021	0	0
South West Langley	Distribution	K (461)	08/24/2021	0	0
South West Langley	Distribution	K (461)	08/31/2021	0	0
South West Langley	Distribution	K (461)	09/07/2021	0	0
South West Langley	Distribution	K (461)	09/14/2021	0	0
South West Langley	Distribution	K (461)	09/21/2021	0	0
South West Langley	Distribution	K (461)	09/28/2021	0	0
South West Langley	Distribution	K (461)	10/05/2021	0	0
South West Langley	Distribution	K (461)	10/19/2021	1	0
South West Langley	Distribution	K (461)	10/26/2021	0	0
South West Langley	Distribution	K (461)	11/02/2021	0	0
South West Langley	Distribution	K (461)	11/09/2021	0	0
South West Langley	Distribution	K (461)	11/16/2021	0	0
South West Langley	Distribution	K (461)	11/23/2021	0	0
South West Langley	Distribution	K (461)	11/30/2021	0	0
South West Langley	Distribution	K (461)	12/07/2021	0	0
South West Langley	Distribution	K (461)	12/14/2021	0	0
South West Langley	Distribution	K (461)	12/21/2021	0	0
South West Langley	Distribution	V	01/05/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	V	01/12/2021	< 1	< 1
South West Langley	Distribution	V	01/19/2021	< 1	< 1
South West Langley	Distribution	V	01/26/2021	< 1	< 1
South West Langley	Distribution	V	02/02/2021	0	0
South West Langley	Distribution	V	02/09/2021	0	0
South West Langley	Distribution	V	02/16/2021	0	0
South West Langley	Distribution	V	02/23/2021	0	0
South West Langley	Distribution	V	03/02/2021	0	0
South West Langley	Distribution	V	03/09/2021	0	0
South West Langley	Distribution	V	03/16/2021	0	0
South West Langley	Distribution	V	03/23/2021	0	0
South West Langley	Distribution	V	03/30/2021	0	0
South West Langley	Distribution	V	04/06/2021	0	0
South West Langley	Distribution	V	04/13/2021	0	0
South West Langley	Distribution	V	04/20/2021	0	0
South West Langley	Distribution	V	04/27/2021	0	0
South West Langley	Distribution	V	05/04/2021	0	0
South West Langley	Distribution	V	05/11/2021	0	0
South West Langley	Distribution	V	05/18/2021	0	0
South West Langley	Distribution	V	05/25/2021	0	0
South West Langley	Distribution	V	06/01/2021	0	0
South West Langley	Distribution	V	06/08/2021	0	0
South West Langley	Distribution	V	06/15/2021	0	0
South West Langley	Distribution	V	06/22/2021	0	0
South West Langley	Distribution	V	06/29/2021	0	0
South West Langley	Distribution	V	07/06/2021	0	0
South West Langley	Distribution	V	07/13/2021	0	0
South West Langley	Distribution	V	07/20/2021	0	0
South West Langley	Distribution	V	07/27/2021	0	0
South West Langley	Distribution	V	08/03/2021	0	0
South West Langley	Distribution	V	08/10/2021	0	0
South West Langley	Distribution	V	08/17/2021	0	0
South West Langley	Distribution	V	08/24/2021	0	0
South West Langley	Distribution	V	08/31/2021	0	0
South West Langley	Distribution	V	09/07/2021	0	0
South West Langley	Distribution	V	09/14/2021	0	0
South West Langley	Distribution	V	09/21/2021	0	0
South West Langley	Distribution	V	09/28/2021	0	0
South West Langley	Distribution	V	10/05/2021	0	0
South West Langley	Distribution	V	10/19/2021	0	0
South West Langley	Distribution	V	10/26/2021	0	0
South West Langley	Distribution	V	11/02/2021	0	0
South West Langley	Distribution	V	11/09/2021	0	0
South West Langley	Distribution	V	11/16/2021	0	0
South West Langley	Distribution	V	11/23/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	V	11/30/2021	0	0
South West Langley	Distribution	V	12/07/2021	0	0
South West Langley	Distribution	V	12/14/2021	0	0
South West Langley	Distribution	V	12/21/2021	0	0
South West Langley	Distribution	W	01/05/2021	< 1	< 1
South West Langley	Distribution	W	01/12/2021	< 1	< 1
South West Langley	Distribution	W	01/19/2021	< 1	< 1
South West Langley	Distribution	W	01/26/2021	< 1	< 1
South West Langley	Distribution	W	02/02/2021	0	0
South West Langley	Distribution	W	02/09/2021	0	0
South West Langley	Distribution	W	02/16/2021	0	0
South West Langley	Distribution	W	02/23/2021	0	0
South West Langley	Distribution	W	03/02/2021	0	0
South West Langley	Distribution	W	03/09/2021	0	0
South West Langley	Distribution	W	03/16/2021	0	0
South West Langley	Distribution	W	03/23/2021	0	0
South West Langley	Distribution	W	03/30/2021	0	0
South West Langley	Distribution	W	04/06/2021	0	0
South West Langley	Distribution	W	04/13/2021	0	0
South West Langley	Distribution	W	04/20/2021	0	0
South West Langley	Distribution	W	04/27/2021	0	0
South West Langley	Distribution	W	05/04/2021	0	0
South West Langley	Distribution	W	05/11/2021	0	0
South West Langley	Distribution	W	05/18/2021	0	0
South West Langley	Distribution	W	05/25/2021	0	0
South West Langley	Distribution	W	06/01/2021	0	0
South West Langley	Distribution	W	06/08/2021	0	0
South West Langley	Distribution	W	06/15/2021	0	0
South West Langley	Distribution	W	06/22/2021	0	0
South West Langley	Distribution	W	06/29/2021	0	0
South West Langley	Distribution	W	07/06/2021	0	0
South West Langley	Distribution	W	07/13/2021	0	0
South West Langley	Distribution	W	07/20/2021	0	0
South West Langley	Distribution	W	07/27/2021	0	0
South West Langley	Distribution	W	08/03/2021	0	0
South West Langley	Distribution	W	08/10/2021	0	0
South West Langley	Distribution	W	08/17/2021	0	0
South West Langley	Distribution	W	08/24/2021	0	0
South West Langley	Distribution	W	08/31/2021	0	0
South West Langley	Distribution	W	09/07/2021	0	0
South West Langley	Distribution	W	09/14/2021	0	0
South West Langley	Distribution	W	09/21/2021	0	0
South West Langley	Distribution	W	09/28/2021	0	0
South West Langley	Distribution	W	10/05/2021	0	0
South West Langley	Distribution	W	10/19/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	W	10/26/2021	0	0
South West Langley	Distribution	W	11/02/2021	0	0
South West Langley	Distribution	W	11/09/2021	0	0
South West Langley	Distribution	W	11/16/2021	0	0
South West Langley	Distribution	W	11/23/2021	0	0
South West Langley	Distribution	W	11/30/2021	0	0
South West Langley	Distribution	W	12/07/2021	0	0
South West Langley	Distribution	W	12/14/2021	0	0
South West Langley	Distribution	W	12/21/2021	0	0
Tall Timber	Distribution	E (693)	01/05/2021	< 1	< 1
Tall Timber	Distribution	E (693)	01/12/2021	< 1	< 1
Tall Timber	Distribution	E (693)	01/19/2021	< 1	< 1
Tall Timber	Distribution	E (693)	01/26/2021	< 1	< 1
Tall Timber	Distribution	E (693)	02/02/2021	< 1	< 1
Tall Timber	Distribution	E (693)	02/09/2021	< 1	< 1
Tall Timber	Distribution	E (693)	02/16/2021	< 1	< 1
Tall Timber	Distribution	E (693)	02/23/2021	< 1	< 1
Tall Timber	Distribution	E (693)	03/02/2021	< 1	< 1
Tall Timber	Distribution	E (693)	03/09/2021	< 1	< 1
Tall Timber	Distribution	E (693)	03/16/2021	< 1	< 1
Tall Timber	Distribution	E (693)	03/23/2021	< 1	< 1
Tall Timber	Distribution	E (693)	03/30/2021	< 1	< 1
Tall Timber	Distribution	E (693)	04/06/2021	< 1	< 1
Tall Timber	Distribution	E (693)	04/13/2021	< 1	< 1
Tall Timber	Distribution	E (693)	04/20/2021	< 1	< 1
Tall Timber	Distribution	E (693)	04/27/2021	< 1	< 1
Tall Timber	Distribution	E (693)	05/04/2021	< 1	< 1
Tall Timber	Distribution	E (693)	05/11/2021	< 1	< 1
Tall Timber	Distribution	E (693)	05/18/2021	< 1	< 1
Tall Timber	Distribution	E (693)	05/25/2021	< 1	< 1
Tall Timber	Distribution	E (693)	06/01/2021	< 1	< 1
Tall Timber	Distribution	E (693)	06/08/2021	< 1	< 1
Tall Timber	Distribution	E (693)	06/15/2021	< 1	< 1
Tall Timber	Distribution	E (693)	06/22/2021	< 1	< 1
Tall Timber	Distribution	E (693)	06/29/2021	< 1	< 1
Tall Timber	Distribution	E (693)	07/06/2021	< 1	< 1
Tall Timber	Distribution	E (693)	07/13/2021	< 1	< 1
Tall Timber	Distribution	E (693)	07/20/2021	< 1	< 1
Tall Timber	Distribution	E (693)	07/27/2021	< 1	< 1
Tall Timber	Distribution	E (693)	08/03/2021	< 1	< 1
Tall Timber	Distribution	E (693)	08/10/2021	< 1	< 1
Tall Timber	Distribution	E (693)	08/17/2021	< 1	< 1
Tall Timber	Distribution	E (693)	08/24/2021	< 1	< 1
Tall Timber	Distribution	E (693)	08/31/2021	< 1	< 1
Tall Timber	Distribution	E (693)	09/07/2021	< 1	< 1

