DILLON CONSULTING

Clean Harbors Canada Inc.

Groundwater Monitoring Program – Clean Harbors Lambton Facility Landfill

2021 Annual Report (FINAL)

March 2022 – 21-1519

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Attention: Mackenzie Costello
Senior Environmental Compliance Manager

2021 Annual Groundwater Monitoring – Lambton Facility, Lambton, Ontario
Draft Report

Please find enclosed the above mentioned report to summarize the Clean Harbors Canada Inc. Lambton Facility annual groundwater monitoring program.

This report documents the scope, methods and results of the 2021 monitoring program conducted by Dillon Consulting Limited (Dillon).

If you have any questions or comments, please feel free to contact David Lake.

Sincerely,

DILLON CONSULTING LIMITED

Dave Lake, P.Eng.
Project Manager

Our file: 21-1519

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1.0 Introduction and Site Description

Dillon Consulting Limited (Dillon) was retained by Clean Harbors Canada Inc. (Clean Harbors) to continue the management of the Groundwater Monitoring Program for the Landfill site located at 4090 Telfer Road, Corunna, Ontario, herein referred to as "the Site". The monitoring program was conducted in accordance with the requirements of the Environmental Compliance Approval (ECA) No. A031806.

This report presents the results of the 2021 Groundwater Monitoring Program.

1.1 Background

The Site was first used for industrial waste treatment in the early 1960s and owned and operated by Goodfellow Enterprises. The liquid waste incinerator was built in 1968, with a 38 metre high stack and designed to process approximately 12,000 tonnes of waste annually.

Tricil Limited purchased the Site in 1973. Numerous improvements were applied to the facility such as; the replacement of open lagoons with closed storage tanks, a coding system to characterize and track waste, the design/construction of a new incinerator from 1979 to 1983 and a physical/chemical pre-treatment facility.

To monitor the groundwater conditions and water quality in close proximity to the facility, in 1974 a drilling program was conducted to install numerous monitoring wells within and around the property. An application to increase the area of certified landfill use to the existing 40 hectares was made in 1985. Subsequently, improvements in surface water control, landscaping, landfill operation and extension of the existing groundwater monitoring program were completed and included in the application to increase certified landfill area. The application was approved by the Ministry of the Environment in 1986.

In December 1989, the Site was purchased by Laidlaw Inc. of Burlington, Ontario and the Site belonged to the Laidlaw Environmental Services Ltd. subsidiary. In 1998, through a series of corporate mergers, the Site became a part of Safety-Kleen Ltd.

On September 6, 2002, Clean Harbors, Inc. completed the acquisition of Safety-Kleen's Chemical Services Division and subsequently became the owner of the Site. Since its acquisition, Clean Harbors has received approval for vertical expansion of the landfill in 2015 and continues to operate the Site as a hazardous waste landfill and waste processing facility. Waste is accepted from Ontario, other Canadian provinces and from the United States. Most waste classes under Ontario Regulation (O.Reg) 347 are accepted with the exception of pathological, radioactive and polychlorinated biphenyl (PCB) waste.

The following was completed at the site in 2021:

- Cell 20-1 was constructed and began receiving waste in December 2021.
- Cells 19-2 and 19-3 were filled with waste and interim cover was placed over 19-2 and the majority of 19-3 with the exception of the active landfilling area in 19-3A and small sections in cell 19-3G.
- A temporary waste cell was constructed for waste placement during re-construction of 20-1.
- Sub cell of cell 19-4 constructed (west of temporary disposal area) for a contingency waste disposal area
- The leachate collection trench was extended toward the south-east portion of the site.

1.2 Local Study Area

1.2.1 Facility Location and Plan

The Landfill is located partially on Lot 8 and wholly on Lot 9 of Concession 10, in St. Clair Township, Lambton County. The facility is approximately total site area of 140 ha in area and is shown in **Figure 1** and **Figure 2**. The waste fill footprint area is 61 ha. Existing site features include; administration offices/facilities, perimeter screening berms, Site entrance, Site monitoring locations, access roads, stormwater ditches/ponds, process water ponds. The entire Site is enclosed by a chain link fence and perimeter access points are secured.

1.2.2 Site Topography and Drainage

The Site is located within the St. Clair Township; an area that is predominately flat and regionally sloping west towards the St. Clair River. Locally, the topography surrounding the Site is relatively flat, with the exception of constructed berms along portions of the north, west and eastern perimeter of the Site. Beyond the Site boundaries are agricultural lands and woodlots.

Surface water generated from non-operational areas at the Site is considered to be non-impacted. Non-impacted surface water runoff is collected through a series of on Site drainage ditches and ponds and directed to two on Site surface water storage ponds (i.e., West and East Ponds). The surface water is processed by the surface water treatment plant and will eventually drain into a creek located south of the Site.

Surface water generated from operational areas is considered to be process water and is therefore collected and stored in process water ponds. The process water is collected by storm sewers, ditches and culverts within the process water catchment area. The process water is used during the operation of the incinerator.

1.2.3 Site Geology

The bedrock at the Site is shale of the Kettle Point formation and Upper Devonian of age. The bedrock is approximately found at 40 metres below ground surface (mbgs) and is described as brown to black, bituminous shale with occasional interbeds of grey-green shale.

The Site is located on the physiographic region of the St. Clair Clay Plain within the Lambton Clay Plain, where two main soils are found; Brookston clay and Caistor clay. (Chapman & Putnam, 1984).

Local geology has been discussed extensively in previous monitoring reports completed for the Site by RWDI and GHD. A summary of local geologic units in order of increasing depth is as follows:

- **Beach Strand** – Medium to silty fine to coarse sand less than 1 m thick.
- **St. Joseph Till** - Massive to laminated clay/silt with thin discontinuous layers of silty sand and localized lenses of sand. The till is weathered and fractured up to 5 m depth.
- **Mackinaw Interstadial Silt and Sand** – Discontinuous (up to 0.5 m thick) black medium sand and silt found at a depth interval of 10 mbgs and 14 mbgs. Shale fragments observed are observed.
- **Black Shale Till** – Massive to laminated clayey silt, with shale clasts
- **Basal Till** – Dense to hard cobbly, sandy clayey silt till with shale fragments and occasional lenses of fine gravel and coarse sand.

1.2.4 Hydrogeology

The local hydrogeologic conditions are well understood and have been discussed in previous monitoring reports completed for the Site by RWDI and GHD. The previously reported hydrostratigraphic units continue to provide the basis for the groundwater monitoring program at the Site and are summarized as follows:

- **Active Aquitard** – The weathered and fractured upper portion of the St. Joseph Till unit. The Active Aquitard has relatively higher hydraulic conductivity due to fracturing when compared to the lower portion of the St. Joseph Till unit.
- **Transition Zone** – The middle portion of the St. Joseph Till unit. The Transition Zone is defined by decreased fracture frequency and reduced hydraulic conductivity.
- **Inactive Aquitard** – The lower portion of the St. Joseph Till unit and Black Shale Till. Hydraulic conductivity is very low. Groundwater movement through the discontinuous layers of sand within the unit is controlled by the surrounding low hydraulic conductivity.
- **Interface Aquifer** – The Basal Till is considered the Interface Aquifer. The Basal Till is found between the overlying aquitard and underlying shale bedrock. Groundwater flow within the Interface Aquifer has historically been to the east and southeast direction.
- **Shale Aquitard** – The shale of the Kettle Point Formation. The unit has little fracturing and a low hydraulic conductivity.

1.3 Regulatory Setting

The Site operates in accordance with 13 Environmental Compliance Approvals (ECA). The groundwater monitoring program is regulated under ECA A031806 (Condition 9-a-i). **Appendix G** contains a summary table of the ECAs.

1.4 Report Organization

As detailed in the Table of Contents, figures are appended after the main text and are numbered sequentially. There are two types of tables: data tables are found after the mina text and figures and are numbered sequentially; in-text tables are found throughout the main text and are used to summarize important data and provide insight and are numbered by section.

2.0 Groundwater Monitoring Methodology

The 2021 groundwater monitoring program was completed according to the document titled, "Final Draft – Groundwater and Landfill Performance Monitoring Programs" (RWDI, 2017). The groundwater monitoring program contains three components:

- Groundwater Monitoring Program along the Perimeter of Facility
- Sub-Cell 3 Remedial Performance Monitoring Program
- Performance Monitoring Program for Engineered Landfill Systems

The network of groundwater monitoring wells is shown on **Figure 3** and groundwater monitoring well completion details are summarized in **Table 1**. The groundwater monitoring activities are undertaken in accordance with standard operating procedures and each of the monitoring components are described below.

2.1 Perimeter Groundwater Monitoring Program

The perimeter groundwater monitoring program provides an assessment of groundwater flow and water quality along the perimeter of the facility and has been in place since 1986. Groundwater levels are measured and groundwater samples are taken semi-annually (Spring and Fall). Groundwater level and chemistry are compiled, assessed and compared to previous monitoring results and summarized annually within the Annual Groundwater Monitoring Report. These activities are undertaken in accordance with standard operating procedures. The locations of the perimeter groundwater monitoring wells are shown on **Figure 4** and **Figure 5**.

In 2021, the perimeter groundwater monitoring well network included a total of 55 wells (installed between 1992 and 2013). Water levels are used to determine groundwater flow directions and horizontal and vertical hydraulic gradients. Water levels are collected using a water level meter or measured continuously through dedicated dataloggers. Dataloggers are downloaded quarterly with a manual water level measurement collected during the downloading event. The manual measurements are used to calibrate the data collected from the loggers and to convert level measurements into groundwater level elevations.

Monitoring wells included within the perimeter groundwater monitoring program are subdivided by hydrostratigraphic unit. Monitoring well locations are summarized in **Table 2.1**.

Table 2.1: Monitoring Well Locations Included in the Perimeter and Sub-Cell 3 Groundwater Monitoring Program 2021

Hydro-stratigraphic Unit	Location Description	Well
Active Aquitard [26 shallow wells]	Along Property Boundary	TW30-94
		TW41-99S
		TW42-99S
		TW43-99S
		TW45-99S
		TW48-16S
		TW62-13S
	Downgradient of Northern Berm	TW21-94-II
		OW32-90S
		OW35-90S
		TW22-94
		TW32-94-IV
		TW40-99S
		TW53-03S
	Internal to Property	TW63-13S
	Located off the Facility Property	TW55-09S
		TW56-11S
		TW57-11S
		TW58-11S
		TW59-13S
	Northern Berm	TW39-99I
		TW39-99S
		TW46-99I
		TW46-99S
		TW61-13I
		TW61-13S
Shale Aquitard [2 deep wells]	Along Property Boundary	TW32-94-I
	Off-Site	TW42-99D
Deep Hydraulic Control Layer [2 extraction wells, 4 monitoring wells]	HCL	EW1a-01
		EW1b-13
		EW1c-13
		EW2a-01
		EW2b-13
		EW2c-13
Interface Aquifer [22 deep wells]	Along Property Boundary (Compliance)	OW32-90D
		OW35-05D
		TW22-99D*
		TW30-99D
		TW32-94-II
		TW40-99D
		TW41-99D
		TW43-99D
		TW45-99D*
		TW47-00D
		TW48-00D
		TW49-00D
		TW53-03D
		TW60-13D
	Internal to Property	TW39-99D
		TW46-99D
		TW54-09D
		TW61-13D
	Located off the Facility Property	TW55-09D
		TW56-11D
		TW57-11D
		TW59-13D
	Nearby Interface Aquifer	PW1-N
		PW2-S(R11)

* monitoring well not sampled during 2021 sampling program

Depending on the location of the monitoring well and well screen elevation, one of three sampling methodologies was used. Wells located within the Active and Shale Aquitard were sampled using a Continuous Volume (CV) sampling methodology with dedicated tubing and inertial pumps. Clean Harbors completed the manual collection of water level measurements and CV purging for prior to sampling. Secondly, a low flow purging methodology was used for the collection of groundwater samples for wells located within the Interface Aquifer. Sampling methodology may be referenced in **Table 2** attached. Well locations included in the perimeter monitoring program are summarized in **Table 2.2**.

Table 2. 2: Groundwater Sampling Details

Aquifer/Unit	Parameters & Frequency				Sampling Method			Water Level Measurement	
	General Indicators [1]	Major[2] and Minor[3] Ions	Metals[4]	Volatile Organic Compounds (VOCs)	Continuous Volume	Low Flow Purging	Pump Discharge Line[7]	Semi-Annual Manual Measurement	Quarterly Manual and Continuous
Active Aquitard	SA		A	BA	x			x[5]	x[6]
Interface Aquifer	SA		A	BA		x		x[5]	x[6]
Shale Aquitard	BA				x				
HCL	SA		A			x[7]			x
Nearby Interface Aquifer	SA		A	BA	x				x

Notes:
SA = semi-annual; A = annual; BA = biennial
[1]pH, Conductivity, Total Dissolved Solids (TDS)
[2]Alkalinity, Chloride, Sulphate, Calcium, Magnesium, Potassium, and Sodium
[3]Ammonia (active aquitard only), Nitrite, Nitrate, Bromide, Cyanide, and Fluoride
[4]Arsenic, Barium, Boron, Cadmium, Chromium, Iron, Lead, Nickel, Mercury, Zinc
[5]where no pressure transducer is installed
[6]where pressure transducer is installed
[7]extraction wells (EW1a-01 and EW2a-01) to resume collection from pump discharge line once pumps are operational

2.2 Performance Monitoring Program (Sub-Cell 3)

Sub-Cell 3 (within Cell 18) is located in the northwest portion of the Site. Fracturing in the base of the landfill excavation was observed in 1999 allowing for gas and water to seep from the base of Sub-Cell 3. The cause of fracturing was reportedly a number of issues such as elevated bedrock elevations, high hydrostratigraphic head in the Interface Aquifer, total depth of the excavation and the heterogeneity of the underlying soil. The removal of low permeable clay soils during the cell excavation also resulted in a

base thickness insufficient to counteract hydraulic head pressures. Remedial measures were put in place to ensure the clay base of the landfill was not compromised. These measures consisted of:

- The installation of a hydraulic control layer (HCL) in Sub-Cell 3 in order to facilitate the long-term control of hydraulic pressures. The HCL consists of a gravel layer placed over the area surrounded by a gravel-filled perimeter trench
- A minimum 5 metre clay layer was placed above and around the HCL in order to provide a barrier to leachate movement from adjacent sub-cells
- Extraction wells were installed within the HCL to facilitate the long-term control of hydraulic pressure and to keep water levels in the HCL below the level in the Interface Aquifer and the leachate level in abutting cells containing waste. The extraction wells were also designed to create an inward pressure gradient while also maintaining upward pressure in order to keep groundwater flow from the Interface Aquifer and into the HCL. This was designed to reduce the potential for seeping from Sub-Cell 3 to move further downward through factures and into bedrock

The performance of Sub-Cell 3 remedial measures are assessed using hydraulic (water level) and water quality monitoring. The water level differences between the HCL and the Interface Aquifer are monitored as part of the Sub-Cell 3 monitoring program. Groundwater samples are collected for specific parameters at frequencies consistent with the perimeter monitoring program (see **Table 2.2**). The remedial measures consist of north and south Hydraulic Control Layers (HCL) with two HCL extraction wells (EW1a-01 and EW2a-01). There are also four monitoring wells installed in the HCL (EW1b-13, EW1c-13, EW2b-13 and EW2c-13) used for groundwater elevation monitoring as well as groundwater quality monitoring.

2.3 Performance Monitoring Program (Engineered Landfill Systems)

As the landfill undergoes vertical expansion, a perimeter leachate collection system (LCS) will be sequentially installed. The purpose of the LCS is to create an inward gradient ("hydraulic trap") by maintaining lower levels within the LCS compared to the surrounding landfill leachate levels, groundwater elevations and surface water ponds. When water levels in the Active Aquitard are greater than LCS levels, an inward groundwater hydraulic gradient towards the LCS is created. In order to maintain an inward gradient, the LCS is to operate at a maximum 197 masl (metres above sea level).

Assessing the performance of the engineered landfill system is completed by evaluating hydraulic gradients from the LCS to surrounding areas to determine if the inward gradient is being maintain by the LCS. Assessing the performance of the engineered landfill systems (performance monitoring program) includes the collection of water levels from LCS standpipes which are located approximately midpoint between the Perimeter Trench Sumps (PTS) and nearby groundwater wells.

Inward gradients and water levels recorded within the LCS were evaluated along one transect in the southwest portion of the landfill where vertical expansion has been completed.

Transect across the Southwest Corner of the Landfill

To determine the status of the inward gradient to the LCS along the southwestern corner of the landfill, water level data from the perimeter monitoring program and the LCS is collected and analyzed. Six wells located within the perimeter monitoring wells network (TW64-16-I through TW64-16IV, TQ48-16S, and TW48-00D) and the LCS standpipe (LCSOW02-15) located on the southwest corner of Cell 19, are used to collect water levels and compare data. Transducer data from the LCS standpipes, including LCSOW02-15, were not available in 2021. Well and sump locations are shown on **Figure 7**.

2.4 Quality Assurance and Quality Control Program

Dillon followed a Quality Assurance/Quality Control (QA/QC) program and incorporated a variety of measures into the program to provide assurance that the results are reliable and representative. These measures as well as the results are described below and in the Quality Assurance/Quality Control Data Validation Memorandum for the 2021 reporting period in **Appendix A.**

Groundwater samples were shipped to AGAT Laboratories (AGAT) in Mississauga, Ontario for analysis. AGAT followed internal QA/QC procedures including analysis of lab duplicates and blanks as well as analysis of surrogate recovery as outlined in the Certificates of Analysis provided in **Appendix E**.

A minimum of one blind field duplicate sample for every ten samples was collected and analyzed for each parameter group. Seven field duplicates were collected from groundwater monitoring wells TW43-99D, OW35-05D, TW63-13S, TW32-94-III, TW57-11S, TW22-94, EW1a-01 during the first sampling event and six duplicates were collected from groundwater monitoring wells EW2c-13, TW47-00D, TW61-13I, TW54-09D, TW48-00D, TW49-00D during the second sampling event.

Analytical testing was conducted by AGAT. AGAT is a Standards Council of Canada (SCC) and Canadian Association of Laboratory Accreditation (CALA) certified environmental analytical laboratories. AGAT analysed method blank samples, laboratory spike samples, and surrogate recovery samples. The laboratory QA/QC data was reviewed and is summarized in **Appendix A**.

The Quality Assurance/Quality Control Data Validation Memorandum presented in **Appendix A** includes a review of the standard quality control criteria including blind duplicate sample analysis. Based on the review, the analytical data is acceptable with the qualifications summarized in **Appendix A**.

3.0 2021 Groundwater Monitoring Program Results (Perimeter of the Facility)

The purpose of the perimeter monitoring program is to assess groundwater quality and vertical and horizontal hydraulic gradients on the Site and near the Site boundaries. Dillon conducted quarterly transducer downloading events (May, June, August and December) and / or semi-annual groundwater monitoring events. An assessment for each hydrostratigraphic unit, water level data and groundwater quality are detailed in the following sections.

3.1 Monitoring Well Assessments

Section 20 of Ontario Regulation 903 (O. Reg. 903) under the Ontario Water Resources Act (OWRA) requires well owners to maintain wells at all times to prevent entry of surface water and other foreign materials. In line with this regulation, the integrity of groundwater monitoring wells must be maintained to prevent movement of water, contaminants or other materials between subsurface formations or between those formations and the ground surface by means of the annular space of the well.

Major repair activities by a licensed contractor are required for groundwater monitoring wells TW60-13D, PW2-S(R11), TW22-94, TW22-99D, TW40-99D and TW45-99D to decommission and reinstall the damaged wells. Major repair activities are required at extraction wells EW1a-01 and EW2a-01 to finalize installation and to install the pumps. It is recommended that PW1-N is reinstalled as it was removed during construction in that area. Minor maintenance is required at TW30-94, TW30-99D, TW32-94-I, TW32-94-II, TW32-94-III, TW32-94-IV, TW39-99D, TW39-99I, TW42-99S, TW45-99S, TW46-99D, TW46-99I, TW48-16S, TW61-13D, TW64-16-I, TW64-16-IV, EW1b-13, EW1c-13, EW2b-13 and EW2c-13. Several other monitoring wells require new locks and repair of the level loggers and the installation of a barometric level logger. **Table 8** summarizes the status of the monitoring wells.

3.2 Perimeter Water Level Data

Water level data was collected for each hydrostratigraphic unit during the reporting period. Manual water levels collected by Clean Harbors and Dillon are summarized in **Table 3**.

3.2.1 Active Aquitard Water Levels

Fracturing within the upper portion of the Active Aquitard permits surface water to recharge and influence groundwater elevations. Groundwater elevations are also influenced by topographic features on and off Site, such as nearby drainage ditches, surface water bodies and groundwater mounding induced by northern berms.

An intentional engineered feature, the groundwater mounding within the northern berms creates an inward hydraulic gradient towards the landfill. Mounded groundwater levels for monitoring wells within and beneath the northern berm (TW39-99S, TW39-99I, TW46-99Sm and TW46-99I) are consistent with historical groundwater levels induced by the berms. Groundwater level monitoring data indicates mounding induced by the northern berm creates an inward hydraulic gradient towards the landfill and limits lateral groundwater migration of potential impacts from the landfill. Groundwater elevations within the Active Aquitard are recorded continuously by transducers installed within eight monitoring wells. Recorded elevations are summarized in **Appendix B** as Figures B-1 – B-7, and B-25.

Water level elevations from the dataloggers installed in Active Aquitard monitoring wells was also compared to daily precipitation rates to demonstrate the influence of precipitation on seasonal fluctuations in groundwater elevations. Higher groundwater elevations were observed within the winter and spring months, with lower groundwater elevations observed within the summer and fall months. Seasonal fluctuations in groundwater elevations ranged from 0.32 m to 4.12 m across the Active Aquitard in 2021. Wells located within the perimeter berms or within proximity to surface water ponds were generally observed to have lower seasonable variations. Lower seasonal variations within these areas is inferred to be caused by the perimeter berms and surface water ponds providing consistent groundwater recharge to the Active Aquitard throughout the year. **Figure 8** illustrates Active Aquitard well hydrographs using datalogger information.

Prior to CV purging of monitoring wells within the Active Aquitard, Clean Harbors collected groundwater level measurements for five weeks. Data collected by Clean Harbors was utilized for generating groundwater contours (**Figure 9** and **Figure 10**). Active Aquitard wells located within the northern berm were not used in the generation of Active Aquitard groundwater contours due to groundwater mounding at these locations which provide an exaggerated influence on horizontal groundwater flow directions. Groundwater contours indicated a potentiometric high within the western portion of the Site in April and October, creating a southwest and southeast groundwater flow direction.

Water level elevation monitoring for monitoring wells located within the northern berm indicate that there is a localized potentiometric high due to induced groundwater mounding. The groundwater mounding also induces groundwater hydraulic gradients away from the Site on the outside of the berm and to induce inward hydraulic gradients towards the landfill and the LCS on the inside.

3.2.2 Interface Aquifer Water Levels

Groundwater elevation contours for the Interface Aquifer illustrate a potentiometric high within the northwestern portion of the property for the spring and fall monitoring events. This is consistent with historical groundwater patterns for the Interface Aquifer. **Figure 11** and **Figure 12** show the groundwater elevation contours for the Interface Aquifer.

Water levels collected from TW45-99D, located along the western boundary of the Site, were inconsistent with water levels from the Interface Aquifer. Historical water levels collected from this location were also inconsistent during previous reporting periods; this pattern is attributed to slow recharge of the well. Water levels form this location were excluded from the Interface Aquifer groundwater contours due to slow recharge of TW45-99D.

Transducer and manual water level measurements were used to generate hydrographs for the 2021 monitoring period (**Appendix B**). The potentiometric head within the Interface Aquifer continues to rise off-Site and along the northern boundary of the Site. Historical hydrographs are summarized in **Appendix C**. Figures C-7 through C-13 in **Appendix C** demonstrate the continued rise of potentiometric head off Site and along the northern boundary of the Site within the Interface Aquifer.

3.2.3 Shale Aquitard Water Levels

Two monitoring wells are located within the Shale Aquitard. One is located along the northeast corner of the Site (TW32-94-I) and the second monitoring well is located along the southern boundary of the Site (TW42-99D). Horizontal groundwater flow directions cannot be determined within the Shale Aquitard due to an insufficient number of wells.

3.2.4 Vertical Hydraulic Gradients

Vertical hydraulic gradients are calculated to determine the vertical component of groundwater flow directions. Assessing vertical hydraulic gradients between hydrostratigraphic units can indicate potential for landfill impacts to migrate into underlying hydrostratigraphic units. Vertical hydraulic gradients between hydrostratigraphic units were assessed at nested monitoring wells across the Site.

The vertical hydraulic gradients of the Active Aquitard and the Interface Aquifer, and between the Interface Aquifer and the Shale Aquitard are compared and discussed within the following sections.

3.2.4.1 Active Aquitard and Interface Aquifer Vertical Hydraulic Gradient

Vertical hydraulic gradients for Active and Interface Aquifers were calculated based on pre-purge spring and fall monitoring events completed by Clean Harbors. Pre-purge water levels were used to calculate vertical gradients as these measurements are inferred to be more representative of static groundwater conditions. Vertical hydraulic gradients are summarized and presented on **Figure 13** and in **Table 3.1** below.

Table 3.1: Active Aquitard and Interface Aquifer Vertical Gradients 2021

Nested Wells		Vertical Gradient	
Active Aquitard	Interface Aquifer	Pre-Purge March 2021	Pre-Purge September 2022
TW55-09S	TW55-09D	0.03	0.01
TW56-11S	TW56-11D	0.03	0.03
TW57-11S	TW57-11D	0.07	-0.01
TW58-11S	TW56-11D	0.02	0.00
TW59-13S	TW59-13D	0.09	0.03
TW39-99I	TW39-99D	-0.01	-0.02
TW39-99S	TW39-99D	0.08	0.07
TW46-99I	TW46-99D	0.09	0.09
TW46-99S	TW46-99D	0.16	0.17
TW61-13I	TW61-13D	-0.08	-0.04
TW61-13S	TW61-13D	-0.01	0.02
OW32-90S	OW32-90D	0.02	0.02
OW35-90S	OW35-05D	0.05	0.03
TW21-94-II	TW47-00D	0.01	-0.05
TW22-94	TW22-99D	---	---
TW22-94	TW60-13D	---	---
TW32-94-IV	TW32-94-II	0.06	-0.02
TW40-99S	TW40-99D	-0.01	-0.02
TW53-03S	TW53-03D	0.07	0.06
TW30-94	TW30-99D	0.03	-0.06
TW41-99S	TW41-99D	0.04	0.03
TW42-99S	TW49-00D	0.04	-0.05
TW43-99S	TW43-99D	-0.02	-0.06
TW45-99S	TW45-99D	1.01	1.00
TW48-16S	TW48-00D	0.06	0.05

Notes:

(1) Positive vertical gradient value indicates a downward gradient

(2) Negative vertical gradient value indicates an upward gradient

-- Indicates insufficient groundwater elevation data to calculate vertical gradient

Based on the calculated gradients between the Active and Interface Aquifers, the potential for groundwater movement between these units is very low.

During the monitoring period, minimal upward and downward gradients were observed across the Site, however downward gradients occurred more frequently. A strong downward gradient was observed at the location of TW45-99S/D; however this hydraulic gradient is inferred to be unrepresentative as monitoring well TW45-99S/D is slow to recharge.

Minimal upward gradients were observed within the north to northwestern boundaries of the Site where the potentiometric head of the Interface Aquifer was identified to be the highest. The potentiometric head is inferred to be driving the upward gradient of wells TW39-99I/D, TW61-13I/D, TW40-99S/D. An upward gradient was also observed at the location of TW43-99S/D; however this well is located south of the southern Site boundary.

Monitoring well nests located away from the perimeter berms display a seasonal trend when calculating vertical gradients. Slightly lower upward gradients and slightly greater downward gradients are identified in March compared to September. Seasonal fluctuations are a consequence of lower groundwater elevations of the Active Aquitard within the spring and fall.

3.2.4.2 Interface Aquifer and Shale Aquitard Vertical Gradient

Nested monitoring well pairs TW49-OOD / TW42-99D and TW32-94-II / TW32-94-I were used to calculate the vertical hydraulic gradient between the Interface Aquifer and Shale Aquitard. During the March and September pre-purge monitoring events, at monitoring well locations TW49-00D / TW42-99D, an upward hydraulic gradient was calculated at -0.31 and -0.18. A downward hydraulic gradient was calculated of 0.05 and 0.03 at monitoring well locations TW32-94-II / TW32-94-I. The calculated vertical hydraulic gradients are shown on **Figure 14**.

3.3 Perimeter Groundwater Quality

The purpose of the perimeter groundwater quality monitoring program is to determine if landfill-related impacts are migrating off Site. The program is designed to monitor groundwater quality and to identify leachate indicator parameters. Historical analytical data is assessed and compared to current trends to determine if parameter concentrations are increasing or decreasing on and / or off Site. The assessment of the perimeter groundwater monitoring data was completed using the following methods:

- An initial review of analytical data for completeness and accuracy. Review of laboratory QA/QC samples and protocols
- Statistically analyzing data in comparison to historical data, including:
  - The comparison to the historical range
  - Shewhart's upper confidence limit (UCL) statistical analysis
  - Linear regression statistical analysis
- Concentration versus time plots to identify increasing trends in data
- Comparing groundwater results to the Ontario Drinking Water Standards (ODWS) and Provincial Water Quality Objectives (PWQO)
- Using Piper plots to identify the geochemical characteristics of groundwater within the Active Aquitard and Interface Aquifer

Surrounding groundwater quality was historically assessed by selecting the following eight leachate indicator parameters: chloride, sodium, sulphate, potassium, fluoride, barium, bromide and boron.

These parameters were selected to assist in determining potential leachate impacts to groundwater. In 2021, Dillon selected the same leachate indicator parameters for review of the 2021 analytical data. The available leachate quality data is discussed in the following sections.

Groundwater analytical data collected from the Active Aquitard and Interface Aquifer is summarized in **Table 4** through **Table 11**. Statistical analysis using UCLs and linear regression is provided for leachate indicator parameters and summarized in **Table 13** and **Table 14**. Concentration versus time plots for leachate indicator parameters at all monitoring wells are included in **Appendix D**. Laboratory Certificates of Analysis for 2021 are in **Appendix E**. Piper plots for the Active Aquitard and Interface Aquifer are found in **Appendix F**.

Baseline Water Quality

Groundwater samples were collected by Jagger Hims Limited (1996) from wells that were installed in an undisturbed area of the Facility. An increase in naturally occurring chloride and sodium concentrations with depth and a decrease in natural occurring sulphate concentrations with depth were identified in the baseline groundwater samples. Naturally occurring readily soluble salts in the shale matrix of the Kettle Point Formation is inferred to be the source of relatively high concentrations of sodium and chloride with depth and within the Interface Aquifer and Shale Aquitard. Other leachate indicator parameters remain consistent in other hydrostratigraphic units.

Table 3.2: Average Concentration of Leachate Indicator Parameters at Wells prior to Landfill Disturbance

Leachate Indicator Parameter	Average Concentration (mg/L)			
	Active Aquitard	Inactive Aquitard	Interface Aquifer	Shale Aquitard
Chloride	16	84	260.2	12925
Sodium	58.9	127.8	254	8163
Sulphate	389	53	3.7	4.8
Potassium	3.5	4.2	2.35	17.68
Fluoride	0.9	1.22	1.16	0.645
Barium	0.047	0.61	0.2	4
Bromide	<0.5	<0.5	<0.5	<5
Boron	0.022	19.5	1.42	5.19

Notes: (RWDI, 2013)

Leachate Quality

Wells within the limit of waste were sampled in 2012 by RWDI in support of the Environmental Assessment (EA) required for vertical expansion (**Table 3.3**). Concentrations of the leachate indicator parameters chloride, sodium, sulphate, potassium, fluoride, and bromide are elevated in comparison to

baseline concentrations shown in **Table 3.2**. Barium and boron concentrations in leachate are not significantly elevated above baseline concentrations.

Table 3.3: Concentrations of Leachate Indicator Parameters in Leachate Sources

Leachate Indicator Parameter	Average Concentration (mg/L)				
	Pre-1986 Landfill Area	Cell 16 Landfill Area (2012)	Cell 17 Landfill Area (2012)	Cell 18 Landfill Area (2012)	Cell 19 Landfill Area (2012)
Chloride	11497	38710	27150	33700	14447
Sodium	8290	17275	22875	28540	12033
Sulphate	779	5508	6433	10708	-
Potassium	252	4867	6398	6206	3760
Fluoride	17.9	9.0	10.1	31.1	-
Barium	0.14	0.4	<0.5	2.3	0.17
Bromide	73.2	462	587	1243	-
Boron	0.39	11.3	16.8	31	40.2

Notes: (GHD, 2021)

3.3.1 Active Aquitard Groundwater Quality

3.3.1.1 Inorganic Chemistry

Inorganic groundwater samples are analyzed for general indicators, major and minor ions and metals. Groundwater analytical results for inorganic parameters are compared to the ODWS and PWQO and are discussed in the following sections.

Comparison to ODWS

Table 3.4: Active Aquitard ODWS Exceedances 2021

		TDS (AO)		Alkalinity (OG)		Chloride (AO)		Sodium (AO)		Sulphate (AO)		Barium (AO)		Iron (AO)	
Location	Well	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep
ODWS (mg/L)		500		500		250		20		200		1		0.3	
Along Property Boundary	TW30-94		504					26.9	37.5						
	TW41-99S	1210	1050					50.7	50.2						
	TW42-99S	3300	3040					76.1	78.8	1900	2120				
	TW43-99S	548	500					22.7	24.6						
	TW45-99S	668	662					34.2	43.3						
	TW48-16S	736	676					37.4	43.2						

		TDS (AO)		Alkalinity (OG)		Chloride (AO)		Sodium (AO)		Sulphate (AO)		Barium (AO)		Iron (AO)	
Location	Well	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep
ODWS (mg/L)		500		500		250		20		200		1		0.3	
	TW62-13S	600	600					53.7	56.9						
Down-gradient of Northern Berm	TW21-94-II	982	676					22.1							
	OW32-90S	1020	908					22.2	24.6						
	OW35-90S	1350	990					34.3	33.8	709	518				
	TW22-94	1470	1320					81.3	88.8	662	646				
	TW32-94-IV	666	710					53.6	56.1					0.36	
	TW40-99S	1150	1220	522				60.8	77		584			1.01	
	TW53-03S	1060	934						24						
Internal to Property	TW63-13S	1610	1310			528	536	160	158						
Located off the Facility Property	TW55-09S	1090	878					52.5	57.2						
	TW56-11S	1320	1100					61	61.3	634	532				
	TW57-11S	1490		504				81.6		649					
	TW58-11S		2400				251		116		1260				
	TW59-13S	586	538					30.8	33.5						
Northern Berm	TW39-99I	946	924	556	547			66.2	74					0.62	
	TW39-99S	826	784					58.5	61.4						
	TW46-99I	1030	1000					49.3	54.7						
	TW46-99S	1560	1500					107	125	764	888			0.53	
	TW61-13I	966	1040					35.6	46.1		513				
	TW61-13S	768	1130					64.2	125		566			0.31	

Notes:

(1) Aesthetic objectives (AO) were developed for parameters affecting the aesthetic quality of drinking water, AO are not based on risks to human health

(2) Operational guidelines (OG) were developed for parameters having potential to cause operational issues in water distribution infrastructure, OG are not based on risks to human health

Samples from monitoring wells located within the Active Aquitard had exceedances of the ODWS for TDS, Alkalinity, Chloride, Sodium, Sulphate, Barium, and Iron. These parameters are considered aesthetic objectives (AO) or operational guidelines (OG) and not based on risk to human health. Parameters affecting aesthetic or operational quality of drinking water treatment plants, such as appearance, taste or hardness, are compared to AO and OG. Exceeding leachate indicator parameters are considered to be chloride, sodium and sulphate.

The exceedances identified for TDS are consistent across the well network, on and off Site. Historical analytical results for TDS are also elevated across the well network. Exceedances are attributed to the natural geologic conditions of the area. Elevated levels of TDS in groundwater are not unusual and are not, solely, an indication of landfill impacts to groundwater.

ODWS identifies two objectives for Sodium, 20 mg/L (established for people on sodium restricted diets) and an aesthetic objective (AO) of 200 mg/L. The OWDS 20 mg/L standard is inappropriate and not applicable in determining exceeding leachate parameters in this case. Groundwater exceedances for Sodium in the Active Aquitard are higher than lower limit of 20 mg/L and lower than the higher limit of 200 mg/L. Exceedances of the lower limit are inferred to be not significant and not indicative of landfill impacts to groundwater.

