



Town of Cornwall

so much to offer...

Water & Sewer Utility

WATER ANALYSIS REPORT 2024

Drinking water quality in the Town of Cornwall is maintained according to the standards set out in the *Guidelines for Canadian Drinking Water Quality*. Throughout the year, our Utility staff sample the Town's water distribution and wastewater treatment plant to ensure residents continue to receive the highest quality of water and wastewater treatment.

Bacteria Testing Results

In the Town's commitment to service and keeping a sustainable environment, our sampling procedures exceed provincial standards.

Samples from Distribution System						
Month	# of Samples	Positive TC Test (TC ≤ 10)	# of Non-Compliant (TC > 10)	Ecoli	Positive BG Tests (BG ≤ 200)	# of Non-Compliant (BG > 200)
January	11	0	0	0	0	0
February	12	0	0	0	0	0
March	12	0	0	0	0	0
April	18	0	0	0	0	0
May	12	0	0	0	0	0
June	12	1	0	0	0	0
July	12	0	0	0	0	0
August	12	0	0	0	0	0
September	12	0	0	0	0	0
October	25	1	0	0	0	0
November	12	0	0	0	0	0
December	14	0	0	0	0	0
Total	164	2	2	0	0	0

*All retests reported negative.

Drinking water within the Town is chlorinated to have a minimum Free Chlorine Residual of at least 0.2 mg/L or higher at all points in the system at all times. This level of chlorination is an

industry standard for drinking water disinfection and is recommended by the Guidelines for Canadian Drinking Water Quality.

In October 2024, a precautionary boil order was issued for area around Kingston Road when a contractor conducting doing work for a new connection broke the watermain and as a precaution Provincial Department of Environment has requested a boil order until water samples have been obtained. Notification of the boil order was hand delivered to each residence and notice was posted on social media until boil order was lifted.

In accordance with the *Drinking Water and Wastewater Facility Operating Regulations*, a water sample is collected from each source of supply (well) on a monthly basis and analyzed for the presence of coliform bacteria and E.coli. River Point Water Distribution system is classified as a small water system based on number of connections and is sampled on a quarterly basis

Following collection, all water samples are sent to the Provincial Department of Environment Analytical Laboratory in Charlottetown. Each sample is tested for Total Coliforms DC and Escherichia Coli DC (E. Coli). In addition to the bacteria tests which are performed at the Provincial Lab, the Free Chlorine Residual is analyzed and recorded by Utility Staff at the time of sample collection, as required by section 11(1)(e) of the Drinking Water and Wastewater Facility Operating Regulations.

Untreated Water (Samples from Wells)											
Month	Meadowbank	Northgate	East Wiltshire	River Point	Main	# of Samples	Positive TC Test (TC ≤ 10)	# of Non-Compliant (TC > 10)	Ecoli	Positive BG Tests (BG ≤ 200)	# of Non-Compliant (BG > 200)
January	3	1	2	1	4	11	2	0	0	0	0
February	3	1	2	1	4	11	2	1	0	0	0
March	3	1	2	0	4	10	4	0	0	0	0
April	3	1	2	1	4	11	3	1	0	1	0
May	3	1	2	0	4	10	3	1	0	0	0
June	3	1	2	0	4	10	1	0	0	0	0
July	3	1	6	1	6	17	3	5	0	0	0
August	3	1	2	0	6	12	7	0	0	1	0
September	3	1	2	0	4	10	2	2	0	0	0
October	6	2	4	1	8	21	4	4	0	0	0
November	3	1	2	0	2	8	2	0	0	0	0
December	3	1	2	0	3	9	0	0	0	0	0
Total	39	13	30	5	53	140	33	14	0	2	0

The Town of Cornwall uses primary and secondary disinfection processes in maintaining safe drinking water systems.

- **Primary disinfection** is a contiguous part of the treatment process and is intended to kill or inactivate (i.e.: render non-infectious) pathogenic microorganisms that may be present in the source water before secondary disinfection takes place.

- **Secondary disinfection** (distribution system disinfection) is intended to protect the distribution system from re-contamination. It is the maintenance of a residual of disinfectant throughout the distribution system to prevent re-growth of microorganisms in the system as well as to kill or inactivate microorganisms that may enter the distribution system. Chlorine is the most commonly used water disinfectant for secondary (residual) disinfection.

At Meadowbank, Northgate, East Wiltshire and Main Street well locations chlorine is added to the water distribution system and with sufficient contact time to inactivate any microbiological contaminants from the ground water sources. At River Point the Town uses a UV disinfection system along with chlorine disinfection together to provide safe drinking water.

In 2024, the Town of Cornwall pumped an average of 2,400 cubic meters of water per day. During the summer months the utility pumped an average of 2,500 cubic meters of water per day.

Pesticide Monitoring Program Results

Samples were collected from wells in December 2023 as part of the provincial annual pesticide monitoring program. Samples are collected from source wells around Cornwall and analyzed for up to 54 selected pesticides. More information is available on the province's open data portal (<https://data.princeedwardisland.ca/>) project OD0004 Pesticide Analysis. Sample results are included in Appendix A.

PFAS

On May 30, 2023, the Department of Environment worked with town utility operators to collect water samples from the municipal drinking water system and analyzed the samples for PFAS compounds using UESPA Method 533 and 537.1. The results from the samples collected meet the current guidelines (perfluorooctanoic acid – PFOA < 0.2 ug/L and Perfluorooctane-sulfonic acid – PFOS < 0.6 ug/L) and proposed interim guidelines (sum of PFAS compounds < 30 ng/L) published by Health Canada.

Background

- Per- and poly-fluoroalkyl substances (PFAS) comprise over 4,700 human-made substances used as surfactants, lubricants, and repellents (for dirt, water, and grease). In the past, these chemicals were found in certain firefighting foams, textiles (including carpets, furniture, and clothing), cosmetics, and food packaging materials.
- The Federal-Provincial-Territorial Committee on Drinking Water (CDW) establishes the Guidelines for Canadian Drinking Water Quality. The department uses these guidelines as criteria that municipal water utilities must meet. The current guidelines for drinking

water for two PFAS compounds, perfluorooctanoic acid (PFOA) and Perfluorooctane-sulfonic acid (PFOS) are 0.2 ug/L and 0.6 ug/L, respectively. Health Canada (HC) has also established screening values for 9 other PFAS compounds.

- In Feb 2023, Health Canada (HC) staff consulted on a draft objective for PFAS in Canadian drinking water. The objective moves from an elemental limit to a class limit. All PFAS compounds from an approved method will be added together and must be below a proposed interim guideline of 30 ng/L. The consultation closed in April 2023, and HC staff are currently reviewing and preparing responses to the comments.
- The proposed interim guideline of 30 ng/L is not a health guideline. It is based on the level that the current treatment technologies can achieve.
- Link to Health Canada

<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/water-talk-per-polyfluoroalkyl-substances-drinking-water.html>

See Appendix B for sample results from PFAS sampling.

Chemistry Analysis

The Drinking Water and Wastewater Facility Operating Regulations require all active wells to be subject to chemical analysis. A general chemical analysis of each well must be performed annually, and all water chemistry analysis for Town of Cornwall is performed at the Provincial Analytical Laboratory. The Guidelines for Canadian Drinking Water Quality set a Maximum Allowable Concentration (MAC) for various chemical contents of drinking water. A detailed chemical analysis is performed every 3 years and is performed by a private analytical laboratory with a copy of the results provided to the province for review.

The Town of Cornwall drew samples from each active well on June 21, 2024, for detailed chemical analysis.

The results showed that all active wells were within the Guidelines for Canadian Drinking Water Quality.

See Appendix C for sample results from detailed water chemistry.

WASTEWATER EFFLUENT

In accordance with regulations, the Town of Cornwall's two lagoons are sampled quarterly, and the results are shown in the table below.

WASTEWATER TREATMENT REPORT						
North River Lagoon				Cornwall Lagoon		
Month	Suspended Solids (MG/L)	CBOD (mg/L)	Average Faecal Coliform (MPN/100ml)	Suspended Solids (MG/L)	cBOD (mg/L)	Average Faecal Coliform (MPN/100ml)
January	n/a	n/a	n/a	n/a	n/a	n/a
February	n/a	n/a	n/a	n/a	n/a	n/a
March	6	<10	13	17	18	350
April	n/a	n/a	n/a	n/a	n/a	n/a
May	n/a	n/a	n/a	n/a	n/a	n/a
June	5	<10	<2	7	<10	<2
July	n/a	n/a	n/a	n/a	n/a	n/a
August	n/a	n/a	n/a	n/a	n/a	n/a
September	25	<10	2	18	<10	<2
October	n/a	n/a	n/a	n/a	n/a	n/a
November	n/a	n/a	n/a	n/a	n/a	n/a
December	8	<10	2	17	<10	4

The Town of Cornwall is required not to exceed 25 mg/L of Total Suspended Solids (TSS), 25mg/L of Carbonaceous Biochemical Oxygen Demand (cBOD), and Faecal Coliform a mean of 200 MPN/100ml and a maximum of 400 MPN/100ml.

UTILITY PROJECTS

The Town of Cornwall Water and Sewer Utility in 2024, has carried out a variety of projects to expand and maintain the water and sewer system owned and operated by the Town.

Hydrant Maintenance

The Utility performed biannual (spring and fall) maintenance on the fire hydrants located around the Town. This process requires each hydrant to be inspected and operated to ensure that it is in good working order. The Utility also completed flow testing on multiple hydrants around the Town. The hydrants were repainted to National Fire Protection Association (NFPA) standards and colour codes for fire flows.