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
Tall Timber	Distribution	E (693)	09/14/2021	< 1	< 1
Tall Timber	Distribution	E (693)	09/21/2021	< 1	< 1
Tall Timber	Distribution	E (693)	09/28/2021	< 1	< 1
Tall Timber	Distribution	E (693)	10/05/2021	< 1	< 1
Tall Timber	Distribution	E (693)	10/12/2021	< 1	< 1
Tall Timber	Distribution	E (693)	10/19/2021	< 1	< 1
Tall Timber	Distribution	E (693)	10/26/2021	< 1	< 1
Tall Timber	Distribution	E (693)	11/02/2021	< 1	< 1
Tall Timber	Distribution	E (693)	11/09/2021	< 1	< 1
Tall Timber	Distribution	E (693)	11/16/2021	< 1	< 1
Tall Timber	Distribution	E (693)	11/23/2021	< 1	< 1
Tall Timber	Distribution	E (693)	11/30/2021	< 1	< 1
Tall Timber	Distribution	E (693)	12/07/2021	< 1	< 1
Tall Timber	Distribution	E (693)	12/14/2021	< 1	< 1
Tall Timber	Distribution	E (693)	12/21/2021	< 1	< 1
South West Langley	Distribution	AC	06/15/2021	0	0
South West Langley	Distribution	AC	06/22/2021	0	0
South West Langley	Distribution	AC	06/29/2021	0	0
South West Langley	Distribution	AC	07/06/2021	0	0
South West Langley	Distribution	W	03/16/2021	0	0
South West Langley	Distribution	W	09/21/2021	0	0
South West Langley	Distribution	W	09/28/2021	0	0
South West Langley	Distribution	AJ	03/30/2021	0	0
South West Langley	Distribution	AJ	05/25/2021	0	0
South West Langley	Distribution	AJ	10/05/2021	0	0
South West Langley	Distribution	AJ	12/21/2021	0	0
Northwest Langley	Distribution	N	08/03/2021	0	0
Northwest Langley	Distribution	N	08/31/2021	0	0
Northwest Langley	Distribution	N	12/14/2021	0	0
Northwest Langley	Distribution	D	02/09/2021	0	0
Northwest Langley	Distribution	D	05/04/2021	0	0
Northwest Langley	Distribution	D	08/17/2021	0	0
Northwest Langley	Distribution	D	08/24/2021	0	0
Northwest Langley	Distribution	D	11/16/2021	0	0
Northwest Langley	Distribution	I	05/18/2021	0	0
Northwest Langley	Distribution	I	06/01/2021	0	0
Northwest Langley	Distribution	I	06/08/2021	0	0
Northwest Langley	Distribution	I	07/27/2021	0	0
Northwest Langley	Distribution	I	11/09/2021	0	0
Northwest Langley	Distribution	H	01/12/2021	< 1	< 1
Northwest Langley	Distribution	H	07/20/2021	0	0
Northwest Langley	Distribution	H	09/14/2021	0	0
South West Langley	Distribution	V	10/26/2021	0	0
South West Langley	Distribution	V	11/23/2021	0	0
South West Langley	Distribution	V	11/30/2021	0	0

Water System	Facility	Sampling Point	Collection Date	Total Coliforms (CFU/100ml)	E. Coli (CFU/100ml)
South West Langley	Distribution	V	12/07/2021	0	0
South West Langley	Distribution	AK	03/09/2021	0	0
South West Langley	Distribution	AK	03/23/2021	0	0
South West Langley	Distribution	AK	04/20/2021	0	0
South West Langley	Distribution	AK	04/27/2021	0	0
South West Langley	Distribution	AK	09/07/2021	0	0
South West Langley	Distribution	AK	09/21/2021	0	0
South West Langley	Distribution	AK	11/02/2021	2	0
East Langley	Distribution	G	01/26/2021	< 1	< 1
East Langley	Distribution	G	04/06/2021	0	0
East Langley	Distribution	G	04/13/2021	0	0
East Langley	Distribution	G	05/11/2021	0	0
East Langley	Distribution	Y	02/16/2021	0	0
East Langley	Distribution	Y	08/10/2021	0	0
East Langley	Distribution	Y	10/19/2021	0	0
South West Langley	Distribution	J	02/02/2021	0	0
South West Langley	Distribution	K	01/05/2021	< 1	< 1
South West Langley	Distribution	K	02/23/2021	0	0
South West Langley	Distribution	K	03/02/2021	0	0
South West Langley	Distribution	K	07/13/2021	0	0