Exceedances of Sulphate above the ODWS were also identified within the Active Aquitard. Sulphate concentrations in till groundwater have been identified to be naturally occurring and it related to either pyrite reduction (Abbott, 1987) or the anhydrite/gypsum content within the till soils of the St. Clair Clay Plain (Hobbs, et al., 2011).

Comparison to PWQO

PWQO exceedances were noted on **Table 3**. Some exceedances were noted for PWQO parameters that are lower than the respective ODWS criteria. The PWQOs are being applied to groundwater chemistry because shallow groundwater can discharge to surface water ditches locally.

Increasing Trends Analysis

Trend analysis was completed using statistical methods on leachate indicator parameter to identify statistically significant increasing trends. **Appendix D** and **Table 13** and **Table 14** contain concentration versus time plots and a summary of the upper confidence limit (UCL) and regression analysis. The data for most monitoring wells indicated no trend or a decreasing trend. **Table 3.5** provides a summary of monitoring wells where increasing trends were identified.

Table 3.5: Active Aquitard Locations with Increasing Trends

Well ID	Parameter with Increasing Trend	May-21			Dec-21		
		Exeeds OWDS	Exceeds PWQO	Outside Historical Range	Exeeds OWDS	Exceeds PWQO	Outside Historical Range
TW40-99S	Chloride						X
	Sulphate			X	X		X
	Sodium	X			X		X
TW41-99S	Boron						
TW42-99S	Sodium	X			X		
TW43-99S	Chloride						
TW45-99S	Chloride						
TW55-09S	Boron		X			X	
TW59-13S	Chloride						
TW61-13I	Sulphate			X	X		X
	Sodium	X		X	X		X
TW63-13S	Boron		X			X	

Major Ion Chemistry - Piper Plot

The chemistry of groundwater changes as it moves though soils and rock and can be used to assess the relative residence time in the subsurface. From this perspective, groundwater chemistry "ages" in the subsurface. For instance, relatively fresh groundwater recently recharged from surface infiltration is dominated by a calcium/magnesium cation and bicarbonate (alkalinity) as the dominant anion. As the residence time in the subsurface increases, groundwater chemistry naturally slowly changes so that sodium is the dominant cation and chloride is the dominant anion. Major ion data from the laboratory analysis of groundwater samples were used to generate Piper diagrams that utilize trilinear diagrams to differentiate groundwater chemical characteristics for different hydrostratigraphic units and locations within the groundwater environment. A Piper diagram plots major cations and anions in trilinear plots and then transfers their location in a general diamond. A Piper plot for wells in the Active Aquitard are included in **Appendix F**. Active Aquitard hydrogeochemistry (**Figure F.1**) indicates that magnesium and calcium are the dominant cations and there are relatively low concentrations of potassium and sodium. The dominant anions are bicarbonate (alkalinity) and sulphate. The one exception is at monitoring well TW63-13S (located in the interior of the site) which has chloride as the dominant anion. Generally, the Piper plot shows similar geochemical patterns between all wells in the Active Aquitard. This supports the interpretation that leachate impacts are generally not observed within the Active Aquitard.

3.3.1.2 Organic Chemistry

Laboratory analysis for volatile organic compounds (VOCs) is completed every other year (biennially) for Active Aquitard monitoring wells in the monitoring program. VOCs were analyzed in 2021 in these monitoring wells. The results of the VOC analyses are compiled in **Table 4**. For the active aquitard

monitoring wells, there was only one monitoring well with VOCs above the detection limit. Monitoring well TW56-11S had low concentrations of three chlorinated hydrocarbons: 1,2-dichloropropane (0.8 µg/L), 1,1,2,2-tetrachloroethane (1.4 µg/L) and 1,1,2-trichloroethane (1.4 µg/L). There are no ODWS established for these VOC parameters and the detections were the first for these parameters at this monitoring well. This monitoring well is located off of the property. Future monitoring data from this monitoring well will be used to determine if the chlorinated hydrocarbons detected in 2021 are anomalous. Given the off property location and isolated detection, these concentrations are not considered to be related to the landfill.

3.3.2 Interface Aquifer Groundwater Quality

3.3.2.1 Inorganic Chemistry

Inorganic groundwater samples are analyzed for general indicators, major and minor ions and metals. Groundwater analytical results for inorganic parameters quantified in Interface Aquifer monitoring wells are compared to the ODWS in **Table 4** and monitoring wells having concentrations exceeding the ODWS are summarized in **Table 3.6**. The ODWS exceedances were for ODWS parameters that were established as aesthetic objectives (AO) or operational guidelines (OG) for water treatment plants except barium which is a health related parameter. As detailed in Section 3.3.1, TDS, sodium and chloride had high concentrations in the baseline groundwater chemistry completed prior to landfilling and are related to soluble salts within the Kettle Point Shale. Naturally occurring sodium concentrations exceeding the aesthetic objective occur in all of the interface aquifer monitoring well locations.

Iron concentrations in shallow groundwater also occur naturally and can fluctuate due to redox conditions that effect iron solubility. With the exception of monitoring well OW32-90D, iron concentrations in the interface aquifer monitoring wells are less than 1 mg/L and are indicative of naturally occurring concentrations.

Barium was detected in two interface aquifer monitoring wells: TW32-94-II (May 2021) and TW47-00D (September 2021). The barium concentration at TW47-00D is within historical ranges have shown a decreasing trend. At monitoring well TW32-94-II, the barium concentration was 2.15 mg/L in May 2021, greater than the historical range for this monitoring well but in December 2021, the barium concentration was just 0.535 mg/L, below the ODWS and within the historical range. Future monitoring data will be used to assess any barium concentration trends at this monitoring well location.

Table 3.6: Interface Aquifer Monitoring Wells with ODWS Exceedances

Well	TDS		Alkalinity		Chloride		Sodium		Barium		Iron	
	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep	May	Sep
ODWS	500		500		250		20		1		0.3	
Along Property Boundary Compliance												
OW32-90D	690	698			295	301	244	54			5.19	1.51
OW35-05D	552						143	148				
TW30-99D	624	618					224	222				0.42
TW32-94-II	10000	1580	1880		5660	828	3830	719	2.15		0.87	
TW40-99D	752	902			328	413	247	302			0.66	0.66
TW41-99D	612	580					216	238				
TW43-99D	612	608					190	213				0.46
TW47-00D	700	3020		687	265	1470	227	1460		1.61	0.31	3.36
TW48-00D	898	840			374	357	292	321				
TW49-00D							125	134				
TW53-03D							82.9	91.4				
TW60-13D	2290		692		1100							
Internal to Property												
TW39-99D	666	622					239	234			0.68	0.44
TW46-99D	650	626					242	242			0.31	
TW54-09D	574						191	185				
TW61-13D	602	706					164	177				
Located off the Facility Property												
TW55-09D	1150	944			526	439	355	358			0.36	
TW56-11D	674	636					224	226				
TW57-11D	812				355		297					
TW59-13D							72.6	75.3				
Nearby Interface Aquifer												
PW1-N	1170				379		329				1.04	
PW2-S(R11)	848				350		319					

Concentrations in mg/L

Major Ion Chemistry - Piper Plot

A Piper plot was also prepared for the Interface Aquifer monitoring well (**Figure F.2**, **Appendix F**). The Interface Active Aquitard hydrogeochemistry indicates that sodium is the dominant cation and there are relatively low concentrations of calcium and magnesium. The dominant anions are bicarbonate (alkalinity) and chloride. Generally, the Piper plot shows similar geochemical patterns between all wells in the Interface Aquifer and supports the interpretation that leachate impacts are not observed in this hydrostratigraphic unit.

3.3.2.2 Organic Chemistry

Laboratory analysis for volatile organic compounds (VOCs) is completed once per year for monitoring wells installed in the Interface Aquifer. The results of the VOC analyses are compiled in **Table 4**. For the Interface Aquifer monitoring wells, there was only one monitoring well (TW54-09D) that had benzene above the detection limit. The benzene concentration at this monitoring wells was 0.00954 mg/L (compared to an ODWS of 0.001 mg/L) which is in the historical range of benzene concentrations for this monitoring well. Monitoring well TW54-09D is located off of the property. Low level benzene concentrations have been detected in the Interface Aquifer monitoring wells historically. For example, in 2020, benzene was detected in eight Interface Aquifer monitoring wells with three monitoring wells having benzene concentrations above the ODWS of 0.001 mg/L. Regionally, the Kettle Point Formation shale has naturally occurring petroleum hydrocarbons such as benzene, toluene, ethylbenzene, and xylenes and has been identified previously as the source of these VOCs in Interface Aquifer monitoring wells.

3.4 Compliance Summary

To determine the significance of an impact on groundwater quality, the MECP developed Guideline B-7, "The Incorporation of the Reasonable Use Policy into Groundwater Management." The essence of this guideline is to establish site-specific groundwater quality criteria based on guidelines established for the "reasonable use" of groundwater and background concentrations. These criteria are applicable at the landfill property boundary.

The Reasonable Use Guideline specifies that the maximum concentration of a particular contaminant that would be acceptable in groundwater at the landfill compliance boundary is calculated using the following equation:

$$C_m = C_b + x(C_r - C_b)$$

Where:

MACB: Maximum allowable concentration at compliance boundary

Cb: Background concentration

Cr: The particular concentration criterion selected for the Reasonable Use of the groundwater which for this assessment, is the drinking water criteria.

x: A factor that reduces the contamination to a level which is considered by the MOE to have only a negligible effect on the use of the groundwater. For groundwater, "x" is 0.5 for non-health related parameters or 0.25 for health related parameters.

The maximum allowable concentrations are calculated for this landfill every five years and in 2020, these concentrations were calculated using background groundwater data from 2016 to 2020. The maximum allowable concentrations should be revised in 2025 using background groundwater data from 2021 to 2025.

3.4.1 Reasonable Use Criteria Exceedances

Table 7 summarizes the laboratory analytical groundwater results from for monitoring wells located along the property boundary for the 2021 Spring and Fall sampling events.

3.4.1.1 Active Aquitard RUC Exceedances

Exceedances of the RUC for the 14 Active Aquitard monitoring wells located at or near the compliance boundary are summarized in **Table 3.7**. In addition to the parameters included in **Table 3.7**, there was a single exceedance for nitrite at monitoring well TW42-99S in the Fall 2021 sampling event (0.88 mg/L compared to the MACB of 0.44 mg/L). Similarly, there was a single exceedance of fluoride at monitoring well TW30-94 in the Spring 2021 sampling event (0.79 mg/L compared to the MACB of 0.75 mg/L).

Table 3.7: RUC Exceedances in Active Aquitard Monitoring Wells

		Sulphate		Alkalinity		Total Dissolved Solids		Iron	
	MACB	472		438		500		0.16	
Monitoring Well		Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
Along Property Boundary	TW30-94						504		
	TW41-99S	495	489	496		1210	1050		
	TW42-99S	1900	2120			3300	3040		
	TW43-99S					548			
	TW45-99S					668	662		
	TW48-16S			449		736	676		
	TW62-13S					600	600		
Downgradient of Northern Berm	TW21-94-II					982	676		
	OW32-90S		475			1020	908		
	OW35-90S	709	518			1350	990		
	TW22-94	662*	646	573*		1470*	1320		
	TW32-94-IV					666	710	0.369	
	TW40-99S		**584**	522	439	1150	1220	1.01	
	TW53-03S					1060	934		

Notes:

- Concentrations in mg/L
- *An asterisk indicates that the higher concentration of the normal or field duplicate sample concentration is shown in the table.
- **Bold** text indicates that the data showed an increasing trend, described in **Table 7**

The exceedances of Reasonable Use concentrations were mainly identified for naturally occurring parameters. Sulphate was the only parameter identified to have a statistically significant increasing concentration trend only at one monitoring well, TW40-99S. All other parameters did not have

statistically significant increasing trends. As detailed in Section 3.3.1, total dissolved solids (TDS) are not generally indicative of landfill impacts. The source of sulphate in the Active Aquitard has been identified as the result of the natural reduction of pyrite (Abbott, 1987) or to solubilization of anhydrite / gypsum in till soils (Hobbs et al., 2011). Overall, the exceedances of Reasonable Use concentrations in Active Aquitard monitoring wells are not interpreted to be landfill related.

3.4.1.2 Interface Aquifer RUC Exceedances

Exceedances of the RUC for the 14 Interface Aquifer monitoring wells located at or near the compliance boundary are summarized in **Table 3.8**. Consistent with the 2020 Monitoring Report, the average background groundwater concentrations for off-Site Interface Aquifer monitoring wells identified elevated concentrations for TDS, alkalinity, chloride, iron and sodium above the OWDS. The elevated background concentrations for these parameters are naturally occurring resulting from solubilization of minerals within the Kettle Point Formation shale and have not been included in the RUC summary of exceedances (**Table 3.8**).

Table 3.8: RUC Exceedances in Interface Aquifer Monitoring Wells

	Fluoride		Arsenic		Barium		Boron	
MACB	1.04		0.0048		0.332		2.6	
Monitoring Well	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
OW32-90D	1.21							
OW35-05D								**2.99**
TW30-99D	1.11				0.375			
TW32-94-II			0.008		2.15	0.535	9.59	
TW47-00D						1.61*		4.05*
TW48-00D		1.12*					2.66	
TW49-00D	1.2							

Notes:

- Concentrations in mg/L
- *An asterisk indicates that the higher concentration of the normal or field duplicate sample concentration is shown in the table.
- **A double asterisk indicates that a parameter was not sampled/analyzed during event.
- **Bold** text indicates that the data showed an increasing trend, detailed in **Table 7**.

Consistent with both the 2020 Monitoring Report and the 2019 Monitoring Report, there were several exceedances of fluoride MACB's but regionally fluoride concentrations are naturally elevated in bedrock groundwater quality. Therefore, the fluoride exceedances are interpreted to not be landfill related.

Barium and boron concentrations do not have statistically significant increasing trends. As well, the Interface Aquifer monitoring wells that do have barium and boron exceedances do not have increasing

trends in other leachate indicator parameters which would be apparent if the source of the impacts were landfill related.

The arsenic concentration at monitoring well TW32-94-II was 0.008 mg/L slightly above the calculated MACB of 0.0048 mg/L. Future monitoring data will be used to evaluate if this first time exceedance a this monitoring well is anomalous.

4.0 2021 Monitoring Program Results (Sub-Cell 3)

The performance of the remedial measures implemented for Sub-Cell 3 are evaluated by a monitoring program based on groundwater level elevations and groundwater quality data in monitoring wells installed within in Sub-Cell 3. The remedial measures consist of north and south Hydraulic Control Layers (HCL) with two HCL extraction wells (EW1a-01 and EW2a-01). There are also four monitoring wells installed in the HCL (EW1b-13, EW1c-13, EW2b-13 and EW2c-13) used for groundwater elevation monitoring as well as groundwater quality monitoring.

The purpose of Groundwater elevations in Sub-Cell 3 are used to assess if there is an appropriate head difference (vertical hydraulic gradient) between the HCL and the Interface Aquifer that is maintained by the HCL extraction wells. The northern HCL has extraction well, EW1a-01, and monitoring wells, EW1b-13, and EW1c-13. Extraction well, EW2a-01m and monitoring wells, EW2b-13 and EW2c-13, are located in the southern HCL which also includes a hydraulic control drain.

4.1 Sub-Cell 3 Groundwater Elevation Data

Hydrographs for the four HCL monitoring wells (EW1b-13, EW1c-13, EW2b-13 and EW2c-13) are included in Appendix B (Figures B-18 through B-21, respectively). **Figure 15** illustrates hydrographs for all four monitoring wells as well as manual measurements for HCL extraction wells, EW1a-01 and EW2a-01. Also shown on **Figure 15** is the water level elevation for Interface Aquifer monitoring well TW32-94-II. Previously, two other Interface Aquifer monitoring wells (Interface Aquifer (PW1-N, and PW2-S[R11], located adjacent to Sub-Cell 3) were used to assess the HCL system performance. These monitoring wells were not available for monitoring in 2021 and monitoring well TW32-94-II was used for comparative purposed. It is noted that TW32-94-II is located some distance away from Sub-Cell 3 and generally has a groundwater elevation about 2.5 m less than PW1-N, and PW2-S[R11] (196 masl for TW32-94-II compared to 198.5 masl for PW1-N and PW2-S[R11].

As shown on **Figure 15**, the groundwater elevation in the HCL monitoring wells and extraction wells was greater than the groundwater elevation in the Interface Aquifer indicating that the extraction are not operating except for a brief period in March 2021 and the HCL is not controlling groundwater levels in Sub-Cell 3 as designed.

Vertical hydraulic gradients were calculated using the groundwater elevations from HCL wells (EW1b-13, EW1c-13, EW2b-13 and EW2c-13) and Interface Aquifer well, TW32-94-II. The average vertical hydraulic gradients calculated for the northern HCL/Interface Aquifer (EW1b-13 and EW1c-13) is shown on **Figure 17** and southern HCL/Interface Aquifer (EW2b-13 and EW2c-13) are illustrated on **Figure 18**. As indicated on these figures, there is a positive vertical hydraulic gradient throughout 2021.

Minimum and maximum vertical gradients and groundwater elevations are presented on **Table 4.1**.

Table 4.1: Vertical Gradients and Groundwater Elevations Sub-Cell 3 - 2021

	Vertical Gradient		Groundwater Elevation (masl)	
	Minimum	Maximum	Minimum	Maximum
Wells within HCL of Sub-Cell 3				
EW1a-01*	0.22	0.40	200.74	204.52
EW1b-13	0.19	0.43	199.87	204.69
EW1c-13	0.19	0.42	199.89	204.71
EW2a-01*	0.15	0.31	199.18	202.75
EW2b-01	-0.13	0.40	192.91	204.90
EW2c-13	-0.14	0.42	192.96	204.87
Wells within the interface aquifer adjacent to Sub-Cell 3				
PW1-N	-	-	199.04	199.36
PW2-S(R11)	-	-	199.47	200.33
Well within the interface aquifer in proximity to Sub-Cell 3				
TW32-94-II	-	-	195.51	196.17

Notes:

- Negative vertical gradient value indicates an upward gradient
- Positive vertical gradient value indicates a downward gradient
- Hydraulic gradients were calculated using groundwater elevations from HCL wells and Interface aquifer well TW32-94-II, transducer data was not available from PW1-N and PW2-S(R11) in 2021
- * Transducer data was not available for EW1a-01 and EW2a-01. The min/max groundwater elevations are based on four manual water level events

Significant surface works have occurred in the Sub-Cell 3 area in 2020 and 2021. As recommended in the 2020 Monitoring Report, an operational and maintenance procedure and an inspection checklist should be developed to provide assurance that Sub-Cell 3 groundwater extraction system is operating as designed.

4.2 Sub-Cell 3 Groundwater Quality

Groundwater quality from Sub-Cell 3 groundwater quality is assessed using monitoring data from the four monitoring wells (EW1b-13, EW1c-13, EW2b-13 and EW2c-13) installed in the ECL and the two extractions wells, EW1a-01 and EW2a-01. The data is compared to both ODWS and PWQO standards. As well, two Interface Aquifer wells (PW1-N, and PW2-S[R11]) were sampled in Spring 2021 before they became unavailable for sampling due to capital works being completed in the vicinity of these monitoring wells.

Consistent with historical data, TDS, iron, chloride and sodium are above the ODWS in these monitoring wells. PWQOs are typically exceeded for boron and iron. As detailed previously, these parameters are elevated in the Active Aquitard and Interface Aquifer monitoring wells as well. While the groundwater

elevation data for the HCL indicates that it is not operating as designed, the groundwater quality data do not indicate deteriorating groundwater quality. The low permeability of the unweathered till results in extremely low groundwater velocities even when there is a reversal of vertical hydraulic gradients.

Table 4.2 summarizes the statistically significant trends of leachate indicator parameters at HCL wells and Sub-Cell 3 Interface Aquifer wells. No statistically significant increasing trends were identified in the monitoring data for these monitoring wells.

Table 4.2: Trends in Sub-Cell 3 HCL Monitoring Wells

Monitoring Well	Chloride	Sulphate	Potassium	Sodium	Bromide	Fluoride	Barium	Boron
EW1a-01	no trend	no trend	no trend	no trend	no trend	no trend	no trend	no trend
EW1b-13	no trend	no trend	no trend	no trend	no trend	no trend	no trend	no trend
EW1c-13	**Decreasing**	no trend	no trend	no trend	no trend	no trend	no trend	no trend
EW2a-01	no trend	**Decreasing**	no trend	no trend	no trend	no trend	no trend	no trend
EW2b-13	no trend	**Decreasing**	no trend	no trend	no trend	no trend	**Decreasing**	no trend
EW2c-13	no trend	no trend	no trend	no trend	no trend	no trend	no trend	no trend

5.0 2021 Engineered Landfill Systems Performance

An assessment of the inward horizontal hydraulic gradient and a review of shallow groundwater elevations in the vicinity of the LCS. The performance assessment is focused on the southwest corner of the landfill. Previously, an assessment was also completed for the southern berm prior to its removal in 2019. Additional evaluation transects will be used to assess the engineered landfill systems as the LCS is expanded with the construction of new landfill cells in the future.

Water levels from dataloggers installed in the LCS standpipes has not available since 2018 when it was identified that the dataloggers at LCS standpipes LCSOW01-15 and LCSOW03-15 were no longer submerged in leachate. For the 2021 performance assessment, the same methodology used in 2019 and 2020 was used which consisted of a review of groundwater elevation data and hydraulic gradients of the LCS and perimeter monitoring wells along a horizontal transect in the southwest portion of the site.

5.1 Transect Across the Southwest Corner of Landfill

The transect is shown graphically on **Figure 19** and consists of LCS standpipe LCSOW02-15, five perimeter wells instrumented in the Active Aquitard, Transition Zone, or Inactive Aquitard (TW64-16-I through to TW64-16IV, and TW48-16S), and one perimeter monitoring well installed in the Interface Aquifer (TW48-00D). Hydrographs for the six perimeter wells within the transect are included in Appendix B as Figures B-6, B-14 and B-22 through B-25. **Figure 19** combines the hydrographs of the six perimeter monitoring wells and shows the location of these monitoring wells both in plan and cross-section.

Leachate elevations in the LCS are controlled to be less than 197 masl. Therefore, as shown on **Figure 19**, the hydraulic gradient is inwards towards the LCS preventing leachate from migrating beyond the western property boundary. Groundwater quality monitoring data (as detailed is Section 3.3.1) confirms this conclusion.

6.0 Summary of Findings

The following is a summary of findings from the 2021 program:

Perimeter Monitoring Program

- As designed, the northern berm has caused groundwater elevation increases within and below the berm causing a groundwater mound that induces an inward hydraulic gradient from the berm to the waste footprint. Groundwater elevations outside of the berm remain stable within historical ranges;
- Groundwater potentiometric contours in the Interface Aquifer indicate a potentiometric high in the northwest portion of the property consistent with historical patterns.
- The groundwater quality of both the Active Aquitard and the Interface Aquifer have exceedances of ODWS parameters such as TDS, alkalinity, chloride, sodium and sulphate but have been attributed to naturally occurring concentrations. The exceedances are consistent with historical monitoring data for the landfill and baseline groundwater quality monitoring
- Sulphate concentrations in the Active Aquitard exceed the maximum allowable concentration at the compliance boundary calculated following the Reasonable Use Guideline. The source of sulphate in the Active Aquitard has been identified as the result of the natural processes. Overall, the exceedances of Reasonable Use concentrations in Active Aquitard monitoring wells are not interpreted to be landfill related.
- Consistent with historical data, groundwater samples taken from Interface Aquifer wells indicate exceedances for fluoride, barium and boron. A single arsenic concentration at monitoring well TW32-94-II was 0.008 mg/L slightly above the calculated allowable concentration of 0.0048 mg/L. Future monitoring data will be used to evaluate if this first time exceedance of arsenic at this monitoring well is anomalous.
- Statistical trend analysis was completed for groundwater data collected for Active Aquitard and Interface Aquifer monitoring wells. The majority of monitoring wells indicated either no trend or a decreasing trend with concentrations generally within historical ranges. The lack of increasing trends in the monitoring data is an indication that exceedances are not related to landfill impacts.

Sub-Cell 3 Monitoring Program

- Groundwater elevation in the HCL monitoring wells and extraction wells was greater than the groundwater elevation in the Interface Aquifer indicating that the extraction wells were not operating except for a brief period in March 2021 and the HCL is not controlling groundwater levels in Sub-Cell 3 as designed. Significant surface works have occurred in the Sub-Cell 3 area in 2020 and 2021 and have affected the operation of the extraction wells.
- While the groundwater elevation data for the HCL indicates that it is not operating as designed, the groundwater quality do not indicate deteriorating groundwater quality. The low

permeability of the unweathered till results in extremely low groundwater velocities even when there is a reversal of vertical hydraulic gradients.

Engineered Landfill System Performance Assessment

- The leachate control system (LCS) indicates that the hydraulic gradient is inwards towards the LCS preventing leachate from migrating beyond the western property boundary. Groundwater quality monitoring data confirms this conclusion.

7.0 Recommendations

The following are recommendations made:

Perimeter Monitoring Program

- As recommended in the 2020 Monitoring Report, rationalize the perimeter monitoring program. Specifically, due to the number of years (over 30 in some monitoring wells) of consistent monitoring data and the lack of increasing trends in the data, it is recommended to reduce the number of sampling events from twice per year (Spring and Fall) to once per year (Spring)
- Repair monitoring wells identified as requiring maintenance. If a monitoring well cannot be repaired the usefulness of the monitoring well in the monitoring program would be reviewed and only replaced if deemed essential to the monitoring program.

Sub-Cell Monitoring Program

- Complete an assessment of issues related to the Sub-Cell 3 groundwater extraction wells and complete repairs and / or upgrades to maintain pump operation and the maintenance of design groundwater levels. Design and install upgraded surface components consistent with the new surface grades in this area.
- Replace datalogger direct read cables for extraction wells EW1a-01 and EW2b-01
- As recommended in the 2020 Monitoring Report, an operational and maintenance procedure and an inspection checklist should be developed to provide assurance that Sub-Cell 3 groundwater extraction system is operating as designed.

Engineered Landfill System Performance Assessment

- As recommended in the 2020 Monitoring Report, assess the condition of the LCS standpipes and assess repair, or replace as needed, the datalogger direct read cables. Rehabilitation or replacement as needed, the LCS standpipes.
- As recommended in the 2020 Monitoring Report, install a water level monitoring system for the surface water pond and establish pond and LCS trigger levels and warning a connection to the LCS monitoring system and program pond/LCS triggers and warning systems (alarms).

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Project Manager

Rob Kell, P.Eng., P.Geo.
Project Hydrogeologist

8.0 References

Abbott, D.E., 1987, *The Origin of Sulphur in Sulphate-Rich Shallow Groundwater of the St. Clair Clay Plain, Southwestern Ontario,* M.Sc. thesis, Earth Sciences, University of Waterloo, Waterloo.

GHD, 2021, *2020 Annual Groundwater Monitoring Report, Clean Harbors Lambton Facility Landfill*, Clean Harbors Canada Inc., March 2021.

M.Y. Hobbs, S.K. Frape, O. Shouakar-Stash and L.R. Kennell, 2011, *Regional Hydrogeochemistry – Southern Ontario*, NWMO DGR-TR-2011-12, March 2011.

RWDI Air Inc., 2013, *2012/2013 Groundwater Monitoring Report,* Clean Harbors Lambton Facility Landfill – Corunna, Ontario, November 15, 2013.

RWDI Air Inc., 2017, *Final Draft, Groundwater and Landfill Performance Monitoring Programs*, December 9, 2017.

Figures

SARNIA INDIAN RESERVE NO. 45

CORUNNA

PETROLIA LINE

SYKESTON

LAMBTON FACILITY

ST. CLAIR RIVER

TELFER ROAD

COLINVILLE

MOORETOWN

PAYNE

SECKERTON

MOORE CENTRE

LEGEND:

APPROXIMATE SITE BOUNDARY

NOTE:
1. SOURCE: GOOGLE PRO IMAGERY, 2006.

1 0 1
SCALE 1:40,000 KILOMETRES

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DATE FEBRUARY 2022

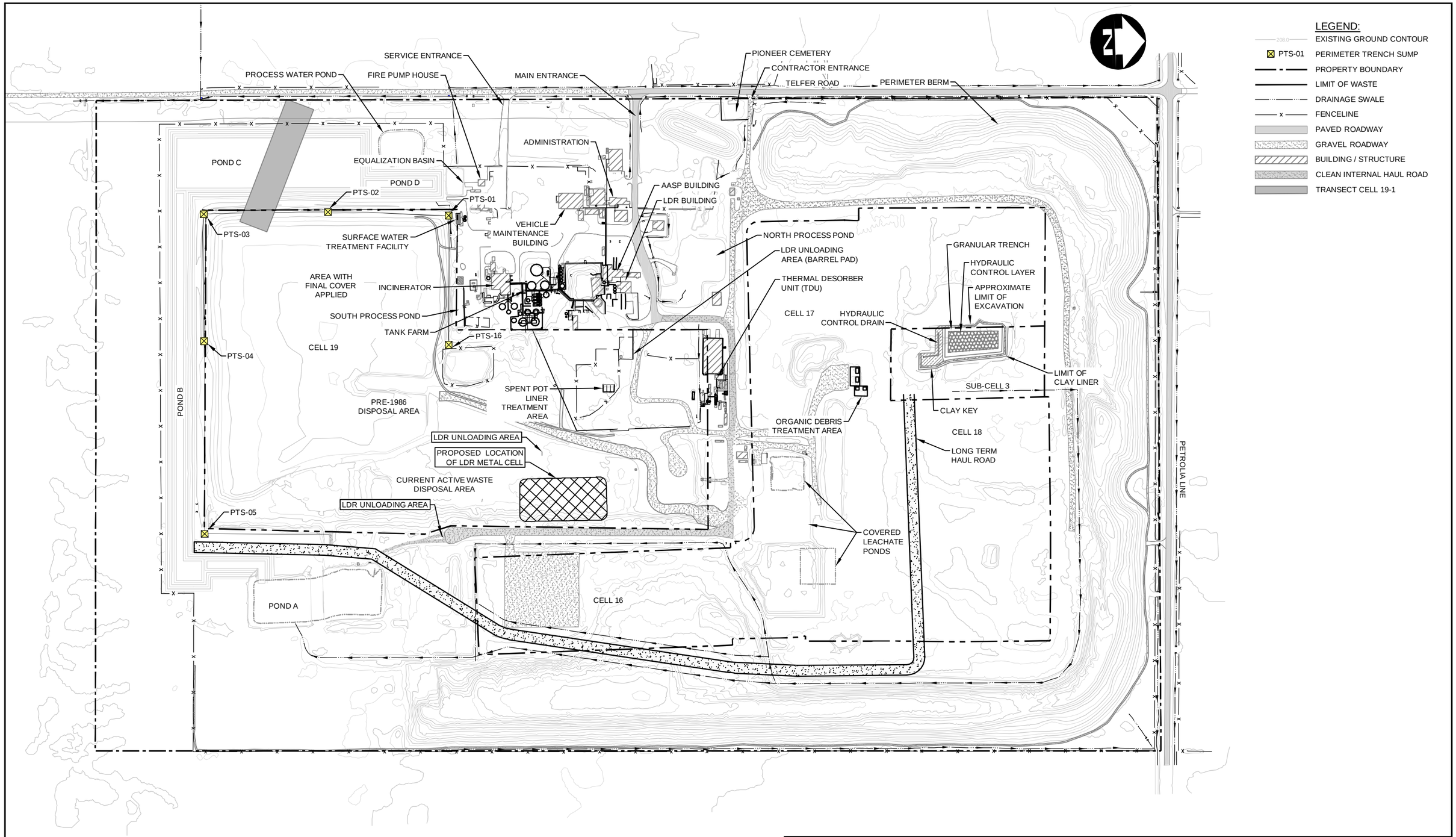
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE SITE LOCATION

FIGURE NO. 1

FileName:c:\pw working directory\projects 2021\50thrldms\157872115\19-05-03_fig 1.dwg



NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

100 0 100
SCALE 1:5,000 METRES

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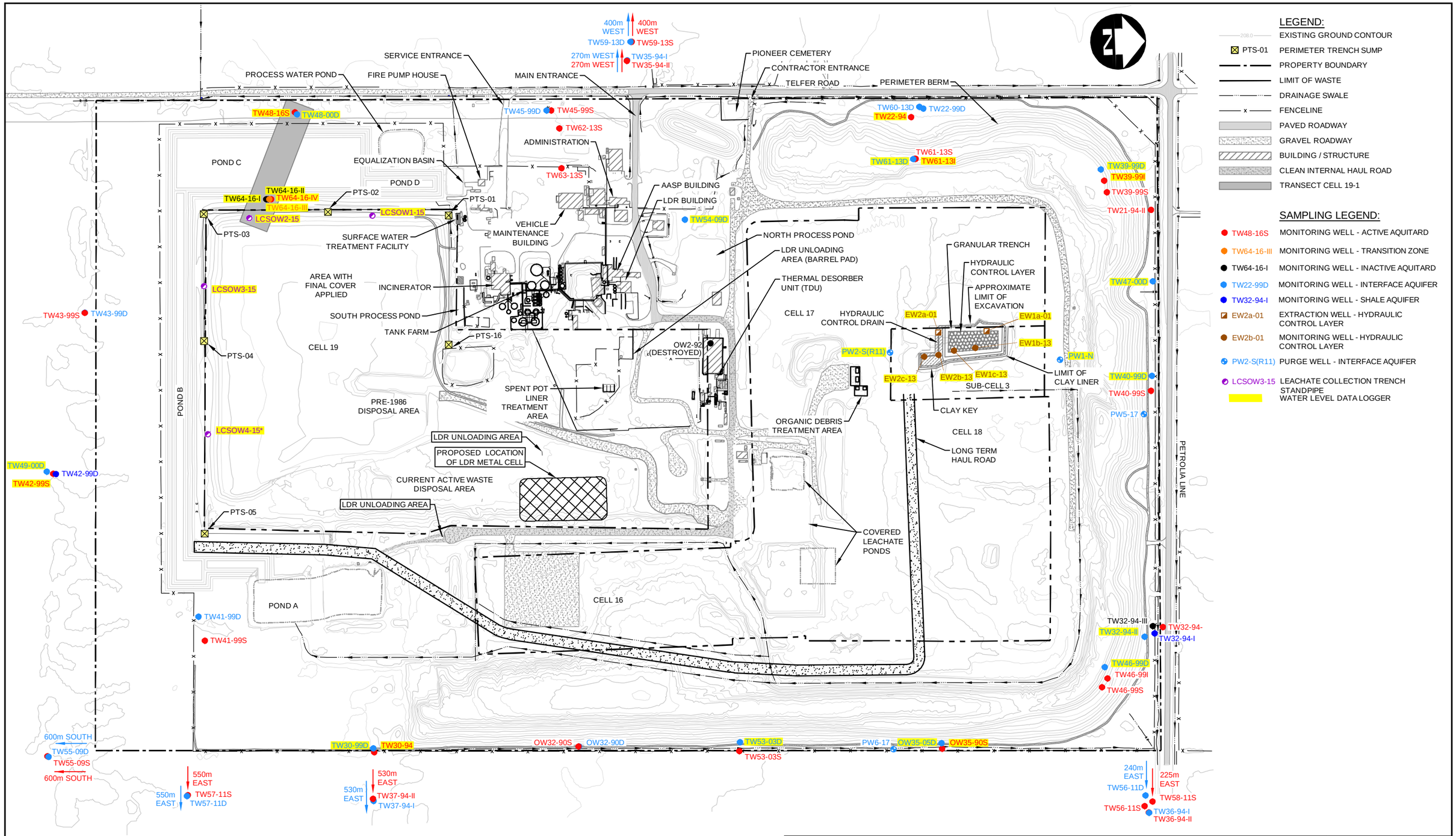
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE SITE PLAN

FIGURE NO. 2

FileName:c:\pw working directory\projects 2021\50\tr\rdms\15787\211519-05-03_figs 2 - 5.dwg



NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

100 0 100
SCALE 1:5,000 METRES

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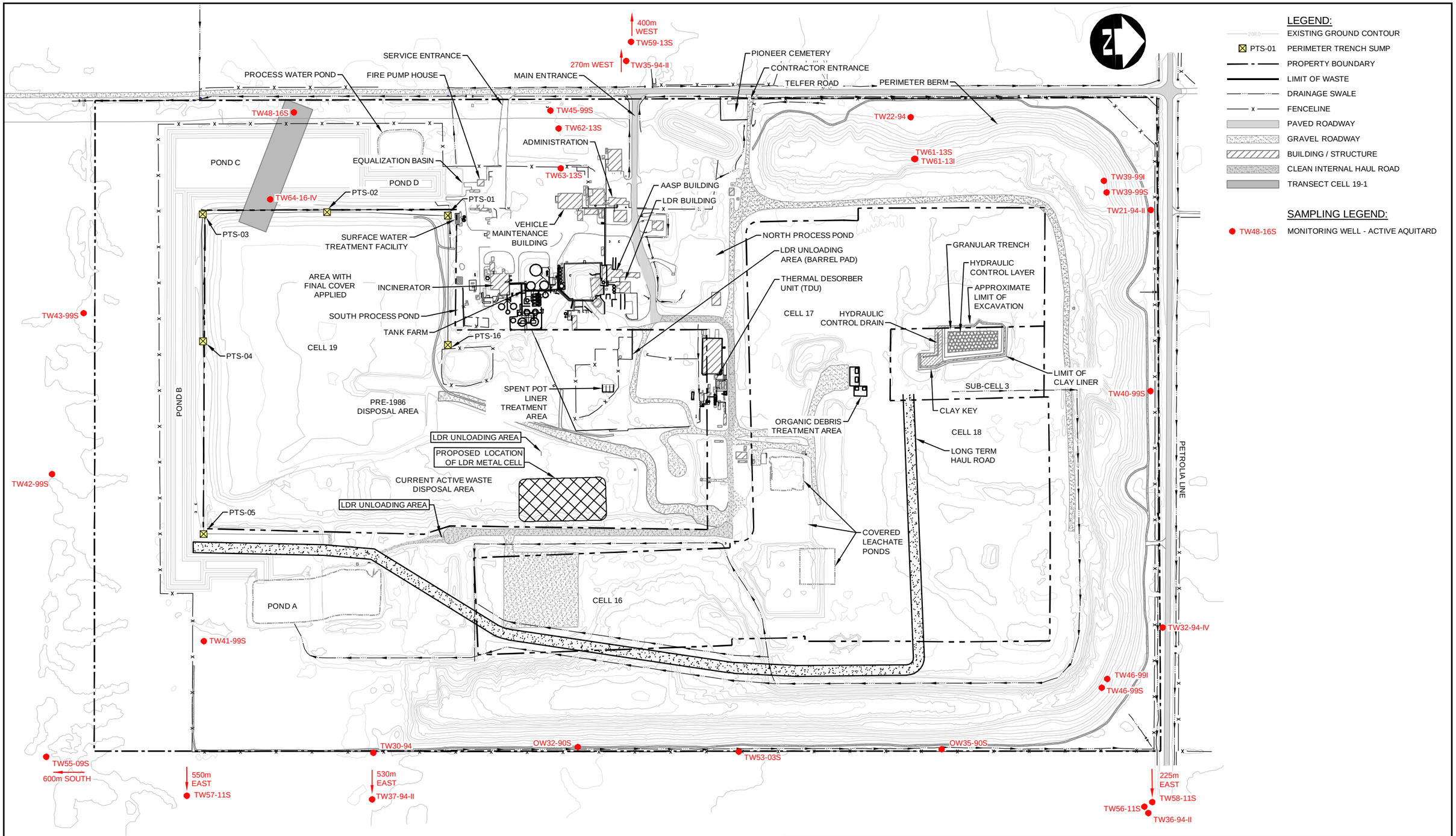
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE MONITORING WELL NETWORK

FIGURE NO. 3

FileName:c:\pw working directory\projects 2021\50\tridms\15787\211519-05-03_figs 2 - 5.dwg



NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

100 0 100
SCALE 1:5,000 METRES

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DATE FEBRUARY 2022

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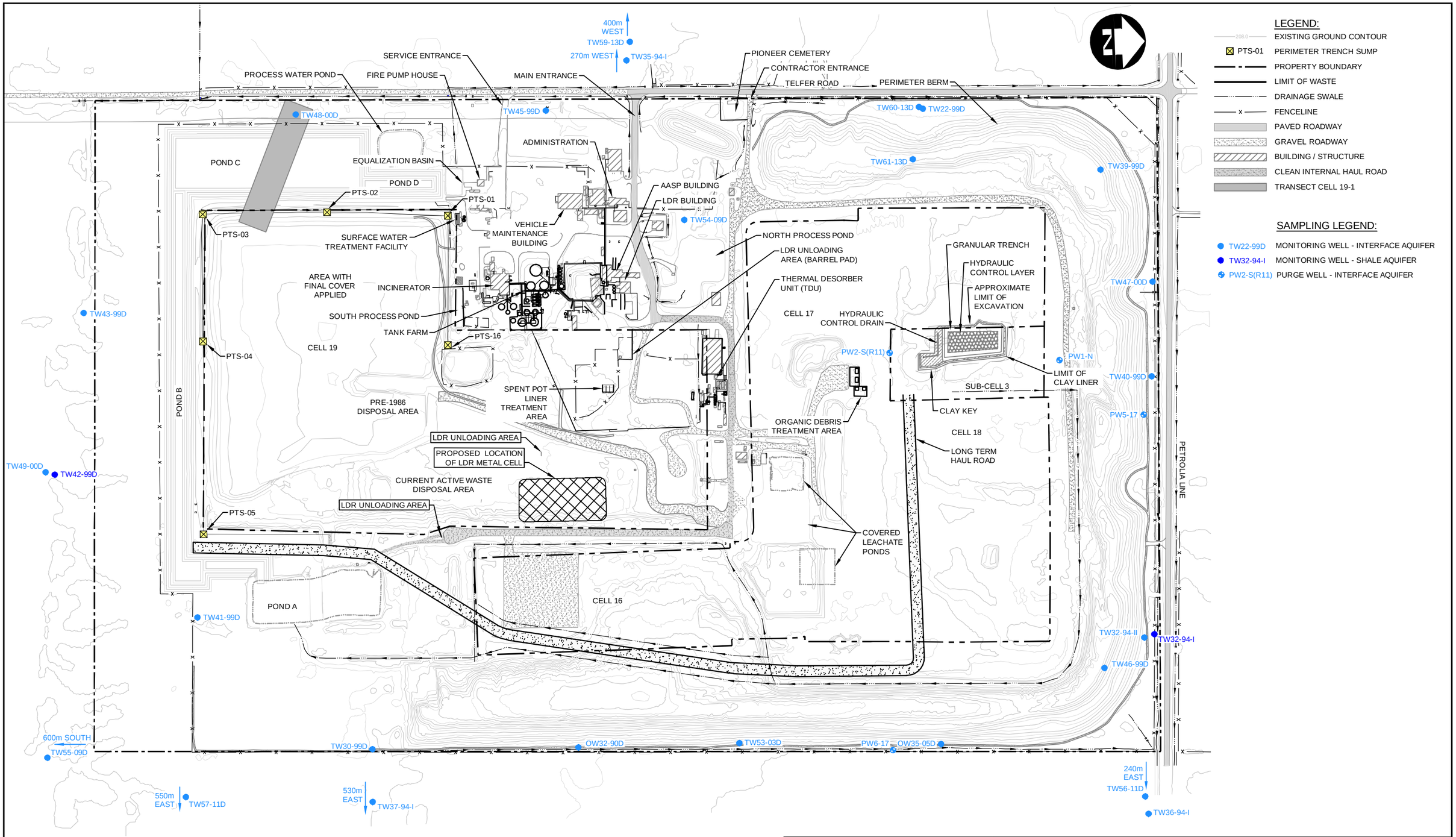
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE PERIMETER ACTIVE AQUITARD MONITORING WELL NETWORK

FIGURE NO. 4

FileName:c:\pw working directory\projects 2021\50\tr\drms\157872\211519-05-03_figs 2 - 5.dwg



LEGEND:

- EXISTING GROUND CONTOUR
- PTS-01 PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW22-99D MONITORING WELL - INTERFACE AQUIFER
- TW32-94-I MONITORING WELL - SHALE AQUIFER
- PW2-S(R11) PURGE WELL - INTERFACE AQUIFER

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

100 0 100
SCALE 1:5,000 METRES

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CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE PERIMETER INTERFACE AQUIFER AND KETTLE POINT SHALE MONITORING WELL NETWORK

FIGURE NO. 5

FileName:c:\pw working directory\projects 2021\50tr\dms15787\211519-05-03_figs 2 - 5.dwg

NORTH PROCESS POND

CELL 17

GRANULAR TRENCH

HYDRAULIC CONTROL LAYER

APPROXIMATE LIMIT OF EXCAVATION

EW1a-01

EW2a-13

HYDRAULIC CONTROL DRAIN

PW2-S(R11)

EW1c-13

EW1b-01

EW2c-13

EW2b-13

LIMIT OF CLAY LINER

PW1-N

CLAY KEY

SUB-CELL 3

THERMAL DESORBER UNIT (TDU)

ORGANIC DEBRIS TREATMENT AREA

CELL 18

LONG TERM HAUL ROAD

COVERED LEACHATE PONDS

PETROLIA LINE

LEGEND:

- 208.0 — EXISTING GROUND CONTOUR
- PTS-01 — PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- EW2a-01 — EXTRACTION WELL - HYDRAULIC CONTROL LAYER
- EW2b-01 — MONITORING WELL - HYDRAULIC CONTROL LAYER
- PW2-S(R11) — PURGE WELL - INTERFACE AQUIFER

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

50 0 50

SCALE 1:2,000 METRES

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PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE SUB-CELL 3 MONITORING WELL NETWORK

FIGURE NO. 6

FileName:c:\pw working directory\projects 2021\50tlrl\dms15787\211519-05-03_figs 6 & 7.dwg

TW48-16S
TW48-00D
TW64-16-II
TW64-16-IV
TW64-16-I
TW64-16-III
PTS-01
PTS-02
PTS-03
PTS-04
PTS-16
LCSOW1-15
LCSOW3-15
EQUALIZATION BASIN
POND D
POND B
CELL 19
AREA WITH FINAL COVER APPLIED
SURFACE WATER TREATMENT FACILITY
VEHICLE MAINTENANCE BUILDING
INCINERATOR
TANK FARM
SOUTH PROCESS POND
PRE-1986 DISPOSAL AREA

LEGEND:

- EXISTING GROUND CONTOUR
- PTS-01 PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW48-16S MONITORING WELL - ACTIVE AQUITARD
- TW64-16-III MONITORING WELL - TRANSITION ZONE
- TW64-16-I MONITORING WELL - INACTIVE AQUITARD
- TW22-99D MONITORING WELL - INTERFACE AQUIFER
- LCSOW3-15 LEACHATE COLLECTION TRENCH STANDPIPE

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

50 0 50
SCALE 1:2,000 METRES

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DATE FEBRUARY 2022

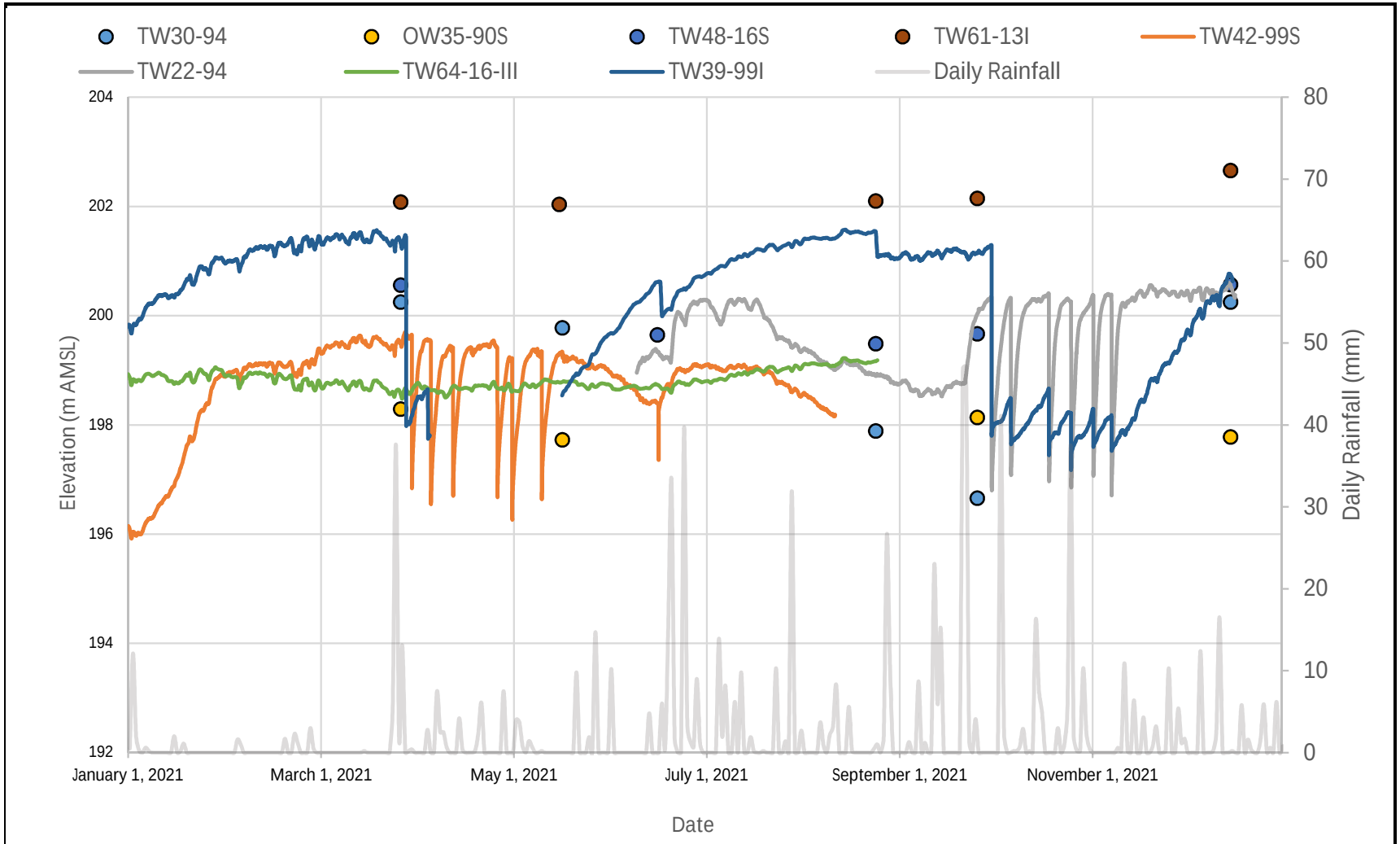
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

TITLE PERFORMANCE MONITORING OF ENGINEERED LANDFILL SYSTEMS MONITORING WELL NETWORK

PROJECT NO. 21-1519

FIGURE NO. 7

FileName:c:\pw working directory\projects 2021\50tr\dms15787\211519-05-03_figs 6 & 7.dwg



Active Aquitard Seasonal Groundwater Fluctuation Hydrograph	**Figure 8**	
Clean Harbors Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** DO	
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

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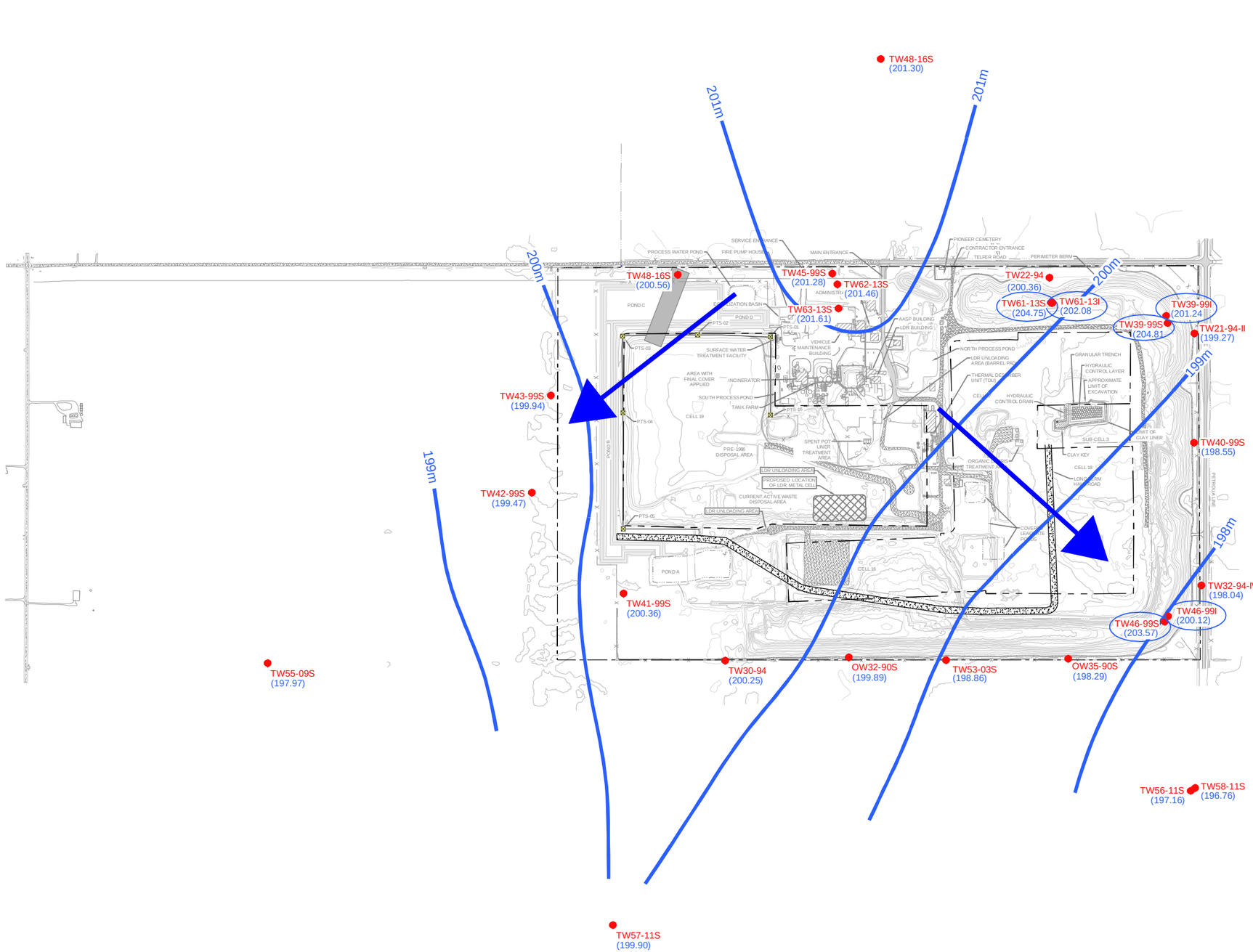

LEGEND:

- EXISTING GROUND CONTOUR
- PTS-01 PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW48-16S MONITORING WELL - ACTIVE AQUITARD
- (199.90) GROUNDWATER ELEVATION (m amsl)
- 199m GROUNDWATER CONTOUR (m amsl)
- GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

200 0 200
SCALE 1:10,000 METRES

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DATE FEBRUARY 2022

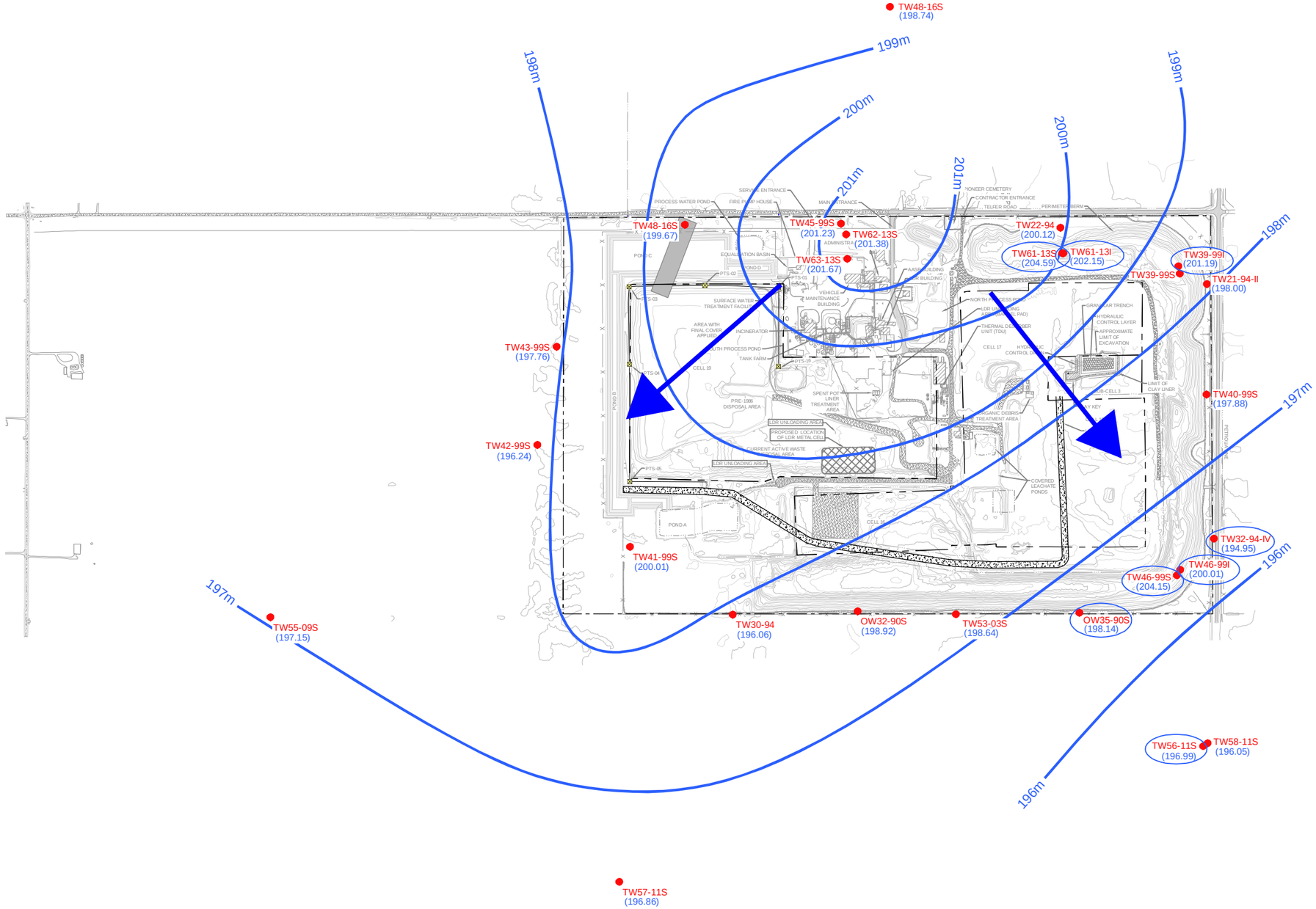
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE GROUNDWATER ELEVATIONS
ACTIVE AQUITARD MARCH 2021

FIGURE NO. 9

FileName:c:\pw working directory\projects 2021\50thrldms\15787\211519-05-03_figs 9 - 12.dwg



LEGEND:

- EXISTING GROUND CONTOUR
- PTS-01 PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW48-16S — MONITORING WELL - ACTIVE AQUITARD
- (199.90) — GROUNDWATER ELEVATION (m amsl)
- 199m — GROUNDWATER CONTOUR (m amsl)
- GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

200 0 200
SCALE 1:10,000 METRES

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DATE FEBRUARY 2022

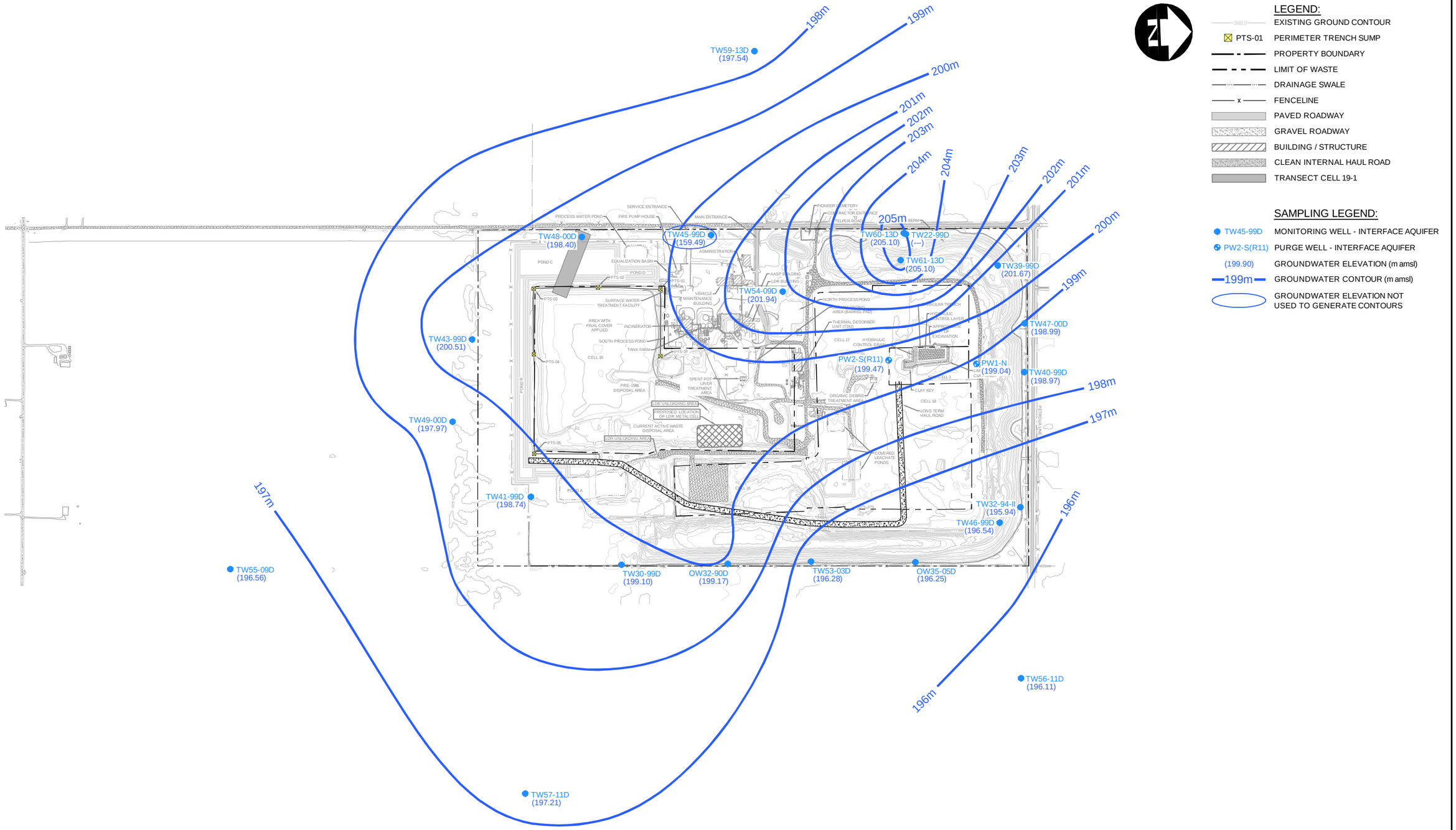
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE GROUNDWATER ELEVATIONS
ACTIVE AQUITARD SEPTEMER 2021

FIGURE NO. 10

FileName:c:\pw working directory\projects 2021\501\rfdms\15787\211519-05-03_figs 9 - 12.dwg



LEGEND:

- EXISTING GROUND CONTOUR
- PTS-01 PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW45-99D MONITORING WELL - INTERFACE AQUIFER
- PW2-S(R11) PURGE WELL - INTERFACE AQUIFER
- (199.90) GROUNDWATER ELEVATION (m amsl)
- 199m GROUNDWATER CONTOUR (m amsl)
- GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

200 0 200
SCALE 1:10,000 METRES

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DATE FEBRUARY 2022

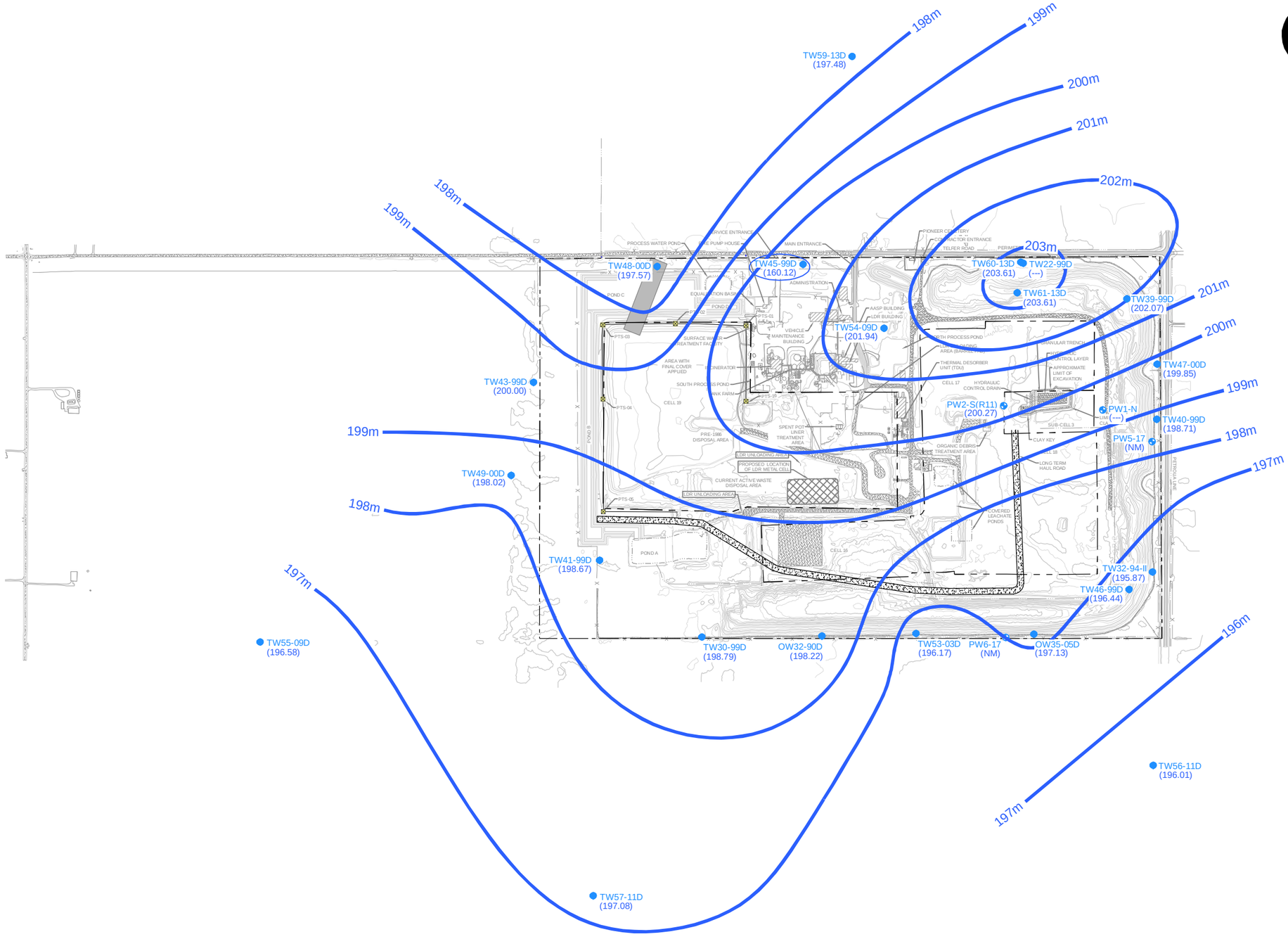
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE GROUNDWATER ELEVATIONS
INTERFACE AQUIFER MARCH 2021

FIGURE NO. 11

FileName:c:\pw working directory\projects 2021\50\dtr\dms1578721\1519-05-03_figs 9 - 12.dwg



LEGEND:

- 208.0 — EXISTING GROUND CONTOUR
- PTS-01 — PERIMETER TRENCH SUMP
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- DRAINAGE SWALE
- FENCELINE
- PAVED ROADWAY
- GRAVEL ROADWAY
- BUILDING / STRUCTURE
- CLEAN INTERNAL HAUL ROAD
- TRANSECT CELL 19-1

SAMPLING LEGEND:

- TW45-99D — MONITORING WELL - INTERFACE AQUIFER
- PW2-S(R11) — PURGE WELL - INTERFACE AQUIFER
- (199.90) — GROUNDWATER ELEVATION (m amsl)
- (NM) — NO GROUNDWATER MONITORING DATA
- 199m — GROUNDWATER CONTOUR (m amsl)
- 199m — INTERPRETED GROUNDWATER CONTOUR (m amsl)
- GROUNDWATER ELEVATION NOT USED TO GENERATE CONTOURS