Lift Stations

The Utility conducted regular inspections of all lift stations. This process includes cleaning the chambers and lifting the individual sewer pumps for cleaning and inspections. As a result of the inspections, several pumps were taken out of service for a short period of time while they were sent away for service.

New Water Tower

The Utility has begun construction of a new water tower for the Town of Cornwall that is expected to be operational in early 2025. The new water tower will provide additional water storage for the town as well as improve water pressure in higher elevations.

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Appendix A

Pesticide Monitoring Program Results

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PESTICIDE ANALYSIS FOR DRINKING WATER REPORT

2024 Pesticide Sampling Results

Site #: 244

Site Name: Cornwall East Wiltshire Municipal

Results:

Site #	Site Name	Date Sampled	Parameter	Concentration	Units	Safe Drinking Water Limit	Safe Drinking Water Limit Source
244	Cornwall East Wiltshire Municipal	2023-12-12	Thiamethoxam	0.02	ng/ml	30	Human Health Reference Values for Pesticides in Drinking Water Sources
244	Cornwall East Wiltshire Municipal	2023-12-12	Clothianidin	0.04	ng/ml	300	Human Health Reference Values for Pesticides in Drinking Water Sources
244	Cornwall East Wiltshire Municipal	2023-12-12	Boscalid	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Chlorpyrifos	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Cypermethrin	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Diazinon	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Endosulfan I	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Endosulfan II	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Fenamidone	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Fludioxonil	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Fluopyram	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Mandipropamid	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Metolachlor	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Oxathiapiprolin	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Penflufen	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Permethrin	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Phorate	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Propyzamide	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Pyraclostrobin	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Terbacil	< 0.01	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	4-hydroxy chlorothalonil	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Azoxystrobin	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Captan	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Carbofuran	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Chlorantraniliprole	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Chlorothalonil	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Difenoconazole	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Fluazifop-P-Butyl	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Hexazinone	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Imidacloprid	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Linuron	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Propiconazole	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Rimsulfuron	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Thiabendazole	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Thifensulfuron-Methyl	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Thiophanate-methyl	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Trifluralin	< 0.02	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Atrazine	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Azinphos-Methyl	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Bentazone	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Metaxyl	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Metobromuron	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Metribuzin	< 0.03	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Dimethoate	< 0.04	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Tribenuron-Methyl	< 0.04	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Phosmet	< 0.1	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Fluazinam	< 0.5	ng/ml		
244	Cornwall East Wiltshire Municipal	2023-12-12	Methamidophos	< 0.5	ng/ml		

PESTICIDE ANALYSIS FOR DRINKING WATER REPORT

2024 Pesticide Sampling Results

Site #: 245

Site Name: Cornwall Northgate Municipal

Results:

Site #	Site Name	Date Sampled	Parameter	Concentration	Units	Safe Drinking Water Limit	Safe Drinking Water Limit Source
245	Cornwall Northgate Municipal	2023-12-12	Clothianidin	0.03	ng/ml	300	Human Health Reference Values for Pesticides in Drinking Water Sources
245	Cornwall Northgate Municipal	2023-12-12	Boscalid	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Chlorpyrifos	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Cypermethrin	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Diazinon	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Endosulfan I	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Endosulfan II	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Fenamidone	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Fludioxonil	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Fluopyram	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Mandipropamid	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Metolachlor	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Oxathiapiprotin	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Penfufen	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Permethrin	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Phorate	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Propyzamide	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Pyraclostrobin	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Terbacil	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Thiamethoxam	< 0.01	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	4-hydroxy chlorothalonil	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Azoxystrobin	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Captan	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Carbofuran	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Chlorantraniliprole	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Chlorothalonil	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Difenoconazole	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Fluazifop-P-Butyl	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Hexazinone	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Imidacloprid	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Linuron	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Propiconazole	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Rimsulfuron	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Thiabendazole	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Thifensulfuron-Methyl	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Thiophanate-methyl	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Trifluralin	< 0.02	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Atrazine	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Azinphos-Methyl	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Bentazone	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Metolaxyl	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Metobromuron	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Metribuzin	< 0.03	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Dimethoate	< 0.04	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Tribenuron-Methyl	< 0.04	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Phosmet	< 0.1	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Fluazinam	< 0.5	ng/ml		
245	Cornwall Northgate Municipal	2023-12-12	Methamidophos	< 0.5	ng/ml		

PESTICIDE ANALYSIS FOR DRINKING WATER REPORT

2024 Pesticide Sampling Results

Site #: 246

Site Name: Cornwall Meadowbank Municipal

Results:

Site#	Site Name	Date Sampled	Parameter	Concentration	Units	Safe Drinking Water Limit	Safe Drinking Water Limit Source
246	Cornwall Meadowbank Municipal	2023-12-12	Boscalid	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Chlorpyrifos	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Clothianidin	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Cypermethrin	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Diazinon	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Endosulfan I	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Endosulfan II	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Fenamidone	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Fludioxonil	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Fluopyram	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Mandipropamid	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Metolachlor	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Oxathiapiprotin	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Penflufen	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Permethrin	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Phorate	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Propyzamide	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Pyraclostrobin	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Terbacil	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Thiamethoxam	<0.01	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	4-hydroxy chlorothalonil	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Azoxystrobin	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Captan	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Carbofuran	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Chlorantraniliprole	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Chlorothalonil	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Difenoconazole	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Fluazifop-P-Butyl	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Hexazinone	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Imidacloprid	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Linuron	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Propiconazole	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Rimsulfuron	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Thiabendazole	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Thifensulfuron-Methyl	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Thiophanate-methyl	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Trifluralin	<0.02	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Atrazine	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Azinphos-Methyl	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Bentazone	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Metaxyl	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Metobromuron	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Metribuzin	<0.03	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Dimethoate	<0.04	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Tribenuron-Methyl	<0.04	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Phosmet	<0.1	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Fluazinam	<0.5	ng/ml		
246	Cornwall Meadowbank Municipal	2023-12-12	Methamidophos	<0.5	ng/ml		

PESTICIDE ANALYSIS FOR DRINKING WATER REPORT

2024 Pesticide Sampling Results

Site #: 250

Site Name: Cornwall Main Street Municipal

Results:

Site #	Site Name	Date Sampled	Parameter	Concentration	Units	Safe Drinking Water Limit	Safe Drinking Water Limit Source
250	Cornwall Main Street Municipal	2023-12-12	Clothianidin	0.02	ng/ml	300	Human Health Reference Values for Pesticides in Drinking Water Sources
250	Cornwall Main Street Municipal	2023-12-12	Boscalid	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Chlorpyrifos	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Cypermethrin	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Diazinon	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Endosulfan I	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Endosulfan II	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Fenamidone	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Fludioxonil	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Fluopyram	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Mandipropamid	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Metolachlor	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Oxathiapiprolin	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Penflufen	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Permethrin	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Phorate	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Propyzamide	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Pyraclostrobin	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Terbacil	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Thiamethoxam	< 0.01	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	4-hydroxy chlorothalonil	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Azoxystrobin	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Captan	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Carbofuran	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Chlorantraniliprole	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Chlorothalonil	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Difenoconazole	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Fluazifop-P-Butyl	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Hexazinone	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Imidacloprid	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Linuron	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Propiconazole	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Rimsulfuron	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Thiabendazole	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Thifensulfuron-Methyl	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Thiophanate-methyl	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Trifluralin	< 0.02	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Atrazine	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Azinphos-Methyl	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Bentazone	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Metaxyl	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Metobromuron	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Metribuzin	< 0.03	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Dimethoate	< 0.04	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Tribenuron-Methyl	< 0.04	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Phosmet	< 0.1	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Fluazinam	< 0.5	ng/ml		
250	Cornwall Main Street Municipal	2023-12-12	Methamidophos	< 0.5	ng/ml		

PESTICIDE ANALYSIS FOR DRINKING WATER REPORT

2024 Pesticide Sampling Results

Site #: 257

Site Name: Cornwall River Point Place Municipal

Results:

Site#	Site Name	Date Sampled	Parameter	Concentration	Units	Safe Drinking Water Limit	Safe Drinking Water Limit Source
257	Cornwall River Point Place Municipal	2023-12-12	Boscalid	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Chlorpyrifos	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Clothianidin	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Cypermethrin	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Diazinon	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Endosulfan I	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Endosulfan II	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Fenamidone	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Fludioxonil	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Fluopyram	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Mandipropamid	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Metolachlor	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Oxathiapiprolin	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Penfufen	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Permethrin	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Phorate	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Propyzamide	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Pyraclostrobin	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Terbacil	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Thiamethoxam	< 0.01	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	4-hydroxy chlorothalonil	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Azoxystrobin	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Captan	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Carbofuran	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Chlorantraniliprole	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Chlorothalonil	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Difenoconazole	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Fluazifop-P-Butyl	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Hexazinone	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Imidacloprid	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Linuron	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Propiconazole	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Rimsulfuron	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Thiabendazole	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Thifensulfuron-Methyl	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Thiophanate-methyl	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Trifluralin	< 0.02	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Atrazine	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Azinphos-Methyl	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Bentazone	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Metaxyl	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Metobromuron	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Metribuzin	< 0.03	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Dimethoate	< 0.04	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Tribenuron-Methyl	< 0.04	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Phosmet	< 0.1	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Fluazinam	< 0.5	ng/ml		
257	Cornwall River Point Place Municipal	2023-12-12	Methamidophos	< 0.5	ng/ml		