Table B.3 Source Water Summer and Winter Routine Parameter Testing

Sampling Point	Collection Date	Chlorine (free)	Aluminum (dissolved)	Aluminum (total)	Ammonia (total, as N)	Antimony (total)	Arsenic (total)	Barium (total)	Beryllium (total)	Bismuth (total)	Boron (total)	Cadmium (total)	Calcium (total)	Chlorate	Chloride	Chlorite	Chromium (total)	Cobalt (total)	Copper (total)	Fluoride	Iron (total)	Lead (total)	Lithium (total)	Magnesium (total)	Manganese (total)	Mercury (total)	Molybdenum (total)	Nickel (total)	Nitrate (as N)	Nitrate + Nitrite (as N)
		mg/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L
Acadia #1 well	09/16/2021		< 3.0	< 3.0	0.020	< 0.50	5.48	10.2	< 0.10	< 1.0	< 50	< 0.010	14.5	< 0.10	2.0	< 0.10	< 1.0	< 0.20	0.70	0.15	23	< 0.20	< 2.0	6.51	113	< 0.0019	1.9	< 1.0	< 0.020	< 0.020
Acadia #1 well	01/12/2022		< 3.0	< 3.0	0.028	< 0.50	5.66	10.3	< 0.10	< 1.0	< 50	< 0.010	14.7	< 0.10	1.8	< 0.10	< 1.0	< 0.20	0.61	0.15	23	< 0.20	< 2.0	6.71	116	< 0.0019	1.9	< 1.0	< 0.020	< 0.020
Acadia #2 well	09/16/2021		3.2	< 3.0	0.016	< 0.50	5.61	9.6	< 0.10	< 1.0	< 50	< 0.010	15.5	< 0.10	2.1	< 0.10	< 1.0	< 0.20	< 0.50	0.14	17	< 0.20	< 2.0	6.80	128	< 0.0019	1.9	< 1.0	< 0.020	< 0.020
Acadia #2 well	01/12/2022		< 3.0	< 3.0	0.026	< 0.50	5.54	9.2	< 0.10	< 1.0	< 50	0.043	14.8	< 0.10	1.9	< 0.10	< 1.0	< 0.20	< 0.50	0.13	18	< 0.20	< 2.0	6.74	121	< 0.0019	1.8	< 1.0	< 0.020	< 0.020
Aldergrove #10 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	0.32	15.0	< 0.10	< 1.0	64	0.025	31.7	< 0.10	7.2	< 0.10	< 1.0	< 0.20	1.02	< 0.050	< 10	< 0.20	< 2.0	8.77	< 1.0	< 0.0019	< 1.0	1.4	13.9	14.0
Aldergrove #10 well	11/15/2021																													
Aldergrove #10 well	11/22/2021																													
Aldergrove #10 well	12/07/2021																													
Aldergrove #10 well	01/10/2022																													
Aldergrove #10 well	01/12/2022		< 3.0	< 3.0	< 0.015	< 0.50	0.30	14.9	< 0.10	< 1.0	68	0.027	31.6	< 0.10	6.5	< 0.10	< 1.0	< 0.20	0.63	< 0.050	< 10	< 0.20	< 2.0	9.05	< 1.0	< 0.0019	< 1.0	1.5	15.3	15.3
Aldergrove #10 well	01/17/2022																													
Aldergrove #4 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	2.57	65.0	< 0.10	< 1.0	< 50	< 0.010	53.7	< 0.10	12	< 0.10	< 1.0	< 0.20	0.58	0.061	200	< 0.20	4.8	15.2	485	< 0.0019	< 1.0	< 1.0	0.672	0.730
Aldergrove #4 well	11/15/2021																													
Aldergrove #4 well	11/22/2021																													
Aldergrove #4 well	12/07/2021																													
Aldergrove #4 well	01/10/2022																													
Aldergrove #4 well	01/12/2022		< 3.0	< 3.0	0.023	< 0.50	2.44	57.8	< 0.10	< 1.0	< 50	0.011	46.8	< 0.10	13	< 0.10	< 1.0	< 0.20	1.23	0.063	182	< 0.20	4.2	14.3	437	< 0.0019	< 1.0	< 1.0	0.555	0.603
Aldergrove #4 well	01/17/2022																													
Aldergrove #6 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	4.70	67.2	< 0.10	< 1.0	< 50	< 0.010	53.0	< 0.10	20	< 0.10	< 1.0	< 0.20	< 0.50	< 0.050	106	< 0.20	5.9	14.1	212	< 0.0019	< 1.0	< 1.0	0.160	0.185
Aldergrove #6 well	11/15/2021																													
Aldergrove #6 well	11/22/2021																													
Aldergrove #6 well	12/07/2021																													
Aldergrove #6 well	01/10/2022																													
Aldergrove #6 well	01/12/2022		< 3.0	< 3.0	< 0.015	< 0.50	5.32	63.8	< 0.10	< 1.0	< 50	< 0.010	51.1	< 0.10	20	< 0.10	< 1.0	< 0.20	< 0.50	< 0.050	56	< 0.20	5.2	13.9	191	< 0.0019	< 1.0	< 1.0	0.378	0.433
Aldergrove #6 well	01/17/2022																													
Aldergrove #7 well	09/16/2021		< 3.0	< 3.0	< 0.015	0.67	5.02	93.4	< 0.10	< 1.0	< 50	0.010	53.6	< 0.10	12	< 0.10	< 1.0	< 0.20	1.17	< 0.050	47	< 0.20	5.6	16.0	151	< 0.0019	1.4	1.6	1.03	1.17
Aldergrove #7 well	11/15/2021																													
Aldergrove #7 well	11/22/2021																													
Aldergrove #7 well	12/07/2021																													
Aldergrove #7 well	01/10/2022																													
Aldergrove #7 well	01/12/2022		< 3.0	< 3.0	< 0.015	0.67	5.26	90.8	< 0.10	< 1.0	< 50	< 0.010	52.1	< 0.10	12	< 0.10	< 1.0	< 0.20	1.35	< 0.050	39	< 0.20	5.2	15.8	145	< 0.0019	1.3	1.7	1.06	1.21
Aldergrove #7 well	01/17/2022																													
Aldergrove #8 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	4.40	43.7	< 0.10	< 1.0	< 50	< 0.010	33.8	< 0.10	7.4	< 0.10	1.0	< 0.20	< 0.50	0.054	81	< 0.20	3.2	11.4	171	< 0.0019	1.9	< 1.0	< 0.020	< 0.020
Aldergrove #8 well	11/15/2021																													
Aldergrove #8 well	11/22/2021																													
Aldergrove #8 well	12/07/2021																													
Aldergrove #8 well	01/10/2022																													
Aldergrove #8 well	01/12/2022		< 3.0	< 3.0	0.017	< 0.50	4.42	45.7	< 0.10	< 1.0	< 50	< 0.010	36.3	< 0.10	8.1	< 0.10	< 1.0	< 0.20	< 0.50	0.052	86	< 0.20	3.0	12.5	184	< 0.0019	1.8	< 1.0	< 0.020	< 0.020
Aldergrove #8 well	01/17/2022																													
Aldergrove #9 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	0.18	12.4	< 0.10	< 1.0	< 50	0.053	44.7	< 0.10	10	< 0.10	< 1.0	< 0.20	6.90	< 0.050	< 10	0.25	< 2.0	13.4	1.5	0.0124	< 1.0	< 1.0	5.96	5.96
Aldergrove #9 well	11/15/2021																													
Aldergrove #9 well	11/22/2021																													
Aldergrove #9 well	12/07/2021																													
Aldergrove #9 well	01/10/2022																													