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

200 0 200
SCALE 1:10,000 METRES

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DATE FEBRUARY 2022

PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

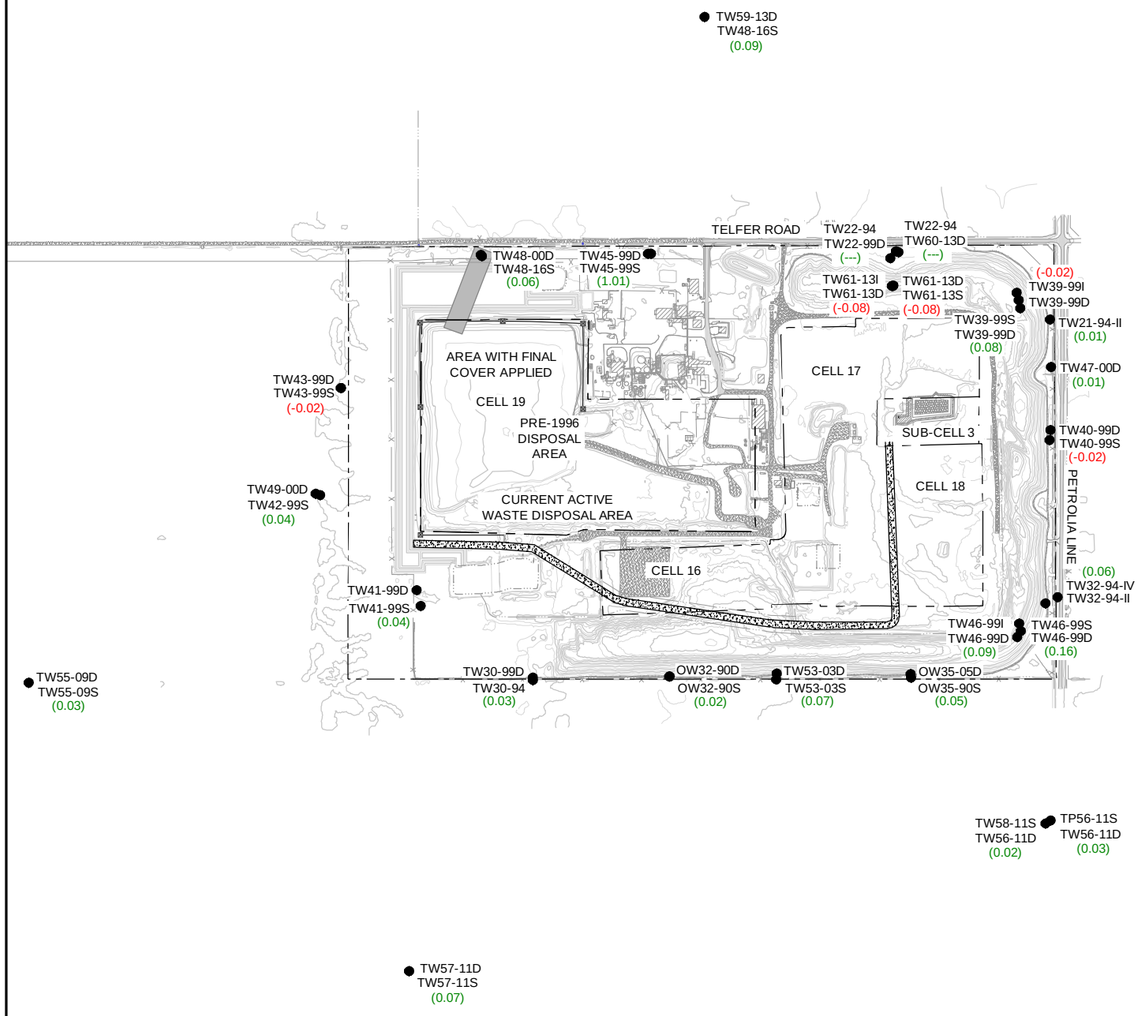
PROJECT NO. 21-1519

TITLE GROUNDWATER ELEVATIONS
INTERFACE AQUIFER SEPTEMBER 2021

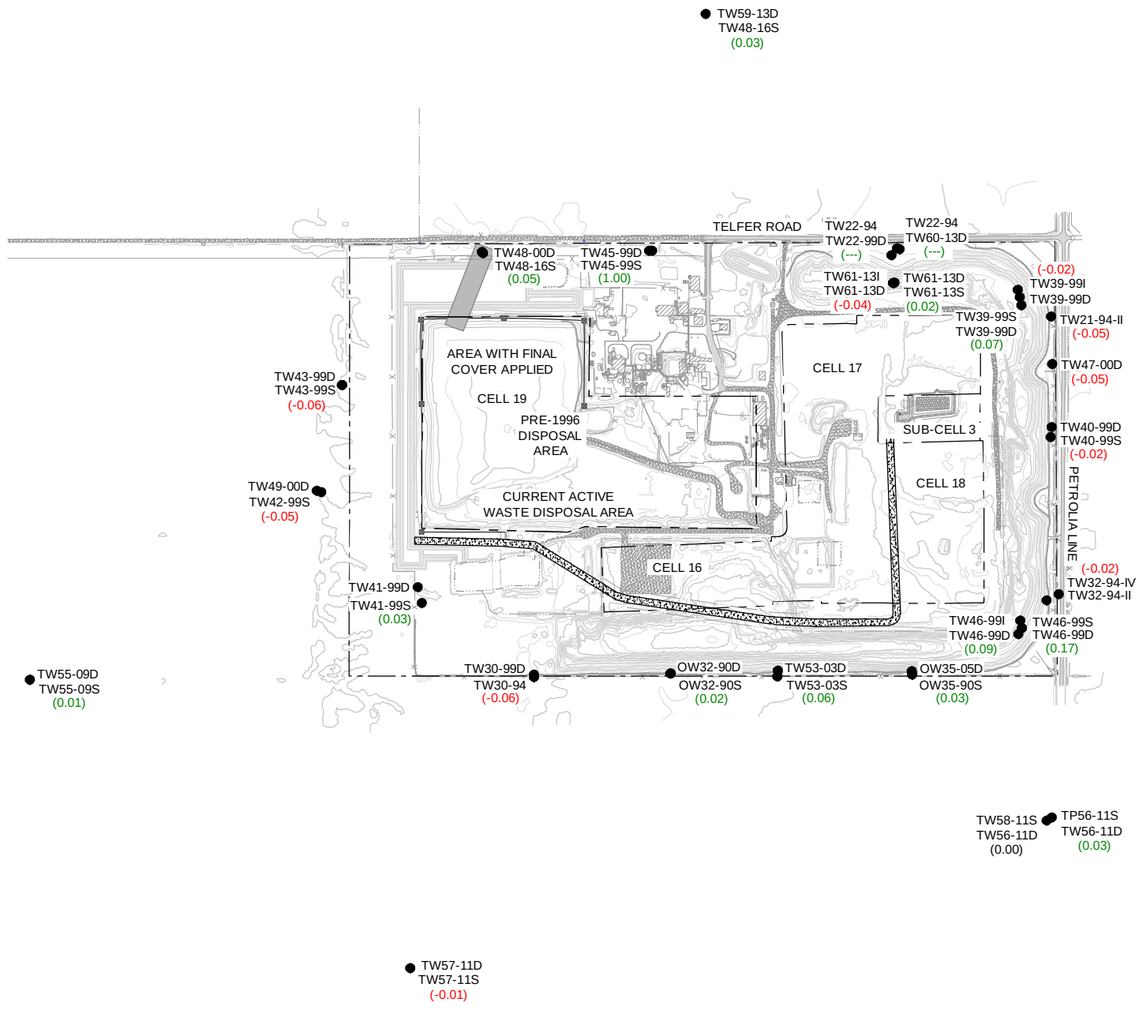
FIGURE NO. 12

FileName:c:\pw working directory\projects 2021\501\rfdms\15787\211519-05-03_figs 9 - 12.dwg

SPRING 2021 (MARCH)



FALL 2021 (SEPTEMBER)



SAMPLING LEGEND:

TW45-99S	MONITORING WELL LOCATION
(0.03)	DOWNWARD HYDRAULIC GRADIENT
(0.00)	NO VERTICAL GRADIENT
(-0.02)	UPWARD HYDRAULIC GRADIENT
(---)	NOT CALCULATED

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

250 0 250
SCALE 1:12,500 METRES

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DATE FEBRUARY 2022

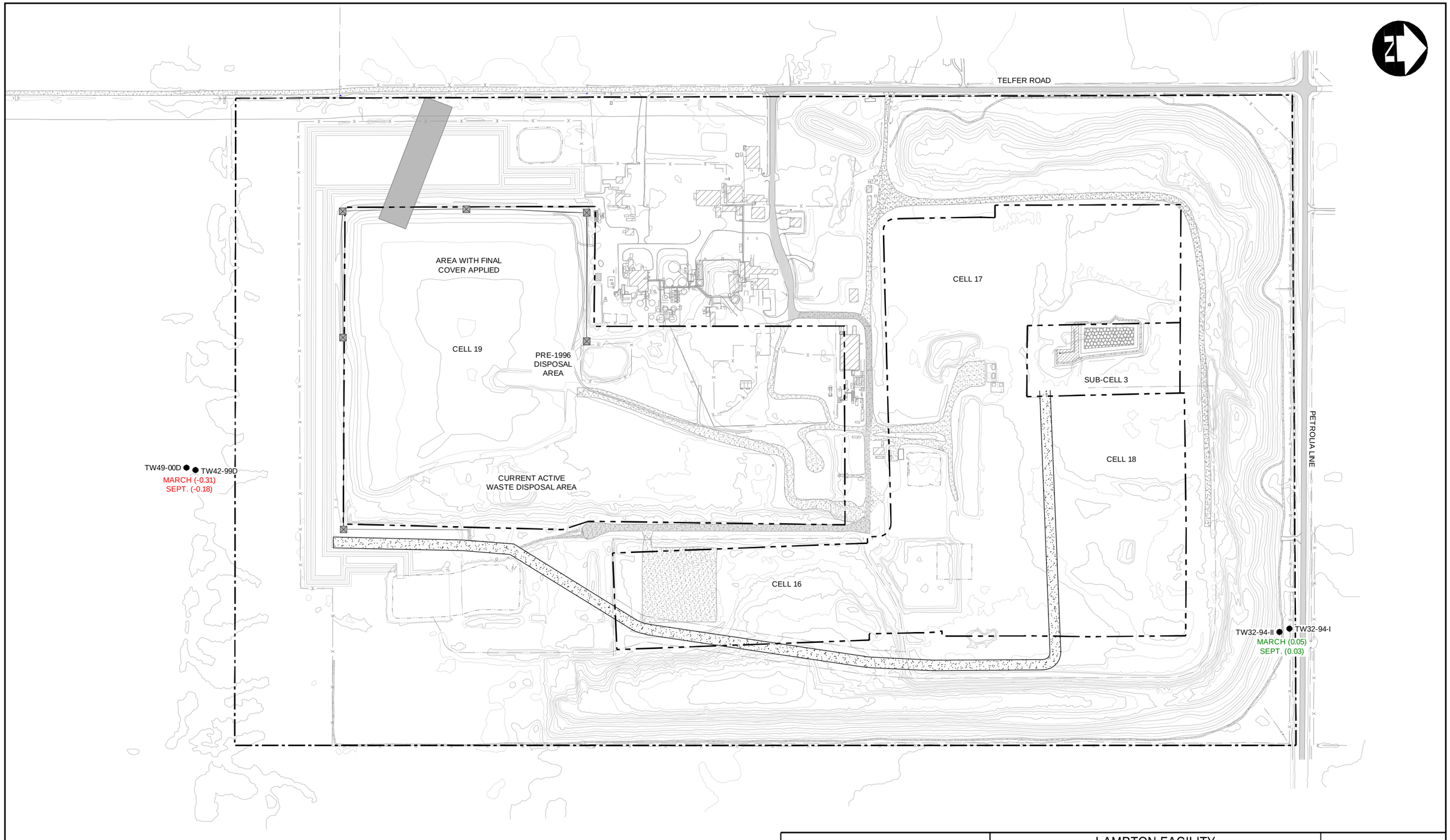
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

PROJECT NO. 21-1519

TITLE DISTRIBUTION OF VERTICAL GRADIENTS BETWEEN AQUITARD AND INTERFACE AQUIFER

FIGURE NO. 13

FileName:c:\pw working directory\projects 2021\50tlrdms157871\211519-05-03_figs 13 & 14.dwg



SAMPLING LEGEND:

● TW42-99D	MONITORING WELL LOCATION
(0.03)	DOWNWARD HYDRAULIC GRADIENT
(-0.31)	UPWARD HYDRAULIC GRADIENT

NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

100 0 100
SCALE 1:5,000 METRES

DILLON CONSULTING

DATE FEBRUARY 2022

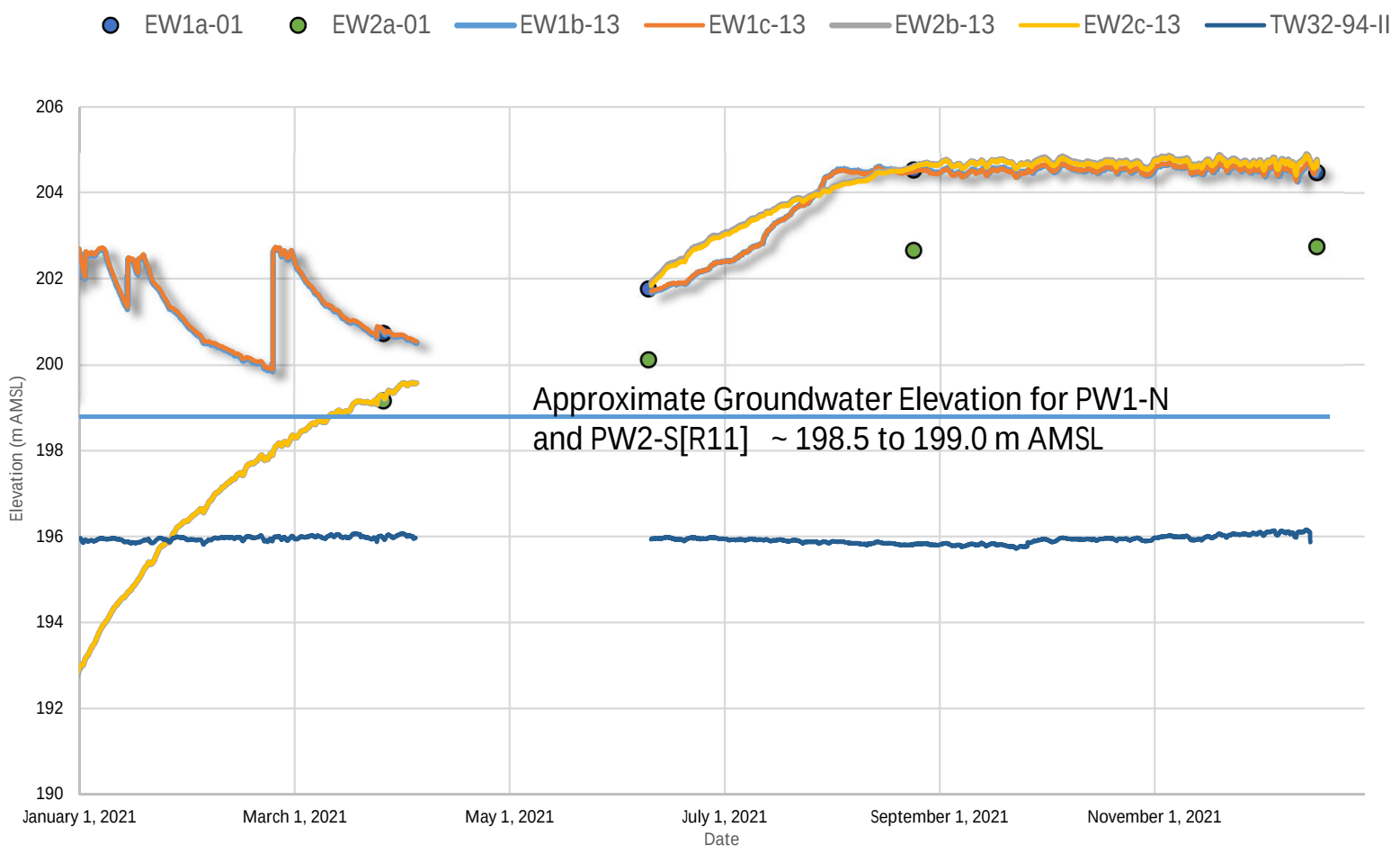
PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

TITLE DISTRIBUTION OF VERTICAL GRADIENTS BETWEEN INTERFACE AQUIFER AND KETTLE POINT FORMATION

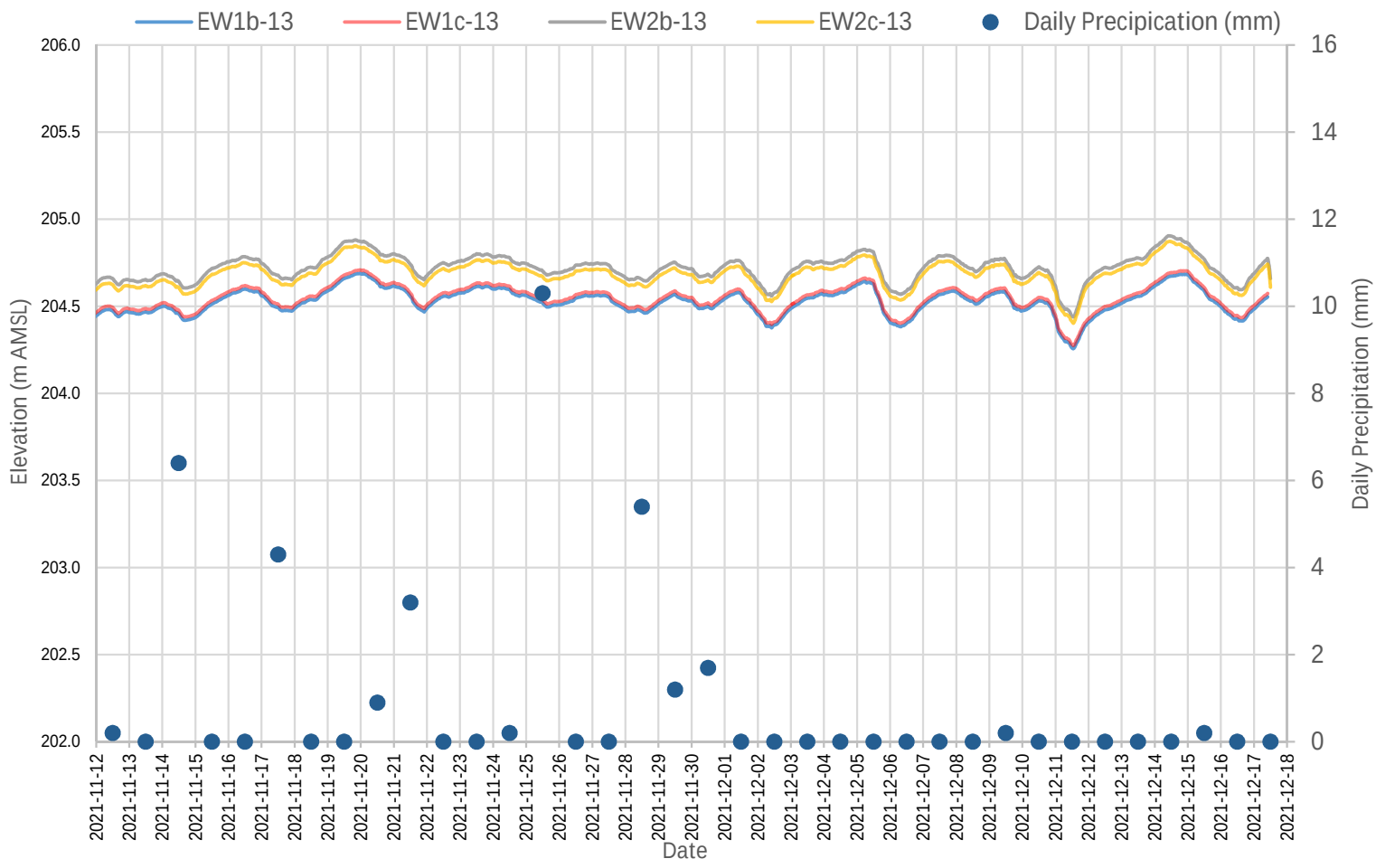
PROJECT NO. 21-1519

FIGURE NO. 14

FileName:c:\pw working directory\projects 2021\501tr\dms157872115\19-05-03_figs 13 & 14.dwg

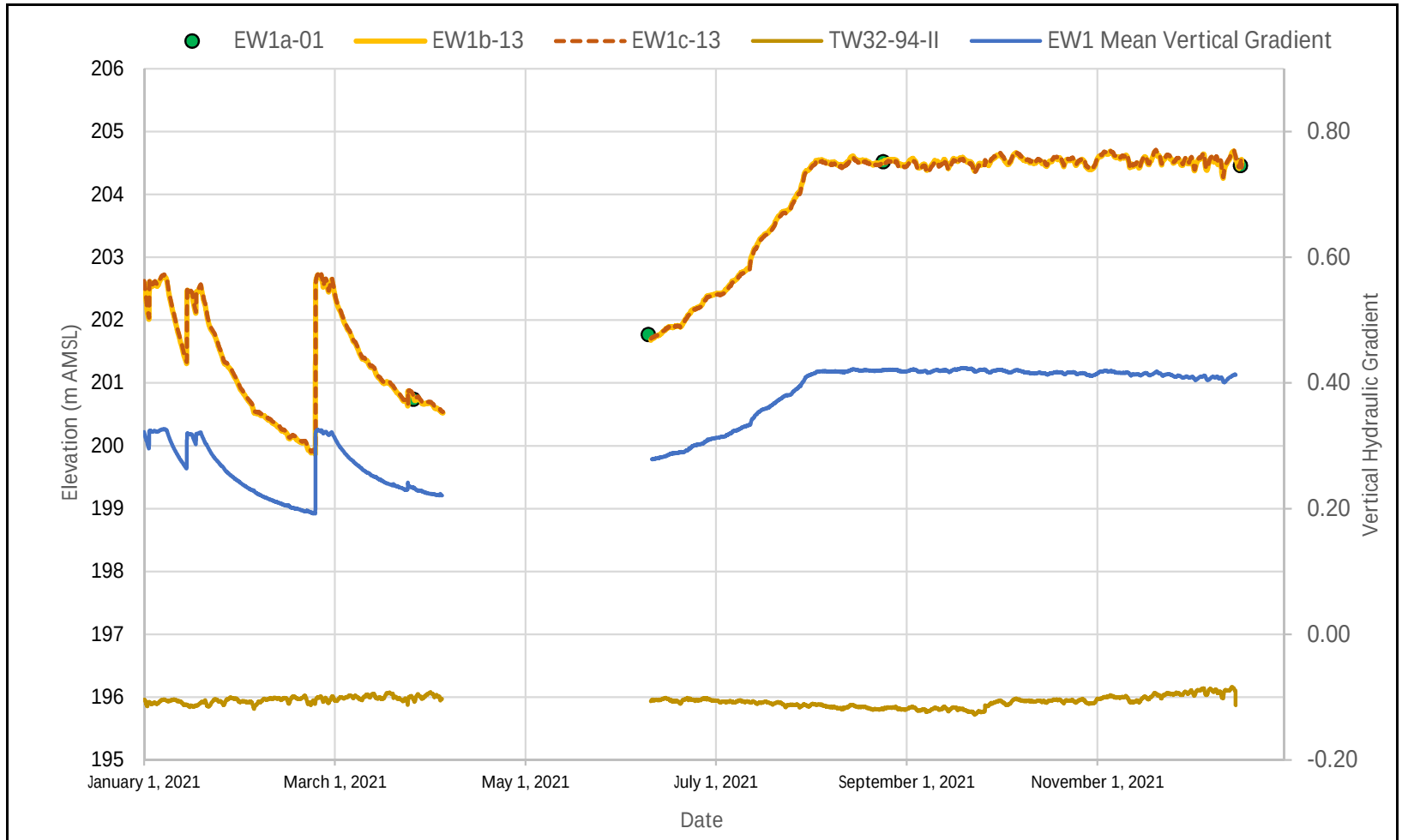


Sub-Cell 3 Group Hydrograph	**Figure 15**	
Clean Harbors Canada Inc.	**Date:** 2022-01-26 / **Drawn by:** DO	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

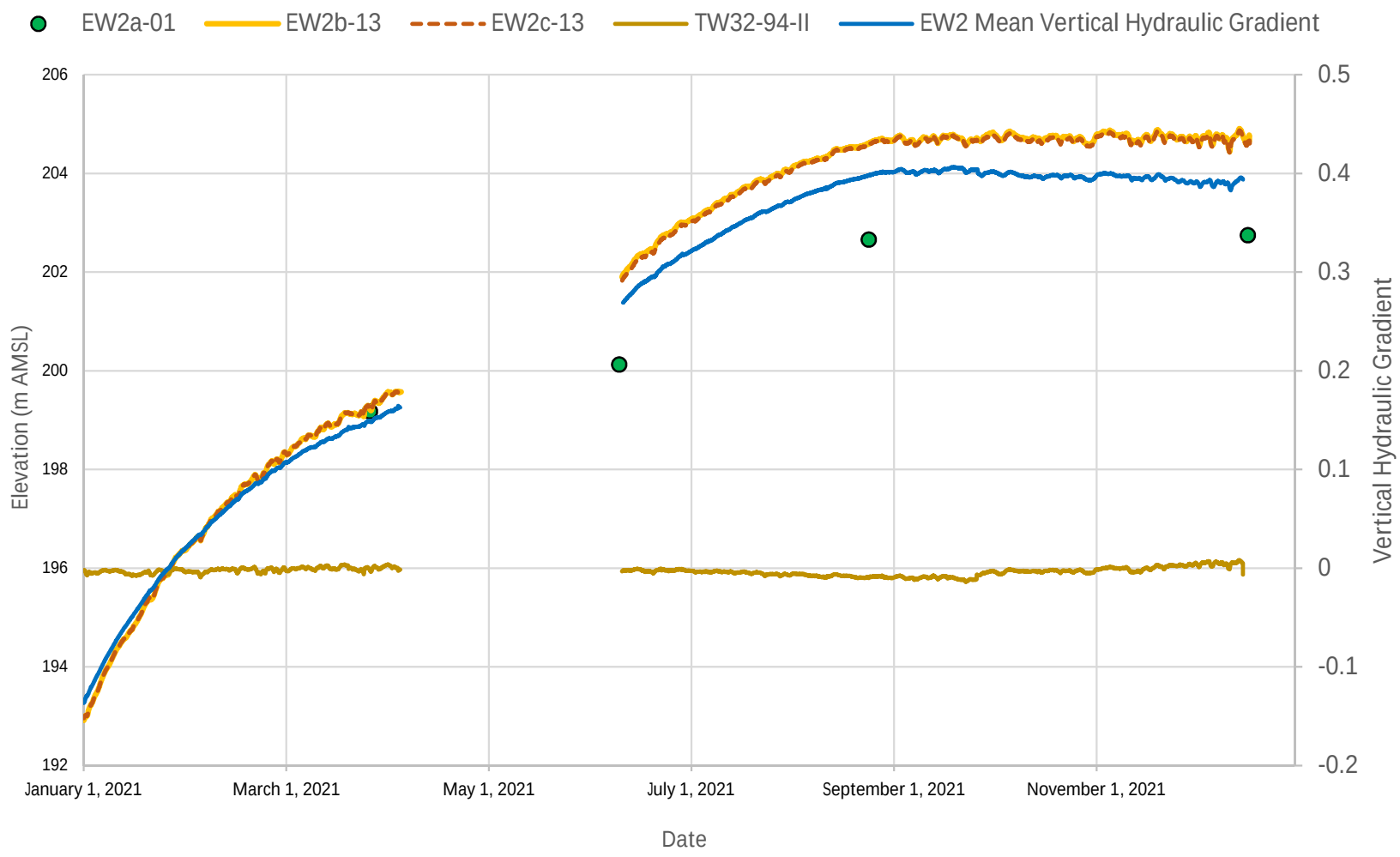


Sub-Cell 3 Group Hydrograph November/December 2021	**Figure 16**	
Clean Harbors Canada Inc.	**Date:** 2022-01-26	**Drawn by:** DO
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

DILLON CONSULTING

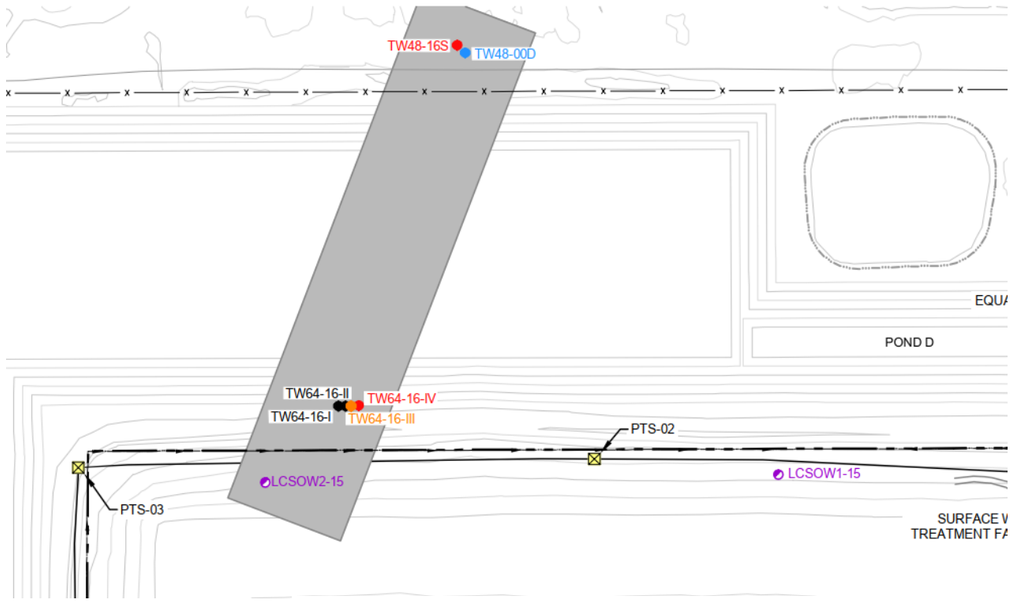


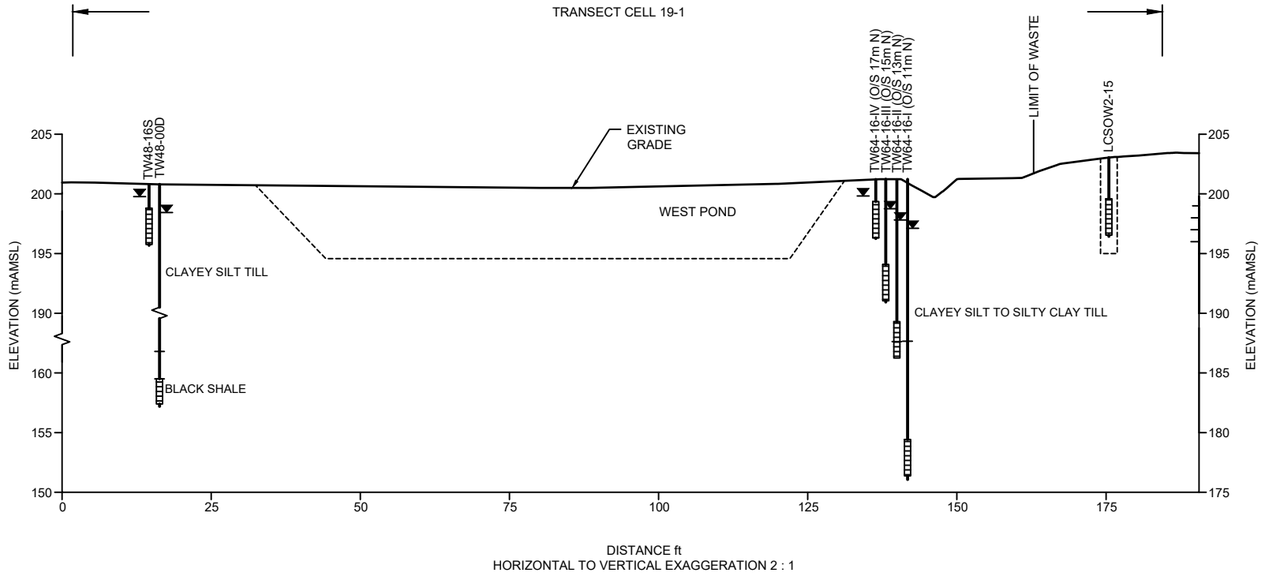
Hydraulic Control Layer Mean Vertical Gradient	**Figure 17**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14 / **Drawn by:** DO	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

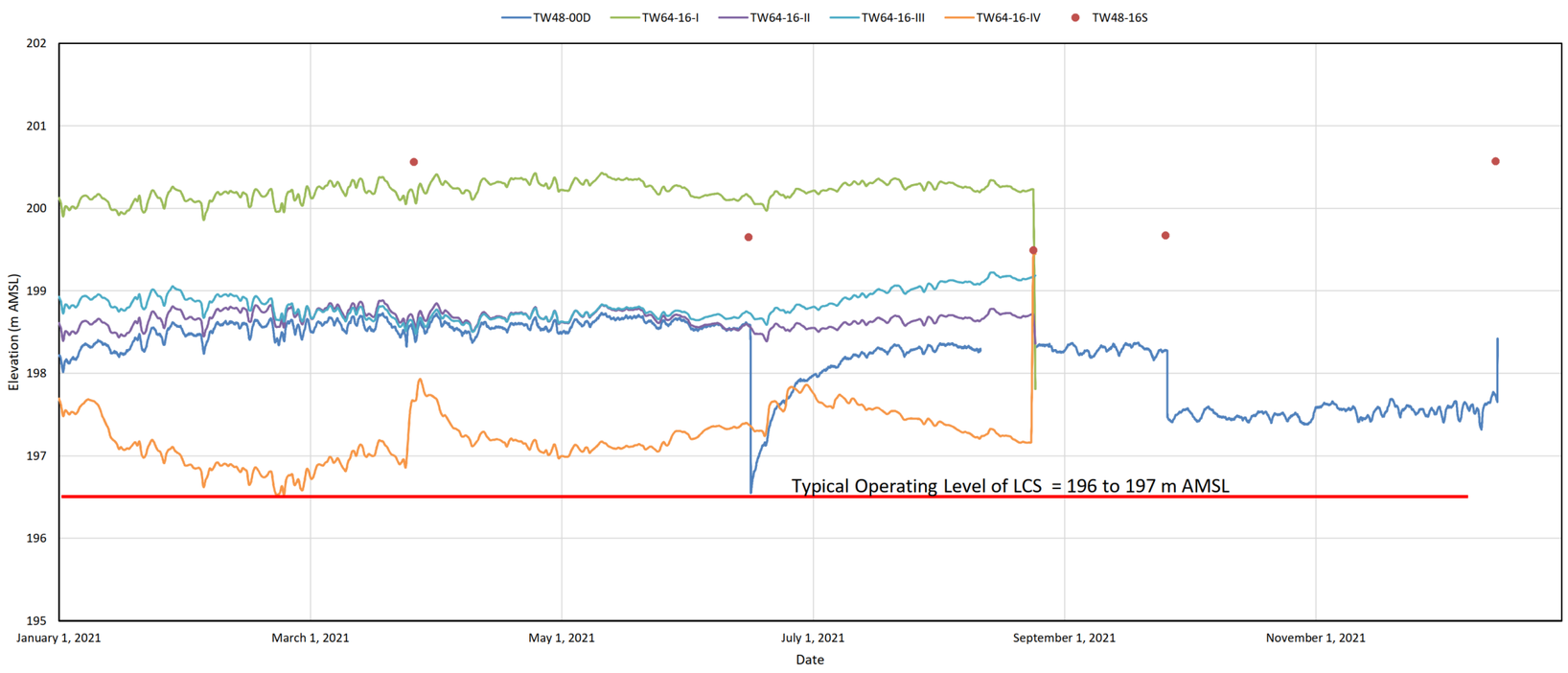


Hydraulic Control Drain Mean Vertical Gradient	**Figure 18**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14 / **Drawn by:** DO	
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

DILLON CONSULTING







NOTES:

1. SOURCE: GDH 2020 ANNUAL GROUNDWATER MONITORING REPORT (BASE DWG & PDF), PROJECT No. 44985-42, FEBRUARY 24, 2021.
2. INFRASTRUCTURE IS APPROXIMATE ONLY. THIS IS NOT A LEGAL SURVEY.