Appendix B

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PFAS Results

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Perfluorinated Compounds - Extended List (water)

Sample Description				Main St well 4	Meadowbank well 4	North Gate well 1	East Wiltshire well 1
Date Sampled				05/30/2023	05/30/2023	05/30/2023	05/30/2023
Parameter	Unit	G / S	RDL	5043094	5043095	5043096	5043097
Perfluorobutanoic acid (PFBA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoropentanoic acid (PFPeA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorohexanoic acid (PFHxA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoroheptanoic acid (PFHpA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorooctanoic acid (PFOA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorononanoic acid (PFNA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorodecanoic acid (PFDA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoroundecanoic acid (PFUnA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorododecanoic acid (PFDoA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorotridecanoic acid (PFTTrDA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorotetradecanoic acid (PFTeDA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorobutanesulfonic acid (PFBS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoropentanesulfonic acid (PFPeS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorohexasulfonic acid (PFHxS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoroheptanesulfonic acid (PFHpS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorooctasulfonic acid (PFOS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorononanesulfonic acid (PFNS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorodecanesulfonic acid (PFDS)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluorododecanesulfonic acid (PFDD)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
4:2 Fluorotelomer Sulfonic Acid (4:2-f)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
6:2 Fluorotelomer Sulfonic Acid (6:2-f)	ng/L		3.0	10.9	<3.0	<3.0	<3.0
8:2 Fluorotelomer Sulfonic Acid (8:2-f)	ng/L		2.0	<2.0	<2.0	<2.0	<2.0
Perfluorooctane sulfonamide (PFOSA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
N-Methyl perfluorooctane sulfonamide	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
N-ethyl perfluorooctane sulfonamide	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
N-Methylperfluorooctane sulfonamide	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Ac N-Ethylperfluorooctanesulfonamide	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
N-Methylperfluorooctanesulfonamide	ng/L		3.0	<3.0	<3.0	<3.0	<3.0
N-ethylperfluorooctane sulfonamide	ng/L		4.0	<4.0	<4.0	<4.0	<4.0
Dimer Acid Hexafluoropropylene Oxide	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
4,8-Dioxo-3H-perfluorononanoic acid	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
9-chloro-hexa-decafluoro-3-oxanonanoic acid	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
11-Chloro-reicosa-fluoro-3-oxanonanoic acid	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoro(2-ethoxyethane)sulfonic acid	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoro-3-methoxypropanoic acid (PF3MP)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Perfluoro-4-methoxybutanoic acid (PF4MB)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
Nonafluoro-3,6-dioxahexanoic acid (FOUEA)	ng/L		3.0	<3.0	<3.0	<3.0	<3.0
2H-perfluoro-octenoic acid (FHUEA)	ng/L		2.0	<2.0	<2.0	<2.0	<2.0
2H-perfluoro-decenoic acid (FOUEA)	ng/L		2.0	<2.0	<2.0	<2.0	<2.0
2H-Perfluoro-dodecanoic acid (FDUEA)	ng/L		1.0	<1.0	<1.0	<1.0	<1.0
13C4-PFBA	%			111	124	94	112
13C5-PFPeA	%			109	128	92	106
13C5-PFHxA	%			109	127	93	109
13C4-PFHpA	%			108	125	91	108
13C8-PFOA	%			110	116	97	114
13C9-PFNA	%			108	122	93	110
13C6-PFDA	%			106	121	93	108
13C7-PFUnDA	%			102	119	90	106
13C2-PFDoA	%			110	124	91	103
13C2-PFTeDA	%			101	114	89	97
13C3-PFBS	%			107	127	94	111

13C3-PFHxS	%	103	127	93	112
13C8-PFOS	%	103	120	91	103
13C2-4:2-FTS	%	100	126	88	101
13C2-6:2-FTS	%	108	129	97	113
13C2-8:2-FTS	%	112	132	97	116
13C8-PFOA	%	106	125	93	104
D3-NMeFOA	%	81	96	67	75
D5-NEtFOA	%	82	99	67	79
D3-NMeFOSAA	%	107	128	95	104
D5-N-EtFOSAA	%	101	122	89	99
D7-NMeFOSE	%	90	105	80	88
D9-NEtFOSE	%	96	110	84	92
13C3-HFPO-DA	%	119	141	101	116
13C2-FHUEA	%	109	129	93	107
13C2-FOUEA	%	123	128	111	124
13C2-FDUEA	%	109	126	95	108

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
5043074-5043116 Results are corrected with surrogate recoveries.

Analysis performed at AGAT Montréal (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

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Appendix C

Detailed Water Chemistry Results

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Certificate of Analysis

AGAT WORK ORDER: 24X165413
 PROJECT:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

HALIFAX - Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	SAMPLE DESCRIPTION: G / S RDL	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #4 Meadowbank		Well #1 Northgate Well	
			Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water
Chloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	µg/L	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Bromomethane	µg/L	0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
Chloroethane	µg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	µg/L	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethylene	µg/L	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Methylene Chloride	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
trans-1,2-Dichloroethylene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Chloroform	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1-Trichloroethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	µg/L	0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56
Benzene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	µg/L	0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Trichloroethylene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Hexanone	µg/L	10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Dibromochloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromoethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethylene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,1,2-Tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Elena Corobets

Certified By:



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

11 Morris Drive, Unit 122
 Dartmouth, Nova Scotia
 CANADA B3B 1M2
 TEL (902)468-8718
 FAX (902)468-8824
 http://www.agatlabs.com

CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

HALIFAX - Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	G / S	RDL	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #4 Meadowbank		Northgate Well	
				Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water
Chlorobenzene	µg/L		1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
m,p-Xylenes	µg/L		4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoform	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L		0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Xylenes	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Surrogate	Unit		Acceptable Limits																
Toluene-d8	%		50-140	78	84	76	77	80	82	78	82	78	82	78	82	78	82	78	82

Certified By: *Elena Corobets*



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

11 Morris Drive, Unit 122
 Dartmouth, Nova Scotia
 CANADA B3B 1M2
 TEL (902)468-8718
 FAX (902)468-8924
 http://www.agatlabs.com

CLIENT NAME: TOWN OF CORNWALL

SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

HALIFAX - Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	SAMPLE DESCRIPTION: SAMPLE TYPE: DATE SAMPLED: G / S	Well #1 East		Well #2 East		Well #1 - River		Well #2 - River		75 Tower Road -		29 Cornwall	
			Wiltshire Wellfield Water	2024-06-19 5954444	Wiltshire Wellfield Water	2024-06-19 5954445	Point Wellfield Water	2024-06-19 5954446	Point Wellfield Water	2024-06-19 5954447	Distribution Sample Water	2024-06-19 5954448	Distribution Sample Water	2024-06-19 5954449
Chloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	µg/L	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	
Bromomethane	µg/L	0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	
Chloroethane	µg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Trichlorofluoromethane	µg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Acetone	µg/L	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
1,1-Dichloroethylene	µg/L	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	
Methylene Chloride	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
trans-1,2-Dichloroethylene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1-Dichloroethane	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
cis-1,2-Dichloroethylene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,1-Trichloroethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Carbon Tetrachloride	µg/L	0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	<0.56	
Benzene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloropropane	µg/L	0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	
Trichloroethylene	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromodichloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,3-Dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
trans-1,3-Dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
1,1,2-Trichloroethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Toluene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
2-Hexanone	µg/L	10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
Dibromochloromethane	µg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dibromoethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Tetrachloroethylene	µg/L	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	

Certified By: *Elena Corobets*



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

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 CANADA B3B 1M2
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CLIENT NAME: TOWN OF CORNWALL

SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

HALIFAX - Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	G / S	RDL	Well #1 East		Well #2 East		Well #1 - River		Well #2 - River		75 Tower Road -		29 Cornwall	
				Wiltshire Wellfield	Water	Wiltshire Wellfield	Water	Point Wellfield	Water	Point Wellfield	Water	Distribution	Sample	Distribution	Sample
1,1,1,2-Tetrachloroethane	µg/L		0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L		1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	µg/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
m,p-Xylenes	µg/L		4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromoforn	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Styrene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
o-Xylene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	µg/L		0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Xylenes	µg/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene-d8	%		50-140	79	82	75	81	71	76						

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5954425-5954449 1,1,2,2-Tetrachloroethane reported only for samples matrices which can be purged. Otherwise N/A.
 Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylenes + o-Xylene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Calgary (unless marked by *)

Elena Roberts

Certified By:



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413
PROJECT:

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
http://www.agatlabs.com

CLIENT NAME: TOWN OF CORNWALL
SAMPLING SITE:

ATTENTION TO: Doug Longmore
SAMPLED BY:

Polycyclic Aromatic Hydrocarbons in Water - (PAH)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #4 Meadowbank		Well #1 Northgate Well			
		SAMPLE DESCRIPTION:		Wellfield		Wellfield		Wellfield		Wellfield		Wellfield		Wellfield		Wellfield		Wellfield	
		G/S	RDL	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:	Water	DATE SAMPLED:
1-Methylnaphthalene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
2-Methylnaphthalene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Acenaphthene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Acenaphthylene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Acridine	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Anthracene	ug/L	0.012	<0.012	<0.012	5954437	<0.012	5954438	<0.012	5954439	<0.012	5954440	<0.012	5954441	<0.012	5954442	<0.012	5954443	<0.012	
Benzo(a)anthracene	ug/L	0.018	<0.018	<0.018	5954437	<0.018	5954438	<0.018	5954439	<0.018	5954440	<0.018	5954441	<0.018	5954442	<0.018	5954443	<0.018	
Benzo(a)pyrene	ug/L	0.010	<0.015	<0.015	5954437	<0.015	5954438	<0.015	5954439	<0.015	5954440	<0.015	5954441	<0.015	5954442	<0.015	5954443	<0.015	
Benzo(b)fluoranthene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Benzo(j+k)fluoranthene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Benzo(e)pyrene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Benzo(ghi)perylene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Chrysene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Dibenzo(e,h)anthracene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Fluoranthene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Fluorene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Indeno(1,2,3-cd)pyrene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Naphthalene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Perylene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Phenanthrene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Pyrene	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Quinoline	ug/L	0.01	<0.01	<0.01	5954437	<0.01	5954438	<0.01	5954439	<0.01	5954440	<0.01	5954441	<0.01	5954442	<0.01	5954443	<0.01	
Sediment	ug/L	0.01	Y	Y	5954437	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Surrogate	Unit	Acceptable Limits																	
Naphthalene-d8	%	50-140	92	95	83	93	88	91	93	86	91	93	91	93	91	93	91	91	
Terphenyl-d14	%	50-140	77	68	65	71	70	65	71	70	65	72	65	72	63	72	63	63	
Pyrene-d10	%	50-140	104	98	88	98	96	96	98	96	96	96	96	96	97	97	90	90	

Certified By:

Elena Roberts

Certificate of Analysis

AGAT WORK ORDER: 24X165413
 PROJECT:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

Polycyclic Aromatic Hydrocarbons in Water - (PAH)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	Well #1 East		Well #2 East		Well #1 - River		Well #2 - River		75 Tower Road -		29 Cornwall	
		Wilshire Wellfield	Water	Wilshire Wellfield	Water	Point Wellfield	Water	Point Wellfield	Water	Distribution	Sample	Distribution	Sample
SAMPLE DESCRIPTION:		2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19	2024-06-19
DATE SAMPLED:		5954444	5954444	5954445	5954446	5954447	5954448	5954449					
G / S	RDL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1-Methylnaphthalene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acridine	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	ug/L	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Benzo(a)anthracene	ug/L	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Benzo(a)pyrene	ug/L	0.010	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(b)fluoranthene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(k)fluoranthene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(e)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(ghi)perylene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenzof(a,h)anthracene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perylene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Quinoline	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sediment	ug/L	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Surrogate	Unit	Acceptable Limits											
Naphthalene-d8	%	100	100	108	87	88	95	79					
Terphenyl-d14	%	77	77	69	77	74	76	62					
Pyrene-d10	%	104	104	102	97	92	100	85					

Elena Roberts

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
<http://www.agatlabs.com>

CLIENT NAME: TOWN OF CORNWALL

SAMPLING SITE:

ATTENTION TO: Doug Longmore

SAMPLED BY:

Polycyclic Aromatic Hydrocarbons in Water - (PAH)

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5954425-5954449 Benzo(b)fluoranthene may include contributions from benzo(j)fluoranthene, if also present in the sample. Benzo(j+k)fluoranthene is not an accredited parameter.

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Halifax (unless marked by *)

Certified By: *Elena Porobets*

Certificate of Analysis

AGAT WORK ORDER: 24X165413
 PROJECT:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

		DATE REPORTED: 2024-07-04															
		Well #1			Well #2			Well #3 Main			Well #4 Main			Well #4		Well #1	
		Meadowbank			Meadowbank			Meadowbank			Meadowbank			Meadowbank		Northgate Well	
		Wellfield			Wellfield			Wellfield			Wellfield			Wellfield		Water	
		2024-06-19			2024-06-19			2024-06-19			2024-06-19			2024-06-19		2024-06-19	
		5954425			5954437			5954438			5954439			5954440		5954442	
		<0.1			<0.1			<0.1			<0.1			<0.1		<0.1	
		0.1			0.1			0.1			0.1			0.1		0.1	
		mg/L			mg/L			mg/L			mg/L			mg/L		mg/L	
Parameter	Chloramines - Total																
Unit	mg/L																
SAMPLE DESCRIPTION:		Well #1 East			Well #2 East			Well #1 - River			Well #2 - River			Well #1		Well #4	
SAMPLE TYPE:		Wiltshire Wellfield			Wiltshire Wellfield			Point Wellfield			Point Wellfield			Distribution Sample		Distribution Sample	
DATE SAMPLED:		2024-06-19			2024-06-19			2024-06-19			2024-06-19			2024-06-19		2024-06-19	
G / S		5954444			5954445			5954446			5954447			5954448		5954449	
RDL		<0.1			<0.1			<0.1			<0.1			<0.1		<0.1	
Parameter																	
Unit	mg/L																
SAMPLE DESCRIPTION:		Well #1 East			Well #2 East			Well #1 - River			Well #2 - River			Well #1		Well #4	
SAMPLE TYPE:		Wiltshire Wellfield			Wiltshire Wellfield			Point Wellfield			Point Wellfield			Distribution Sample		Distribution Sample	
DATE SAMPLED:		2024-06-19			2024-06-19			2024-06-19			2024-06-19			2024-06-19		2024-06-19	
G / S		5954444			5954445			5954446			5954447			5954448		5954449	
RDL		<0.1			<0.1			<0.1			<0.1			<0.1		<0.1	
Parameter																	
Unit	mg/L																

Comments: • RDL - Reported Detection Limit; G / S - Guideline / Standard
• 5954425-5954449 Chloramines is a calculated parameter. The calculated parameter is non-accredited. The component parameters of the calculation are accredited.
 TRC and Chloramines have been analyzed past the recommended holding time of 15 minutes from sampling. Field measurement recommended for most accurate result
 Analysis performed at AGAT Halifax (unless marked by *)

Kaleigh Cullen

Certified By:



Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
http://www.agatlabs.com

CLIENT NAME: TOWN OF CORNWALL

SAMPLING SITE:

ATTENTION TO: Doug Longmore

SAMPLED BY:

Standard Water Analysis + Total Metals

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	SAMPLE DESCRIPTION: G / S	RDL	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #4 Meadowbank		Well #1 Northgate Well							
				Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water				
pH				6.84		6.97		6.99		7.02		7.24		7.30		7.28		7.02		5954443		5954442		5954443	
Reactive Silica as SiO2	mg/L		0.5	6.7		5.9		6.3		6.0		7.7		7.2		6.5		6.3							
Chloride	mg/L		1	9		8		13		13		45		92		22		22							
Fluoride	mg/L		0.12	<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12		<0.12							
Sulphate	mg/L		2	5		5		10		6		5		11		5		6							
Alkalinity	mg/L		5	99		101		102		103		118		127		127		140							
True Color	TCU		5	<5		<5		<5		<5		<5		<5		<5		<5							
Turbidity	NTU		0.5	0.69		<0.5		<0.5		0.66		1.10		<0.5		0.98		<0.5							
Electrical Conductivity	umho/cm		1	234		245		287		281		391		588		322		360							
Nitrate + Nitrite as N	mg/L		0.05	3.30		2.92		5.52		5.00		1.56		1.86		2.24		5.77							
Nitrate as N	mg/L		0.05	<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05		<0.05							
Nitrite as N	mg/L		0.03	<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03		<0.03							
Ammonia as N	mg/L		0.50	<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50		<0.50							
Total Organic Carbon	mg/L		0.01	0.04		0.07		0.04		0.05		0.013		0.02		0.03		0.04							
Ortho-Phosphate as P	mg/L		0.1	4.8		4.8		4.9		4.7		33.7		61.7		27.6		6.9							
Total Sodium	mg/L		0.1	1.7		1.4		1.5		1.4		2.2		2.4		1.7		1.7							
Total Potassium	mg/L		0.1	25.0		26.4		29.8		27.1		25.4		30.3		24.2		36.2							
Total Calcium	mg/L		0.1	13.1		13.9		16.0		14.5		14.7		19.3		13.7		20.1							
Total Magnesium	mg/L		5	99		101		102		103		118		127		127		140							
Bicarb. Alkalinity (as CaCO3)	mg/L		10	<10		<10		<10		<10		<10		<10		<10		<10							
Carb. Alkalinity (as CaCO3)	mg/L		5	<5		<5		<5		<5		<5		<5		<5		<5							
Hydroxide	mg/L		1	133		133		161		151		204		301		180		202							
Calculated TDS	mg/L			116		123		140		127		124		155		117		173							
Hardness	mg/L			-1.37		-1.20		-1.14		-1.14		-0.90		-0.75		-0.85		-0.89							
Langelier Index (@20C)	NA			-1.69		-1.52		-1.46		-1.46		-1.22		-1.07		-1.17		-1.21							
Langelier Index (@ 4C)	NA			8.21		8.17		8.13		8.16		8.14		8.05		8.13		7.91							
Saturation pH (@ 20C)	NA			8.53		8.49		8.45		8.48		8.46		8.37		8.45		8.23							
Saturation pH (@ 4C)	NA																								

Certified By:

Kateagh Cullen

Certificate of Analysis

AGAT WORK ORDER: 24X165413
 PROJECT:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