Sampling Point	Collection Date	Chlorine (free)	Aluminum (dissolved)	Aluminum (total)	Ammonia (total, as N)	Antimony (total)	Arsenic (total)	Barium (total)	Beryllium (total)	Bismuth (total)	Boron (total)	Cadmium (total)	Calcium (total)	Chlorate	Chloride	Chlorite	Chromium (total)	Cobalt (total)	Copper (total)	Fluoride	Iron (total)	Lead (total)	Lithium (total)	Magnesium (total)	Manganese (total)	Mercury (total)	Molybdenum (total)	Nickel (total)	Nitrate (as N)	Nitrate + Nitrite (as N)
		mg/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L
Aldergrove #9 well	01/12/2022		< 3.0	< 3.0	< 0.015	< 0.50	0.16	12.0	< 0.10	< 1.0	< 50	0.053	44.0	< 0.10	9.9	< 0.10	< 1.0	< 0.20	6.98	< 0.050	< 10	< 0.20	< 2.0	13.7	1.8	0.0135	< 1.0	< 1.0	3.39	3.40
Aldergrove #9 well	01/17/2022																													
Ft. Langley #2 well	01/05/2021																													
Ft. Langley #2 well	01/12/2021																													
Ft. Langley #2 well	01/19/2021	SC																												
Ft. Langley #2 well	01/26/2021																													
Ft. Langley #2 well	02/02/2021																													
Ft. Langley #2 well	02/09/2021																													
Ft. Langley #2 well	02/16/2021	0.48																												
Ft. Langley #2 well	03/02/2021																													
Ft. Langley #2 well	06/16/2021																													
Ft. Langley #2 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	0.55	10.3	< 0.10	< 1.0	< 50	< 0.010	21.3	< 0.10	55	< 0.10	< 1.0	< 0.20	1.42	< 0.050	< 10	< 0.20	< 2.0	8.87	6.2	< 0.0019	< 1.0	< 1.0	4.12	4.12
Ft. Langley #2 well	01/12/2022		< 3.0	< 3.0	< 0.015	< 0.50	0.52	8.5	< 0.10	< 1.0	< 50	< 0.010	17.6	< 0.10	45	< 0.10	< 1.0	< 0.20	2.52	< 0.050	< 10	< 0.20	< 2.0	7.32	6.2	< 0.0019	< 1.0	< 1.0	4.90	4.90
Brookswood #10 well	06/16/2021																													
Brookswood #10 well	09/16/2021		< 3.0	< 3.0	0.031	< 0.50	2.71	13.4	< 0.10	< 1.0	< 50	0.012	37.0	< 0.10	7.6	< 0.10	1.4	< 0.20	0.51	0.057	127	< 0.20	< 2.0	6.41	293	0.0020	1.3	< 1.0	< 0.020	< 0.020
Brookswood #10 well	01/12/2022		< 3.0	< 3.0	0.038	< 0.50	2.48	13.7	< 0.10	< 1.0	< 50	0.012	36.3	< 0.10	7.2	< 0.10	< 1.0	< 0.20	0.72	0.058	117	< 0.20	< 2.0	6.41	284	< 0.0019	1.1	< 1.0	< 0.020	< 0.020
Brookswood #7 well	06/16/2021																													
Brookswood #7 well	09/16/2021		3.0	4.9	0.034	< 0.50	0.56	12.9	< 0.10	< 1.0	< 50	0.061	19.2	< 0.10	20	< 0.10	< 1.0	0.38	3.04	0.054	473	0.28	< 2.0	4.96	495	< 0.0019	< 1.0	15.9	< 0.020	< 0.020
Brookswood #7 well	01/19/2022		< 3.0	< 3.0	0.065	< 0.50	0.51	11.6	< 0.10	< 1.0	< 50	0.072	19.5	< 0.10	21	< 0.10	< 1.0	0.43	8.97	0.061	507	1.46	< 2.0	5.01	537	< 0.0019	< 1.0	18.6	< 0.020	< 0.020
Brookswood #9 well	06/16/2021																													
Brookswood #9 well	09/16/2021		< 3.0	< 3.0	0.061	< 0.50	1.30	10.0	< 0.10	< 1.0	< 50	0.048	21.3	< 0.10	18	< 0.10	< 1.0	0.71	1.78	0.058	311	< 0.20	< 2.0	6.46	423	< 0.0019	1.3	16.2	< 0.020	< 0.020
Brookswood #9 well	01/12/2022		< 3.0	< 3.0	0.082	< 0.50	1.41	10.3	< 0.10	< 1.0	< 50	0.055	21.5	< 0.10	17	< 0.10	< 1.0	0.80	1.66	0.061	529	< 0.20	< 2.0	6.53	496	< 0.0019	1.4	17.9	< 0.020	< 0.020
Murrayville #1 well	06/16/2021																													
Murrayville #1 well	09/16/2021		5.3	630	0.12	< 0.50	1.38	13.3	< 0.10	< 1.0	< 50	< 0.010	12.6	< 0.10	1.6	< 0.10	1.0	0.32	2.38	0.14	731	0.24	< 2.0	5.39	95.5	< 0.0019	1.9	1.0	< 0.020	< 0.020
Murrayville #1 well	01/12/2022		< 3.0	768	0.14	< 0.50	1.37	14.1	< 0.10	< 1.0	< 50	< 0.010	11.6	< 0.10	1.6	< 0.10	1.2	0.43	1.94	0.15	964	0.26	< 2.0	5.36	96.7	< 0.0019	1.6	3.2	< 0.020	< 0.020
Murrayville #2 well	06/16/2021																													
Murrayville #2 well	09/16/2021		< 3.0	< 3.0	< 0.015	< 0.50	2.11	29.9	< 0.10	< 1.0	< 50	< 0.010	12.3	< 0.10	2.9	< 0.10	< 1.0	< 0.20	< 0.50	0.10	297	< 0.20	< 2.0	5.57	94.3	< 0.0019	< 1.0	< 1.0	< 0.020	< 0.020
Murrayville #2 well	01/12/2022		< 3.0	< 3.0	< 0.015	< 0.50	2.06	28.8	< 0.10	< 1.0	< 50	< 0.010	11.7	< 0.10	2.5	< 0.10	< 1.0	< 0.20	< 0.50	0.11	219	< 0.20	< 2.0	5.35	91.4	< 0.0019	< 1.0	< 1.0	< 0.020	< 0.020