DILLON CONSULTING

DATE FEBRUARY 2022

PROJECT LAMBTON FACILITY
CLEAN HARBOURS CANADA INC.
2021 ANNUAL GROUNDWATER MONITORING REPORT

TITLE **Performance of Engineered Landfill System Transect**

PROJECT NO. 21-1519

FIGURE NO. **19**

Tables

Monitoring Well ID	Survey Date	Easting	Northing	Ground Elevation masl	Reference Elevation masl	Hydraulic Conductivity K m/s	Top of Screen Elevation masl	Bottom of Screen Elevation masl
Active Aquitard								
OW32-90S	1990-12-13	394484	4748064	200.25	201.28	---	198.72	194.12
OW35-90S	1990-12-13	394507	4748570	198.42	199.26	---	196.90	192.30
TW21-94-II	1994-04-05	393769	4748890	199.3	200.08	---	197.85	194.88
TW22-94	1994-10-06	393627	4748562	200.51	201.31	---	198.73	195.76
TW30-94	1994-06-29	394481	4747780	200.51	201.35	0.000068	197.15	195.63
TW32-94-IV	1994-07-26	394351	4748884	198.04	198.8	---	195.61	192.64
TW39-99I	1999-02-24	393726	4748827	211.89	212.65	1E-10	199.52	196.78
TW39-99S	1999-02-25	393743	4748830	211.84	212.58	3.2E-10	203.10	200.36
TW40-99S	1999-02-03	394021	4748880	198.77	199.49	1.2E-09	196.97	194.22
TW41-99S	1999-10-03	394317	4747550	200.34	201.01	4.1E-10	198.46	195.72
TW42-99S	2014-11-10	394076	4747349	199.758	200.636	1E-10	198.08	195.33
TW43-99S	1999-03-16	393854	4747401	200.03	200.73	2.2E-10	198.07	195.33
TW45-99S	1999-12-03	393598	4748061	201.38	202.25	7.1E-09	199.09	196.36
TW46-99I	1999-09-08	394419	4748804	211.95	212.84	0.00000084	196.76	194.02
TW46-99S	1999-09-08	394431	4748796	212.04	212.85	7.7E-10	201.45	198.71
TW48-16S	2016-01-12	393587	4747705	200.71	201.56	---	198.81	195.76
TW53-03S	2003-08-19	394500	4748288	198.94	199.74	1.2E-09	198.24	195.15
TW55-09S	2009-12-01	394445	4746723	198.572	199.36	1.424E-08	195.83	192.79
TW56-11S	2011-12-11	394823	4748840	197.53	198.535	2.6E-10	195.27	191.31
TW57-11S	2011-12-11	395080	4747497	200.289	201.199	0.000000026	198.21	195.16
TW58-11S	2011-12-11	394817	4748851	197.83	198.809	4.8E-10	195.57	192.52
TW59-13S	2013-03-20	393107	4748193	201.362	202.036	0.000000059	198.61	195.56
TW61-13I	2013-07-10	393686	4748564	209.69	210.67	0.000000015	199.94	196.89
TW61-13S	2013-07-10	393686	4748566	209.72	210.63	5.7E-10	203.93	200.88
TW62-13S	2013-12-13	393624	4748072	201.473	202.39	---	199.03	195.99
TW63-13S	2013-12-13	393679	4748072	201.538	202.36	---	199.03	195.98
TW64-16-IV	2016-01-11	393706	4747667	201.21	202.12	---	199.31	196.26
Transition Zone								
TW64-16-III	2016-01-11	393706	4747664	201.23	202.24	---	193.99	190.94
Inactive Aquitard								
TW64-16-I	2016-01-07	393706	4747660	201.22	202.21	---	179.43	176.38
TW64-16-II	2016-01-08	393706	4747663	201.19	202.08	---	189.30	186.25
Interface Aquifer								
OW32-90D	1990-12-13	394485	4748065	200.25	201.46	8E-10	158.42	156.92
OW35-05D	2005-03-01	394500	4748569	198.58	199.63	0.0000014	158.08	155.08
PW1-N	01-Mar-00(a)/21-Jul-15(b)	393973	4748755	201.00(a)	202.82(b)	---	162.00	158.89
PW2-S(R11)	11-Dec-11(a)/21-Jul-15(b)	393954	4748519	202.53(a)	203.52(b)	0.000005	---	---
TW22-99D	1999-02-18	393616	4748579	200.65	201.38	0.00000032	160.24	158.89
TW30-99D	1999-04-03	394475	4747779	200.62	201.35	0.000068	158.18	157.26
TW32-94-II	1994-12-07	394363	4748858	198.09	198.65	0.00000002	157.00	155.48
TW39-99D	1999-02-23	393711	4748823	211.92	212.63	0.000000047	161.75	160.42
TW40-99D	1999-02-03	394000	4748882	198.78	199.51	0.00000078	158.70	157.40
TW41-99D	1999-09-03	394283	4747543	200.42	201.18	0.000072	157.43	156.07
TW43-99D	1999-03-16	393854	4747401	200.21	200.99	0.0000032	160.43	157.69
TW45-99D	1999-12-03	393598	4748055	201.45	202.39	3.7E-09	159.35	153.73
TW46-99D	1999-09-08	394403	4748801	212.02	212.80	7.1E-09	155.94	154.64
TW47-00D	2000-06-22	393869	4748889	199.59	200.43	3.9E-10	162.41	159.54
TW48-00D	2016-01-18	393589	4747707	200.68	201.40	0.00000032	160.27	157.40
TW49-00D	2014-11-10	394073	4747340	199.874	200.771	8.1E-10	159.99	157.12
TW53-03D	2003-08-18	394487	4748289	198.96	199.86	0.0000072	159.25	156.00
TW54-09D	2009-12-01	393758	4748241	202.42	203.338	1.005E-08	160.35	158.83
TW55-09D	2009-12-01	394445	4746726	198.66	199.465	8.641E-08	153.34	151.82
TW56-11D	2011-12-11	394824	4748841	197.51	198.541	0.000012	155.62	154.10
TW57-11D	2011-12-11	395081	4747495	200.382	201.273	0.0000013	158.02	156.49
TW59-13D	2013-03-20	393107	4748191	201.35	202.103	0.00111	155.23	153.71
TW60-13D	2013-07-10	393614	4748574	200.55	201.55	0.0000083	160.01	158.49
TW61-13D	2013-07-10	393686	4748562	209.68	210.56	2.8E-10	160.17	158.66
PW5-17	2017-11-03	---	---	198.72	199.67	---	160.24	157.20
PW6-17	2017-11-03	---	---	198.83	199.73	---	157.69	154.64
Shale Aquitard								
TW32-94-I	---	---	---	---	---	---	152.93	151.41
TW42-99D	2014-11-10	394076	4747352	199.778	200.623	2.2E-09	157.99	155.25
Sub-Cell 3 Wells								
EW1a-01	2011-12-11	393929	4748655	201.528	203.453	---	178.52	177.08
EW1b-13	2013-07-10	393952	4748638	201.57	203.13	---	177.35	175.82
EW1c-13	2013-07-10	393954	4748608	201.536	203.22	---	178.01	176.49
EW2a-01	2011-12-11	393928	4748588	201.268	202.767	---	178.80	177.35
EW2b-13	2013-07-10	393960	4748587	201.567	203.20	---	179.62	178.10
EW2c-13	2013-07-10	393961	4748567	201.566	203.23	---	178.51	176.99
Leachate Collection Trench								
LCSOW1-15	2015-12-18	393735	4747807	204.52	205.61	---	199.95	196.90
LCSOW2-15	2015-12-18	393731	4747635	204.16	205.37	---	199.59	196.54
LCSOW3-15	2015-12-19	393823	4747569	202.99	204.02	---	199.48	196.44
LCSOW4-15	2015-12-19	394029	4747566	201.52	202.57	---	199.49	196.44

Monitoring Well Name	Water Level Measurement Method		Groundwater Sample Collection Method		
	Semi-Annual Manual Measurement	Quarterly Manual and Continuous (Pressure Transducer)	Continuous Volume	Low Flow	From Pump Discharge Line
Active Aquitard					
OW32-90S	x		x		
OW35-90S		x	x		
TW21-94-II	x		x		
TW22-94		x	x		
TW30-94		x	x		
TW32-94-IV	x		x		
TW39-99I		x	x		
TW39-99S	x		x		
TW40-99S	x		x		
TW41-99S	x		x		
TW42-99S		x	x		
TW43-99S	x		x		
TW45-99S	x		x		
TW46-99I	x		x		
TW46-99S	x		x		
TW48-16S		x	x		
TW50-02A[1]	-	-	-	-	
TW50-02B[1]	-	-	-	-	
TW51-02A[1]	-	-	-	-	
TW51-02B[1]	-	-	-	-	
TW52-02A[1]	-	-	-	-	
TW52-02B[1]	-	-	-	-	
TW53-03S	x		x		
TW55-09S	x		x		
TW56-11S	x		x		
TW57-11S	x		x		
TW58-11S	x		x		
TW59-13S	x		x		
TW61-13I		x	x		
TW61-13S	x		x		
TW62-13S	x		x		
TW63-13S	x		x		
TW64-16-IV	x	x	-	-	
Transition Zone					
TW64-16-III	x	x	-	-	
Inactive Aquifer					
TW32-94-III	x		-	-	
TW64-16-I	x	x	-	-	
TW64-16-II	x	x	-	-	
Interface Aquifer					
OW32-90D	x			x	
OW35-05D		x		x	
PW1-N		x		x	
PW2-S(R11)		x		x	
TW22-99D	x			x	
TW30-99D		x		x	
TW32-94-II		x		x	
TW39-99D		x		x	
TW40-99D		x		x	
TW41-99D	x			x	
TW43-99D	x			x	
TW45-99D	x			x	
TW46-99D		x		x	
TW47-00D		x		x	
TW48-00D		x		x	
TW49-00D		x		x	
TW53-03D		x		x	

TW54-09D		x		x	
TW55-09D		x		x	
TW56-11D	x			x	
TW57-11D	x			x	
TW59-13D	x			x	
TW60-13D	x			x	
TW61-13D		x		x	
Shale Aquitard					
TW32-94-I			x		
TW42-99D			x		
Deep Hydraulic Control Layer Wells (Sub Cells 3)					
EW1a-01		x		x[3]	
EW1b-13		x		x	
EW1c-13		x		x	
EW2a-01		x		x[3]	
EW2b-13		x		x	
EW2c-13		x		x	
Leachate Collection Trench					
LCSOW1-15		x	-	-	-
LCSOW2-15		x	-	-	-
LCSOW3-15[2]	-	-	-	-	-
LCSOW4-15[2]	-	-	-	-	-

Notes:

[1] Location destroyed (GHD, 2020)

[2] Removed due to construction of Surface Water Management Pond (GHD, 2020)

[3] extraction discharge line removed due to construction, low flow sampling used in place of discharge line

Table 3
Groundwater Elevations
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

DILLON CONSULTING

Well ID	Date Measured	Reference Elevation (m AMSL)	Water Level Depth (m BTOR)	Water Level Elevation (m AMSL)
Active Aquitard Monitoring Wells				
OW32-90S	03-28-2021	201.28	1.39	199.89
	05-18-2021	201.28	2.13	199.15
	08-25-2021	201.28	2.95	198.33
	09-26-2021	201.28	2.36	198.92
	12-15-2021	201.28	1.55	199.73
OW35-90S	03-28-2021	199.26	0.97	198.29
	05-18-2021	199.26	1.53	197.73
	09-26-2021	199.26	1.12	198.14
	12-15-2021	199.26	1.48	197.78
TW21-94-II	03-28-2021	200.08	0.81	199.27
	05-18-2021	200.08	1.96	198.12
	09-26-2021	200.08	2.08	198.00
	12-15-2021	200.08	1.16	198.92
TW22-94	03-28-2021	201.31	0.95	200.36
	06-09-2021	201.31	1.75	199.56
	08-25-2021	201.31	2.38	198.93
	09-26-2021	201.31	1.19	200.12
	12-16-2021	201.31	0.93	200.38
TW30-94	03-28-2021	201.35	1.1	200.25
	05-18-2021	201.35	1.57	199.78
	08-25-2021	201.35	3.46	197.89
	09-26-2021	201.35	4.69	196.66
	12-15-2021	201.35	1.1	200.25
TW32-94-IV	03-28-2021	198.80	0.76	198.04
	05-18-2021	198.80	3.60	195.20
	09-26-2021	198.80	3.85	194.95
	12-15-2021	198.80	0.82	197.98
TW39-99I	03-28-2021	212.65	11.41	201.24
	05-17-2021	212.65	14.11	198.54
	08-25-2021	212.65	11.57	201.08
	09-26-2021	212.65	11.46	201.19
	12-15-2021	212.65	12.02	200.63
TW39-99S	03-28-2021	212.58	7.77	204.81
	05-18-2021	212.58	11.07	201.51
	09-26-2021	212.58	7.80	204.78
	12-15-2021	212.58	9.80	202.78
TW40-99S	03-28-2021	199.49	0.94	198.55
	06-18-2021	199.49	2.68	196.81
	09-26-2021	199.49	1.61	197.88
	12-15-2021	199.49	0.98	198.51
TW41-99S	03-28-2021	201.01	0.65	200.36
	06-11-2021	201.01	1.40	199.61
	09-26-2021	201.01	1.00	200.01
	12-15-2021	201.01	0.68	200.33
TW42-99S	03-28-2021	200.64	1.17	199.47
	06-17-2021	200.64	2.39	198.25
	08-25-2021	200.64	3.73	196.91
	09-26-2021	200.64	4.4	196.24
	12-13-2021	200.64	3.25	197.39
TW43-99S	03-28-2021	200.73	0.79	199.94
	06-17-2021	200.73	2.01	198.72
	09-26-2021	200.73	2.97	197.76
	12-13-2021	200.73	0.92	199.81

Notes:
m BTOR Metres Below Top of Riser
m AMSL Metres Above Mean Sea-Level

Table 3
Groundwater Elevations
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

DILLON CONSULTING

Well ID	Date Measured	Reference Elevation (m AMSL)	Water Level Depth (m BTOR)	Water Level Elevation (m AMSL)
Active Aquitard Monitoring Wells				
TW45-99S	03-28-2021	202.25	0.97	201.28
	05-17-2021	202.25	1.78	200.47
	09-26-2021	202.25	1.02	201.23
	12-18-2021	202.25	0.99	201.26
TW46-99I	03-28-2021	212.84	12.72	200.12
	05-18-2021	212.84	13.01	199.83
	09-26-2021	212.84	12.83	200.01
	12-15-2021	212.84	12.69	200.15
TW46-99S	03-28-2021	212.85	9.28	203.57
	05-18-2021	212.85	12.82	200.03
	09-26-2021	212.85	8.70	204.15
	12-15-2021	212.85	11.49	201.36
TW48-16S	03-28-2021	201.56	1.00	200.56
	06-17-2021	201.56	1.91	199.65
	08-25-2021	201.56	2.07	199.49
	09-26-2021	201.56	1.89	199.67
	12-15-2021	201.56	0.99	200.57
TW53-03S	03-28-2021	199.74	0.88	198.86
	05-18-2021	199.74	1.93	197.81
	09-26-2021	199.74	1.10	198.64
	12-15-2021	199.74	0.98	198.76
TW55-09S	03-28-2021	199.36	1.39	197.97
	06-17-2021	199.36	1.99	197.37
	09-26-2021	199.36	2.21	197.15
	12-13-2021	199.36	1.27	198.09
TW56-11S	03-28-2021	198.54	1.36	197.18
	06-11-2021	198.54	1.73	196.81
	09-26-2021	198.54	1.55	196.99
	12-15-2021	198.54	1.32	197.22
TW57-11S	03-28-2021	201.20	1.30	199.9
	06-11-2021	201.20	2.36	198.84
	09-26-2021	201.20	4.34	196.86
TW58-11S	03-28-2021	198.81	2.05	196.76
	09-26-2021	198.81	2.76	196.05
	12-15-2021	198.81	2.74	196.07
TW59-13S	03-28-2021	202.04	0.74	201.3
	06-10-2021	202.04	1.95	200.09
	09-26-2021	202.04	3.30	198.74
	12-14-2021	202.04	0.96	201.08
TW61-13I	03-28-2021	210.67	8.59	202.08
	05-17-2021	210.67	8.63	202.04
	08-25-2021	210.67	8.57	202.1
	09-26-2021	210.67	8.52	202.15
	12-15-2021	210.67	8.01	202.66

Notes:
m BTOR Metres Below Top of Riser
m AMSL Metres Above Mean Sea-Level

Table 3
Groundwater Elevations
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

Well ID	Date Measured	Reference Elevation (m AMSL)	Water Level Depth (m BTOR)	Water Level Elevation (m AMSL)
Active Aquitard Monitoring Wells				
TW61-13S	03-28-2021	210.63	5.88	204.75
	05-17-2021	210.63	7.36	203.27
	09-26-2021	210.63	6.04	204.59
	12-15-2021	210.63	5.65	204.98
TW62-13S	03-28-2021	202.39	0.93	201.46
	05-17-2021	202.39	1.60	200.79
	09-26-2021	202.39	1.01	201.38
	12-18-2021	202.39	0.96	201.43
TW63-13S	03-28-2021	202.36	0.75	201.61
	05-17-2021	202.36	1.23	201.13
	06-11-2021	202.36	1.26	201.10
	09-26-2021	202.36	0.69	201.67
	12-14-2021	202.36	0.78	201.58

Notes:
m BTOR Metres Below Top of Riser
m AMSL Metres Above Mean Sea-Level

Table 4 - 2021 Chemistry Data
2021 Annual Groundwater Monitoring Report
Clean Harbours Canada Lambton Facility

DILLON CONSULTING

					General Chemistry																							
					Ammonia (as N)		Nitrate (as N)		Nitrite (as N)		Electrical conductivity (Lab)		Chloride		Fluoride		Bromide		pH (Lab)		Sulphate (SO4)		Alkalinity (Bicarbonate as CaCO3)		Total Dissolved Solids (TDS)	
					mg/L		mg/L		mg/L		µS/cm		mg/L		mg/L		mg/L		pH Unit		mg/L		mg/L		mg/L	
RDL					0.02		0.05		0.05		2		0.1		0.05		0.05		0		0.1		5		10	
ODWS			Source		-		MAC		MAC		-		AO		MAC		-		OG		AO		OG		AO	
			min																6.5							
			max		-		10		1		-		250		1.5		-		8.5		500		500		500	
PWQO			min																6.5							
			max		-		-		-		-		-		-		-		8.5		-		-		-	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.02	<0.02-0.49	<0.05	<0.1-1.28	<0.05	<0.01-<0.25	837	645-1050	5.31	4-6.16	0.79	<0.25-1.74	<0.05	<0.05-<0.5	7.95	7.14-8.4	116	90-160	411	349-468	446	420-630
			2021-12-14	Normal	<0.02		<0.05		<0.05		868		5.36		<0.05		<0.05		7.83		124		376		504	
		TW41-99S	2021-06-11	Normal	<0.02	<0.02-0.18	<0.05	<0.1-0.26	<0.05	<0.01-<0.5	1,580	1220-2000	34.7	7-60	0.56	<0.05-1.3	<0.05	<0.05-2.3	**7.23**	7.4-8.14	495	238-603	496	386-608	1,210	793-1270
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,460		30.9		<0.05		<0.05		7.69		489		417		1,050	
		TW42-99S	2021-06-17	Normal	0.09	<0.02-0.47	<0.14	<0.1-0.9	<0.11	<0.01-0.1	3,250	724-3670	49.4	3-57	<0.05	<0.13-1.16	<0.11	<0.05-1.39	**7.09**	7.4-8.25	1,900	162-1980	397	183-429	**3,300**	471-2970
			2021-12-13	Normal	<0.02		<0.07		**0.88**		3,090		23.5		<0.05		<0.06		7.54		**2,120**		373		**3,040**	
		TW43-99S	2021-06-17	Normal	<0.02	<0.02-0.37	<0.05	<0.1-0.24	<0.05	<0.01-0.13	805	597-1350	16.3	6.98-21.3	<0.05	<0.05-1.1	<0.05	<0.05-36.5	**7.25**	7.4-8.29	107	50.7-455	348	259-363	548	350-995
			2021-12-13	Normal	<0.02		**0.05**		<0.05		808		20.1		0.37		<0.05		7.81		111		320		500	
		TW45-99S	2021-05-17	Normal	<0.02	<0.02-0.26	<0.05	<0.1-0.33	<0.05	<0.01-0.2	1,060	618-1400	63.2	9-240	0.42	<0.05-1.3	<0.05	<0.05-0.6	7.66	7.58-8.26	120	2.5-190	425	260-542	668	430-830
			2021-12-16	Normal	<0.02		<0.05		<0.05		1,080		76.5		<0.05		<0.05		7.71		115		386		662	
		TW48-16S	2021-06-17	Normal	<0.02	<0.02-0.04	<0.05	<0.1-<0.25	<0.05	<0.1-<0.25	1,090	872-1330	23.3	18.9-23.7	0.52	<0.05-1.2	<0.05	<0.25-<0.25	**7.28**	7.67-8.13	186	167-210	**449**	370-420	**736**	592-698
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,060		**17.1**		0.64		<0.05		7.86		205		408		676	
		TW62-13S	2021-05-17	Normal	<0.02	<0.02-0.4	<0.05	<0.1-0.26	<0.05	<0.1-<0.25	969	794-1180	**43.1**	25-38.6	0.54	<0.05-0.93	<0.05	<0.1-<0.25	7.82	7.55-8.26	179	177-226	282	281-355	600	570-690
			2021-12-16	Normal	<0.02		<0.05		<0.05		947		36.4		0.65		<0.05		7.96		192		295		600	
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.02	<0.02-0.24	<0.05	<0.086-1.5	<0.05	<0.01-<0.5	1,240	742-1530	6.83	4.1-16	<0.05	<0.05-2.1	<0.05	<0.02-1.41	**7.21**	7.49-8.22	346	85-422	422	210-495	**982**	400-902
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,050		6.06		<0.05		<0.05		7.71		228		399		676	
		OW32-90S	2021-05-18	Normal	<0.02	<0.02-0.26	<0.05	<0.03-2.63	<0.05	<0.01-<0.25	1,370	810-2900	9.52	8.3-73	<0.05	<0.05-0.9	<0.05	<0.05-0.9	7.84	7.2-11.5	467	88.6-495	321	169-360	1,020	578-1100
			2021-12-14	Normal	<0.02		<0.05		<0.05		1,250		9.04		<0.05		<0.05		7.7		475		322		908	
		OW35-90S	2021-05-18	Normal	<0.02	<0.02-0.52	<0.05	<0.03-1.02	<0.05	<0.01-<0.5	1,660	610-1940	7.35	7-40.1	<0.05	<0.05-1	<0.05	<0.02-0.25	7.85	7.38-8.33	**709**	152-668	321	190-350.7	**1,350**	566.43-1230
			2021-12-14	Normal	<0.02		<0.05		<0.05		1,300		**5.13**		<0.05		<0.05		7.65		518		320		990	
		TW22-94	2021-06-09	Normal	<0.02	<0.02-0.14	<0.07	<0.01-0.3	<0.05	<0.01-<0.5	1,880	1029-2190	60.4	30-74.3	<0.05	<0.07-1.3	<0.06	<0.05-0.21	**7.1**	7.48-8.2	662	282-692	**491**	340-487	1,470	692-1520
			2021-06-10	Field_D	<0.02		<0.07		<0.05		1,720		**18.3**		<0.05		<0.06		**7.13**		341		**573**		1,370	
			2021-12-16	Normal	<0.02		<0.07		<0.05		1,740		60.2		<0.05		<0.06		7.82		646		414		1,320	
		TW32-94-IV	2021-05-18	Normal	<0.02	<0.02-0.4	<0.05	<0.01-0.26	<0.05	<0.01-0.12	1,080	684-1600	25.5	12.2-260	0.45	<0.05-1.35	<0.05	<0.02-0.79	7.87	7.63-8.39	211	<1-564	381	260-428	666	514-1200
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,100		19		<0.05		<0.05		7.88		239		382		710	
		TW40-99S	2021-06-18	Normal	<0.02	<0.02-0.16	<0.05	<0.1-3.23	<0.05	<0.01-<0.25	**1,590**	780-1520	25.4	17-26	0.7	<0.25-1.4	<0.05	<0.05-0.29	**7.35**	7.6-8.27	**437**	126-348	**522**	334-480	**1,150**	533-960
			2021-12-15	Normal	<0.02		<0.05		<0.05		**1,670**		**51.7**		0.7		<0.05		7.81		**584**		439		**1,220**	
		TW53-03S	2021-05-18	Normal	<0.02	<0.02-0.28	<0.05	<0.1-0.44	<0.05	<0.01-0.14	1,390	860-1620	6.37	4.1-13	<0.05	<0.05-0.97	<0.05	<0.05-0.38	**7.63**	7.66-8.21	445	173-516	375	299-449	1,060	<5-1110
			2021-12-14	Normal	<0.02		<0.05		<0.05		1,270		5.6		<0.05		<0.05		7.77		461		364		934	
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.02	<0.02-0.11	<0.14	<0.1-0.16	<0.11	<0.1-<1	2,340	1930-2850	522	500-668	<0.05	<0.13-0.76	**5.74**	<0.5-2.54	7.59	7.58-8.1	**54.3**	56.8-80	433	384-442	1,600	1250-2250
				Normal	<0.02		<0.14		<0.11		2,310		528		<0.05		<0.05		7.65		**54.1**		385		1,610	
			2021-12-14	Normal	<0.02		<0.07		<0.05		2,040		536		<0.05		<0.06		7.71		73.3		386		1,310	
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.02	<0.02-0.16	<0.05	<0.1-0.54	<0.05	<0.1-<0.25	1,330	1020-1440	14.8	13.4-16.8	0.48	<0.25-1	<0.05	<0.25-<0.25	**7.24**	7.44-8.29	458	359-521	**344**	272-335	**1,090**	752-1080
			2021-12-13	Normal	<0.02		<0.05		<0.05		1,200		**12.7**		<0.05		<0.05		7.79		412		311		878	
		TW56-11S	2021-06-11	Normal	<0.02	<0.02-0.32	<0.07	<0.1-0.7	<0.05	<0.1-<1	1,730	1340-2400	44.1	33-67.3	<0.05	<0.07-0.95	<0.06	<0.25-<1	**7.24**	7.65-8.13	634	497-1100	**432**	317-407	1,320	1160-2050
			2021-12-14	Normal	<0.02		<0.05		<0.05		1,500		38.9		<0.05		<0.05		7.75		532		382		**1,100**	
		TW57-11S	2021-06-09	Field_D	<0.02	<0.02-1.02	<0.07	<0.1-0.15	<0.05	<0.1-<0.5	1,890	1290-2240	**59.5**	19.1-31	<0.05	<0.07-1.48	<0.06	<0.25-<0.5	7.23	7.23-8.06	649	267-912	504	459-550	1,490	838-1790
			2021-06-10	Normal	<0.02		<0.07		<0.05		1,780		24.5		<0.05		<0.06		**7.15**		304		**566**		994	
		TW58-11S	2021-12-14	Normal	<0.02	<0.02-0.38	<0.14	<0.1-0.21	<0.11	<0.1-<1	2,880	2510-3620	**251**	264-355	<0.05	<0.13-1.06	<0.11	<0.25-0.43	7.49	7.46-8.03	**1,260**	935-1240	469	463-544	2,400	2080-3250
		TW59-13S	2021-06-10	Normal	<0.02	<0.02-12	<0.05	<0.1-1.26	<0.05	<0.1-1.5	951	755-1160	17.2	11-17.7	0.73	<0.05-1.13	<0.05	<0.1-<0.25	**7.3**	7.79-8.22	124	103-164	**453**	358-429	586	506-631
			2021-12-14	Normal	<0.02		<0.05		<0.05		912		17.1		0.55		<0.05		7.83		106		388		538	
	Northern Berm	TW39-99I	2021-05-17	Normal	<0.02	<0.02-1.35	<0.05	<0.1-0.6	<0.05	<0.01-0.12	1,460	1100-1710	18.4	16.9-28.8	0.6	<0.05-1.5	<0.05	<0.2-0.47	7.56	7.5-8.33	293	287-389	556	410-598	946	848-1340
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,420		**15**		0.46		<0.05		7.62		336		547		924	
		TW39-99S	2021-05-18	Normal	<0.02	<0.02-0.09	<0.05	<0.1-0.53	<0.05	<0.01-0.16	1,290	1030-1520	22.5	17.5-24	0.57	<0.05-1.3	<0.05	<0.25-0.57	7.86	7.5-8.24	265	256-477	457	357-487	826	748-1420
			2021-12-15	Normal	0.21		<0.05		<0.05		1,160		22.3		0.66		<0.05		7.87		283		380		784	
		TW46-99I	2021-05-18	Normal	<0.02	<0.02-0.35	<0.05	<0.01-0.26	<0.05	<0.01-<0.5	1,460	1060-1740	41.9	28.6-44.6	0.4	<0.05-1.2	<0.05	<0.05-0.37	7.84	7.3-8.2	392	213-447	402	332-424	1,030	772-1130
			2021-12-15	Normal	<0.02		<0.05		<0.05		1,400		40.2		<0.05		<0.05		7.73		445		396		1,000	
		TW46-99S	2021-05-18	Normal	<0.02	<0.02-0.36	<0.07	<0.1-0.88	<0.05	<0.01-0.5	1,970	1310-2400	53.2	23-100	<0.05	<0.05-1.5	<0.06	<0.25-1.3	7.84	7.3-8.21	764	356-956	309	270-375	1,560	917-1980
			2021-12-15	Normal	<0.02		<0.07		<0.05		1,900		57.3		<0.05		<0.06		7.68		888		311		1,500	
		TW61-13I	2021-05-17	Normal	<0.02	<0.02-0.1	<0.05	<0.1-0.13	<0.05	<0.1-<0.25	1,340	899-1430	**16.4**	19.6-24.8	<0.05	<0.05-0.48	<0.05	<0.25-<0.25	7.84	7.63-8.27	**421**	189-379	340	309-372	**966**	620-906
			2021-12-16	Field_D	<0.02		<0.05		<0.05		1,370		**15**		<0.05		<0.05		7.83		**513**		349		**1,020**	
				Normal	<0.02		<0.05		<0.05		1,360		**14.5**		<0.05		<0.05		7.79		**512**		346		**1,040**	
		TW61-13S	2021-05-17	Normal	<0.02	<0.02-0.08	<0.05	<0.25-0.89	<0.05	<0.1-<0.25	1,230	1010-1500	21.1	18.8-22.6	0.58	<0.05-0.99	<0.05	<0.25-0.71	7.81	7.64-8.25	**236**	239-313	443	368-470	768	738-890
			2021-12-16	Normal	<0.02		<0.05		<0.05		**1,560**		**14.3**		0.57		<0.05		7.77		**566**		420		**1,130**	
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	0.2		<0.05		<0.05		934		166		1.2		<0.05		8.06		<0.10		228		468	
				Normal	0.1		<0.05		<0.05		951		167		1.21		<0.05		8.17		<0.10		234		600	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	**0.43**	1.1-2.29	<0.36	<0.01-1.9	<0.27	<0.1-<10	4,130	1440-21182	1,300	395-7720	<0.13	<0.25-9.5	<0.28	<0.02-3.45	8.23	7.42-8.35	<0.95	<0.05-15	304	204-2120	2,130	866-65600
			2021-12-15	Normal	**0.32**		<0.05		<0.05		16,300		5,590		<0.05		**6.45**		8.16		<0.10		1,800		10,200	
	Off-Site	TW42-99D	2021-06-17	Normal	<0.02		<0.7	<0.1-0.92	<0.5	<0.1-<5	**8,060**	8300-10600	2,260	1500-3730	<0.26	<5-6.4	<0.6	<0.2-5.86	8.28	7.63-8.47	**22.5**	<1-6	**1,000**	1100-1280	4,250	485-6890
			2021-12-13	Normal	<0.02		<0.36		<0.27		**7,300**		2,210		<0.13		<0.28		8.37		**23.3**		**912**		4,240	

Notes:

1.03	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.03	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.03	Indicates value outside of the historical concentration range for the parameter
1.03	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.03	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.03	Indicates value exceeds ODWS and PWQO
1.03	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

					General Chemistry																											
					Ammonia (as N)		Nitrate (as N)		Nitrite (as N)		Electrical conductivity (Lab)		Chloride		Fluoride		Bromide		pH (Lab)		Sulphate (SO4)		Alkalinity (Bicarbonate as CaCO3)		Total Dissolved Solids (TDS)	
					mg/L		mg/L		mg/L		µS/cm		mg/L		mg/L		mg/L		pH Unit		mg/L		mg/L		mg/L	
RDL					0.02		0.05		0.05		2		0.1		0.05		0.05		0		0.1		5		10	
ODWS				Source	-		MAC		MAC		-		AO		MAC		-		OG		AO		OG		AO	
				min															6.5							
				max	-		10		1		-		250		1.5		-		8.5		500		500		500	
PWQO				min															6.5							
				max	-		-		-		-		-		-		-		8.5		-		-		-	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	**0.03**	0.37-0.37	0.72	<0.1-1.01	**0.48**	<0.1-0.013	**596**	674-2130	**60.9**	62.4-402	0.56	<0.5-2	0.76	<0.1-9.28	**7.02**	7.07-8.42	107	67-179	132	88-347	**374**	406-1380
				Normal	**0.04**		0.71		**0.38**		**594**		**61.8**		0.65		0.73		7.07		106		123		**380**	
			2021-12-17	Normal	**0.23**		<0.05		<0.05		1,560		304		1.01		2.04		7.96		115		263		882	
		EW1b-13	2021-06-11	Normal	0.08		**1.8**	<0.1-<0.5	<0.05	<0.1-<0.5	1,460	1350-1990	**203**	302-356	0.71	<0.07-1.51	**4.07**	<0.5-2.98	**7.47**	7.65-8.23	**231**	116-147	267	254-321	**870**	900-1230
			2021-12-17	Normal	0.22		<0.05		<0.05		1,560		302		1.08		1.9		7.86		129		266		**884**	
		EW1c-13	2021-06-11	Normal	0.22		<0.05	<0.1-<0.5	<0.05	<0.1-<0.5	1,600	1320-1960	312	281-348	1.21	<0.07-1.54	**5.45**	<0.5-4.23	**7.43**	7.71-8.22	130	111-165	305	252-326	932	888-1180
			2021-12-17	Normal	0.13		<0.05		<0.05		1,500		285		1.01		1.88		7.95		138		**249**		**852**	
		EW2a-01	2021-06-11	Normal	**0.23**	0.51-0.51	<0.05	<0.1-1.2	<0.05	<0.01-0.11	736	533-1200	110	62-220	1.23	0.67-1.41	**1.23**	<1.8-3.38	**7.39**	7.41-8.35	1.6	0.85-150	260	119-290	392	346-719
			2021-12-17	Normal	**0.23**		<0.05		<0.05		721		106		1.12		**0.84**		8.04		0.97		211		376	
		EW2b-13	2021-06-11	Normal	0.23		<0.05	<0.1-<0.5	<0.05	<0.1-<0.5	740	584-872	105	95-105	**1.38**	<0.07-1.36	**2.12**	<0.25-1.18	**7.54**	7.75-8.37	**1.39**	2.1-52	**261**	204-257	372	366-521
			2021-12-17	Normal	0.21		<0.05		<0.05		712		103		1.31		1.09		8.02		**1.58**		213		368	
		EW2c-13	2021-06-11	Normal	0.22		<0.05	<0.1-<0.5	<0.05	<0.1-<0.5	732	565-859	102	92-109	1.28	<0.07-1.45	**1.9**	<0.25-1.03	**7.59**	7.63-8.28	6.48	0.51-72	**256**	199-248	382	350-540
			2021-12-17	Field_D	0.23		<0.05		<0.05		695		98.6		1.13		0.71		8		1.56		209		358	
				Normal	0.22		<0.05		<0.05		696		97.8		1.12		0.74		8.05		1.61		209		360	
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	0.32	0.18-0.2	<0.05	<0.002-0.22	<0.05	<0.01-<0.25	1,410	647-1660	295	42.4-400	1.21	<0.25-1.82	<0.05	<0.25-3.7	7.95	7.15-8.4	<0.10	<0.5-95.2	251	188-265.53	690	462-949
			2021-12-14	Normal	0.38		<0.05		<0.05		1,350		301		1		<0.05		7.82		<0.10		244		698	
		OW35-05D	2021-06-18	Field_D	<0.02	0.28-0.3	<0.05	<0.1-<0.25	<0.05	<0.1-<0.25	**914**	1070-1690	**141**	234-346	0.82	<0.25-1.55	<0.05	<0.25-2.11	**7.35**	7.6-8.43	**20**	<0.5-11	264	234-334	**502**	658-897
				Normal	<0.02		<0.05		<0.05		**915**		**143**		0.83		<0.05		**7.46**		**20.3**		258		**552**	
			2021-12-14	Normal	<0.02		<0.05		<0.05		**883**		**137**		0.8		<0.05		7.88		**17.5**		**227**		**472**	
		TW30-99D	2021-05-18	Normal	**0.17**	0.32-0.4	<0.05	<0.021-0.22	<0.05	<0.01-<0.25	1,220	968-1600	244	208-365	1.11	<0.25-1.62	**2.08**	<0.25-1.81	8.13	7.73-8.57	<0.10	<0.5-11	242	225-312	624	588-1010
			2021-12-15	Normal	**0.18**		<0.05		<0.05		1,180		243		0.98		<0.05		7.91		<0.10		237		618	
		TW32-94-II	2021-05-18	Normal	0.1	0.1-0.24	<1.4	<0.01-0.5	<1.1	<0.01-<1	**18,300**	1190-6790	**5,660**	24-1940	<0.5	<0.13-1.7	<1.1	<0.05-4.31	8.41	7.6-8.52	<3.8	<1-380	**1,880**	234-384	**10,000**	309-4410
			2021-12-15	Normal	0.44		<0.14		<0.11		2,800		828		<0.05		<0.11		8.32		<0.38		254		1,580	
		TW40-99D	2021-06-18	Normal	**0.15**	0.18-0.2	<0.05	<0.021-0.3	<0.05	<0.01-<0.5	1,460	1180-3340	328	247-819	0.8	<0.07-1.41	0.72	<0.05-3.95	**7.47**	7.56-8.37	<0.10	<0.5-6	282	224-327	752	688-2170
			2021-12-15	Normal	**0.3**		<0.05		<0.05		1,680		413		0.82		<0.05		7.88		<0.10		255		902	
		TW41-99D	2021-06-11	Normal	**0.1**	0.26-0.26	<0.05	<0.01-0.3	<0.05	<0.01-<0.25	1,140	917-1400	217	45.8-278	1.03	<0.25-1.55	**2.56**	<0.25-1.8	**7.54**	7.59-8.6	<0.10	<0.5-11	327	258-358	612	540-895
			2021-12-15	Normal	**0.09**		<0.05		<0.05		1,120		204		0.88		<0.05		8.09		<0.10		274		580	
		TW43-99D	2021-06-17	Field_D	**0.1**	0.2-0.24	<0.05	<0.05-0.4	<0.05	<0.01-<0.25	1,190	952-1430	237	204-367	0.86	<0.25-1.6	<0.05	<0.25-2.4	**7.35**	7.7-8.49	<0.10	<0.5-4.1	284	237-294	612	580-833
				Normal	**0.11**		<0.05		<0.05		1,190		238		0.86		<0.05		**7.47**		<0.10		285		606	
			2021-12-13	Normal	**0.18**		<0.05		<0.05		1,180		243		0.76		<0.05		8.14		<0.10		263		608	
		TW47-00D	2021-06-18	Normal	<0.02	0.62-1.24	<0.05	<0.05-0.22	<0.05	<0.01-<5	1,370	1100-12200	265	240-3150	0.99	<0.7-1.5	<0.05	<0.25-4.77	**7.46**	7.75-8.52	<0.10	<1-4	318	270-1360	700	680-7930
			2021-12-15	Field_D	**0.39**		<0.36		<0.27		5,190		1,470		<0.13		<0.28		8.02		<0.95		687		3,020	
				Normal	**0.41**		<0.36		<0.27		4,970		1,400		<0.13		<0.28		8		<0.95		661		2,970	
		TW48-00D	2021-06-17	Normal	<0.02	0.26-0.26	<0.07	<0.1-0.35	<0.05	<0.01-<0.5	1,720	1350-2670	374	305-610	0.78	<0.07-1.89	<0.06	<0.25-3.2	**7.61**	7.8-8.54	<0.19	<0.5-12	353	254-494	898	796-1600
			2021-12-15	Field_D	**0.07**		<0.05		<0.05		1,600		357		1.12		<0.05		8.13		<0.10		308		834	
				Normal	**0.07**		<0.05		<0.05		1,600		357		1.08		<0.05		8.12		<0.10		312		840	
		TW49-00D	2021-06-17	Normal	**0.08**	0.18-0.18	<0.05	<0.01-0.14	<0.05	<0.01-<0.25	746	586-2010	97	83-99	1.2	<0.01-1.7	0.49	<0.1-0.8	**7.44**	7.72-8.57	<0.10	<0.2-43.4	**279**	206-268	410	360-551
			2021-12-13	Field_D	**0.09**		<0.05		<0.05		711		93.7		0.9		0.44		8.06		<0.10		245		374	
				Normal	**0.09**		<0.05		<0.05		713		94.1		0.9		0.42		8.08		<0.10		246		376	
		TW53-03D	2021-06-18	Normal	**0.05**	0.34-0.42	<0.05	<0.05-<1	<0.05	<0.01-<0.5	**655**	676-4920	**102**	113-1210	0.71	<0.25-1.54	<0.05	<0.1-3.4	**7.2**	7.37-8.53	12.3	<0.5-22	186	172-607	348	340-3200
			2021-12-14	Normal	**4.13**		<0.05		<0.05		**666**		**101**		0.65		<0.05		7.51		7.19		179		**322**	
		TW60-13D	2021-06-09	Normal	0.05		<0.36	<0.1-<2.5	<0.27	<0.1-<2.5	4,190	2840-4750	1,100	696-1120	<0.13	<0.33-0.91	<0.28	<0.25-1.66	7.95	7.92-8.44	<0.95	<1-4.9	692	458-746	2,290	1450-3010
	Internal to Property	TW39-99D	2021-06-18	Normal	0.04	0.15-0.37	<0.05	<0.021-0.4	<0.05	<0.01-<0.5	1,300	1030-2400	239	221-528	1.21	<0.25-2	<0.05	<0.25-3	**7.35**	7.57-8.54	0.96	<0.5-10	353	283-421	666	640-1230
			2021-12-16	Normal	0.38		<0.05		<0.05		1,180		**216**		1.18		<0.05		7.83		<0.10		295		**622**	
		TW46-99D	2021-06-09	Normal	**0.08**		<0.05	<0.021-0.46	<0.05	<0.01-<0.5	1,240	985-1480	226	153-292	1	<0.25-1.8	0.86	<0.25-2.61	**7.32**	7.68-8.71	<0.10	<0.5-11	**374**	290-356	650	290-845
			2021-12-16	Normal	**0.12**		<0.05		<0.05		1,170		206		1.02		<0.05		7.92		<0.10		301		626	
		TW54-09D	2021-06-09	Normal	0.07		<0.05		<0.05		1,120		**197**		1.32		<0.05		**7.53**		<0.10		**343**		574	
			2021-12-14	Field_D	<0.02		<0.05	<0.1-0.14	<0.05	<0.1-<0.25	937	753-1130	152	116-154	1.13	<0.25-1.77	<0.05	<0.25-1.1	8.03	7.78-8.64	<0.10	<0.2-12	253	238-289	488	458-620
				Normal	<0.02		<0.05		<0.05		935		154		1.05		<0.05		8.04		<0.10		254		490	
		TW61-13D	2021-05-17	Normal	<0.02		<0.05	<0.1-0.11	<0.05	<0.1-<0.25	1,110	812-1320	144	128-225	1.05	<0.25-1.69	1.46	<0.25-1.68	7.88	7.6-8.53	**98**	12-86.6	250	206-313	602	490-858
			2021-12-16	Normal	0.06		<0.05		<0.05		1,200		137		0.94		<0.05		7.93		**192**		253		706	
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	0.14		<0.07	<0.1-<0.5	<0.05	<0.1-<0.5	2,130	1480-2220	**526**	344-451	0.87	<0.07-1.88	<0.06	<0.25-2.96	**7.51**	7.82-8.53	<0.19	<0.5-27	**337**	260-310	1,150	854-1220
			2021-12-13	Normal	0.05		<0.05		<0.05		1,770		439		1.28		<0.05		8.01		<0.10		276		944	
		TW56-11D	2021-06-10	Normal	<0.02		<0.05	<0.1-0.11	<0.05	<0.1-<0.5	1,270	1160-1840	**226**	277-334	1.12	<0.25-1.48	<0.05	<0.25-1.73	**7.5**	7.8-8.42	**49.6**	<0.5-7	310	300-357	674	580-1150
			2021-12-14	Normal	<0.02		<0.05		<0.05		1,190		**208**		0.72		<0.05		7.99		**51.5**		**264**		636	
		TW57-11D	2021-06-10	Normal	<0.02		<0.05	<0.1-<0.5	<0.05	<0.1-<0.5	1,570	1360-2310	355	299-455	1.41	<0.07-1.69	**4.21**	<0.25-4.11	**7.51**	7.76-8.44	<0.10	<0.5-4	351	289-432	812	690-1500
		TW59-13D	2021-06-10	Normal	<0.02		<0.05	<0.1-<0.25	<0.05	<0.1-<0.25	**541**	684-1070	**56.4**	110-136	1.1	<0.25-1.65	<0.05	<0.25-0.77	**7.16**	7.75-8.37	**26.6**	<0.2-15	**202**	227-293	**310**	410-610
			2021-12-14	Normal	<0.02		<0.05		<0.05		**529**		**53.5**		0.86		<0.05		**7.73**		**26.8**		**168**		**272**	
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	**0.65**	<0.05-0.27	<0.07	<0.1-0.069	<0.05	<0.01-<0.5	1,730	1390-2040	379	267-408	<0.05	<0.07-14	<0.06	<0.25-3.15	**7.84**	7.97-8.54	7.78	<1-49	339	197-355	1,170	746-1250
		PW2-S(R11)	2021-06-09	Normal	**1.62**	<0.05-0.39	<0.05	<0.1-<0.5	<0.05	<0.01-<0.5	1,660	1240-2770	350	277-600	0.88	<0.07-8.2	0.86	<0.25-2.37	**7.64**	7.97-8.72	5.3	<0.5-24	394	42-454	848	700-1800