Standard Water Analysis + Total Metals

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #4 Meadowbank		Well #1 Northgate Well	
		Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water
Anion Sum	me/L	2.57	2.57	2.56	2.56	3.01	3.01	2.91	2.91	3.84	3.84	5.50	5.50	3.42	3.42	3.96	3.96
Cation sum	me/L	2.58	2.58	2.71	2.71	3.05	3.05	2.79	2.79	4.00	4.00	5.84	5.84	3.58	3.58	3.80	3.80
% Difference/Ion Balance	%																
Total Aluminum	ug/L	5	5	18	18	10	10	11	11	17	17	8	8	12	12	9	9
Total Antimony	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	2	2	3	3	3	3	<2	<2
Total Barium	ug/L	5	5	623	623	127	127	508	508	529	529	366	366	332	332	328	328
Total Beryllium	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5	5	6	6	6	6	5	5	29	29	36	36	25	25	7	7
Total Cadmium	ug/L	0.09	0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	2	<2	<2
Total Cobalt	ug/L	1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1	1	4	4	6	6	7	7	4	4	3	3	3	3	9	9
Total Iron	ug/L	50	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total Lead	ug/L	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Molybdenum	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Nickel	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	2	<2	<2
Total Phosphorous	mg/L	0.07	0.07	1.84	1.84	1.91	1.91	1.77	1.77	2.32	2.32	2.21	2.21	2.07	2.07	1.91	1.91
Total Selenium	ug/L	1	1	<1	<1	<1	<1	<1	<1	4	4	5	5	3	3	<1	<1
Total Silver	ug/L	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Strontium	ug/L	5	5	303	303	145	145	100	100	450	450	341	341	177	177	92	92
Total Thallium	ug/L	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Uranium	ug/L	0.2	0.2	3.6	3.6	1.3	1.3	0.7	0.7	12.6	12.6	10.7	10.7	8.5	8.5	1.0	1.0
Total Vanadium	ug/L	2	2	<2	<2	<2	<2	<2	<2	20	20	20	20	30	30	<2	<2

Certified By:

Kaleigh Cullen



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
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CLIENT NAME: TOWN OF CORNWALL
SAMPLING SITE:

ATTENTION TO: Doug Longmore
SAMPLED BY:

Standard Water Analysis + Total Metals

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	Well #1 Main		Well #2 Main		Well #3 Main		Well #4 Main		Well #1 Meadowbank		Well #2 Meadowbank		Well #1 Northgate Well			
		Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water		
Total Zinc	ug/L	5954425	<5	5954437	<5	5954438	<5	5954439	<5	5954440	<5	5954441	5	5954442	<5	5954443	11
		G/S	RDL	G/S	RDL	G/S	RDL	G/S	RDL	G/S	RDL	G/S	RDL	G/S	RDL	G/S	RDL
		2024-06-19	5	2024-06-19	5	2024-06-19	5	2024-06-19	5	2024-06-19	5	2024-06-19	5	2024-06-19	5	2024-06-19	5
		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:		DATE SAMPLED:	
		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:		SAMPLE TYPE:	
		Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water	Wellfield	Water

Certified By:

Kaleigh Cullen

Certificate of Analysis

AGAT WORK ORDER: 24X165413
 PROJECT:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

ATTENTION TO: Doug Longmore
 SAMPLED BY:

DATE RECEIVED: 2024-06-21		DATE REPORTED: 2024-07-04	
Standard Water Analysis + Total Metals			
Parameter	Unit	Well #1 - River Point Wellfield Water 2024-06-19 5954446	Well #2 - River Point Wellfield Water 2024-06-19 5954447
pH		7.26	7.28
Reactive Silica as SiO2	mg/L	6.4	6.4
Chloride	mg/L	21	16
Fluoride	mg/L	<0.12	<0.12
Sulphate	mg/L	5	7
Alkalinity	mg/L	151	104
True Color	TCU	<5	<5
Turbidity	NTU	0.59	<0.5
Electrical Conductivity	umho/cm	366	286
Nitrate + Nitrite as N	mg/L	2.69	3.13
Nitrate as N	mg/L	2.69	3.13
Nitrite as N	mg/L	<0.05	<0.05
Ammonia as N	mg/L	<0.03	<0.03
Total Organic Carbon	mg/L	0.63	0.68
Ortho-Phosphate as P	mg/L	0.08	0.08
Total Sodium	mg/L	11.4	9.8
Total Potassium	mg/L	1.8	1.6
Total Calcium	mg/L	34.9	36.2
Total Magnesium	mg/L	19.6	19.8
Bicarb. Alkalinity (as CaCO3)	mg/L	151	152
Carb. Alkalinity (as CaCO3)	mg/L	<10	<10
Hydroxide	mg/L	<5	<5
Calculated TDS	mg/L	236	199
Hardness	mg/L	176	172
Langelier Index (@20C)	NA	-0.63	-0.60
Langelier Index (@4C)	NA	-0.95	-0.92
Saturation pH (@20C)	NA	7.89	7.88

Well #1 - River Point Wellfield Water 2024-06-19 5954446	Well #2 - River Point Wellfield Water 2024-06-19 5954447	75 Tower Road - Distribution Sample Water 2024-06-19 5954448	29 Cornwall Road - Distribution Sample Water 2024-06-19 5954449
7.26	7.28	7.10	7.04
6.4	6.4	6.6	6.4
21	16	16	20
<0.12	<0.12	<0.12	<0.12
5	7	7	8
151	104	104	101
<5	<5	<5	<5
0.59	<0.5	<0.5	1.77
366	286	286	273
2.69	3.13	4.43	4.41
2.69	3.13	4.43	4.41
<0.05	<0.05	<0.05	<0.05
<0.03	<0.03	<0.03	<0.03
0.63	0.68	<0.50	<0.50
0.08	0.08	0.04	0.05
11.4	9.8	8.2	5.3
1.8	1.6	1.6	1.5
34.9	36.2	27.5	26.5
19.6	19.8	15.0	14.3
151	152	104	101
<10	<10	<10	<10
<5	<5	<5	<5
236	199	157	156
176	172	130	125
-0.63	-0.60	-1.05	-1.14
-0.95	-0.92	-1.37	-1.46
7.89	7.88	8.15	8.18

Kaleigh Cullen

Certified By:

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore
 SAMPLED BY:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

DATE RECEIVED: 2024-06-21		DATE REPORTED: 2024-07-04	
Standard Water Analysis + Total Metals			
Parameter	Unit	Well #1 East Wiltshire Wellfield Water 2024-06-19 5954444	Well #2 East Wiltshire Wellfield Water 2024-06-19 5954445
Saturation pH (@ 4C)	NA	8.18	8.04
Anion Sum	me/L	3.97	4.76
Cation sum	me/L	4.09	4.77
% Difference/ Ion Balance	%	1.5	0.1
Total Aluminum	ug/L	15	15
Total Antimony	ug/L	<2	<2
Total Arsenic	ug/L	<2	<2
Total Barium	ug/L	916	811
Total Beryllium	ug/L	<2	<2
Total Bismuth	ug/L	<2	<2
Total Boron	ug/L	16	10
Total Cadmium	ug/L	<0.09	<0.09
Total Chromium	ug/L	<2	<2
Total Cobalt	ug/L	<1	<1
Total Copper	ug/L	<1	<1
Total Iron	ug/L	<50	<50
Total Lead	ug/L	<0.5	<0.5
Total Manganese	ug/L	<2	<2
Total Molybdenum	ug/L	<2	<2
Total Nickel	ug/L	<2	<2
Total Phosphorous	mg/L	2.50	2.48
Total Selenium	ug/L	<1	<1
Total Silver	ug/L	<0.1	<0.1
Total Strontium	ug/L	603	179
Total Thallium	ug/L	<0.1	<0.1
Total Tin	ug/L	<2	<2
Total Titanium	ug/L	<2	<2

Well #1 - River Point Wellfield Water 2024-06-19 5954446	Well #2 - River Point Wellfield Water 2024-06-19 5954447	75 Tower Road - Distribution Sample Water 2024-06-19 5954448	29 Cornwall Road - Distribution Sample Water 2024-06-19 5954449
8.21	8.20	8.47	8.50
3.91	3.98	2.99	3.07
3.90	3.90	3.00	2.77
0.2	1.0	0.2	5.1
18	13	10	13
<2	<2	<2	<2
<2	<2	<2	<2
152	224	561	490
<2	<2	<2	<2
<2	<2	<2	<2
15	22	5	<5
<0.09	<0.09	<0.09	<0.09
<2	<2	<2	<2
<1	<1	<1	<1
<1	<1	57	58
<50	<50	<50	<50
<0.5	<0.5	<0.5	<0.5
<2	<2	<2	<2
<2	<2	<2	<2
<2	<2	<2	<2
1.88	1.85	1.95	1.82
<1	<1	<1	<1
<0.1	<0.1	<0.1	<0.1
25	23	193	125
<0.1	<0.1	<0.1	<0.1
<2	<2	<2	<2
<2	<2	<2	<2

Certified By:

Kaleigh Cullen

11 Morris Drive, Unit 122
 Dartmouth, Nova Scotia
 CANADA B3B 1M2
 TEL (902)468-8718
 FAX (902)468-8924
 http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore
 SAMPLED BY:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

Standard Water Analysis + Total Metals

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	Well #1 East Wilshire Wellfield Water 2024-06-19 5954444	Well #2 East Wilshire Wellfield Water 2024-06-19 5954445	Well #1 - River Point Wellfield Water 2024-06-19 5954446	Well #2 - River Point Wellfield Water 2024-06-19 5954447	75 Tower Road - Distribution Sample Water 2024-06-19 5954448	29 Cornwall Road - Distribution Sample Water 2024-06-19 5954449
Total Uranium	ug/L	13.3	4.0	<0.2	<0.2	3.1	1.6
Total Vanadium	ug/L	5	<2	<2	<2	4	<2
Total Zinc	ug/L	103	<5	<5	<5	<5	<5