Sampling Point	Collection Date	Nitrite (as N)	Phosphorus (total)	Potassium (total)	Selenium (total)	Silicon (total, as Si)	Silver (total)	Sodium (total)	Strontium (total)	Sulfur (total)	Sulphate	Sulphide (total, as S)	Thallium (total)	Tin (total)	Titanium (total)	Vanadium (total)	Zinc (total)	Zirconium (total)	1,3-Dichlorobenzene	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,3-Dichlorophenol	2,4 + 2,5-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	
		mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Acadia #1 well	09/16/2021	< 0.0050	0.30	2.73	< 0.10	12,700	< 0.020	14.9	63.8	< 3.0	6.1	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acadia #1 well	01/12/2022	< 0.0050	0.33	2.81	< 0.10	12,200	< 0.020	16.0	61.4	< 3.0	6.2	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	8.6	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acadia #2 well	09/16/2021	< 0.0050	0.27	2.86	< 0.10	13,000	< 0.020	14.8	66.1	< 3.0	6.5	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acadia #2 well	01/12/2022	< 0.0050	0.25	2.74	< 0.10	11,800	< 0.020	14.9	58.4	< 3.0	6.6	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #10 well	09/16/2021	0.0131	0.0074	1.05	0.12	10,800	< 0.020	6.25	192	11.4	40	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #10 well	11/15/2021																														
Aldergrove #10 well	11/22/2021																														
Aldergrove #10 well	12/07/2021																														
Aldergrove #10 well	01/10/2022																														
Aldergrove #10 well	01/12/2022	0.0099	0.0084	0.978	0.13	10,200	< 0.020	6.45	188	11.7	39	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #10 well	01/17/2022																														
Aldergrove #4 well	09/16/2021	0.0574	< 0.0030	4.83	0.22	10,000	< 0.020	8.31	207	7.8	23	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #4 well	11/15/2021																														
Aldergrove #4 well	11/22/2021																														
Aldergrove #4 well	12/07/2021																														
Aldergrove #4 well	01/10/2022																														
Aldergrove #4 well	01/12/2022	0.0483	< 0.0030	4.35	0.23	8,720	< 0.020	8.29	183	7.7	23	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #4 well	01/17/2022																														
Aldergrove #6 well	09/16/2021	0.0246	0.0041	5.22	< 0.10	7,580	< 0.020	17.7	215	14.3	51	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #6 well	11/15/2021																														
Aldergrove #6 well	11/22/2021																														
Aldergrove #6 well	12/07/2021																														
Aldergrove #6 well	01/10/2022																														
Aldergrove #6 well	01/12/2022	0.0548	< 0.0030	5.07	< 0.10	7,220	< 0.020	15.8	206	12.2	39	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #6 well	01/17/2022																														
Aldergrove #7 well	09/16/2021	0.137	0.0039	5.10	0.18	6,910	< 0.020	11.5	221	18.8	58	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #7 well	11/15/2021																														
Aldergrove #7 well	11/22/2021																														
Aldergrove #7 well	12/07/2021																														
Aldergrove #7 well	01/10/2022																														
Aldergrove #7 well	01/12/2022	0.153	0.0039	4.83	0.18	6,410	< 0.020	11.7	206	17.9	53	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #7 well	01/17/2022																														
Aldergrove #8 well	09/16/2021	< 0.0050	0.010	3.39	< 0.10	7,960	< 0.020	11.3	131	9.2	29	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #8 well	11/15/2021																														
Aldergrove #8 well	11/22/2021																														
Aldergrove #8 well	12/07/2021																														
Aldergrove #8 well	01/10/2022																														
Aldergrove #8 well	01/12/2022	< 0.0050	0.0071	3.43	< 0.10	7,500	< 0.020	11.5	131	9.3	29	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #8 well	01/17/2022																														
Aldergrove #9 well	09/16/2021	< 0.0050	0.0084	1.28	< 0.10	10,700	< 0.020	7.47	302	26.7	95	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Aldergrove #9 well	11/15/2021																														
Aldergrove #9 well	11/22/2021																														
Aldergrove #9 well	12/07/2021																														
Aldergrove #9 well	01/10/2022																														

Sampling Point	Collection Date	Nitrite (as N)	Phosphorus (total)	Potassium (total)	Selenium (total)	Silicon (total, as Si)	Silver (total)	Sodium (total)	Strontium (total)	Sulfur (total)	Sulphate	Sulphide (total, as S)	Thallium (total)	Tin (total)	Titanium (total)	Vanadium (total)	Zinc (total)	Zirconium (total)	1,3-Dichlorobenzene	2,3,4,5-Tetrachlorophenol	2,3,4,6-Tetrachlorophenol	2,3,4-Trichlorophenol	2,3,5,6-Tetrachlorophenol	2,3,5-Trichlorophenol	2,3,6-Trichlorophenol	2,3-Dichlorophenol	2,4 + 2,5-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol		
		mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	mg/L	ug/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		
Aldergrove #9 well	01/12/2022	0.0160	0.0084	1.27	< 0.10	10,100	< 0.020	7.81	289	29.5	87	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10		
Aldergrove #9 well	01/17/2022																															
Ft. Langley #2 well	01/05/2021																															
Ft. Langley #2 well	01/12/2021																															
Ft. Langley #2 well	01/19/2021																															
Ft. Langley #2 well	01/26/2021																															
Ft. Langley #2 well	02/02/2021																															
Ft. Langley #2 well	02/09/2021																															
Ft. Langley #2 well	02/16/2021																															
Ft. Langley #2 well	03/02/2021																															
Ft. Langley #2 well	06/16/2021																															
Ft. Langley #2 well	09/16/2021	< 0.0050	0.024	2.33	< 0.10	9,480	< 0.020	34.1	173	5.9	18	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Ft. Langley #2 well	01/12/2022	< 0.0050	0.021	2.06	< 0.10	8,550	< 0.020	30.2	138	5.3	15	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #10 well	06/16/2021																															
Brookwood #10 well	09/16/2021	< 0.0050	0.042	1.72	< 0.10	10,100	< 0.020	8.17	144	5.9	19	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #10 well	01/12/2022	< 0.0050	0.031	1.76	< 0.10	8,820	< 0.020	9.03	141	5.7	18	0.014	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #7 well	06/16/2021																															
Brookwood #7 well	09/16/2021	< 0.0050	0.043	1.58	< 0.10	8,600	< 0.020	17.0	141	9.9	33	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #7 well	01/19/2022	< 0.0050	0.023	1.50	< 0.10	8,210	< 0.020	17.1	138	10.3	35	0.0063	< 0.010	< 5.0	< 5.0	< 5.0	36.7	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #9 well	06/16/2021																															
Brookwood #9 well	09/16/2021	< 0.0050	0.072	2.57	< 0.10	11,900	< 0.020	14.9	114	12.5	44	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	10.3	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Brookwood #9 well	01/12/2022	< 0.0050	0.074	2.51	< 0.10	11,100	< 0.020	15.8	113	11.8	34	0.0063	< 0.010	< 5.0	< 5.0	< 5.0	8.4	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Murrayville #1 well	06/16/2021																															
Murrayville #1 well	09/16/2021	< 0.0050	0.22	2.16	< 0.10	15,800	< 0.020	14.0	61.3	< 3.0	2.0	0.030	< 0.010	< 5.0	36.6	< 5.0	< 5.0	0.14	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Murrayville #1 well	01/12/2022	< 0.0050	0.24	2.03	< 0.10	14,700	< 0.020	13.2	54.9	< 3.0	1.6	0.048	< 0.010	< 5.0	46.8	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Murrayville #2 well	06/16/2021																															
Murrayville #2 well	09/16/2021	< 0.0050	0.099	1.76	< 0.10	15,700	< 0.020	7.58	56.6	< 3.0	4.4	< 0.0018	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Murrayville #2 well	01/12/2022	< 0.0050	0.099	1.65	< 0.10	13,800	< 0.020	7.40	51.6	< 3.0	4.6	0.0044	< 0.010	< 5.0	< 5.0	< 5.0	< 5.0	< 0.10	< 0.50	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	