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

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					Metals																											
					Arsenic		Barium		Boron		Cadmium		Calcium		Chromium Total (III+VI)		Iron		Lead		Magnesium		Mercury		Nickel		Potassium		Sodium		Zinc	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
RDL					0.001		0.002		0.01		0.0001		0.05		0.002		0.01		0.0005		0.05		0.0001		0.001		0.05		0.05		0.005	
ODWS				Source	IMAC		MAC		IMAC		MAC		-		MAC		AO		MAC		-		MAC		-		-		AO		AO	
				min																												
				max	0.01		1		5		0.005		-		0.05		0.3		0.01		-		0.001		-		-		20		5	
PWQO				min																												
				max	0.005		-		0.2		0.0002		-		0.001		0.3		0.005		-		0.0002		0.025		-		-		0.03	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.001	<0.001-0.001	**0.025**	0.028-0.058	0.098	<0.03-0.18	<0.0001	<0.0001-0.0001	**71.6**	74-106	<0.002	<0.001-0.002	<0.010	<0.005-0.010	<0.0005	<0.0005-0.0005	**46.8**	48-62.1	<0.0001	<0.0001-0.0001	<0.003	<0.001-0.003	1.81	1-4	**26.9**	27-49	<0.005	<0.003-0.005
			2021-12-14	Normal	<0.001	<0.003	**0.025**		0.042		<0.0001	0.005	80.7		<0.002	0.001	0.041	0.304	<0.0005	<0.01	57.3			<0.0001	0.005	<0.01	1.11		37.5		<0.005	0.039
		TW41-99S	2021-06-11	Normal	<0.001	<0.001	**0.017**	0.018-0.05	0.191	0.06-0.342	<0.0001	<0.0001-0.003	203	151-236	<0.002	<0.001-0.002	0.028	<0.005-0.058	<0.0005	<0.0005-0.002	88.6	46-100	<0.0001	<0.0001-0.0001	<0.003	<0.001-0.004	<2.50	<1-4	50.7	41-65	<0.005	<0.003-0.061
			2021-12-15	Normal	<0.001	<0.006	0.024		0.18		<0.0001		191		<0.002	0.002	<0.010	0.058	<0.0005	<0.002	74.9				0.004	0.004	1.73		50.2		<0.005	
		TW42-99S	2021-06-17	Normal	<0.001	<0.001-0.001	**0.015**	<0.1-0.058	0.194	0.12-0.3	<0.0001	<0.0001-0.0001	478	68-509	<0.002	<0.001-0.002	0.039	<0.005-0.23	<0.0005	<0.0005-0.05	**232**	24-229	<0.0001	<0.0001-0.00044	<0.003	<0.003-0.006	<5.0	1-8	76.1	32-105	<0.005	<0.005-0.079
			2021-12-13	Normal	**0.003**	0.001	**0.012**		0.257		<0.0001	<0.003	**532**		<0.002	0.002	0.063		<0.0005	<0.05	**268**				0.006	0.017	6.3		78.8		**0.005**	
		TW43-99S	2021-06-17	Normal	<0.001	<0.001-0.001	0.034	0.02-0.063	0.09	0.05-0.358	<0.0001	<0.0001-0.0001	89.9	0.001-172	<0.002	<0.001-0.002	<0.010	<0.005-0.07	<0.0005	<0.0005-0.002	32.3	22-77.6	<0.0001	<0.0001-0.0013	<0.003	<0.001-0.001	1.8	<1-3.4	22.7	18.2-56	<0.005	<0.005-0.039
			2021-12-13	Normal	<0.001	<0.003	0.04		0.096		<0.0001	0.004	102		<0.002	0.002	**0.131**		<0.0005	0.002	34.7				**0.001**	<0.01	1.89		24.6		<0.005	
		TW45-99S	2021-05-17	Normal	<0.001	<0.001-0.007	0.059	0.05-0.14	0.115	<0.079-0.206	0.0009	<0.0001-0.003	103	13-144	<0.002	<0.001-0.003	<0.010	<0.005-2.52	<0.0005	<0.0005-0.002	40.7	4.5-51.3	<0.0001	<0.0001-0.0012	<0.003	<0.001-0.002	<2.50	1-3	34.2	26-260	<0.005	<0.003-0.037
			2021-12-16	Normal	<0.001	0.007	0.066		0.109		<0.0001	0.003	123		<0.002	0.003	**0.067**		<0.0005	<0.002	45.8				**0.002**	<0.01	2.08		43.3		<0.005	
		TW48-16S	2021-06-17	Normal	<0.001	<0.001-0.001	0.034	0.028-0.038	**0.176**	0.2-0.3	<0.0001	<0.0001-0.0001	102	89.4-119	<0.002	<0.001-0.002	<0.010	<0.01-0.047	<0.0005	<0.0005-0.002	57.6	50-64	<0.0001	<0.0001-0.0001	<0.003	<0.003-0.003	<2.50	1.8-3	37.4	32.9-50	<0.005	<0.005-0.01
			2021-12-15	Normal	<0.001	<0.005	0.036		**0.172**		<0.0001	<0.001	106		<0.002	<0.003	0.014		<0.0005	<0.002	60.4			<0.0001	**0.001**	<0.005	2.19		43.2		**0.007**	<0.01
		TW62-13S	2021-05-17	Normal	<0.001	<0.001-0.001	**0.033**	0.035-0.09	0.158	0.12-0.18	<0.0001	<0.0001-0.0001	93.5	79.6-118	<0.002	<0.001-0.002	0.011	<0.01-<0.03	<0.0005	<0.0005-0.002	40	34.4-48	<0.0001	<0.0001-0.0001	<0.003	<0.003-<0.005	<2.50	1.89-4	53.7	48.3-66	<0.005	<0.005-0.02
			2021-12-16	Normal	<0.001	<0.01	0.038		0.136		<0.0001	<0.001	92.7		<0.002	0.003	**0.046**		<0.0005	<0.002	40.8			<0.0001	**0.001**		2.37		56.9		<0.005	
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.001	<0.001-0.06	0.052	0.04-0.073	0.122	<0.03-0.309	0.0001	<0.0001-0.005	178	71.6-191	<0.002	<0.001-0.004	<0.010	<0.005-0.062	<0.0005	<0.0005-0.002	63.3	36-68	<0.0001	<0.0001-0.0001	<0.003	<0.003-0.006	<2.50	<1-3.2	22.1	15.7-51	<0.005	<0.005-0.045
			2021-12-15	Normal	<0.001		**0.035**		0.103		<0.0001		164		<0.002		<0.010		<0.0005		49			<0.0001	**0.001**		**0.65**		16.7		<0.005	
		OW32-90S	2021-05-18	Normal	<0.001	<0.0002-0.0012	0.025	0.003-0.185	0.179	<0.03-3.71	<0.0001	<0.0001-0.004	179	104-256	<0.002	<0.0002-0.01	0.023	<0.004-0.05	<0.0005	<0.0001-0.09	63.7	38.3-80.11	<0.0001	<0.0001-0.00018	<0.003	<0.001-0.033	<2.50	1.49-6.3	22.2	20.2-76.2	<0.005	<0.002-0.05
			2021-12-14	Normal	<0.001	0.0012	0.019		0.146		<0.0001	0.004	178		<0.002	0.01	<0.010		<0.0005	0.09	64.6				<0.001	0.033	1.92		24.6		<0.005	
		OW35-90S	2021-05-18	Normal	<0.001	<0.0004-0.003	0.024	0.002-0.29	0.201	<0.03-3.69	<0.0001	<0.0001-0.0024	202	21.7-352	<0.002	<0.0002-0.009	0.05	<0.004-1.83	<0.0005	<0.0005-0.072	90.3	8-147	<0.0001	<0.0001-0.00016	<0.003	<0.001-0.002	3.08	0.8-5.4	34.3	4.3-306	<0.005	<0.002-0.09
			2021-12-14	Normal	<0.001	0.003	0.021		0.189		<0.0001		176		<0.002	0.009	**0.084**		<0.0005		76.9				0.002	0.033	3.14		33.8		<0.005	
		TW22-94	2021-06-09	Normal	<0.001	<0.001-0.06	0.016	<0.002-0.058	0.171	<0.03-0.295	<0.0001	<0.0001-<0.005	**182**	102-180	<0.002	<0.001-0.004	0.035	<0.005-0.46	<0.0005	<0.0005-0.025	119	73.3-121	<0.0001	<0.0001-0.0001	<0.003	<0.001-0.006	<2.50	1.63-4.4	81.3	58.7-109	0.008	<0.003-0.097
			2021-06-10	Field_D	<0.001		0.019		0.16		<0.0001		176		<0.002		0.023		<0.0005		106		<0.0001		<0.003		3.11		**50.5**		<0.005	
			2021-12-16	Normal	<0.001		0.018		0.199		<0.0001		**181**		<0.002		0.07		<0.0005		120				0.002		2.23		88.8		<0.005	
		TW32-94-IV	2021-05-18	Normal	<0.001	<0.001-0.0011	0.018	0.01-0.19	0.133	0.071-1.8	<0.0001	<0.0001-0.004	96.8	15-195	<0.002	<0.001-0.004	0.369	<0.005-0.682	<0.0005	<0.0005-0.002	62.8	7-88.5	<0.0001	<0.0001-0.0005	0.013	<0.001-0.02	<2.50	0.54-4	53.6	30.1-256	<0.005	<0.005-0.055
			2021-12-15	Normal	<0.001		0.021		0.078		<0.0001		100		<0.002		0.087		<0.0005		62.7				0.003		1.48		56.1		**0.005**	
		TW40-99S	2021-06-18	Normal	0.002	<0.001-0.003	**0.026**	0.028-0.06	0.213	0.15-0.24	<0.0001	<0.0001-0.005	**147**	77.7-121	<0.002	<0.001-0.004	**1.01**	<0.005-0.038	<0.0005	<0.0005-0.002	**113**	52.5-91.4	<0.0001	<0.0001-0.0001	<0.003	<0.001-0.001	<2.50	1.64-3.23	60.8	40-61.1	<0.005	<0.003-0.067
			2021-12-15	Normal	<0.001	<0.003	**0.025**		0.206		<0.0001		**154**		<0.002	0.004	0.025		<0.0005	<0.002	**118**			<0.0001	0.001	<0.01	1.76		**77**		<0.005	
		TW53-03S	2021-05-18	Normal	<0.001	<0.001-0.003	0.028	0.026-0.068	0.114	0.09-0.19	<0.0001	<0.0001-0.0001	184	100-258	<0.002	<0.001-0.002	0.02	<0.01-0.04	<0.0005	<0.0005-0.002	67.5	40-85	<0.0001	<0.0001-0.0001	<0.003	<0.001-0.003	<2.50	<1-3	19.6	17.1-90	<0.005	<0.005-0.02
			2021-12-14	Normal	<0.001	<0.003	**0.025**		0.123		<0.0001	<0.001	180		<0.002	0.005	0.025		<0.0005	<0.002	65.9			<0.0001	<0.001	0.003	1.48		24		<0.005	
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.001	<0.001-<0.01	0.115	0.112-0.19	0.292	0.2-0.38	<0.0001	<0.0001-0.0001	160	146-236	<0.002	<0.001-0.004	<0.010	<0.01-0.015	<0.0005	<0.0005-0.002	72.8	67.2-106	<0.0001	<0.0001-<0.0001	0.08	0.077-0.092	3.27	2.9-5	149	138-196	<0.005	<0.005-0.02
				Normal	<0.001		0.112		0.281		<0.0001		168		<0.002		<0.010		<0.0005		76.5		<0.0001		0.078		3.06		160		<0.005	
			2021-12-14	Normal	<0.001		**0.103**		0.283		<0.0001		170		<0.002		<0.010		<0.0005		77.9				**0.069**		3.14		158		<0.005	
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.001	<0.001-<0.01	**0.017**	0.018-0.05	0.249	0.17-0.42	<0.0001	<0.0001-0.0001	134	119-170	<0.002	<0.001-0.002	**0.163**	<0.01-<0.03	<0.0005	<0.0005-0.002	66.8	56.5-87	<0.0001	<0.0001-0.0001	<0.003	<0.003-0.006	2.96	2.48-3.08	52.5	41-59	<0.005	<0.005-0.02
			2021-12-13	Normal	<0.001	<0.01	0.02		0.256		<0.0001	<0.001	140		<0.002	0.002	0.019		<0.0005	<0.002	67.7				**0.001**	0.006	3.06		57.2		<0.005	
		TW56-11S	2021-06-11	Normal	<0.001	<0.001-0.003	0.012	0.01-0.04	0.269	0.203-0.43	<0.0001	<0.0001-0.0001	188	168-336	<0.002	<0.001-0.002	0.012	<0.01-0.021	<0.0005	<0.0005-0.002	92	81.9-161	<0.0001	<0.0001-0.0001	<0.003	<0.003-0.005	<2.50	2.4-4	61	58.6-90	<0.005	<0.005-0.04
			2021-12-14	Normal	<0.001	<0.003	0.011		**0.136**		<0.0001	0.0002	183		<0.002	0.002	<0.010		<0.0005	<0.002	84.4			<0.0001	**0.002**	0.015	**2.38**		61.3		<0.005	
		TW57-11S	2021-06-09	Field_D	<0.001	<0.001-0.003	**0.016**	0.02-0.031	0.191	0.13-0.25	<0.0001	<0.0001-0.001	183	130-319	<0.002	<0.001-<0.005	0.035	<0.01-0.759	<0.0005	<0.0005-0.001	119	76.1-174	<0.0001	<0.0001-0.0001	0.003	<0.003-0.005	<2.50	2.64-5	**81.6**	39-69	<0.005	<0.005-0.02
			2021-06-10	Normal	<0.001	<0.003	0.021		0.19		<0.0001	<0.001	170		<0.002		0.012		<0.0005		102		<0.0001	<0.0001	<0.003		2.76		48.9		<0.005	
		TW58-11S	2021-12-14	Normal	<0.001	<0.001-<0.003	0.01	0.01-0.05	0.267	0.2-0.32	<0.0001	<0.0001-<0.001	294	261-385	<0.002	<0.001-0.004	<0.010	<0.01-<0.03	<0.0005	<0.0005-0.002	229	208-280		<0.0001-0.0001	**0.002**	<0.003-0.014	4.56	4-7	116	105-138	<0.005	<0.005-0.02
		TW59-13S	2021-06-10	Normal	<0.001	<0.001-0.003	**0.165**	0.033-0.08	0.145	0.1-0.15	<0.0001	<0.0001-0.001	97.7	84.7-104	<0.002	<0.001-0.003	**0.042**	<0.01-<0.03	<0.0005	<0.0005-0.002	54.3	45.1-57	<0.0001	<0.0001-0.0001	<0.003	<0.003-0.005	<2.50	2-3	30.8	21.6-52	**0.007**	<0.005-0.01
			2021-12-14	Normal	**0.004**	<0.003	0.041		0.145		<0.0001	<0.001	**105**		<0.002	0.003	<0.010		<0.0005	<0.002	**58.4**			<0.0001	**0.001**		2.61		33.5		<0.005	
	Northern Berm	TW39-99I	2021-05-17	Normal	0.001	<0.001-0.003	0.035	0.032-0.07	0.185	0.04-0.197	<0.0001	<0.0001-0.004	93.7	82-123	0.002	<0.001-0.003	0.62	<0.005-1.52	<0.0005	<0.0001-0.002	101	27-124	<0.0001	<0.0001-0.0003	<0.003	<0.001-0.001	<2.50	<1-2.2	66.2	20-94	<0.005	<0.005-0.084
			2021-12-15	Normal	<0.001	0.003	0.035		0.172		<0.0001	0.004	107		<0.002	0.003	<0.010		<0.0005	<0.002	113				0.001	<0.01	1.34		74		<0.005	
		TW39-99S	2021-05-18	Normal	<0.001	<0.001-0.003	0.029	0.027-0.05	0.286	0.19-0.387	<0.0001	<0.0001-0.003	109	89.2-128	<0.002	<0.001-0.004	**0.109**	<0.005-0.04	<0.0005	<0.0001-0.002	82.8	62-90	<0.0001	<0.0001-0.0008	<0.003	<0.001-0.001	<2.50	<1-3	58.5	49.6-88	<0.005	<0.005-0.04
			2021-12-15	Normal	<0.001	<0.003	0.028		0.286		<0.0001	<0.003	109		<0.002	0.006	0.011		<0.0005	<0.002	79.4				0.001	<0.01	1.31		61.4		<0.005	
		TW46-99I	2021-05-18	Normal	<0.001	<0.001-0.001	0.031	0.026-0.08	0.16	0.087-0.16	<0.0001	<0.0001-0.003	140	121-173	<0.002	<0.0003-0.003	<0.010	<0.005-0.042	<0.0005	<0.0001-0.002	82.5	66.4-97	<0.0001	<0.0001-0.00018	<0.003	<0.001-0.001	<2.50	1-3	49.3	37.6-57	<0.005	<0.005-0.04
			2021-12-15	Normal	<0.001	0.001	**0.024**		**0.048**		<0.0001	<0.003	153		<0.002	0.003	<0.010		<0.0005	0.002	89.4				<0.001	0.003	1.93		54.7		<0.005	
		TW46-99S	2021-05-18	Normal	<0.001	<0.001-0.0029	0.016	0.015-0.068	3.16	0.81-31	<0.0001	<0.0001-0.003	206	78-243	<0.002	<0.0003-0.004	**0.526**	<0.005-0.014	<0.0005	<0.0005-0.001	89.9	33-110	<0.0001	<0.0001-<0.01	0.003	<0.003-0.012	6.45	5-19	107	78.5-320	<0.005	<0.003-0.04
			2021-12-15	Normal	<0.001		**0.013**		2.05		<0.0001	<0.003	229		<0.002	0.004	0.014		<0.0005		99.1				0.003		6.4		125		<0.005	
		TW61-13I	2021-05-17	Normal	<0.001	<0.001-0.06	0.064	0.047-0.07	0.322	0.08-0.44	<0.0001	<0.0001-<0.001	**137**	98.8-135	<0.002	<0.001-0.003	<0.010	<0.01-0.022	<0.0005	<0.0005-0.002	**67.5**	47.5-66.3	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	<2.50	<1-1.26	**35.6**	23-34.9	0.009	<0.005-0.03
			2021-12-16	Field_D	<0.001		0.016		0.265		<0.0001		**161**		<0.002		0.016		<0.0005		**76.8**				**0.001**		1.13		**43.6**		<0.005	
				Normal	<0.001		0.058		0.246		<0.0001		**160**		<0.002		0.013		<0.0005		**75.9**				**0.001**		1.05		**46.1**		<0.005	
		TW61-13S	2021-05-17	Normal	<0.001	<0.001-<0.005	0.037	0.036-0.08	0.355	0.267-0.4	<0.0001	<0.0001-<0.001	118	108-140	0.002	<0.001-0.004	**0.308**	<0.01-0.053	<0.0005	<0.0005-0.002	63.1	55.8-74	<0.0001	<0.0001-<0.0001	<0.003	<0.003-0.006	2.59	1.78-3	64.2	55.5-71	**0.01**	<0.005-0.01
			2021-12-16	Normal	<0.001		0.041		0.285		<0.0001	<0.001	**152**		<0.002	0.004	<0.010		<0.0005	<0.002	**75.6**				**0.003**		2.52		**125**		<0.005	
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	<0.001		0.082		1.29		<0.0001		22.6		<0.002		0.15		<0.0005		6.78		<0.0001		<0.003		<2.50		154		<0.005	
				Normal	<0.001		0.084		1.38		<0.0001		23		<0.002		0.143		<0.0005		6.84		<0.0001		<0.003		<2.50		152		<0.005	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	<0.001	<0.001-0.06	**0.442**	1.3-2.5	**2.86**	7-11.4	<0.0001	<0.0001-0.005	**15.3**	16.8-79	<0.002	<0.001-0.004	0.08	<0.005-0.718	<0.0005	<0.001-<0.025	19	9.7-75	<0.0001	<0.0001-0.0001	<0.003	<0.003-<0.05	3.55	2.52-26	637	327-5345	<0.005	<0.005-0.009
			2021-12-15	Normal	0.003	<0.06	1.83		7.06		<0.0001	<0.005	22		<0.002	0.004	0.016		<0.0005		56				<0.001		10		4,470		<0.005	
	Off-Site	TW42-99D	2021-06-17	Normal	<0.001	<0.001-0.006	**0.718**	0.731-1.3	5.18	4.9-6.6	<0.0001	<0.0001-0.004	18.5	16-48	<0.002	<0.001-0.003	<0.010	<0.005-5.56	**0.0008**	<0.001-0.002	17.3	14-23	<0.0001	<0.0001-0.001	<0.003	<0.003-<0.05	<10.0	3-8	**1,590**	1950-2620	**0.037**	<0.003-0.029
			2021-12-13	Normal	0.003	0.006	**0.715**		**4.43**		<0.0001	0.004	19		<0.002	0.003	0.048		<0.0005	0.002	17.9				**0.001**	<0.05	5.2		**1,710**		<0.005	

Notes:

1.03	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.03	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.03	Indicates value outside of the historical concentration range for the parameter
1.03	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.03	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.03	Indicates value exceeds ODWS and PWQO
1.03	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Table 4 - 2021 Chemistry Data
2021 Annual Groundwater Monitoring Report
Clean Harbours Canada Lambton Facility

DILLON CONSULTING

Metals

					Arsenic		Barium		Boron		Cadmium		Calcium		Chromium Total (III+VI)		Iron	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
RDL					0.001		0.002		0.01		0.0001		0.05		0.002		0.01	
ODWS				Source	IMAC		MAC		IMAC		MAC		-		MAC		AO	
				min														
				max	0.01		1		5		0.005		-		0.05		0.3	
PWQO				min														
				max	0.005		-		0.2		0.0002		-		0.001		0.3	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.001	<0.001-0.005	0.025	<0.1-0.11	0.298	1-1.9	<0.0001	<0.0001-<0.001	54.2	47.2-129	<0.002	<0.001-0.009	<0.010	<0.01-1.58
				Normal	<0.001		0.026		0.347		<0.0001		54.3		<0.002		<0.010	
			2021-12-17	Normal	<0.001		0.048		0.68		<0.0001		80.1		<0.002		0.018	
		EW1b-13	2021-06-11	Normal	<0.001	<0.001-<0.005	0.03	0.048-0.07	2.5	1.15-1.4	<0.0001	<0.0001-<0.001	59.1	70.5-109	<0.002	<0.001-0.004	0.018	0.11-0.67
			2021-12-17	Normal	<0.001		0.045		0.73		<0.0001		80.9		<0.002		0.065	
		EW1c-13	2021-06-11	Normal	0.002	<0.003-0.003	0.044	0.049-0.06	1.23	1.1-1.4	<0.0001	<0.0001-0.0001	84.1	69.1-108	<0.002	<0.001-0.004	0.63	0.04-0.71
			2021-12-17	Normal	<0.001		0.045		0.62		<0.0001		84.4		<0.002		0.036	
		EW2a-01	2021-06-11	Normal	<0.001	<0.001-0.0021	0.108	0.08-0.21	1.32	0.83-1.3	<0.0001	<0.0001-0.0002	33.1	29.1-78	<0.002	<0.001-0.005	0.087	<0.01-0.16
			2021-12-17	Normal	<0.001		0.301		0.69		<0.0001		33.8		<0.002		0.352	
		EW2b-13	2021-06-11	Normal	<0.001	<0.001-<0.006	0.108	0.12-0.14	1.27	1.1-1.32	<0.0001	<0.0001-<0.001	33	31.3-51	<0.002	<0.001-<0.005	0.147	<0.01-0.121
			2021-12-17	Normal	<0.001		0.109		0.66		<0.0001		33.6		<0.002		0.057	
		EW2c-13	2021-06-11	Normal	<0.001	<0.001-<0.006	0.111	0.11-0.141	1.26	1.1-1.35	<0.0001	<0.0001-<0.001	28.9	29.6-54	<0.002	<0.001-<0.005	0.366	<0.01-0.22
			2021-12-17	Field_D	<0.001		0.123		0.62		<0.0001		32		<0.002		0.128	
				Normal	<0.001		0.125		0.79		<0.0001		31.8		<0.002		0.036	
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	0.001	<0.001-0.003	0.063	0-0.3	2	<0.03-2.1	<0.0001	<0.00005-0.005	21.7	18.66-66	<0.002	<0.0002-0.009	5.19	<0.0002-3.66
			2021-12-14	Normal	<0.001		0.047		0.92		<0.0001		5.19		<0.002		1.51	
		OW35-05D	2021-06-18	Field_D	0.003	<0.001-0.001	0.078	0.11-0.22	2.4	1.37-1.9	<0.0001	<0.0001-0.0001	31	17-28	<0.002	<0.001-0.007	0.019	<0.03-0.671
				Normal	0.003		0.084		2.52		<0.0001		31.9		<0.002		0.025	
			2021-12-14	Normal	0.002		0.089		2.99		<0.0001		32		<0.002		0.047	
		TW30-99D	2021-05-18	Normal	<0.001	<0.001-<0.004	0.375	0.29-0.46	1.93	1.32-2	<0.0001	<0.0001-<0.003	22.9	18-37	<0.002	<0.001-0.008	0.039	<0.01-0.352
			2021-12-15	Normal	<0.001		0.32		1.11		<0.0001		21.9		<0.002		0.423	
		TW32-94-II	2021-05-18	Normal	0.008	<0.001-0.002	2.15	0.013-1	9.59	0.27-3.83	<0.0001	<0.0001-<0.005	42.8	11.6-120	0.002	<0.001-0.009	0.879	<0.005-0.077
			2021-12-15	Normal	<0.001		0.535		2.47		<0.0001		19.3		<0.002		0.049	
		TW40-99D	2021-06-18	Normal	<0.001	<0.001-0.002	0.17	0.186-0.37	1.73	1.4-2.4	<0.0001	<0.0001-0.005	32	25.3-78	<0.002	<0.001-0.008	0.668	<0.013-1.92
			2021-12-15	Normal	<0.001		0.284		1.52		<0.0001		36.6		<0.002		0.666	
		TW41-99D	2021-06-11	Normal	<0.001	<0.001-0.002	0.073	0.074-0.93	1.88	1.5-2.1	<0.0001	<0.0001-0.006	16.2	12-26	<0.002	<0.001-0.0063	0.078	<0.02-4.9
			2021-12-15	Normal	<0.001		0.075		1.37		<0.0001		17.1		<0.002		0.11	
		TW43-99D	2021-06-17	Field_D	<0.001	<0.001-0.0017	0.142	0.139-0.3	1.35	1-1.7	<0.0001	<0.0001-<0.003	25.7	19-37	<0.002	<0.001-0.007	0.283	<0.01-0.591
				Normal	0.001		0.145		1.28		<0.0001		25.3		<0.002		0.296	
			2021-12-13	Normal	<0.001		0.186		1.39		<0.0001		26.4		<0.002		0.465	
		TW47-00D	2021-06-18	Normal	<0.001	<0.001-0.004	0.26	0.2-3.4	2.11	2-6	<0.0001	<0.0001-<0.001	26.3	17-104	<0.002	<0.001-0.007	0.311	<0.019-6.79
			2021-12-15	Field_D	<0.001		1.61		4.05		<0.0001		55.6		<0.002		2.98	
				Normal	0.001		1.49		3.7		<0.0001		53.5		<0.002		3.36	
		TW48-00D	2021-06-17	Normal	<0.001	<0.003-0.0042	0.174	0.16-0.63	2.66	0.3-3.5	<0.0001	<0.0001-<0.001	26.5	12-34.9	<0.002	<0.001-0.009	0.146	<0.019-0.543
			2021-12-15	Field_D	<0.001		0.162		1.66		<0.0001		27.3		<0.002		0.205	
				Normal	<0.001		0.198		1.79		0.0001		28		<0.002		0.221	
		TW49-00D	2021-06-17	Normal	0.002	<0.003-0.0027	0.08	0.06-0.8	1.14	0.9-1.5	<0.0001	<0.0001-<0.001	17.6	9-28.9	<0.002	<0.001-0.004	0.208	<0.03-1.2
			2021-12-13	Field_D	0.001		0.083		0.96		<0.0001		17.9		<0.002		0.054	
				Normal	0.001		0.081		0.98		0.0001		17.9		<0.002		0.055	
		TW53-03D	2021-06-18	Normal	0.001	<0.001-0.002	0.059	0.15-1.03	1.65	1.3-3.6	<0.0001	<0.0001-<0.001	29.2	19-65	<0.002	<0.001-0.009	0.225	<0.03-0.592
			2021-12-14	Normal	<0.001		0.045		1.5		<0.0001		29.8		<0.002		0.083	
		TW60-13D	2021-06-09	Normal		<0.001-0.003		0.196-0.49		3.09-5.6		<0.0001-<0.001		21.1-39		<0.001-0.004		<0.01-1.6
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.001	<0.001-0.002	0.091	0.1-0.312	1.83	1.67-2.4	<0.0001	<0.0001-0.003	21.8	18-55	<0.002	<0.001-0.008	0.688	<0.019-0.412
			2021-12-16	Normal	<0.001		0.107		1.15		<0.0001		22.2		<0.002		0.447	
		TW46-99D	2021-06-09	Normal	<0.001	<0.001-0.002	0.087	0.08-0.2	1.82	1.46-2.09	<0.0001	<0.0001-0.003	15.5	13.3-23	<0.002	<0.001-0.007	0.312	<0.02-0.755
			2021-12-16	Normal	<0.001		0.083		1.32		<0.0001		14.7		<0.002		0.257	
		TW54-09D	2021-06-09	Normal	<0.001	<0.001-<0.1	0.102	0.106-0.3	1.84	1.4-1.92	<0.0001	<0.0001-<0.001	16.7	14.4-18	<0.002	<0.001-0.004	0.279	<0.03-0.23
			2021-12-14	Field_D	<0.001		0.114		1.21		<0.0001		16.7		<0.002		0.057	
				Normal	<0.001		0.119		1.26		<0.0001		17		<0.002		0.091	
		TW61-13D	2021-05-17	Normal	0.004	<0.003-0.004	0.048	0.045-0.13	1.73	1.4-1.63	<0.0001	<0.0001-<0.001	33.2	17-30.6	<0.002	<0.001-0.002	0.027	<0.01-0.1
			2021-12-16	Normal	<0.01		0.047		0.91		<0.0001		53.1		<0.002		0.112	
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.001	<0.001-0.002	0.209	0.14-0.29	1.8	1.3-1.95	<0.0001	<0.0001-<0.001	19.5	14-22	<0.002	<0.001-0.007	0.364	<0.01-0.47
			2021-12-13	Normal	<0.001		0.212		1.59		<0.0001		21.8		<0.002		0.276	
		TW56-11D	2021-06-10	Normal	0.002	<0.001-0.001	0.093	0.105-0.25	1.66	1.85-2.5	<0.0001	<0.0001-<0.001	26	17.8-31	<0.002	<0.001-0.004	0.038	<0.03-1.21
			2021-12-14	Normal	0.004		0.083		1.46		<0.0001		28.6		<0.002		0.038	
		TW57-11D	2021-06-10	Normal	<0.001	<0.001-0.002	0.065	0.083-0.14	1.8	1.6-2.4	<0.0001	<0.0001-<0.001	17.6	15-24	<0.002	<0.001-0.037	<0.010	0.23-7.5
		TW59-13D	2021-06-10	Normal	0.002	<0.001-0.002	0.046	0.091-0.18	0.664	1.09-1.4	<0.0001	<0.0001-<0.001	27.3	14.1-18	<0.002	<0.001-0.003	<0.010	<0.03-0.453
			2021-12-14	Normal	0.003		0.037		0.428		<0.0001		27.7		<0.002		0.017	
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	<0.001	<0.001-0.001	0.035	0.096-0.57	1.92	1.6-2.7	<0.0001	<0.0001-<0.001	8.31	7.89-159	<0.002	<0.001-0.009	1.04	<0.01-0.527
		PW2-S(R11)	2021-06-09	Normal	<0.001	<0.001-0.001	0.109	0.128-0.41	2.86	1.97-3.6	<0.0001	<0.0001-<0.001	9.39	8.3-33	<0.002	<0.001-0.01	0.118	<0.01-0.64