Comments: RDL - Reported Detection Limit, G / S - Guideline / Standard

5954425-5954449 % Difference / Ion Balance, Hardness, Langelier Index, Nitrate + Nitrite, Hydroxide and Saturation pH are calculated parameters. The calculated parameters are non-accredited. The component parameters of the calculations are accredited.

pH has been analyzed past the recommended holding time of 15 minutes from sampling. Field measurement recommended for most accurate result
 Analysis performed at AGAT Halifax (unless marked by *)

Certified By:

Kaleigh Cullen

11 Morris Drive, Unit 122
 Dartmouth, Nova Scotia
 CANADA B3B 1M2
 TEL (902)468-8718
 FAX (902)468-8924
 http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore
 SAMPLED BY:



CLIENT NAME: TOWN OF CORNWALL
 SAMPLING SITE:

Water Analysis - Bromate

DATE RECEIVED: 2024-06-21

DATE REPORTED: 2024-07-04

Parameter	Unit	G / S	RDL	Well #1 Main Wellfield Water 2024-06-19 5954425	Well #2 Main Wellfield Water 2024-06-19 5954437	Well #3 Main Wellfield Water 2024-06-19 5954438	Well #4 Main Wellfield Water 2024-06-19 5954439	Well #1 Meadowbank Wellfield Water 2024-06-19 5954440	Well #2 Meadowbank Wellfield Water 2024-06-19 5954441	Well #4 Meadowbank Wellfield Water 2024-06-19 5954442	Well #1 Northgate Well Water 2024-06-19 5954443
Bromate	mg/L	0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Reporting- W				88							
Parameter	Unit	G / S	RDL	Well #1 East Wiltshire Wellfield Water 2024-06-19 5954444	Well #2 East Wiltshire Wellfield Water 2024-06-19 5954445	Well #1 - River Point Wellfield Water 2024-06-19 5954446	Well #2 - River Point Wellfield Water 2024-06-19 5954447	75 Tower Road - Distribution Sample Water 2024-06-19 5954448	29 Cornwall Road - Distribution Sample Water 2024-06-19 5954449		
Bromate	mg/L	0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
 Analysis performed at AGAT Calgary (unless marked by *)

Certified By:

Kaleigh Cullen

Quality Assurance

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Jul 04, 2024

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Polycyclic Aromatic Hydrocarbons in Water - (PAH)															
1-Methylnaphthalene	1	5954425	<0.01	<0.01	NA	< 0.01	117%	50%	140%	109%	50%	140%	127%	50%	140%
2-Methylnaphthalene	1	5954425	<0.01	<0.01	NA	< 0.01	107%	50%	140%	95%	50%	140%	116%	50%	140%
Acenaphthene	1	5954425	<0.01	<0.01	NA	< 0.01	104%	50%	140%	104%	50%	140%	117%	50%	140%
Acenaphthylene	1	5954425	<0.01	<0.01	NA	< 0.01	104%	50%	140%	111%	50%	140%	116%	50%	140%
Acridine	1	5954425	<0.01	<0.01	NA	< 0.01	100%	50%	140%	134%	50%	140%	120%	50%	140%
Anthracene	1	5954425	<0.012	<0.012	NA	< 0.012	102%	50%	140%	111%	50%	140%	116%	50%	140%
Benzo(a)anthracene	1	5954425	<0.018	<0.018	NA	< 0.018	126%	50%	140%	121%	50%	140%	117%	50%	140%
Benzo(a)pyrene	1	5954425	<0.015	<0.015	NA	< 0.015	92%	50%	140%	111%	50%	140%	99%	50%	140%
Benzo(b)fluoranthene	1	5954425	<0.01	<0.01	NA	< 0.01	110%	50%	140%	52%	50%	140%	77%	50%	140%
Benzo(j+k)fluoranthene	1	5954425	<0.01	<0.01	NA	< 0.01	94%	50%	140%	108%	50%	140%	110%	50%	140%
Benzo(e)pyrene	1	5954425	<0.01	<0.01	NA	< 0.01	119%	50%	140%	95%	50%	140%	132%	50%	140%
Benzo(ghi)perylene	1	5954425	<0.01	<0.01	NA	< 0.01	101%	50%	140%	128%	50%	140%	114%	50%	140%
Chrysene	1	5954425	<0.01	0.09	NA	< 0.01	104%	50%	140%	128%	50%	140%	127%	50%	140%
Dibenzo(a,h)anthracene	1	5954425	<0.01	<0.01	NA	< 0.01	88%	50%	140%	107%	50%	140%	96%	50%	140%
Fluoranthene	1	5954425	<0.01	<0.01	NA	< 0.01	116%	50%	140%	130%	50%	140%	128%	50%	140%
Fluorene	1	5954425	<0.01	<0.01	NA	< 0.01	110%	50%	140%	114%	50%	140%	127%	50%	140%
Indeno(1,2,3-cd)pyrene	1	5954425	<0.01	<0.01	NA	< 0.01	118%	50%	140%	82%	50%	140%	127%	50%	140%
Naphthalene	1	5954425	<0.01	<0.01	NA	< 0.01	114%	50%	140%	122%	50%	140%	133%	50%	140%
Perylene	1	5954425	<0.01	<0.01	NA	< 0.01	112%	50%	140%	138%	50%	140%	144%	50%	140%
Phenanthrene	1	5954425	<0.01	<0.01	NA	< 0.01	103%	50%	140%	124%	50%	140%	132%	50%	140%
Pyrene	1	5954425	<0.01	<0.01	NA	< 0.01	113%	50%	140%	136%	50%	140%	134%	50%	140%
Quinoline	1	5954425	<0.01	<0.01	NA	< 0.01	114%	50%	140%	127%	50%	140%	154%	50%	140%

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution. Matrix spike performed on a different sample than the duplicate.

If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

Matrix spike: More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Chlorophenols by GC-MS (Water)

2,3,4,6-Tetrachlorophenol	5954443	5954443	<0.5	<0.5	NA	< 0.5	90%	50%	140%	64%	50%	140%	60%	50%	140%
2,4,6-Trichlorophenol	5954443	5954443	<0.2	<0.2	NA	< 0.2	89%	50%	140%	101%	50%	140%	81%	50%	140%
2,4-Dichlorophenol	5954443	5954443	<0.3	<0.3	NA	< 0.3	95%	50%	140%	77%	50%	140%	100%	50%	140%
Pentachlorophenol	5954443	5954443	<0.5	<0.5	NA	< 0.5	68%	50%	140%	72%	50%	140%	71%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

HALIFAX - Volatile Organic Compounds in Water (ug/L)

Chloromethane	5189	5954437	< 1	< 1	NA	< 1	79%	50%	140%	90%	50%	140%	122%	50%	140%
Vinyl Chloride	5189	5954437	< 0.6	< 0.6	NA	< 0.6	82%	50%	140%	104%	50%	140%	81%	50%	140%
Bromomethane	5189	5954437	< 0.89	< 0.89	NA	< 0.89	105%	50%	140%	117%	50%	140%	127%	50%	140%
Chloroethane	5189	5954437	< 5	< 5	NA	< 5	91%	50%	140%	98%	50%	140%	89%	50%	140%
Trichlorofluoromethane	5189	5954437	< 5	< 5	NA	< 5	111%	50%	140%	120%	60%	130%	101%	50%	140%