Sampling Point	Collection Date	2-Chlorophenol	2-Methylnaphthalene	3 and 4-Chlorophenol	3,4,5-Trichlorophenol	3,4-Dichlorophenol	3,5-Dichlorophenol	Acenaphthene	Acenaphthylene	Acridine	Anthracene	Benz(a)anthracene	Benzo(b)fluoranthene + Benzo(j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzo(a)pyrene	Bromochloromethane	Bromoform	Chloroethane	Chloroform	Chloromethane	Chrysene	Dibenz(a,h)anthracene	Dibromochloromethane	Dissolved Organic Carbon	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L
Acadia #1 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	1.0	< 0.020	< 0.050	< 0.050
Acadia #1 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.82	< 0.020	< 0.050	< 0.050
Acadia #2 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Acadia #2 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #10 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #10 well	11/15/2021																											
Aldergrove #10 well	11/22/2021																											
Aldergrove #10 well	12/07/2021																											
Aldergrove #10 well	01/10/2022																											
Aldergrove #10 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.54	< 0.020	< 0.050	< 0.050
Aldergrove #10 well	01/17/2022																											
Aldergrove #4 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #4 well	11/15/2021																											
Aldergrove #4 well	11/22/2021																											
Aldergrove #4 well	12/07/2021																											
Aldergrove #4 well	01/10/2022																											
Aldergrove #4 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #4 well	01/17/2022																											
Aldergrove #6 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #6 well	11/15/2021																											
Aldergrove #6 well	11/22/2021																											
Aldergrove #6 well	12/07/2021																											
Aldergrove #6 well	01/10/2022																											
Aldergrove #6 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	1.2	< 0.020	< 0.050	< 0.050
Aldergrove #6 well	01/17/2022																											
Aldergrove #7 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.52	< 0.020	< 0.050	< 0.050
Aldergrove #7 well	11/15/2021																											
Aldergrove #7 well	11/22/2021																											
Aldergrove #7 well	12/07/2021																											
Aldergrove #7 well	01/10/2022																											
Aldergrove #7 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050
Aldergrove #7 well	01/17/2022																											
Aldergrove #8 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.53	< 0.020	< 0.050	< 0.050
Aldergrove #8 well	11/15/2021																											
Aldergrove #8 well	11/22/2021																											
Aldergrove #8 well	12/07/2021																											
Aldergrove #8 well	01/10/2022																											
Aldergrove #8 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.51	< 0.020	< 0.050	< 0.050
Aldergrove #8 well	01/17/2022																											
Aldergrove #9 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	1.1	< 0.020	< 0.050	< 0.050
Aldergrove #9 well	11/15/2021																											
Aldergrove #9 well	11/22/2021																											
Aldergrove #9 well	12/07/2021																											
Aldergrove #9 well	01/10/2022																											

Sampling Point	Collection Date	2-Chlorophenol	2-Methylnaphthalene	3 and 4-Chlorophenol	3,4,5-Trichlorophenol	3,4-Dichlorophenol	3,5-Dichlorophenol	Acenaphthene	Acenaphthylene	Acridine	Anthracene	Benz(a)anthracene	Benzo(b)fluoranthene + Benzo(j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzo(a)pyrene	Bromochloromethane	Bromoform	Chloroethane	Chloroform	Chloromethane	Chrysene	Dibenz(a,h)anthracene	Dibromochloromethane	Dissolved Organic Carbon	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	
Aldergrove #9 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	1.4	< 0.020	< 0.050	< 0.050	
Aldergrove #9 well	01/17/2022																												
Ft. Langley #2 well	01/05/2021																												
Ft. Langley #2 well	01/12/2021																												
Ft. Langley #2 well	01/19/2021																												
Ft. Langley #2 well	01/26/2021																												
Ft. Langley #2 well	02/02/2021																												
Ft. Langley #2 well	02/09/2021																												
Ft. Langley #2 well	02/16/2021																												
Ft. Langley #2 well	03/02/2021																												
Ft. Langley #2 well	06/16/2021																												
Ft. Langley #2 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Ft. Langley #2 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.68	< 0.020	< 0.050	< 0.050	
Brookswood #10 well	06/16/2021																												
Brookswood #10 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Brookswood #10 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.86	< 0.020	< 0.050	< 0.050	
Brookswood #7 well	06/16/2021																												
Brookswood #7 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Brookswood #7 well	01/19/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.95	< 0.020	< 0.050	< 0.050	
Brookswood #9 well	06/16/2021																												
Brookswood #9 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	0.64	< 0.020	< 0.050	< 0.050	
Brookswood #9 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Murrayville #1 well	06/16/2021																												
Murrayville #1 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Murrayville #1 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Murrayville #2 well	06/16/2021																												
Murrayville #2 well	09/16/2021	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	
Murrayville #2 well	01/12/2022	< 0.050	< 0.10	< 0.075	< 0.10	< 0.10	< 0.10	< 0.050	< 0.050	< 0.050	< 0.010	< 0.010	< 0.030	< 0.050	< 0.050	< 0.0050	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.020	< 0.0030	< 1.0	< 0.50	< 0.020	< 0.050	< 0.050	

Sampling Point	Collection Date	m- + p- Xylene	MCPA	Methyl bromide	Methyl tert-butyl ether / MTBE	Naphthalene	Nitrotriacetic acid / NTA	o-Xylene	Pentachlorophenol / PCP	Phenanthrene	Pyrene	Quinoline	Total HMW-PAH	Total LMW-PAH	Total Organic Carbon / TOC	Total PAH	Trichlorofluoromethane (phenolphthalein, as CaCO3)	Alkalinity (total, as CaCO3)	Bicarbonate (as HCO3)	Carbonate (as CO3)	Colour	Conductivity	Hardness (total, as CaCO3)	Hydroxide (as OH)	pH	Temperature	Total dissolved solids / TDS	Turbidity
		ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	mg/L	mg/L	mg/L	CU	uS/cm	mg/L	mg/L	degrees C	mg/L	NTU	
Acadia #1 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	95	120	< 1.0	< 5.0		62.9	< 1.0		150	0.11
Acadia #1 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.71	< 0.10	< 4.0	< 1.0	94	110	< 1.0	< 5.0		64.4	< 1.0	8.01	180	0.35
Acadia #2 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	93	110	< 1.0	< 5.0		66.7	< 1.0		130	0.63
Acadia #2 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	91	110	< 1.0	9.1		64.6	< 1.0	8.03	130	0.21
Aldergrove #10 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	40	49	< 1.0	< 5.0		115	< 1.0		230	< 0.10
Aldergrove #10 well	11/15/2021																< 1.0	66	81	< 1.0				< 1.0				
Aldergrove #10 well	11/22/2021																< 1.0	44	53	< 1.0				< 1.0	6.79			
Aldergrove #10 well	12/07/2021																< 1.0	41	49	< 1.0				< 1.0	7.17			
Aldergrove #10 well	01/10/2022																< 1.0	39	48	< 1.0				< 1.0				
Aldergrove #10 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	39	48	< 1.0	< 5.0		116	< 1.0	7.06	220	0.12
Aldergrove #10 well	01/17/2022																< 1.0	39	48	< 1.0				< 1.0	7.19			
Aldergrove #4 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.75	< 0.10	< 4.0	< 1.0	170	210	< 1.0	< 5.0		197	< 1.0		260	0.81
Aldergrove #4 well	11/15/2021																< 1.0	170	210	< 1.0				< 1.0				
Aldergrove #4 well	11/22/2021																< 1.0	170	210	< 1.0				< 1.0	7.99			
Aldergrove #4 well	12/07/2021																< 1.0	170	200	< 1.0				< 1.0	8.04			
Aldergrove #4 well	01/10/2022																< 1.0	160	200	< 1.0				< 1.0				
Aldergrove #4 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.51	< 0.10	< 4.0	< 1.0	160	200	< 1.0	< 5.0		176	< 1.0	8.11	230	0.67
Aldergrove #4 well	01/17/2022																< 1.0	160	200	< 1.0				< 1.0	8.16			
Aldergrove #6 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.63	< 0.10	< 4.0	< 1.0	170	200	< 1.0	< 5.0		190	< 1.0		280	0.33
Aldergrove #6 well	11/15/2021																< 1.0	160	200	< 1.0				< 1.0				
Aldergrove #6 well	11/22/2021																< 1.0	160	200	< 1.0				< 1.0	7.91			
Aldergrove #6 well	12/07/2021																< 1.0	160	190	< 1.0				< 1.0	8.14			
Aldergrove #6 well	01/10/2022																< 1.0	160	200	< 1.0				< 1.0				
Aldergrove #6 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.96	< 0.10	< 4.0	< 1.0	160	200	< 1.0	< 5.0		185	< 1.0	8.15	240	0.34
Aldergrove #6 well	01/17/2022																< 1.0	160	200	< 1.0				< 1.0	8.22			
Aldergrove #7 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.78	< 0.10	< 4.0	< 1.0	160	190	< 1.0	< 5.0		200	< 1.0		320	0.12
Aldergrove #7 well	11/15/2021																< 1.0	160	190	< 1.0				< 1.0				
Aldergrove #7 well	11/22/2021																< 1.0	160	190	< 1.0				< 1.0	8.04			
Aldergrove #7 well	12/07/2021																< 1.0	150	180	< 1.0				< 1.0	8.21			
Aldergrove #7 well	01/10/2022																< 1.0	150	180	< 1.0				< 1.0				
Aldergrove #7 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	1.7	< 0.10	< 4.0	< 1.0	160	190	< 1.0	8.1		195	< 1.0	8.21	270	0.19
Aldergrove #7 well	01/17/2022																< 1.0	150	180	< 1.0				< 1.0	8.23			
Aldergrove #8 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.55	< 0.10	< 4.0	< 1.0	130	150	< 1.0	< 5.0		132	< 1.0		170	0.14
Aldergrove #8 well	11/15/2021																< 1.0	140	170	< 1.0				< 1.0				
Aldergrove #8 well	11/22/2021																< 1.0	140	170	< 1.0				< 1.0	7.97			
Aldergrove #8 well	12/07/2021																< 1.0	140	170	< 1.0				< 1.0	8.19			
Aldergrove #8 well	01/10/2022																< 1.0	140	170	< 1.0				< 1.0				
Aldergrove #8 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.62	< 0.10	< 4.0	< 1.0	130	160	< 1.0	15.6		142	< 1.0	8.16	200	0.40
Aldergrove #8 well	01/17/2022																< 1.0	140	170	< 1.0				< 1.0	8.21			
Aldergrove #9 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.96	< 0.10	< 4.0	< 1.0	73	90	< 1.0	< 5.0		167	< 1.0		250	< 0.10
Aldergrove #9 well	11/15/2021																< 1.0	77	93	< 1.0				< 1.0				
Aldergrove #9 well	11/22/2021																< 1.0	79	96	< 1.0				< 1.0	6.82			
Aldergrove #9 well	12/07/2021																< 1.0	69	85	< 1.0				< 1.0	6.92			
Aldergrove #9 well	01/10/2022																< 1.0	72	87	< 1.0				< 1.0				