					Lead		Magnesium		Mercury		Nickel		Potassium		Sodium		Zinc	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
RDL					0.0005		0.05		0.0001		0.001		0.05		0.05		0.005	
ODWS				Source	MAC		-		MAC		-		-		AO		AO	
				min														
				max	0.01		-		0.001		-		-		20		5	
PWQO				min														
				max	0.005		-		0.0002		0.025		-		-		0.03	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.0005	<0.0005-<0.002	14.5	19.8-78	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	1.62	2.01-8	34.8	42.2-300	0.01	<0.005-0.03
				Normal	<0.0005		14.5		<0.0001		<0.003		1.59		34.7		0.009	
			2021-12-17	Normal	<0.0005		45				0.001		4.52		179		<0.005	
		EW1b-13	2021-06-11	Normal	<0.0005	<0.0005-<0.002	33.6	40.6-62	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	3.89	4.08-6	196	157-211	0.008	<0.005-0.01
			2021-12-17	Normal	<0.0005		44.7				<0.001		4.5		181		<0.005	
		EW1c-13	2021-06-11	Normal	<0.0005	<0.0005-<0.002	44.8	41-57	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	4.03	3.98-6	168	156-202	<0.005	<0.005-0.013
			2021-12-17	Normal	<0.0005		45.8				<0.001		4.58		177		0.006	
		EW2a-01	2021-06-11	Normal	<0.0005	<0.0005-<0.002	14.9	13-46	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.01	<2.50	2-8.1	92.8	61-114	<0.005	<0.005-0.04
			2021-12-17	Normal	<0.0005		14.9				0.001		2.41		98.9		<0.005	
		EW2b-13	2021-06-11	Normal	<0.0005	<0.0005-<0.002	14.7	13.8-21	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	2.45	2.27-3	90.8	87.1-106	<0.005	<0.005-<0.01
			2021-12-17	Normal	<0.0005		14.8				0.001		2.54		97.6		<0.005	
		EW2c-13	2021-06-11	Normal	<0.0005	<0.0005-<0.002	13.1	13.3-22	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	2.02	2.22-3.55	98.3	84.5-103	<0.005	<0.005-0.01
			2021-12-17	Field_D	<0.0005		13.9				0.001		2.32		97.4		0.01	
				Normal	<0.0005		14.2				0.004		2.34		96.9		<0.005	
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	0.0026	<0.0001-0.04	7.82	6-22	<0.0001	<0.0001-0.0013	<0.003	<0.001-0.033	4.18	1.5-5.2	244	62-392.6	<0.005	<0.0002-0.04
			2021-12-14	Normal	<0.0005		1.78				<0.001		0.58		54		<0.005	
		OW35-05D	2021-06-18	Field_D	<0.0005	<0.0005-<0.002	7.17	6-9	<0.0001	<0.0001-<0.0001	0.003	<0.001-<0.005	3.83	1.29-2.4	141	207-310	<0.005	<0.005-0.06
				Normal	<0.0005		7.46		<0.0001		<0.003		3.92		143		<0.005	
			2021-12-14	Normal	<0.0005		7.12				0.005		3.87		148		<0.005	
		TW30-99D	2021-05-18	Normal	<0.0005	<0.0005-0.003	8.41	6.89-14	<0.0001	<0.0001-<0.0001	<0.003	<0.001-0.007	2.71	<1-3	224	182-320	<0.005	<0.003-0.09
			2021-12-15	Normal	<0.0005		7.66				<0.001		2.43		222		<0.005	
		TW32-94-II	2021-05-18	Normal	<0.0005	<0.0005-<0.025	52.8	6-81	<0.0001	<0.0001-0.0003	<0.003	<0.001-<0.05	<25.0	1-5	3,830	75-1380	<0.005	<0.003-0.045
			2021-12-15	Normal	<0.0005		21.2				0.001		4.02		719		<0.005	
		TW40-99D	2021-06-18	Normal	<0.0005	<0.0005-0.002	11.8	9-28	<0.0001	<0.0001-0.0001	<0.003	<0.001-<0.01	2.58	1.9-4	247	222-572	<0.005	<0.005-0.516
			2021-12-15	Normal	<0.0005		13.6				<0.001		2.69		302		<0.005	
		TW41-99D	2021-06-11	Normal	<0.0005	<0.0005-0.0073	5.8	4.55-7.2	<0.0001	<0.0001-0.00035	<0.003	<0.001-<0.01	<2.50	1-3.3	216	181-320	<0.005	<0.005-0.53
			2021-12-15	Normal	<0.0005		5.86				0.003		1.88		238		<0.005	
		TW43-99D	2021-06-17	Field_D	<0.0005	<0.0005-<0.002	9.49	7-11	<0.0001	<0.0001-<0.0001	<0.003	<0.001-<0.01	<2.50	1-3	190	189-259	0.012	<0.005-0.06
				Normal	<0.0005		9.34		<0.0001		<0.003		<2.50		189		0.008	
			2021-12-13	Normal	<0.0005		9.6				0.001		1.82		213		<0.005	
		TW47-00D	2021-06-18	Normal	<0.0005	<0.0005-0.001	9.51	<0.1-47	<0.0001	<0.0001-0.0001	<0.003	<0.001-<0.05	<2.50	1.3-10	227	250-3040	<0.005	<0.001-0.2
			2021-12-15	Field_D	<0.0005		26.4				0.001		5.1		1,460		<0.005	
				Normal	<0.0005		25.3				<0.001		4.5		1,380		<0.005	
		TW48-00D	2021-06-17	Normal	<0.0005	<0.0005-<0.002	9.7	7-14.8	<0.0001	<0.0001-<0.0001	<0.003	<0.001-<0.01	2.74	1.9-4	292	260-510	<0.005	<0.005-0.042
			2021-12-15	Field_D	<0.0005		9.79				0.001		2.79		316		<0.005	
				Normal	0.0006		10				0.002		2.79		321		<0.005	
		TW49-00D	2021-06-17	Normal	<0.0005	<0.0005-<0.002	5.21	3.7-7.6	<0.0001	<0.0001-<0.0001	<0.003	<0.001-<0.01	1.29	<1-2	125	122-166	0.023	<0.005-0.08
			2021-12-13	Field_D	<0.0005		5.5				<0.001		1.34		133		<0.005	
				Normal	<0.0005		5.45				<0.001		1.28		134		<0.005	
		TW53-03D	2021-06-18	Normal	<0.0005	<0.0005-<0.002	7.37	6.82-25	<0.0001	<0.0001-<0.0001	<0.003	<0.001-<0.01	2.15	1.74-4	82.9	88.9-853	<0.005	<0.005-0.73
			2021-12-14	Normal	<0.0005		7.77				0.001		3.24		91.4		<0.005	
		TW60-13D	2021-06-09	Normal		<0.0005-<0.01		8-14		<0.0001-<0.0001		<0.003-0.05		1.76-4		498-1010		<0.005-0.03
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.0005	<0.0005-<0.002	6.64	6.03-18.3	<0.0001	<0.0001-0.00048	<0.003	<0.001-0.005	<2.50	1-2.3	239	220-415	<0.005	<0.005-0.096
			2021-12-16	Normal	<0.0005		6.32				0.001		1.75		234		0.006	
		TW46-99D	2021-06-09	Normal	<0.0005	<0.0005-<0.002	5.18	4.61-7.1	<0.0001	<0.0001-<0.001	<0.003	<0.001-0.024	<2.50	1-4	242	201-290	0.005	<0.003-0.19
			2021-12-16	Normal	<0.0005		4.88				0.002		2.08		242		<0.005	
		TW54-09D	2021-06-09	Normal	<0.0005	<0.0005-<0.002	5.84	4.77-7	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	<2.50	1.24-3	191	150-196	<0.005	<0.005-0.04
			2021-12-14	Field_D	<0.0005		5.6				0.002		1.77		181		<0.005	
				Normal	<0.0005		5.63				0.004		1.73		185		0.007	
		TW61-13D	2021-05-17	Normal	<0.0005	<0.0005-<0.002	13.8	5-12.6	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	<2.50	1-2.03	164	162-275	<0.005	<0.005-0.02
			2021-12-16	Normal	<0.0005		24.2				<0.001		1.91		177		<0.005	
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.0005	<0.0005-<0.002	6.89	6-8	<0.0001	<0.0001-<0.0001	<0.003	<0.003-0.006	3.32	2-4	355	294-385	<0.005	<0.005-0.04
			2021-12-13	Normal	<0.0005		7.41				<0.001		3.48		358		<0.005	
		TW56-11D	2021-06-10	Normal	<0.0005	<0.0005-<0.002	10.2	6.95-11	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.005	2.66	1-3	224	247-366	0.007	<0.005-0.04
			2021-12-14	Normal	<0.0005		10.7				<0.001		2.84		226		<0.005	
		TW57-11D	2021-06-10	Normal	<0.0005	<0.0005-<0.002	6.12	6-9	<0.0001	<0.0001-<0.0001	<0.003	<0.003-0.013	<2.50	1-3	297	291-474	<0.005	<0.005-0.02
		TW59-13D	2021-06-10	Normal	<0.0005	<0.0005-<0.002	7.18	4.68-6	<0.0001	<0.0001-<0.0001	0.004	<0.003-<0.005	1.85	1-3	72.6	148-192	<0.005	<0.005-0.03
			2021-12-14	Normal	<0.0005		7.27				0.003		1.84		75.3		<0.005	
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	0.0031	<0.0005-0.004	4.34	4.17-50	<0.0001	<0.0001-<0.0001	<0.003	<0.001-<0.05	<2.50	<1-45	329	92-391	0.01	<0.005-0.08
		PW2-S(R11)	2021-06-09	Normal	<0.0005	<0.0005-<0.01	7.5	6-16	<0.0001	<0.0001-<0.0001	<0.003	<0.003-<0.05	2.56	1.83-23	319	250-579	<0.005	<0.005-0.03

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines. The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentraion range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

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					Volatile Organic Compounds (VOCs)																					
					Bromodichloromethane		Bromoform		Bromomethane		Carbon tetrachloride		Chlorobenzene		Chlorodibromomethane		Chloroethane		Chloroform		Chloromethane		1,2-Dibromoethane		1,4-Dichlorobenzene		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene	
					µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
RDL					0.2		0.1		0.2		0.2		0.1		0.1		0.2		0.2		0.4		0.1		0.1		0.3		0.2		0.2	
ODWS				Source	-		-		-		MAC		MAC		-		-		-		-		-		MAC		-		IMAC		MAC	
				min																												
				max	-		-		-		2		80		-		-		-		-		-		5		-		5		14	
PWQO				min																												
				max	200		60		0.9		-		15		40		-		-		700		5		4		200		100		40	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020	
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-14	Normal																												
		TW41-99S	2021-06-11	Normal	<0.20	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.1-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		TW42-99S	2021-06-17	Normal	<0.20	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.1-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.4	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-13	Normal																												
		TW43-99S	2021-06-17	Normal	<0.20	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.1-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-13	Normal																												
		TW45-99S	2021-05-17	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-16	Normal																												
		TW48-16S	2021-06-17	Normal	<0.20	<0.2-<0.2	<0.10	<0.1-<0.1	<0.20	<0.2-<0.2	<0.20	<0.2-<0.2	<0.10	<0.1-<0.1	<0.10	<0.1-<0.1	<0.20	<0.2-<0.2	<0.20	<0.2-<0.2	<0.40	<0.4-<0.4	<0.10	<0.1-<0.1	<0.10	<0.1-<0.1	<0.30	<0.3-<0.3	<0.20	<0.2-<0.2	<0.2	<0.3-<0.3
			2021-12-15	Normal																												
		TW62-13S	2021-05-17	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-16	Normal																												
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		OW32-90S	2021-05-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-0.9	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-14	Normal																												
		OW35-90S	2021-05-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-14	Normal																												
		TW22-94	2021-06-09	Normal	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-06-10	Field_D	<0.20	<0.2-<0.6	<0.10	<0.1-<0.8	<0.20	<0.1-<1	<0.20	<0.2-<1	<0.10	<0.1-<0.4	<0.10	<0.1-<0.6	<0.20	<0.2-<2	<0.20	<0.2-<1	<0.40	<0.2-<2	<0.10	<0.1-<2	<0.10	<0.1-<0.8	<0.30	<0.1-<0.8	<0.20	<0.1-<1	<0.2	<0.1-<1
			2021-12-16	Normal																												
		TW32-94-IV	2021-05-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		TW40-99S	2021-06-18	Normal	<0.20	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<0.7	<0.20	<0.1-<0.5	<0.10	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.01-<10	<0.20	<0.2-<0.6	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.002-<2	<0.30	<0.01-<10	<0.20	<0.002-<2	<0.2	<0.1-<0.6
			2021-12-15	Normal																												
		TW53-03S	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<0.7	<0.20	<0.1-<0.5	<0.10	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.01-<1	<0.20	<0.2-<0.6	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.002-<0.4	<0.30	<0.01-<0.7	<0.20	<0.002-<0.5	<0.2	<0.1-<0.6
			2021-12-14	Normal																												
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
				Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-14	Normal																												
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.5	<0.2	<0.3-<0.5
			2021-12-13	Normal																												
		TW56-11S	2021-06-11	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-14	Normal																												
		TW57-11S	2021-06-09	Field_D	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-06-10	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
		TW58-11S	2021-12-14	Normal		<0.2-<0.3		<0.1-<0.4		<0.2-<0.5		<0.2-<0.2		<0.1-<0.2		<0.1-<0.3		<0.2-<0.2		<0.2-<0.5		<0.2-<0.4		<0.1-<0.2		<0.1-<0.4		<0.3-<0.4		<0.2-<0.2		<0.3-<0.5
		TW59-13S	2021-06-10	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-14	Normal																												
	Northern Berm	TW39-99I	2021-05-17	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		TW39-99S	2021-05-18	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.5	<0.20	<0.1-<0.5	<0.20	<0.1-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.5	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<10	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		TW46-99I	2021-05-18	Normal	<0.20	<0.2-<0.6	<0.10	<0.1-<0.8	<0.20	<0.1-<1	<0.20	<0.2-<1	<0.10	<0.1-<0.4	<0.10	<0.1-<0.6	<0.20	<0.2-<2	<0.20	<0.1-<1	<0.40	<0.2-<2	<0.10	<0.1-<2	<0.10	<0.1-<0.8	<0.30	<0.1-<0.8	<0.20	<0.1-<1	<0.2	<0.1-<1
			2021-12-15	Normal																												
		TW46-99S	2021-05-18	Normal	<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																												
		TW61-13I	2021-05-17	Normal	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-16	Field_D		<0.2-<0.3		<0.1-<0.4		<0.2-<0.5		<0.2-<0.2		<0.1-<0.2		<0.1-<0.3		<0.2-<0.2		<0.2-<0.5		<0.2-<0.4		<0.1-<0.2		<0.1-<0.4		<0.3-<0.4		<0.2-<0.2		<0.3-<0.5
				Normal																												
		TW61-13S	2021-05-17	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-16	Normal																												
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
				Normal	<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.3-<0.5
			2021-12-15	Normal																												
	Off-Site	TW42-99D	2021-06-17	Normal	<0.40	<0.2-<0.3	<0.20	<0.1-<0.4	<0.40	<0.2-<0.5	<0.40	<0.2-<0.2	<0.20	<0.1-<0.2	<0.20	<0.1-<0.3	<0.40	<0.2-<0.2	<0.40	<0.2-<0.5	<0.80	<0.2-<0.4	<0.20	<0.1-<0.2	<0.20	<0.1-<0.4	<0.60	<0.3-<0.4	<0.40	<0.2-<0.2	<0.4	<0.3-<0.5
			2021-12-13	Normal																												

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

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						Volatile Organic Compounds (VOCs)																											
						Bromodichloromethane		Bromoform		Bromomethane		Carbon tetrachloride		Chlorobenzene		Chlorodibromomethane		Chloroethane		Chloroform		Chloromethane		1,2-Dibromoethane		1,4-Dichlorobenzene		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene	
						µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
RDL						0.2		0.1		0.2		0.2		0.1		0.1		0.2		0.2		0.4		0.1		0.1		0.3		0.2		0.2	
ODWS				Source		-		-		-		MAC		MAC		-		-		-		-		-		MAC		-		IMAC		MAC	
				min																													
				max		-		-		-		2		80		-		-		-		-		-		5		-		5		14	
PWQO				min																													
				max		200		60		0.9		-		15		40		-		-		700		5		4		200		100		40	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
				Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.5	<0.2	<0.2-<0.5
			2021-12-17	Normal																													
		EW1b-13	2021-06-11	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
			2021-12-17	Normal																													
		EW1c-13	2021-06-11	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
			2021-12-17	Normal																													
		EW2a-01	2021-06-11	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.3-<0.7	<0.20	<0.2-<0.5	<0.2	<0.2-<0.5
			2021-12-17	Normal																													
		EW2b-13	2021-06-11	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
			2021-12-17	Normal																													
		EW2c-13	2021-06-11	Normal		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-17	Field_D			<0.2-<0.3		<0.1-<0.4		<0.2-<0.5		<0.2-<0.2		<0.1-<0.2		<0.1-<0.3		<0.2-<0.2		<0.2-<0.5		<0.2-<0.4		<0.1-<0.2		<0.1-<0.4		<0.3-<0.4		<0.2-<0.2		<0.2-<0.5
				Normal																													
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal		<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-14	Normal																													
		OW35-05D	2021-06-18	Field_D		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
				Normal		<0.20	<0.2-<0.5	<0.10	<0.1-1.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.4	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-14	Normal																													
		TW30-99D	2021-05-18	Normal		<0.20	<0.2-<0.5	<0.10	<0.1-<0.4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-0.7	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																													
		TW32-94-II	2021-05-18	Normal		<0.20	<0.2-<0.5	<0.10	<0.1-0.5	<0.20	<0.1-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-15	Normal																													
		TW40-99D	2021-06-18	Normal		<0.20	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<0.7	<0.20	<0.1-<0.5	<0.10	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.01-<10	<0.20	<0.2-2.1	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.002-<2	<0.30	<0.01-<10	<0.20	<0.002-<2	<0.2	<0.1-<0.6
			2021-12-15	Normal																													
		TW41-99D	2021-06-11	Normal		<0.20	<0.1-<0.6	<0.10	<0.1-<0.8	<0.20	<0.2-<1	<0.20	<0.1-<1	<0.10	<0.1-<0.4	<0.10	<0.1-<0.6	<0.20	<0.2-<2	<0.20	<0.2-0.5	<0.40	<0.2-<2	<0.10	<0.1-<2	<0.10	<0.1-<0.8	<0.30	<0.1-<0.8	<0.20	<0.1-<1	<0.2	<0.1-<1
			2021-12-15	Normal																													
		TW43-99D	2021-06-17	Field_D		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
				Normal		<0.20	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.1-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.1-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<0.7	<0.20	<0.1-<0.5	<0.2	<0.1-<0.5
			2021-12-13	Normal																													
		TW47-00D	2021-06-18	Normal		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-15	Field_D			<0.1-<0.4		<0.1-<0.4		<0.2-<0.7		<0.1-<0.5		<0.1-<0.3		<0.1-<0.4		<0.01-<10		<0.2-<0.6		<0.2-<1		<0.1-<1		<0.002-<2		<0.01-<10		<0.002-<2		<0.1-<0.6
				Normal																													
		TW48-00D	2021-06-17	Normal		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-15	Field_D			<0.1-<0.6		<0.1-<0.8		<0.2-<1		<0.1-<1		<0.1-<0.4		<0.1-<0.6		<0.2-<2		<0.1-<1		<0.2-<2		<0.1-<2		<0.1-<0.8		<0.1-<0.8		<0.1-<1		<0.1-<1
				Normal																													
		TW49-00D	2021-06-17	Normal		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-13	Field_D			<0.1-<0.6		<0.1-<0.8		<0.2-<1		<0.1-<1		<0.1-<0.4		<0.1-<0.6		<0.2-<2		<0.2-0.1		<0.2-<2		<0.1-<2		<0.1-<0.8		<0.1-<0.8		<0.1-<1		<0.1-<1
				Normal																													
		TW53-03D	2021-06-18	Normal		<0.20	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<0.7	<0.20	<0.1-<0.5	<0.10	<0.1-<0.3	<0.10	<0.1-<0.4	<0.20	<0.01-<1	<0.20	<0.2-0.7	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.002-<0.4	<0.30	<0.01-<0.7	<0.20	<0.002-<0.5	<0.2	<0.1-<0.6
			2021-12-14	Normal																													
		TW60-13D	2021-06-09	Normal			<0.2-<0.3		<0.1-<0.4		<0.2-<0.5		<0.2-<0.2		<0.1-<0.2		<0.1-<0.3		<0.2-<0.2		<0.2-<0.5		<0.2-<0.4		<0.1-<0.2		<0.1-<0.4		<0.3-<0.4		<0.2-<0.2		<0.2-<0.5
	Internal to Property	TW39-99D	2021-06-18	Normal		<0.80	<0.1-<0.8	<0.40	<0.1-0.4	<0.80	<0.2-<0.8	<0.80	<0.1-<0.8	<0.40	<0.1-<0.4	<0.40	<0.1-<0.4	<0.80	<0.01-<10	<0.80	<0.2-0.7	<1.60	<0.2-<1.6	<0.40	<0.1-<1	<0.40	<0.002-<2	<1.20	<0.01-<10	<0.80	<0.002-<2	<0.8	<0.1-<1.2
			2021-12-16	Normal																													
		TW46-99D	2021-06-09	Normal		<0.20	<0.2-<0.8	<0.10	<0.1-3.2	<0.20	<0.1-<0.8	<0.20	<0.2-<0.8	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<1	<0.20	<0.2-0.25	<0.40	<0.2-<1.6	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.1-<1.2	<0.20	<0.1-<0.8	<0.2	<0.1-<1.2
			2021-12-16	Normal																													
		TW54-09D	2021-06-09	Normal		<0.20		<0.10		<0.20		<0.20		<0.10		<0.10		<0.20		<0.20		<0.40		<0.10		<0.10		<0.30		<0.20		<0.2	
			2021-12-14	Field_D			<0.2-<0.3		<0.1-<0.4		<0.2-<0.5		<0.2-<0.5		<0.1-<0.2		<0.1-<0.3		<0.2-<1		<0.2-<0.5		<0.2-<1		<0.1-<1		<0.1-<0.4		<0.3-<0.4		<0.2-<0.5		<0.2-<0.5
				Normal																													
		TW61-13D	2021-05-17	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
			2021-12-16	Normal																													
	Located off the Facility Property	TW55-09D	2021-06-17	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.5	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<1	<0.20	<0.2-<0.5	<0.40	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.5	<0.2	<0.2-<0.5
			2021-12-13	Normal																													
		TW56-11D	2021-06-10	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
			2021-12-14	Normal																													
		TW57-11D	2021-06-10	Normal		<0.20	<0.2-<0.3	<0.10	<0.1-<0.4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.10	<0.1-<0.2	<0.10	<0.1-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.5	<0.40	<0.2-<0.4	<0.10	<0.1-<0.2	<0.10	<0.1-<0.4	<0.30	<0.3-<0.4	<0.20	<0.2-<0.2	<0.2	<0.2-<0.5
		TW59-13D	2021-06-10	Normal		<0.20	<0.2-<0.8	<0.10	<0.1-<0.4	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.40	<0.2-<1.6	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4	<0.30	<0.3-<1.2	<0.20	<0.2-<0.8	<0.2	<0.2-<1.2
			2021-12-14	Normal																													
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal		<0.20	<0.1-<1	<0.10	<0.1-<2	<0.20	<0.2-<5	<0.20	<0.1-<1	<0.10	<0.1-<1	<0.10	<0.1-<2	<0.20	<0.01-<10	<0.20	<0.2-23.8	<0.40	<0.2-<1.6	<0.10	<0.1-<2	<0.10	<0.002-<2	<0.30	<0.01-1	<0.20	<0.002-<2	<0.2	<0.1-<1.2
		PW2-S(R11)	2021-06-09	Normal		<0.20	<0.2-<1	<0.10	<0.1-<2	<0.20	<0.2-<5	<0.20	<0.2-<1	<0.10	<0.1-<1	<0.10	<0.1-<2	<0.20	<0.2-<2	<0.20	<0.2-<1	<0.40	<0.2-<1.6	<0.10	<0.1-<2	<0.10	<0.1-<2	<0.30	<0.3-<1.2	<0.20	<0.2-<2	<0.2	<0.2-<1.2

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

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					Volatile Organic Compounds (VOCs)																											
					cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Dichloromethane		1,2-Dichloropropane		cis-1,3-Dichloropropene		trans-1,3-Dichloropropene		Styrene		1,1,2,2-Tetrachloroethane		Tetrachloroethene		1,1,1-Trichloroethane		1,1,2-Trichloroethane		Trichloroethene		Trichlorofluoromethane		Vinyl chloride	
					µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
RDL					0.2		0.2		0.3		0.2		0.2		0.3		0.1		0.1		0.2		0.3		0.2		0.2		0.4		0.17	
ODWS				Source	-		-		MAC		-		-		-		-		-		MAC		-		-		MAC		-		MAC	
				min																												
				max	-		-		50		-		-		-		-		-		10		-		-		5		-		1	
PWQO				min																												
				max	200		200		100		0.7		-		7		4		70		50		10		800		20		-		600	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.42	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-14	Normal																												
		TW41-99S	2021-06-11	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.35	<0.20	<0.1-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.1-<0.4	<0.20	<0.2-<0.4	<0.20	<0.1-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-15	Normal																												
		TW42-99S	2021-06-17	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-<4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.1-<0.4	<0.20	<0.2-<0.4	<0.20	<0.1-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-13	Normal																												
		TW43-99S	2021-06-17	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.37	<0.20	<0.1-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.1-<0.4	<0.20	<0.2-<0.4	<0.20	<0.1-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-13	Normal																												
		TW45-99S	2021-05-17	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-<5	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-16	Normal																												
		TW48-16S	2021-06-17	Normal	<0.20	<0.2-<0.2	<0.20	<0.2-<0.2	<0.30	<0.3-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.2	<0.30	<0.3-<0.3	<0.10	<0.1-<0.1	<0.10	<0.1-<0.1	<0.20	<0.2-<0.2	<0.30	<0.3-<0.3	<0.20	<0.2-<0.2	<0.20	<0.2-<0.2	<0.40	<0.4-<0.4	<0.17	<0.17-<0.17
			2021-12-15	Normal																												
		TW62-13S	2021-05-17	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-16	Normal																												
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.39	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal																												
		OW32-90S	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.42	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-14	Normal																												
		OW35-90S	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.46	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-14	Normal																												
		TW22-94	2021-06-09	Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-06-10	Field_D	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.42	<0.20	<0.2-<1	<0.20	<0.1-<0.4	<0.30	<0.2-<10	<0.10	<0.1-<1	<0.10	<0.1-<1	<0.20	<0.1-<0.6	<0.30	<0.2-<0.8	<0.20	<0.2-<0.8	<0.20	<0.2-<0.6	<0.40	<0.1-<1	<0.17	<0.1-<0.4
			2021-12-16	Normal																												
		TW32-94-IV	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.38	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal																												
		TW40-99S	2021-06-18	Normal	<0.20	<0.1-<0.5	<0.20	<0.1-<0.9	<0.30	<0.01-0.3	<0.20	<0.1-<0.5	<0.20	<0.2-<0.4	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.6	<0.20	<0.1-<0.3	<0.30	<0.01-<10	<0.20	<0.2-<0.4	<0.20	<0.01-<10	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-15	Normal																												
		TW53-03S	2021-05-18	Normal	<0.20	<0.1-<0.5	<0.20	<0.1-<0.9	<0.30	<0.01-<4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.4	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.6	<0.20	<0.1-<0.3	<0.30	<0.01-<0.4	<0.20	<0.2-<0.4	<0.20	<0.01-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal																												
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
				Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal																												
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-13	Normal																												
		TW56-11S	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	0.8	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	1.4	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	1.4	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal																												
		TW57-11S	2021-06-09	Field_D	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-06-10	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
		TW58-11S	2021-12-14	Normal		<0.2-<0.4		<0.2-<0.4		<0.3-<4		<0.2-<0.5		<0.2-<0.2		<0.2-<0.3		<0.1-<0.5		<0.1-<0.5		<0.2-<0.3		<0.3-<0.4		<0.2-<0.4		<0.2-<0.3		<0.4-<0.5		<0.17-<0.2
		TW59-13S	2021-06-10	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal																												
	Northern Berm	TW39-99I	2021-05-17	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.33	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal																												
		TW39-99S	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.1-0.32	<0.20	<0.1-<0.5	<0.20	<0.2-<0.2	<0.30	<0.1-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.1-<0.4	<0.20	<0.1-<0.4	<0.20	<0.2-<0.3	<0.40	<0.2-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal																												
		TW46-99I	2021-05-18	Normal	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.45	<0.20	<0.2-<1	<0.20	<0.1-<0.4	<0.30	<0.2-<10	<0.10	<0.1-<1	<0.10	<0.1-<1	<0.20	<0.1-<0.6	<0.30	<0.2-<0.8	<0.20	<0.2-<0.8	<0.20	<0.2-<0.6	<0.40	<0.1-<1	<0.17	<0.1-<0.4
			2021-12-15	Normal																												
		TW46-99S	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.43	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal																												
		TW61-13I	2021-05-17	Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-12-16	Field_D		<0.2-<0.4		<0.2-<0.4		<0.3-<4		<0.2-<0.5		<0.2-<0.2		<0.2-<0.3		<0.1-<0.5		<0.1-<0.5		<0.2-<0.3		<0.3-<0.4		<0.2-<0.4		<0.2-<0.3		<0.4-<0.5		<0.17-<0.2
				Normal																												
		TW61-13S	2021-05-17	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-16	Normal																												
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
				Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10		<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-15	Normal																												
	Off-Site	TW42-99D	2021-06-17	Normal	<0.40	<0.2-<0.4	<0.40	<0.2-<0.4	<0.60	<0.3-<4	<0.40	<0.2-<0.5	<0.40	<0.2-<0.2	<0.60	<0.2-<0.3	<0.20	<0.1-<0.5	<0.20	<0.1-<0.5	<0.40	<0.2-<0.3	<0.60	<0.3-<0.4	<0.40	<0.2-<0.4	<0.40	<0.2-<0.3	<0.80	<0.4-<0.5	<0.34	<0.17-<0.2
			2021-12-13	Normal																												

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Table 4 - 2021 Chemistry Data
2021 Annual Groundwater Monitoring Report
Clean Harbours Canada Lambton Facility

DILLON CONSULTING

					Volatile Organic Compounds (VOCs)													
					cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Dichloromethane		1,2-Dichloropropane		cis-1,3-Dichloropropene		trans-1,3-Dichloropropene		Styrene	
					µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
RDL					0.2		0.2		0.3		0.2		0.2		0.3		0.1	
ODWS				Source	-		-		MAC		-		-		-		-	
				min														
				max	-		-		50		-		-		-		-	
PWQO				min														
				max	200		200		100		0.7		-		7		4	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
				Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10	
			2021-12-17	Normal														
		EW1b-13	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-17	Normal														
		EW1c-13	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-17	Normal														
		EW2a-01	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-17	Normal														
		EW2b-13	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-17	Normal														
		EW2c-13	2021-06-11	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-17	Field_D														
				Normal														
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.45	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5
			2021-12-14	Normal														
		OW35-05D	2021-06-18	Field_D	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-<5	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5
				Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10	
			2021-12-14	Normal														
		TW30-99D	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.41	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5
			2021-12-15	Normal														
		TW32-94-II	2021-05-18	Normal	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-0.38	<0.20	<0.2-<0.5	<0.20	<0.1-<0.2	<0.30	<0.2-<10	<0.10	<0.1-<0.5
			2021-12-15	Normal														
		TW40-99D	2021-06-18	Normal	<0.20	<0.1-<0.5	<0.20	<0.1-<0.9	<0.30	<0.01-0.41	<0.20	<0.1-<0.5	<0.20	<0.2-<0.4	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-15	Normal														
		TW41-99D	2021-06-11	Normal	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.4	<0.20	<0.1-<1	<0.20	<0.2-<0.4	<0.30	<0.2-<0.4	<0.10	<0.1-<1
			2021-12-15	Normal														
		TW43-99D	2021-06-17	Field_D	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4	<0.30	<0.3-<4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
				Normal	<0.20		<0.20		<0.30		<0.20		<0.20		<0.30		<0.10	
			2021-12-13	Normal														
		TW47-00D	2021-06-18	Normal	<0.20	<0.1-<0.5	<0.20	<0.1-<0.9	<0.30	<0.01-0.32	<0.20	<0.1-<0.5	<0.20	<0.2-<0.4	<0.30	<0.2-<0.3	<0.10	<0.1-0.528
			2021-12-15	Field_D														
				Normal														
		TW48-00D	2021-06-17	Normal	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.31	<0.20	<0.1-<1	<0.20	<0.2-<0.4	<0.30	<0.2-<0.4	<0.10	<0.1-<1
			2021-12-15	Field_D														
				Normal														
		TW49-00D	2021-06-17	Normal	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.36	<0.20	<0.1-<1	<0.20	<0.2-<0.4	<0.30	<0.2-<0.4	<0.10	<0.1-<1
			2021-12-13	Field_D														
				Normal														
		TW53-03D	2021-06-18	Normal	<0.20	<0.1-<0.5	<0.20	<0.1-<0.9	<0.30	<0.01-<4	<0.20	<0.1-<0.5	<0.20	<0.2-<0.4	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-14	Normal														
		TW60-13D	2021-06-09	Normal		<0.2-<0.4		<0.2-<0.4		<0.3-<4		<0.2-<0.5		<0.2-<0.2		<0.2-<0.3		<0.1-<0.5
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.80	<0.1-<0.8	<0.80	<0.1-<0.9	<1.20	<0.01-0.32	<0.80	<0.1-<0.8	<0.80	<0.2-<0.8	<1.20	<0.2-<1.2	<0.40	<0.1-<0.5
			2021-12-16	Normal														
		TW46-99D	2021-06-09	Normal	<0.20	<0.1-<0.8	<0.20	<0.1-<0.8	<0.30	<0.3-0.41	<0.20	<0.2-<0.8	<0.20	<0.1-<0.8	<0.30	<0.2-<10	<0.10	<0.1-<0.5
			2021-12-16	Normal														
		TW54-09D	2021-06-09	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-14	Field_D														
				Normal														
		TW61-13D	2021-05-17	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-16	Normal														
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-13	Normal														
		TW56-11D	2021-06-10	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
			2021-12-14	Normal														
		TW57-11D	2021-06-10	Normal	<0.20	<0.2-<0.4	<0.20	<0.2-<0.4	<0.30	<0.3-<4	<0.20	<0.2-<0.5	<0.20	<0.2-<0.2	<0.30	<0.2-<0.3	<0.10	<0.1-<0.5
		TW59-13D	2021-06-10	Normal	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.30	<0.3-<4	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.30	<0.2-<1.2	<0.10	<0.1-<0.5
			2021-12-14	Normal														
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	<0.20	<0.1-<1	<0.20	<0.1-<1	<0.30	<0.01-0.37	<0.20	<0.1-<1	<0.20	<0.2-<2	<0.30	<0.2-<2	<0.10	<0.1-<2
		PW2-S(R11)	2021-06-09	Normal	<0.20	<0.2-<1	<0.20	<0.2-<1	<0.30	<0.3-<5	<0.20	<0.2-<1	<0.20	<0.2-<2	<0.30	<0.2-<2	<0.10	<0.1-<2