Quality Assurance

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)																
RPT Date: Jul 04, 2024			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits		
								Lower	Upper		Lower	Upper		Lower	Upper	
Acetone	5189	5954437	< 10	< 10	NA	< 10	67%	50%	140%	73%	50%	140%	78%	50%	140%	
1,1-Dichloroethylene	5189	5954437	< 0.6	< 0.6	NA	< 0.6	108%	50%	140%	119%	60%	130%	105%	50%	140%	
Methylene Chloride	5189	5954437	< 2	< 2	NA	< 2	89%	50%	140%	90%	60%	130%	86%	50%	140%	
trans-1,2-Dichloroethylene	5189	5954437	< 2	< 2	NA	< 2	109%	50%	140%	117%	60%	130%	108%	50%	140%	
1,1-Dichloroethane	5189	5954437	< 1	< 1	NA	< 1	90%	50%	140%	99%	60%	130%	92%	50%	140%	
cis-1,2-Dichloroethylene	5189	5954437	< 2	< 2	NA	< 2	78%	50%	140%	87%	60%	130%	82%	50%	140%	
Chloroform	5189	5954437	< 1	< 1	NA	< 1	90%	50%	140%	98%	60%	130%	92%	50%	140%	
1,2-Dichloroethane	5189	5954437	< 2	< 2	NA	< 2	87%	50%	140%	97%	60%	130%	93%	50%	140%	
1,1,1-Trichloroethane	5189	5954437	< 1	< 1	NA	< 1	127%	50%	140%	112%	60%	130%	107%	50%	140%	
Carbon Tetrachloride	5189	5954437	< 0.56	< 0.56	NA	< 0.56	105%	50%	140%	116%	60%	130%	103%	50%	140%	
Benzene	5189	5954437	< 1	< 1	NA	< 1	85%	50%	140%	103%	60%	130%	94%	50%	140%	
1,2-Dichloropropane	5189	5954437	< 0.7	< 0.7	NA	< 0.7	89%	50%	140%	94%	60%	130%	100%	50%	140%	
Trichloroethylene	5189	5954437	< 1	< 1	NA	< 1	73%	50%	140%	75%	60%	130%	71%	50%	140%	
Bromodichloromethane	5189	5954437	< 1	< 1	NA	< 1	111%	50%	140%	93%	60%	130%	97%	50%	140%	
cis-1,3-Dichloropropene	5189	5954437	< 0.5	< 0.5	NA	< 0.5	87%	50%	140%	103%	60%	130%	108%	50%	140%	
trans-1,3-Dichloropropene	5189	5954437	< 0.5	< 0.5	NA	< 0.5	76%	50%	140%	96%	60%	130%	101%	50%	140%	
1,1,2-Trichloroethane	5189	5954437	< 1	< 1	NA	< 1	62%	50%	140%	83%	60%	130%	68%	50%	140%	
Toluene	5189	5954437	< 2	< 2	NA	< 2	80%	50%	140%	68%	60%	130%	90%	50%	140%	
2-Hexanone	5189	5954437	< 10.0	< 10.0	NA	< 10.0	111%	50%	140%	82%	50%	140%	89%	50%	140%	
Dibromochloromethane	5189	5954437	< 1	< 1	NA	< 1	94%	50%	140%	77%	60%	130%	62%	50%	140%	
1,2-Dibromoethane	5189	5954437	< 0.5	< 0.5	NA	< 0.5	65%	50%	140%	70%	60%	130%	76%	50%	140%	
Tetrachloroethylene	5189	5954437	< 2	< 2	NA	< 2	69%	50%	140%	74%	60%	130%	73%	50%	140%	
1,1,1,2-Tetrachloroethane	5189	5954437	< 0.5	< 0.5	NA	< 0.5	62%	50%	140%	65%	60%	130%	69%	50%	140%	
Chlorobenzene	5189	5954437	< 1.0	< 1.0	NA	< 1.0	68%	50%	140%	74%	60%	130%	76%	50%	140%	
Ethylbenzene	5189	5954437	< 2	< 2	NA	< 2	84%	50%	140%	91%	60%	130%	100%	50%	140%	
m,p-Xylenes	5189	5954437	< 4	< 4	NA	< 4	89%	50%	140%	120%	60%	130%	104%	50%	140%	
Bromoform	5189	5954437	< 1	< 1	NA	< 1	82%	50%	140%	94%	60%	130%	100%	50%	140%	
Styrene	5189	5954437	< 1	< 1	NA	< 1	66%	50%	140%	90%	60%	130%	80%	50%	140%	
1,1,2,2-Tetrachloroethane	5189	5954437	< 1	< 1	NA	< 1	99%	50%	140%	67%	60%	130%	79%	50%	140%	
o-Xylene	5189	5954437	< 1	< 1	NA	< 1	80%	50%	140%	82%	60%	130%	90%	50%	140%	
1,3-Dichlorobenzene	5189	5954437	< 1	< 1	NA	< 1	64%	50%	140%	76%	60%	130%	75%	50%	140%	
1,4-Dichlorobenzene	5189	5954437	< 1	< 1	NA	< 1	76%	50%	140%	86%	60%	130%	88%	50%	140%	
1,2-Dichlorobenzene	5189	5954437	< 0.7	< 0.7	NA	< 0.7	88%	50%	140%	94%	60%	130%	95%	50%	140%	

Comments: Duplicate NA: results are less than 5X the RDL and RDP will not be calculated.

The sample spikes and dups are not from the same sample ID.

Certified Reference Material: More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Quality Assurance

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jul 04, 2024			DUPLICATE			Method Blank	REFERENCE MATERIAL		METHOD BLANK SPIKE		MATRIX SPIKE				
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By:


Quality Assurance

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

PROJECT:

ATTENTION TO: Doug Longmore

SAMPLING SITE:

SAMPLED BY:

Water Analysis

RPT Date: Jul 04, 2024			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Standard Water Analysis + Total Metals

pH	5948925		6.18	6.22	0.6%	<	101%	80%	120%	NA			NA		
Reactive Silica as SiO2	5954437	5954437	5.9	6.4	9.3%	< 0.5	92%	80%	120%	104%	80%	120%	108%	80%	120%
Chloride	5949571		46	46	1.2%	< 1	90%	80%	120%	NA	80%	120%	NA	70%	130%
Fluoride	5949571		<0.12	<0.12	NA	< 0.12	100%	80%	120%	NA	80%	120%	91%	70%	130%
Sulphate	5949571		<2	<2	NA	< 2	83%	80%	120%	NA	80%	120%	94%	70%	130%
Alkalinity	5948925		32	33	2.6%	< 5	106%	80%	120%	NA			NA		
True Color	5954437	5954437	<5	<5	NA	< 5	92%	80%	120%	95%	80%	120%			
Turbidity	1	595243	0.7	0.8	NA	< 0.5	101%	80%	120%						
Electrical Conductivity	5948925		654	656	0.3%	< 1	97%	90%	110%	NA			NA		
Nitrate as N	5949571		0.06	0.06	NA	< 0.05	109%	80%	120%	NA	80%	120%	91%	70%	130%
Nitrite as N	5949571		<0.05	<0.05	NA	< 0.05	103%	80%	120%	NA	80%	120%	89%	70%	130%
Ammonia as N	5952752		<0.03	<0.03	NA	< 0.03	95%	80%	120%	99%	80%	120%	99%	70%	130%
Total Organic Carbon	5954425	5954425	<0.50	<0.50	NA	< 0.5	90%	80%	120%	NA	80%	120%	84%	80%	120%
Ortho-Phosphate as P	1595443	5954437	0.07	0.08	13.3%	< 0.01	97%	80%	120%	103%	80%	120%	101%	80%	120%
Total Sodium	5954449	5954449	5.3	5.2	1.9%	< 0.1	106%	80%	120%	105%	80%	120%	111%	70%	130%
Total Potassium	5954449	5954449	1.5	1.4	2.3%	< 0.1	105%	80%	120%	104%	80%	120%	107%	70%	130%
Total Calcium	5954449	5954449	26.5	25.1	5.6%	< 0.1	104%	80%	120%	109%	80%	120%	NA	70%	130%
Total Magnesium	5954449	5954449	14.3	14.3	0.2%	< 0.1	107%	80%	120%	107%	80%	120%	114%	70%	130%
Bicarb. Alkalinity (as CaCO3)	5948925		32	33	2.6%	< 5	NA	80%	120%	NA			NA		
Carb. Alkalinity (as CaCO3)	5948925		<10	<10	NA	< 10	NA	80%	120%	NA			NA		
Hydroxide	5948925		<5	<5	NA	< 5	NA	80%	120%	NA			NA		
Total Aluminum	5954449	5954449	13	19	NA	< 5	101%	80%	120%	106%	80%	120%	109%	70%	130%
Total Antimony	5954449	5954449	< 2	< 2	NA	< 2	96%	80%	120%	96%	80%	120%	95%	70%	130%
Total Arsenic	5954449	5954449	< 2	< 2	NA	< 2	101%	80%	120%	101%	80%	120%	100%	70%	130%
Total Barium	5954449	5954449	490	489	0.2%	< 5	94%	80%	120%	96%	80%	120%	NA	70%	130%
Total Beryllium	5954449	5954449	< 2	< 2	NA	< 2	102%	80%	120%	100%	80%	120%	110%	70%	130%
Total Bismuth	5954449	5954449	< 2	< 2	NA	< 2	102%	80%	120%	102%	80%	120%	103%	70%	130%
Total Boron	5954449	5954449	< 5	< 5	NA	< 5	96%	80%	120%	94%	80%	120%	111%	70%	130%
Total Cadmium	5954449	5954449	< 0.09	< 0.09	NA	< 0.09	95%	80%	120%	96%	80%	120%	94%	70%	130%
Total Chromium	5954449	5954449	< 1	< 1	NA	< 1	103%	80%	120%	103%	80%	120%	101%	70%	130%
Total Cobalt	5954449	5954449	< 1	< 1	NA	< 1	102%	80%	120%	102%	80%	120%	99%	70%	130%
Total Copper	5954449	5954449	58	58	NA	< 1	101%	80%	120%	98%	80%	120%	103%	70%	130%
Total Iron	5954449	5954449	< 50	< 50	NA	< 50	105%	80%	120%	105%	80%	120%	104%	70%	130%
Total Lead	5954449	5954449	< 0.5	< 0.5	NA	< 0.5	102%	80%	120%	102%	80%	120%	100%	70%	130%
Total Manganese	5954449	5954449	< 2	< 2	NA	< 2	103%	80%	120%	102%	80%	120%	103%	70%	130%
Total Molybdenum	5954449	5954449	< 2	< 2	NA	< 2	96%	80%	120%	95%	80%	120%	94%	70%	130%
Total Nickel	5954449	5954449	< 2	< 2	NA	< 2	104%	80%	120%	103%	80%	120%	100%	70%	130%
Total Phosphorous	5954449	5954449	1.82	1.86	NA	0.40	100%	80%	120%	102%	80%	120%	113%	70%	130%
Total Selenium	5954449	5954449	< 1	< 1	NA	< 1	99%	80%	120%	97%	80%	120%	98%	70%	130%

Quality Assurance

CLIENT NAME: TOWN OF CORNWALL
 PROJECT:
 SAMPLING SITE:

AGAT WORK ORDER: 24X165413
 ATTENTION TO: Doug Longmore
 SAMPLED BY:

Water Analysis (Continued)