Sampling Point	Collection Date	m- + p- Xylene	MCPA	Methyl bromide	Methyl tert-butyl ether / MTBE	Naphthalene	Nitrotriacetic acid / NTA	o-Xylene	Pentachlorophenol / PCP	Phenanthrene	Pyrene	Quinoline	Total HMW-PAH	Total LMW-PAH	Total Organic Carbon / TOC	Total PAH	Trichlorofluoromethane	(p)henolphthalein, as CaCO3	Alkalinity (total, as CaCO3)	Bicarbonate (as HCO3)	Carbonate (as CO3)	Colour	Conductivity	Hardness (total, as CaCO3)	Hydroxide (as OH)	pH	Temperature	Total dissolved solids / TDS	Turbidity
		ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	CU	uS/cm	mg/L	mg/L		degrees C	mg/L	NTU
Aldergrove #9 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	1.1	< 0.10	< 4.0	< 1.0	70	86	< 1.0	10.5	166	< 1.0	6.87		240	0.14	
Aldergrove #9 well	01/17/2022																< 1.0	72	88	< 1.0				< 1.0	7.11				
Ft. Langley #2 well	01/05/2021																		57.7						6.30	13.0			
Ft. Langley #2 well	01/12/2021																		59.1						6.78	14.4			
Ft. Langley #2 well	01/19/2021																		54.1						6.94	13.1			
Ft. Langley #2 well	01/26/2021																		53.7						6.35	12.8			
Ft. Langley #2 well	02/02/2021																< 1.0	51	63	< 1.0		347		< 1.0	6.4	13.1			
Ft. Langley #2 well	02/09/2021																						338		6.79	11.7			
Ft. Langley #2 well	02/16/2021																						310		6.37	10.5			
Ft. Langley #2 well	03/02/2021																< 1.0	75	91	< 1.0		328		< 1.0	6.67	13.5			
Ft. Langley #2 well	06/16/2021																						353		6.84				
Ft. Langley #2 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	68	83	< 1.0	< 5.0		89.8	< 1.0	6.82	210	0.13	
Ft. Langley #2 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	1.2	< 0.10	< 4.0	< 1.0	52	64	< 1.0	< 5.0		74.1	< 1.0	6.99	190	0.10	
Brookwood #10 well	06/16/2021																						283		7.85				
Brookwood #10 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	110	140	< 1.0	< 5.0		119	< 1.0	7.97	170	0.52	
Brookwood #10 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	110	140	< 1.0	< 5.0		117	< 1.0	7.95	170	0.55	
Brookwood #7 well	06/16/2021																						235		7.15				
Brookwood #7 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	67	81	< 1.0	< 5.0		68.3	< 1.0	6.85	130	1.6	
Brookwood #7 well	01/19/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.52	< 0.10	< 4.0	< 1.0	52	63	< 1.0	< 5.0		69.4	< 1.0	7.22	150	2.0	
Brookwood #9 well	06/16/2021																						246		7.16				
Brookwood #9 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	65	79	< 1.0	< 5.0		79.9	< 1.0	7.00	160	2.3	
Brookwood #9 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	0.95	< 0.10	< 4.0	< 1.0	58	71	< 1.0	15.5		80.5	< 1.0	7.26	170	1.8	
Murrayville #1 well	06/16/2021																						158.0		8.64				
Murrayville #1 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	88	110	< 1.0	5.4		53.5	< 1.0	7.47	98	2.9	
Murrayville #1 well	01/12/2022	1.9	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	75	91	< 1.0	< 5.0		51.1	< 1.0	7.93	110	0.68	
Murrayville #2 well	06/16/2021																						137.4		7.98				
Murrayville #2 well	09/16/2021	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10		< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	64	78	< 1.0	< 5.0		53.7	< 1.0	7.95	100	0.40	
Murrayville #2 well	01/12/2022	< 0.40	< 0.020	< 1.0	< 4.0	< 0.10	< 0.050	< 0.40	< 0.10	< 0.050	< 0.020	< 0.020	< 0.050	< 0.10	< 0.50	< 0.10	< 4.0	< 1.0	63	77	< 1.0	< 5.0		51.1	< 1.0	7.80	96	0.60	