RPT Date: Jul 04, 2024			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Total Silver	5954449	5954449	< 0.1	< 0.1	NA	< 0.1	96%	80%	120%	98%	80%	120%	93%	70%	130%
Total Strontium	5954449	5954449	125	123	1.6%	< 5	102%	80%	120%	103%	80%	120%	109%	70%	130%
Total Thallium	5954449	5954449	< 0.1	< 0.1	NA	< 0.1	102%	80%	120%	102%	80%	120%	101%	70%	130%
Total Tin	5954449	5954449	< 2	< 2	NA	< 2	96%	80%	120%	98%	80%	120%	96%	70%	130%
Total Titanium	5954449	5954449	< 2	< 2	NA	< 2	102%	80%	120%	101%	80%	120%	101%	70%	130%
Total Uranium	5954449	5954449	1.6	1.6	NA	< 0.2	99%	80%	120%	100%	80%	120%	98%	70%	130%
Total Vanadium	5954449	5954449	< 2	< 2	NA	< 2	103%	80%	120%	102%	80%	120%	103%	70%	130%
Total Zinc	5954449	5954449	< 5	< 5	NA	< 5	102%	80%	120%	101%	80%	120%	100%	70%	130%

Comments: If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

Standard Water Analysis + Total Metals

Reactive Silica as SiO2	5954449	5954449	6.4	6.5	1.7%	< 0.5	94%	80%	120%	105%	80%	120%	110%	80%	120%
Chloride	5954437	5954437	8	10	20%	< 1	89%	80%	120%	NA	80%	120%	93%	70%	130%
Fluoride	5954437	5954437	<0.12	<0.12	NA	< 0.12	104%	80%	120%	NA	80%	120%	101%	70%	130%
Sulphate	5954437	5954437	5	6	NA	< 2	100%	80%	120%	NA	80%	120%	98%	70%	130%
Nitrate as N	5954437	5954437	2.92	3.49	18%	< 0.05	114%	80%	120%	NA	80%	120%	NA	70%	130%
Nitrite as N	5954437	5954437	<0.05	<0.05	NA	< 0.05	100%	80%	120%	NA	80%	120%	109%	70%	130%
Ammonia as N	5954449	5954449	<0.03	<0.03	NA	< 0.03	94%	80%	120%	99%	80%	120%	94%	70%	130%

Comments: If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.

Water Analysis - Bromate

Bromate	5954425	5954425	<0.010	<0.010	NA	< 0.010	105%	70%	130%	108%	80%	120%	94%	70%	130%
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Comments: Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.
 Duplicate NA: results are less than 5X the RDL and RDP will not be calculated.

Nitrate and Nitrite: The regulatory hold time for the analysis of nitrate and/or nitrite in water is 72 hours.

Certified By:

Kathleen Cullen



CLIENT NAME: TOWN OF CORNWALL
 PROJECT:

AGAT WORK ORDER: 24X165413
 ATTENTION TO: Doug Longmore

RPT Date: Jul 04, 2024		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Sample Id	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
			Lower	Upper		Lower	Upper		Lower	Upper
Polycyclic Aromatic Hydrocarbons in Water - (PAH)										
Perylene	5954425	112%	50%	140%	138%	50%	140%	144%	50%	140%
Quinoline	5954425	114%	50%	140%	127%	50%	140%	154%	50%	140%

Comments: If Matrix spike value is NA, the spiked analyte concentration was lower than that of the matrix contribution. Matrix spike performed on a different sample than the duplicate.
 If RPD value is NA, the results of the duplicates are less than 5x the RDL and the RPD will not be calculated.
 Matrix spike: More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Method Summary

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

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SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
2,3,4,6-Tetrachlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4,6-Trichlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4-Dichlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Pentachlorophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
2,4,6-Tribromophenol	ORG-91-5114	modified from EPA 3510C, 8270E & ON MOECC E3265	GC/MS
Sediment			N/A
Chloromethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Vinyl Chloride	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Bromomethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Chloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Trichlorofluoromethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Acetone	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,1-Dichloroethylene	TO-0330	EPA SW-846 8260	GC/MS
Methylene Chloride	TO-0330	EPA SW-846 5030 & 8260	GC/MS
trans-1,2-Dichloroethylene	TO-0330	EPA SW-846 8260	GC/MS
1,1-Dichloroethane	TO-0330	EPA SW-846 8260	GC/MS
cis-1,2-Dichloroethylene	TO-0330	EPA SW-846 8260	GC/MS
Chloroform	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,2-Dichloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,1,1-Trichloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Carbon Tetrachloride	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Benzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,2-Dichloropropane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Trichloroethylene	TO-0330	EPA SW-846 8260	GC/MS
Bromodichloromethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
cis-1,3-Dichloropropene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
trans-1,3-Dichloropropene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,1,2-Trichloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Toluene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
2-Hexanone	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Dibromochloromethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,2-Dibromoethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Tetrachloroethylene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,1,1,2-Tetrachloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Chlorobenzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Ethylbenzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
m,p-Xylenes	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Bromoform	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Styrene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,1,2,2-Tetrachloroethane	TO-0330	EPA SW-846 5030 & 8260	GC/MS
o-Xylene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,3-Dichlorobenzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,4-Dichlorobenzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1,2-Dichlorobenzene	TO-0330	EPA SW-846 5030 & 8260	GC/MS
Xylenes	TO-0330	EPA SW-846 5030 & 8260	GC/MS

Method Summary

CLIENT NAME: TOWN OF CORNWALL
AGAT WORK ORDER: 24X165413
PROJECT:
ATTENTION TO: Doug Longmore
SAMPLING SITE:
SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Toluene-d8	TO-0330	EPA SW-846 5030 & 8260	GC/MS
1-Methylnaphthalene	ORG-120-5119	EPA 3510C/8270E	GC/MS
2-Methylnaphthalene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Acenaphthene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Acenaphthylene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Acridine	ORG-120-5119	EPA 3510C/8270E	GC/MS
Anthracene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(a)anthracene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(a)pyrene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(b)fluoranthene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(j+k)fluoranthene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(e)pyrene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Benzo(ghi)perylene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Chrysene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Dibenzo(a,h)anthracene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Fluoranthene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Fluorene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Naphthalene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Perylene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Phenanthrene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Pyrene	ORG-120-5119	EPA 3510C/8270E	GC/MS
Quinoline	ORG-120-5119	EPA 3510C/8270E	GC/MS
Sediment			GC/MS/FID
Naphthalene-d8	ORG-120-5119	EPA 3510C/8270E	GC/MS
Terphenyl-d14	ORG-120-5119	EPA 3510C/8270E	GC/MS
Pyrene-d10	ORG-120-5119	EPA 3510C/8270E	GC/MS

Method Summary

CLIENT NAME: TOWN OF CORNWALL

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PROJECT:

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SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Chloramines - Total			CALCULATION
pH	INOR-121-6001	SM 4500 H+B	PC TITRATE
Reactive Silica as SiO2	INOR-121-6027	SM 4500-SiO2 F	COLORIMETER
Chloride	INOR-121-6005	SM 4110 B	ION CHROMATOGRAPH
Fluoride	INOR-121-6005	SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-121-6005	SM 4110 B	ION CHROMATOGRAPH
Alkalinity	INOR-121-6001	SM 2320 B	
True Color	INOR-121-6008	SM 2120 B	LACHAT FIA
Turbidity	INOR-121-6001	SM 2130 B	PC TITRATE
Electrical Conductivity	INOR-121-6001	SM 2510 B	PC TITRATE
Nitrate + Nitrite as N	INOR-121-6005	SM 4110 B	CALCULATION
Nitrate as N	INOR-121-6005	SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-121-6005	SM 4110 B	ION CHROMATOGRAPH
Ammonia as N	INOR-121-6047	SM 4500-NH3 H	COLORIMETER
Total Organic Carbon	INOR-121-6026	SM 5310 B	TOC ANALYZER
Ortho-Phosphate as P	INOR-121-6012	SM 4500-P G	COLORIMETER
Total Sodium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Potassium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Calcium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Magnesium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Bicarb. Alkalinity (as CaCO3)	INOR-121-6001	SM 2320 B	PC TITRATE
Carb. Alkalinity (as CaCO3)	INOR-121-6001	SM 2320 B	PC TITRATE
Hydroxide	INOR-121-6001	SM 2320 B	PC-TITRATE
Calculated TDS	CALCULATION	SM 1030E	CALCULATION
Hardness	CALCULATION	SM 2340B	CALCULATION
Langelier Index (@20C)	CALCULATION	CALCULATION	CALCULATION
Langelier Index (@ 4C)	CALCULATION	CALCULATION	CALCULATION
Saturation pH (@ 20C)	CALCULATION	CALCULATION	CALCULATION
Saturation pH (@ 4C)	CALCULATION	CALCULATION	CALCULATION
Anion Sum	CALCULATION	SM 1030E	CALCULATION
Cation sum	CALCULATION	SM 1030E	CALCULATION
% Difference/ Ion Balance	CALCULATION	SM 1030E	CALCULATION
Total Aluminum	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Antimony	MET121-6104 & MET-121-6105	SM 3125	ICP-MS
Total Arsenic	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Barium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Beryllium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Bismuth	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Boron	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Cadmium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS

Method Summary

CLIENT NAME: TOWN OF CORNWALL

AGAT WORK ORDER: 24X165413

PROJECT:

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SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Total Chromium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Cobalt	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Copper	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Iron	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Lead	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Manganese	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Molybdenum	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Nickel	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Phosphorous	MET-121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Selenium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Silver	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Strontium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Thallium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Tin	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Titanium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Uranium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Vanadium	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Total Zinc	MET121-6104 & MET-121-6105	modified from SM 3125/SM 3030 B/SM 3030 D	ICP-MS
Bromate	INST 0150	SM 4110 B	ION CHROMATOGRAPH
Reporting- W			N/A