Sampling Point	Collection Date	Uranium (total)	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,4-Dichlorobenzene	Benzene	Carbon tetrachloride	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropene	Dichloromethane	Ethylbenzene	Monochlorobenzene	Styrene	Tetrachloroethylene	Toluene	Total Xylenes	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropene	Trichloroethylene	Vinyl chloride
		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aldergrove #9 well	01/12/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Aldergrove #9 well	01/17/2022																								
Ft. Langley #2 well	01/05/2021																								
Ft. Langley #2 well	01/12/2021																								
Ft. Langley #2 well	01/19/2021																								
Ft. Langley #2 well	01/26/2021																								
Ft. Langley #2 well	02/02/2021																								
Ft. Langley #2 well	02/09/2021																								
Ft. Langley #2 well	02/16/2021																								
Ft. Langley #2 well	03/02/2021																								
Ft. Langley #2 well	06/16/2021																								
Ft. Langley #2 well	09/16/2021	< 0.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Ft. Langley #2 well	01/12/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #10 well	06/16/2021																								
Brookwood #10 well	09/16/2021	0.27	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #10 well	01/12/2022	0.25		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #7 well	06/16/2021																								
Brookwood #7 well	09/16/2021	< 0.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #7 well	01/19/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #9 well	06/16/2021																								
Brookwood #9 well	09/16/2021	< 0.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Brookwood #9 well	01/12/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Murrayville #1 well	06/16/2021																								
Murrayville #1 well	09/16/2021	< 0.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Murrayville #1 well	01/12/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	1.9	< 1.0	< 1.0	< 0.50	< 0.50
Murrayville #2 well	06/16/2021																								
Murrayville #2 well	09/16/2021	< 0.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50
Murrayville #2 well	01/12/2022	< 0.10		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.40	< 0.50	< 1.0	< 1.0	< 2.0	< 0.40	< 0.50	< 0.50	< 0.50	< 0.40	< 0.40	< 1.0	< 1.0	< 0.50	< 0.50

Table B.4.1 Quarterly Water Distribution Metal Samples by GVWD Results

Analysis	Units	GCDWQ Limit	TOL-463	TOL-467	TOL-469	TOL-691	TOL-694	TOL-463	TOL-467	TOL-469	TOL-691	TOL-694
			19951 - 99A Ave.	7025 - 208 Street	5679 - 211 Street	26829 - 60 Avenue	23752 - 52 Avenue	19951 - 99A Ave.	7025 - 208 Street	5679 - 211 Street	26829 - 60 Avenue	23752 - 52 Avenue
			20/04/2021 11:44	20/04/2021 12:40	20/04/2021 9:05	20/04/2021 11:05	20/04/2021 10:15	09/11/2021 11:35	09/11/2021 12:02	09/11/2021 8:50	09/11/2021 11:03	09/11/2021 10:14
			GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
Aluminum Total	µg/L	200	29	79	83	80	86	83	86	99	188	95
Antimony Total	µg/L	6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic Total	µg/L	10 (ALARA)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Barium Total	µg/L	2000	7.4	2.2	2.0	2.3	2.1	1.9	2.0	1.9	2.9	2.2
Boron Total	µg/L	5000	22	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cadmium Total	µg/L	7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Calcium Total	µg/L	none	13400	881	1020	1020	975	1240	824	1180	1350	1010
Chromium Total	µg/L	50	0.13	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Cobalt Total	µg/L	none	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper Total	µg/L	≤2000	11.4	8.2	2.8	2.2	9.5	6.1	6.4	2.3	2.1	6.0
Iron Total	µg/L	≤ 300	29	62	65	68	65	37	46	37	137	39
Lead Total	µg/L	5 (ALARA)	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Magnesium Total	µg/L	none	5250	100	92	97	95	301	95	82	134	92
Manganese Total	µg/L	120	2.2	5.2	6.9	6.6	6.9	1.9	1.9	1.5	35.2	1.8
Mercury Total	µg/L	1.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum Total	µg/L	none	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel Total	µg/L	none	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Potassium Total	µg/L	none	1400	109	112	110	115	174	109	114	135	117
Selenium Total	µg/L	50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver Total	µg/L	none	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sodium Total	µg/L	≤ 200,000	24100	6080	4890	4790	5070	11100	10700	10500	10600	10500
Zinc Total	µg/L	≤ 5000	3.4	6.8	<3.0	<3.0	<3.0	<3.0	3.8	<3.0	<3.0	<3.0

Table B.4.2 Distribution System Quarterly Results by GVWD
Township of Langley Water Distribution System Disinfectant By-products

Sample	Date Sampled	THM (ppb)						HAA (ppb)						
		Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average (Guideline Limit 100 ppb)	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average (Guideline Limit 80 ppb)
TOL-463	23-Feb-21	<1	3	2	<1	7	23	1.5	<1	<1	<2	1	<5	26
TOL-463	1-Jun-21	<1	<1	<1	20	22	23	<0.5	14	<1	<2	17	33	29
TOL-463	24-Aug-21	<1	<1	<1	18	20	18	<0.5	10	<1	<2	13	23	25
TOL-463	23-Nov-21	<1	2	2	<1	6	14	1.1	<1	<1	<2	<0.5	<2.5	16
TOL-465	23-Feb-21	<1	<1	<1	30	31	33	<0.5	8	<1	<2	18	29	39
TOL-465	1-Jun-21	<1	<1	<1	29	30	32	<0.5	9	<1	<2	28	40	41
TOL-465	24-Aug-21	4	1	3	27	35	32	<0.5	4	<1	<2	13	17	30
TOL-465	23-Nov-21	<1	<1	<1	41	43	35	<0.5	8	<1	<2	29	37	31
TOL-469	23-Feb-21	<1	<1	<1	31	32	36	<0.5	8	<1	<2	14	25	37
TOL-469	1-Jun-21	<1	<1	<1	28	29	34	<0.5	14	<1	<2	27	42	40
TOL-469	24-Aug-21	1	<1	<1	38	41	36	<0.5	8	<1	<2	25	34	35
TOL-469	23-Nov-21	<1	<1	<1	40	41	36	<0.5	10	<1	<2	26	36	34
TOL-691	23-Feb-21	<1	<1	<1	33	34	36	<0.5	6	<1	<2	20	28	49
TOL-691	1-Jun-21	<1	<1	<1	30	32	35	<0.5	7	<1	<2	41	50	51
TOL-691	24-Aug-21	1	<1	<1	41	43	39	<0.5	4	<1	<2	27	30	41
TOL-691	23-Nov-21	<1	<1	<1	50	51	40	<0.5	2	<1	<2	43	46	38
TOL-694	23-Feb-21	<1	<1	<1	32	33	41	<0.5	11	<1	2	22	37	59
TOL-694	01-Jun-21	<1	<1	<1	32	34	40	<0.5	16	<1	<2	35	53	59
TOL-694	24-Aug-21	<1	<1	<1	34	36	37	<0.5	9	<1	<2	22	31	47
TOL-694	23-Nov-21	<1	<1	<1	46	47	38	<0.5	13	<1	<2	42	55	44

Township of Langley Water Distribution System Disinfectant By-products – Vinyl Chloride

Analysis	Units	TOL-463	TOL-465	TOL-468	TOL-691	TOL-694	TOL-463	TOL-465	TOL-468	TOL-691	TOL-694
		19951 - 99A Ave.	6350 - 197 Street	21584 - 78 Avenue	26829 - 60 Avenue	23752 - 52 Avenue	19951 - 99A Ave.	6350 - 197 Street	21584 - 78 Avenue	26829 - 60 Avenue	23752 - 52 Avenue
		07/12/2021 10:55	07/12/2021 10:35	07/12/2021 9:55	07/12/2021 9:15	07/12/2021 8:25	18/05/2021 11:32	18/05/2021 12:40	18/05/2021 12:05	18/05/2021 11:04	18/05/2021 10:05
		GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB	GRAB
Vinyl Chloride	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1