					Volatile Organic Compounds (VOCs)													
					1,1,2,2-Tetrachloroethane		Tetrachloroethene		1,1,1-Trichloroethane		1,1,2-Trichloroethane		Trichloroethene		Trichlorofluoromethane		Vinyl chloride	
					µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
RDL					0.1		0.2		0.3		0.2		0.2		0.4		0.17	
ODWS				Source	-		MAC		-		-		MAC		-		MAC	
				min														
				max	-		10		-		-		5		-		1	
PWQO				min														
				max	70		50		10		800		20		-		600	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-1.3	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
				Normal	<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-12-17	Normal														
		EW1b-13	2021-06-11	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-17	Normal														
		EW1c-13	2021-06-11	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-17	Normal														
		EW2a-01	2021-06-11	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-17	Normal														
		EW2b-13	2021-06-11	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-17	Normal														
		EW2c-13	2021-06-11	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-17	Field_D														
				Normal														
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-14	Normal														
		OW35-05D	2021-06-18	Field_D	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
				Normal	<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-12-14	Normal														
		TW30-99D	2021-05-18	Normal	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal														
		TW32-94-II	2021-05-18	Normal	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.2-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.1-<0.5	<0.17	<0.1-<0.2
			2021-12-15	Normal														
		TW40-99D	2021-06-18	Normal	<0.10	<0.1-<0.6	<0.20	<0.1-<0.3	<0.30	<0.01-<10	<0.20	<0.2-<0.4	<0.20	<0.01-<10	<0.40	<0.2-<0.5	<0.17	<0.17-<0.5
			2021-12-15	Normal														
		TW41-99D	2021-06-11	Normal	<0.10	<0.1-<1	<0.20	<0.1-<0.6	<0.30	<0.1-<0.8	<0.20	<0.2-<0.8	<0.20	<0.1-<0.6	<0.40	<0.2-<1	<0.17	<0.17-<0.4
			2021-12-15	Normal														
		TW43-99D	2021-06-17	Field_D	<0.10	<0.1-<0.5	<0.20	<0.1-<0.3	<0.30	<0.1-<0.4	<0.20	<0.2-<0.4	<0.20	<0.1-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
				Normal	<0.10		<0.20		<0.30		<0.20		<0.20		<0.40		<0.17	
			2021-12-13	Normal														
		TW47-00D	2021-06-18	Normal	<0.10	<0.1-<0.6	<0.20	<0.1-<0.3	<0.30	<0.01-<10	<0.20	<0.2-<0.4	<0.20	<0.01-<10	<0.40	<0.2-<0.5	<0.17	<0.17-<0.5
			2021-12-15	Field_D														
				Normal														
		TW48-00D	2021-06-17	Normal	<0.10	<0.1-<1	<0.20	<0.1-<0.6	<0.30	<0.1-<0.8	<0.20	<0.2-<0.8	<0.20	<0.1-<0.6	<0.40	<0.2-<1	<0.17	<0.17-<0.4
			2021-12-15	Field_D														
				Normal														
		TW49-00D	2021-06-17	Normal	<0.10	<0.1-<1	<0.20	<0.1-<0.6	<0.30	<0.1-<0.8	<0.20	<0.2-<0.8	<0.20	<0.1-<0.6	<0.40	<0.2-<1	<0.17	<0.17-<0.4
			2021-12-13	Field_D														
				Normal														
		TW53-03D	2021-06-18	Normal	<0.10	<0.1-<0.6	<0.20	<0.1-<0.3	<0.30	<0.01-<0.4	<0.20	<0.2-<0.4	<0.20	<0.01-<0.3	<0.40	<0.2-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal														
		TW60-13D	2021-06-09	Normal		<0.1-<0.5		<0.2-<0.3		<0.3-<0.4		<0.2-<0.4		<0.2-<0.3		<0.4-<0.5		<0.17-<0.2
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.40	<0.1-<0.6	<0.80	<0.1-<0.8	<1.20	<0.01-<10	<0.80	<0.2-<0.8	<0.80	<0.01-<10	<1.60	<0.2-<1.6	<0.68	<0.17-<0.68
			2021-12-16	Normal														
		TW46-99D	2021-06-09	Normal	<0.10	<0.1-<0.5	<0.20	<0.1-<0.8	<0.30	<0.2-<1.2	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.40	<0.1-<1.6	<0.17	<0.1-<0.68
			2021-12-16	Normal														
		TW54-09D	2021-06-09	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Field_D														
				Normal														
		TW61-13D	2021-05-17	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-16	Normal														
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-13	Normal														
		TW56-11D	2021-06-10	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
			2021-12-14	Normal														
		TW57-11D	2021-06-10	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.3	<0.30	<0.3-<0.4	<0.20	<0.2-<0.4	<0.20	<0.2-<0.3	<0.40	<0.4-<0.5	<0.17	<0.17-<0.2
		TW59-13D	2021-06-10	Normal	<0.10	<0.1-<0.5	<0.20	<0.2-<0.8	<0.30	<0.3-<1.2	<0.20	<0.2-<0.8	<0.20	<0.2-<0.8	<0.40	<0.4-<1.6	<0.17	<0.17-<0.68
			2021-12-14	Normal														
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	<0.10	<0.1-<2	<0.20	<0.1-<1	<0.30	<0.01-<10	<0.20	<0.2-<2	<0.20	<0.01-<10	<0.40	<0.2-<2	<0.17	<0.17-<2
		PW2-S(R11)	2021-06-09	Normal	<0.10	<0.1-<2	<0.20	<0.2-<1	<0.30	<0.3-<1.2	<0.20	<0.2-<2	<0.20	<0.2-<1	<0.40	<0.4-<2	<0.17	<0.17-<2

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines. The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentraion range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

					BTEX										(sVOCs)					
					Benzene		Toluene		Ethylbenzene		Xylene (m & p)		Xylene (o)		Xylene Total		1,2,4-Trichlorobenzene		1,2-Dichlorobenzene		1,3-Dichlorobenzene	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		µg/L		µg/L		µg/L	
RDL					0.0002		0.0002		0.0001		0.0002		0.0001		0.0002		0.3		0.1		0.1	
ODWS				Source	MAC		MAC		MAC		-		-		MAC		-		MAC		-	
				min																		
				max	0.001		0.06		0.14		-		-		0.09		-		200		-	
PWQO				min																		
				max	0.1		0.0008		0.008		0.002		0.04		-		0.5		2.5		2.5	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW41-99S	2021-06-11	Normal	<0.00020	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW42-99S	2021-06-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-13	Normal																		
		TW43-99S	2021-06-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-13	Normal																		
		TW45-99S	2021-05-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-0.39	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-16	Normal																		
		TW48-16S	2021-06-17	Normal	<0.00020	<0.2-<0.2	<0.00020	<0.2-<0.2	<0.00010	<0.1-<0.1	<0.00020	<0.2-<0.2	<0.00010	<0.1-<0.1	<0.00020	<0.2-<0.2	<0.30	<0.3-<0.3	<0.10	<0.1-<0.1	<0.10	<0.1-<0.1
			2021-12-15	Normal																		
		TW62-13S	2021-05-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-16	Normal																		
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		OW32-90S	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		OW35-90S	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-0.43	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW22-94	2021-06-09	Normal	<0.00020	<0.2-<1	<0.00020	<0.2-<1	<0.00010	<0.1-<1	<0.00020	<0.1-<2	<0.00010	<0.1-<1	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.8	<0.10	<0.1-<0.8
			2021-06-10	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-16	Normal																		
		TW32-94-IV	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW40-99S	2021-06-18	Normal	<0.00020	<0.001-<1	<0.00020	<0.01-<10	<0.00010	<0.001-<1	<0.00020	<0.1-<10	<0.00010	<0.1-<10	<0.00020	<0.01-<1.5	<0.30	<0.3-<0.3	<0.10	<0.002-<2	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW53-03S	2021-05-18	Normal	<0.00020	<0.001-<0.5	<0.00020	<0.01-<0.5	<0.00010	<0.001-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.01-<1.5	<0.30	<0.3-<0.3	<0.10	<0.002-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
				Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-13	Normal																		
		TW56-11S	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW57-11S	2021-06-09	Field_D	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-06-10	Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
		TW58-11S	2021-12-14	Normal		<0.2-<0.5		<0.2-<0.5		<0.1-<0.5		<0.2-<0.5		<0.1-<0.5		<0.2-<1		<0.3-<0.3		<0.1-<0.4		<0.1-<0.4
		TW59-13S	2021-06-10	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
	Northern Berm	TW39-99I	2021-05-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW39-99S	2021-05-18	Normal	<0.00020	<0.1-<0.5	<0.00020	<0.1-<0.5	<0.00010	<0.1-<5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW46-99I	2021-05-18	Normal	<0.00020	<0.2-<1	<0.00020	<0.2-<1	<0.00010	<0.1-<1	<0.00020	<0.1-<2	<0.00010	<0.1-<1	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.8	<0.10	<0.1-<0.8
			2021-12-15	Normal																		
		TW46-99S	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW61-13I	2021-05-17	Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-16	Field_D		<0.2-<0.5		<0.2-<0.5		<0.1-<0.5		<0.2-<0.5		<0.1-<0.5		<0.2-<1		<0.3-<0.3		<0.1-<0.4		<0.1-<0.4
				Normal																		
		TW61-13S	2021-05-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-16	Normal																		
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
				Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	<0.00020	<0.2-1.6	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
	Off-Site	TW42-99D	2021-06-17	Normal	<0.00040	<0.5-16	<0.00040	<0.2-<0.5	<0.00020	<0.1-<0.5	<0.00040	<0.2-<0.5	<0.00020	<0.1-<0.5	<0.00040	<0.2-<1	<0.60	<0.3-<0.3	<0.20	<0.1-<0.4	<0.20	<0.1-<0.4
			2021-12-13	Normal																		

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

					BTEX										(sVOCs)					
					Benzene		Toluene		Ethylbenzene		Xylene (m & p)		Xylene (o)		Xylene Total		1,2,4-Trichlorobenzene		1,2-Dichlorobenzene		1,3-Dichlorobenzene	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		µg/L		µg/L		µg/L	
RDL					0.0002		0.0002		0.0001		0.0002		0.0001		0.0002		0.3		0.1		0.1	
ODWS				Source	MAC		MAC		MAC		-		-		MAC		-		MAC		-	
				min																		
				max	0.001		0.06		0.14		-		-		0.09		-		200		-	
PWQO				min																		
				max	0.1		0.0008		0.008		0.002		0.04		-		0.5		2.5		2.5	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
				Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-0.88	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Normal																		
		EW1b-13	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Normal																		
		EW1c-13	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Normal																		
		EW2a-01	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Normal																		
		EW2b-13	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Normal																		
		EW2c-13	2021-06-11	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.4	<0.00010	<0.1-<0.4	<0.00020	<0.2-<0.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-17	Field_D																		
				Normal																		
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		OW35-05D	2021-06-18	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
				Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW30-99D	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW32-94-II	2021-05-18	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-2.1	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW40-99D	2021-06-18	Normal	<0.00020	<0.001-<1	<0.00020	<0.01-<10	<0.00010	<0.001-<1	<0.00020	<0.1-<10	<0.00010	<0.1-<10	<0.00020	<0.01-<1.5	<0.30	<0.3-<0.3	<0.10	<0.002-<2	<0.10	<0.1-<0.4
			2021-12-15	Normal																		
		TW41-99D	2021-06-11	Normal	<0.00020	<0.1-<1	<0.00020	<0.2-<1	<0.00010	<0.1-<1	<0.00020	<0.1-<2	<0.00010	<0.1-<1	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.8	<0.10	<0.1-<0.8
			2021-12-15	Normal																		
		TW43-99D	2021-06-17	Field_D	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
				Normal	<0.00020	<0.1-0.7	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-13	Normal																		
		TW47-00D	2021-06-18	Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-15	Field_D		<0.001-6.3		<0.01-<10		<0.001-<1		<0.1-<10		<0.1-<10		<0.01-<1.5		<0.3-<0.3		<0.002-<2		<0.1-<0.4
				Normal																		
		TW48-00D	2021-06-17	Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-15	Field_D		<0.1-<1		<0.2-0.41		<0.1-<1		<0.1-<2		<0.1-<1		<0.2-<1.5		<0.3-<0.3		<0.1-<0.8		<0.1-<0.8
				Normal																		
		TW49-00D	2021-06-17	Normal	<0.00020		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-13	Field_D		<0.2-0.2		<0.2-<1		<0.1-<1		<0.1-<2		<0.1-<1		<0.2-<1.5		<0.3-<0.3		<0.1-<0.8		<0.1-<0.8
				Normal																		
		TW53-03D	2021-06-18	Normal	<0.00020	<0.001-1.6	<0.00020	<0.01-<0.5	<0.00010	<0.001-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.01-<1.5	<0.30	<0.3-<0.3	<0.10	<0.002-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW60-13D	2021-06-09	Normal		<0.2-7		<0.2-1.5		<0.1-<0.5		<0.2-0.22		<0.1-<0.5		<0.2-0.22		<0.3-<0.3		<0.1-<0.4		<0.1-<0.4
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.00080	<0.001-<1	<0.00080	<0.01-0.6	<0.00040	<0.001-<1	<0.00080	<0.1-<10	<0.00040	<0.1-<10	<0.00080	<0.01-<1.5	<1.20	<0.3-<1.2	<0.40	<0.002-<2	<0.40	<0.1-<0.4
			2021-12-16	Normal																		
		TW46-99D	2021-06-09	Normal	<0.00020	<0.2-<0.8	<0.00020	<0.2-1.2	<0.00010	<0.1-<0.5	<0.00020	<0.1-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<1.2	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-16	Normal																		
		TW54-09D	2021-06-09	Normal	0.00954		<0.00020		<0.00010		<0.00020		<0.00010		<0.00020		<0.30		<0.10		<0.10	
			2021-12-14	Field_D		<0.2-0.7		<0.2-<0.5		<0.1-<0.5		<0.2-<1		<0.1-<0.5		<0.2-<1.5		<0.3-<0.3		<0.1-<0.4		<0.1-<0.4
				Normal																		
		TW61-13D	2021-05-17	Normal	<0.00020	<0.2-5.6	<0.00020	<0.2-0.8	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-16	Normal																		
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1.5	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-13	Normal																		
		TW56-11D	2021-06-10	Normal	<0.00020	<0.2-0.6	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.5	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
		TW57-11D	2021-06-10	Normal	<0.00020	2.1-8.1	<0.00020	<0.2-1	<0.00010	<0.1-<0.5	<0.00020	<0.2-0.31	<0.00010	<0.1-0.15	<0.00020	<0.2-0.46	<0.30	<0.3-<0.3	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
		TW59-13D	2021-06-10	Normal	<0.00020	<0.5-3.6	<0.00020	<0.2-0.41	<0.00010	<0.1-<0.5	<0.00020	<0.2-<0.8	<0.00010	<0.1-<0.5	<0.00020	<0.2-<1	<0.30	<0.3-<1.2	<0.10	<0.1-<0.4	<0.10	<0.1-<0.4
			2021-12-14	Normal																		
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	<0.00020	<0.001-1.9	<0.00020	<0.01-0.64	<0.00010	<0.001-<1	<0.00020	<0.1-<10	<0.00010	<0.1-<10	<0.00020	<0.01-<1.5	<0.30	<0.1-<1.2	<0.10	<0.002-<2	<0.10	<0.1-<2
		PW2-S(R11)	2021-06-09	Normal	<0.00020	<0.2-0.26	<0.00020	<0.2-1.7	<0.00010	<0.1-<1	<0.00020	<0.2-<1	<0.00010	<0.1-<1	<0.00020	<0.2-<1.5	<0.30	<0.1-<1.2	<0.10	<0.1-<2	<0.10	<0.1-<2

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

					Other															
					1,1,1,2-Tetrachloroethane		1,3-Dichloropropene		2-hexanone (MBK)		Acetone		Dichlorodifluoromethane		Hexane		Methyl Ethyl Ketone (MEK)		Methyl tert-Butyl Ether (MTBE)		Cyanide, free	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
RDL					0.0001		0.0003		0.001		0.001		0.0002		0.0002		0.001		0.0002		0.002	
ODWS				Source	-		-		-		-		-		-		-		AO		-	
				min																		
				max	-		-		-		-		-		-		-		0.015		-	
PWQO				min																		
				max	0.02		-		-		-		-		-		0.4		0.2		0.005	
Monitoring Zone	Location Description	Location Code	Date	Sample Type		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020		Historical to 2020
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	<0.02
		TW41-99S	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	0.005
		TW42-99S	2021-06-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-13	Normal																	<0.002	<0.02
		TW43-99S	2021-06-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-13	Normal																	<0.002	<0.02
		TW45-99S	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-16	Normal																	<0.002	0.003
		TW48-16S	2021-06-17	Normal	<0.00010	<0.1-<0.1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.005
		TW62-13S	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-16	Normal																	<0.002	<0.005
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	0.006
		OW32-90S	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	0.007
		OW35-90S	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	0.007
		TW22-94	2021-06-09	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<1	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-06-10	Field_D	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	<0.02
			2021-12-16	Normal																	<0.002	
		TW32-94-IV	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW40-99S	2021-06-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW53-03S	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	<0.02
	Internal to Property	TW63-13S	2021-05-17	Field_D	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	<0.002-
				Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.005
			2021-12-14	Normal																	<0.002	
	Located off the Facility Property	TW55-09S	2021-06-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-13	Normal																	<0.002	<0.01
		TW56-11S	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	<0.005
		TW57-11S	2021-06-09	Field_D	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-06-10	Normal	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	0.003
		TW58-11S	2021-12-14	Normal		<0.1-<0.5		<0.3-<0.3		<1-<1		<1-<1		<0.2-<0.5		<0.2-<0.2		<1-<1		<0.2-<0.2	<0.002	<0.002-
																						<0.005
		TW59-13S	2021-06-10	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-14	Normal																	<0.002	<0.005
	Northern Berm	TW39-99I	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW39-99S	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<0.2-<1	<0.00020	<0.2-<5	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW46-99I	2021-05-18	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<1	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW46-99S	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.02
		TW61-13I	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-16	Field_D																	<0.002	<0.005
				Normal																	<0.002	
		TW61-13S	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-16	Normal																	<0.002	<0.005
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	Field_D	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	
				Normal	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-
			2021-12-15	Normal																	<0.002	<0.005
	Off-Site	TW42-99D	2021-06-17	Normal	<0.00020	<0.1-<0.5	<0.00060	<0.3-<0.3	<0.0020	<1-<1	<0.0020	<1-<1	<0.00040	<0.2-<0.5	<0.00040	<0.2-<0.2	<0.0020	<1-<1	<0.00040	<0.2-<0.2	<0.002	<0.002-
			2021-12-13	Normal																	<0.002	<0.005

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

					Other																	
					1,1,1,2-Tetrachloroethane		1,3-Dichloropropene		2-hexanone (MBK)		Acetone		Dichlorodifluoromethane		Hexane		Methyl Ethyl Ketone (MEK)		Methyl tert-Butyl Ether (MTBE)		Cyanide, free	
					mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
RDL					0.0001		0.0003		0.001		0.001		0.0002		0.0002		0.001		0.0002		0.002	
ODWS				Source	-		-		-		-		-		-		-		AO		-	
				min																		
				max	-		-		-		-		-		-		-		0.015		-	
PWQO				min																		
				max	0.02		-		-		-		-		-		0.4		0.2		0.005	
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	Field_D	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.004
				Normal	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	
			2021-12-17	Normal																	<0.002	
		EW1b-13	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	**1.58**	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	**1.35**	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.004
			2021-12-17	Normal																	<0.002	
		EW1c-13	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	**0.832**	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	**0.844**	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.005
			2021-12-17	Normal																	<0.002	
		EW2a-01	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.01
			2021-12-17	Normal																	<0.002	
		EW2b-13	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	**0.19**	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	**0.199**	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.005
			2021-12-17	Normal																	<0.002	
		EW2c-13	2021-06-11	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	**0.774**	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	**0.841**	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.005
			2021-12-17	Field_D																	<0.002	
				Normal																	<0.002	
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-<0.02
			2021-12-14	Normal																	<0.002	
		OW35-05D	2021-06-18	Field_D	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-<0.02
				Normal	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	
			2021-12-14	Normal																	<0.002	
		TW30-99D	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-0.006
			2021-12-15	Normal																	<0.002	
		TW32-94-II	2021-05-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<0.1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.1-<0.2	<0.002	<0.002-0.006
			2021-12-15	Normal																	<0.002	
		TW40-99D	2021-06-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-0.005
			2021-12-15	Normal																	<0.002	
		TW41-99D	2021-06-11	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<1	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-0.009
			2021-12-15	Normal																	<0.002	
		TW43-99D	2021-06-17	Field_D	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.05
				Normal	<0.00010		<0.00030		<0.0010		<0.0010		<0.00020		<0.00020		<0.0010		<0.00020		<0.002	
			2021-12-13	Normal																	<0.002	
		TW47-00D	2021-06-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.02
			2021-12-15	Field_D																	<0.002	
				Normal																	<0.002	
		TW48-00D	2021-06-17	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-85	<0.00020	<0.2-<1	<0.00020	<0.2-<0.2	<0.0010	<1-7.7	<0.00020	<0.2-<0.2	<0.002	<0.002-0.002
			2021-12-15	Field_D																	<0.002	
				Normal																	<0.002	
		TW49-00D	2021-06-17	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-35	<0.00020	<0.2-<1	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.02
			2021-12-13	Field_D																	<0.002	
				Normal																	<0.002	
		TW53-03D	2021-06-18	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<10	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<5	<0.00020	<0.2-<0.2	<0.002	<0.002-0.005
			2021-12-14	Normal																	<0.002	
		TW60-13D	2021-06-09	Normal		<0.1-<0.5		<0.3-<0.3		<1-<1		<1-<30		<0.2-<0.5		<0.2-<0.2		<1-5.1		<0.2-<2		<0.002-<0.005
	Internal to Property	TW39-99D	2021-06-18	Normal	<0.00040	<0.1-<0.5	<0.00120	<0.3-<1.2	<0.0040	<1-<4	<0.0040	<1-<10	<0.00080	<0.2-<0.8	<0.00080	<0.2-<0.8	<0.0040	<1-<5	<0.00080	<0.2-<0.8	<0.002	<0.002-0.006
			2021-12-16	Normal																	<0.002	
		TW46-99D	2021-06-09	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<1.2	<0.0010	<1-<4	<0.0010	<0.1-<4	<0.00020	<0.2-<0.8	<0.00020	<0.2-<0.8	<0.0010	<1-<5	<0.00020	<0.1-<0.8	<0.002	<0.002-<0.02
			2021-12-16	Normal																	<0.002	
		TW54-09D	2021-06-09	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.007
			2021-12-14	Field_D																	<0.002	
				Normal																	<0.002	
		TW61-13D	2021-05-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.005
			2021-12-16	Normal																	<0.002	
	Located off the Facility Property	TW55-09D	2021-06-17	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-<0.01
			2021-12-13	Normal																	<0.002	
		TW56-11D	2021-06-10	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.006
			2021-12-14	Normal																	<0.002	
		TW57-11D	2021-06-10	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<0.3	<0.0010	<1-<1	<0.0010	<1-<1	<0.00020	<0.2-<0.5	<0.00020	<0.2-<0.2	<0.0010	<1-<1	<0.00020	<0.2-<0.2	<0.002	<0.002-0.003
		TW59-13D	2021-06-10	Normal	<0.00010	<0.1-<0.5	<0.00030	<0.3-<1.2	<0.0010	<1-<4	<0.0010	<1-<4	<0.00020	<0.2-<0.8	<0.00020	<0.2-<0.8	<0.0010	<1-<4	<0.00020	<0.2-<0.8	<0.002	<0.002-<0.005
			2021-12-14	Normal																	<0.002	
	Nearby Interface Aquifer	PW1-N	2021-06-18	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<1.2	<0.0010	<1-<4	<0.0010	<1-<100	<0.00020	<0.2-<5	<0.00020	<0.2-<5	<0.0010	<1-<50	<0.00020	<0.2-<2	<0.002	<0.002-0.004
		PW2-S(R11)	2021-06-09	Normal	<0.00010	<0.1-<1	<0.00030	<0.3-<1.2	<0.0010	<1-<4	<0.0010	<1-<100	<0.00020	<0.2-<5	<0.00020	<0.2-<5	<0.0010	<1-<50	<0.00020	<0.2-<2	<0.002	<0.002-<0.01

Notes:

1.09	Indicates value exceeds Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
1.09	Indicates value exceeds Policy and Guidelines - Provincial Water Quality Guidelines, The Ontario Ministry of the Environment and Energy, July 1994 (PWQO)
1.09	Indicates value outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds PWQO and is outside of the historical concentration range for the parameter
1.09	Indicates value exceeds ODWS and PWQO
1.09	Indicates value exceeds ODWS, PWQO and is outside of the historical concentration range for the parameter
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Table 5 - Upper Confidence Limit Summary Table
2021 Groundwater Monitoring Report
Clean Harbours Labton Facility Landfill

Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
EW1a-01	Chloride	mg/L	2004-11-03 - 2008-05-13	8	0%	306	364	329.38	327.00	17.57	382.07
	Sulphate	mg/L	2004-11-03 - 2008-05-13	8	0%	67	136	112.25	119.50	24.21	184.89
	Potassium	mg/L	2004-11-03 - 2008-05-13	8	0%	3.7	8	5.13	5.00	1.37	9.22
	Sodium	mg/L	2004-11-03 - 2008-05-13	8	0%	242	300	266.63	267.00	17.98	320.55
	Bromide	mg/L	2004-11-03 - 2008-05-13	8	13%	0.96	3.5	1.60	1.47	0.81	4.03
	Fluoride	mg/L	2004-11-03 - 2008-05-13	8	0%	1.44	2	1.60	1.55	0.19	2.17
	Barium	mg/L	2006-06-07 - 2013-05-23	8	13%	0.07	0.11	0.09	0.09	0.02	0.13
	Boron	mg/L	2006-06-07 - 2013-05-23	8	0%	1	1.9	1.47	1.50	0.25	2.22
EW1b-13	Chloride	mg/L	2014-05-15 - 2017-11-21	8	0%	302	345	325.38	327.50	14.87	369.99
	Sulphate	mg/L	2014-05-15 - 2017-11-21	8	0%	128	147	138.88	141.00	7.00	159.87
	Potassium	mg/L	2014-05-15 - 2017-11-21	8	0%	4.77	6	5.19	5.00	0.51	6.72
	Sodium	mg/L	2014-05-15 - 2017-11-21	8	0%	182	211	198.38	199.00	8.93	225.16
	Bromide	mg/L	2014-05-15 - 2017-11-21	8	0%	1.81	2.98	2.53	2.78	0.47	3.94
	Fluoride	mg/L	2014-05-15 - 2017-11-21	8	0%	0.74	1.51	1.23	1.43	0.32	2.19
	Barium	mg/L	2014-05-15 - 2021-06-11	8	0%	0.03	0.07	0.05	0.05	0.01	0.09
	Boron	mg/L	2014-05-15 - 2021-06-11	8	0%	1.15	2.5	1.43	1.30	0.44	2.75
EW1c-13	Chloride	mg/L	2014-05-15 - 2017-11-21	8	0%	281	329	311.00	314.50	16.46	360.37
	Sulphate	mg/L	2014-05-15 - 2017-11-21	8	0%	120	165	136.00	130.50	15.51	182.53
	Potassium	mg/L	2014-05-15 - 2017-11-21	8	0%	4.74	6	5.06	5.00	0.39	6.25
	Sodium	mg/L	2014-05-15 - 2017-11-21	8	0%	179	202	193.13	195.00	7.85	216.66
	Bromide	mg/L	2014-05-15 - 2017-11-21	8	0%	1.65	2.96	2.40	2.47	0.46	3.79
	Fluoride	mg/L	2014-05-15 - 2017-11-21	8	0%	0.72	1.54	1.20	1.38	0.33	2.18
	Barium	mg/L	2014-05-15 - 2021-06-11	8	0%	0.044	0.06	0.05	0.05	0.01	0.07
	Boron	mg/L	2014-05-15 - 2021-06-11	8	0%	1.1	1.4	1.27	1.28	0.11	1.61
EW2a-01	Chloride	mg/L	2001-12-05 - 2005-06-01	8	0%	129	220	157.88	155.00	30.99	250.83
	Sulphate	mg/L	2001-12-05 - 2005-06-01	8	0%	110	150	132.88	140.00	14.83	177.36
	Potassium	mg/L	2001-12-05 - 2005-06-01	8	0%	3.7	8.1	5.08	4.40	1.56	9.75
	Sodium	mg/L	2001-12-05 - 2005-11-02	8	0%	83	100	94.63	95.50	5.45	110.97
	Bromide	mg/L	2003-05-13 - 2006-11-07	8	13%	1.27	1.8	1.53	1.50	0.17	2.03
	Fluoride	mg/L	2003-05-13 - 2006-11-07	8	0%	0.9	1.38	1.15	1.17	0.16	1.64
	Barium	mg/L	2003-05-13 - 2011-07-12	8	0%	0.08	0.11	0.09	0.09	0.01	0.12
	Boron	mg/L	2003-05-13 - 2011-07-12	8	0%	0.83	1.15	1.02	1.00	0.10	1.31
EW2b-13	Chloride	mg/L	2014-05-15 - 2017-11-21	8	0%	95	104	100.50	100.50	3.02	109.57
	Sulphate	mg/L	2014-05-15 - 2017-11-21	8	0%	4.04	52	21.14	14.50	18.11	75.48
	Potassium	mg/L	2014-05-15 - 2017-11-21	8	0%	2.63	3	2.91	3.00	0.17	3.42
	Sodium	mg/L	2014-05-15 - 2017-11-21	8	0%	93.6	106	100.49	101.00	4.32	113.45
	Bromide	mg/L	2014-05-15 - 2017-11-21	8	0%	0.56	1.18	0.93	0.98	0.19	1.51
	Fluoride	mg/L	2014-05-15 - 2017-11-21	8	0%	0.81	1.36	1.18	1.26	0.19	1.75
	Barium	mg/L	2014-05-15 - 2021-06-11	8	0%	0.108	0.14	0.13	0.13	0.01	0.16
	Boron	mg/L	2014-05-15 - 2021-06-11	8	0%	1.1	1.32	1.23	1.26	0.09	1.50
EW2c-13	Chloride	mg/L	2014-05-15 - 2017-11-21	8	0%	92	109	100.10	100.40	5.14	115.52
	Sulphate	mg/L	2014-05-15 - 2017-11-21	8	0%	1.14	72	35.20	34.50	27.49	117.67
	Potassium	mg/L	2014-05-15 - 2017-11-21	8	0%	2.42	3	2.86	3.00	0.26	3.64
	Sodium	mg/L	2014-05-15 - 2017-11-21	8	0%	93.5	103	99.34	101.00	3.62	110.20
	Bromide	mg/L	2014-05-15 - 2017-11-21	8	0%	0.68	1.03	0.90	0.94	0.13	1.29
	Fluoride	mg/L	2014-05-15 - 2017-11-21	8	0%	0.84	1.45	1.19	1.30	0.21	1.83
	Barium	mg/L	2014-05-15 - 2021-06-11	8	0%	0.11	0.141	0.12	0.12	0.01	0.17
	Boron	mg/L	2014-05-15 - 2021-06-11	8	0%	1.1	1.35	1.21	1.20	0.08	1.45
OW32-90D	Chloride	mg/L	1991-06-19 - 1994-11-08	8	0%	276	365	332.25	347.00	36.88	442.88
	Sulphate	mg/L	1991-06-19 - 1994-11-08	8	0%	3.19	10.6	6.02	5.86	2.33	13.01
	Potassium	mg/L	1991-06-19 - 1994-11-08	8	0%	2.4	5.2	3.60	3.45	0.80	6.02
	Sodium	mg/L	1991-06-19 - 1994-11-08	8	0%	228	274	256.46	257.00	13.29	296.33
	Bromide	mg/L	1996-06-17 - 2000-11-14	8	38%	0.3	0.7	0.48	0.43	0.17	0.98
	Fluoride	mg/L	1996-06-17 - 2000-11-14	8	0%	1.21	1.5	1.41	1.40	0.10	1.70
	Barium	mg/L	1991-06-19 - 1994-11-08	8	0%	0.094	0.177	0.15	0.15	0.03	0.24
	Boron	mg/L	1991-06-19 - 1994-11-08	8	0%	1.43	2.1	1.60	1.49	0.24	2.31
OW32-90S	Chloride	mg/L	1991-06-19 - 1994-11-08	8	0%	32.2	45.1	40.38	40.60	4.34	53.40
	Sulphate	mg/L	1991-06-19 - 1994-11-08	8	0%	271	395	352.63	369.00	43.12	481.99
	Potassium	mg/L	1991-06-19 - 1994-11-08	8	0%	3.3	4.487	3.77	3.65	0.40	4.97
	Sodium	mg/L	1991-06-19 - 1994-11-08	8	0%	42	68.2	55.40	55.35	7.89	79.06
	Bromide	mg/L	1996-06-17 - 2000-11-14	8	50%	0.2	0.9	0.38	0.35	0.22	1.04
	Fluoride	mg/L	1996-06-17 - 2000-06-26	8	0%	0.26	0.9	0.65	0.70	0.24	1.37
	Barium	mg/L	1991-06-19 - 1994-11-08	8	0%	0.039	0.049	0.04	0.04	0.00	0.05
	Boron	mg/L	1991-06-19 - 1994-11-08	8	0%	1.4	3.71	2.94	3.16	0.69	5.00
OW35-05D	Chloride	mg/L	2005-05-31 - 2008-10-22	8	0%	244	261	247.88	246.00	5.51	264.42
	Sulphate	mg/L	2005-05-31 - 2008-10-22	8	13%	0.5	3	2.19	2.50	1.00	5.18
	Potassium	mg/L	2005-05-31 - 2008-10-22	8	0%	2	2.4	2.05	2.00	0.14	2.47
	Sodium	mg/L	2005-05-31 - 2008-10-22	8	0%	232	310	250.63	242.00	26.57	330.34
	Bromide	mg/L	2005-05-31 - 2008-10-22	8	0%	0.15	0.9	0.61	0.63	0.21	1.25
	Fluoride	mg/L	2005-05-31 - 2008-10-22	8	0%	1.11	1.5	1.35	1.35	0.12	1.70
	Barium	mg/L	2005-05-31 - 2011-06-13	8	0%	0.11	0.22	0.16	0.14	0.05	0.30
	Boron	mg/L	2005-05-31 - 2011-06-13	8	0%	1.4	1.9	1.62	1.62	0.15	2.08
OW35-90S	Chloride	mg/L	1991-06-20 - 1995-06-13	8	0%	18.5	36.6	23.35	22.00	5.65	40.30
	Sulphate	mg/L	1991-06-20 - 1995-06-13	8	0%	152	235	200.63	201.50	23.83	272.10
	Potassium	mg/L	1991-06-20 - 1994-11-08	8	0%	1.4	3.5	2.57	2.82	0.72	4.73
	Sodium	mg/L	1991-06-20 - 1994-11-08	8	0%	45.5	53.5	49.64	49.53	2.98	58.59
	Bromide	mg/L	1996-06-18 - 2000-11-15	8	88%	0.02	0.35	0.26	0.35	0.14	0.69
	Fluoride	mg/L	1996-06-18 - 2000-06-28	8	0%	0.64	1	0.84	0.90	0.15	1.29
	Barium	mg/L	1991-06-20 - 1994-11-08	8	0%	0.033	0.109	0.05	0.04	0.02	0.12
	Boron	mg/L	1991-06-20 - 1994-11-08	8	0%	0.56	1.3	0.87	0.83	0.22	1.54

Table 5 - Upper Confidence Limit Summary Table
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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
PW1-N	Chloride	mg/L	2001-11-14 - 2005-06-01	8	0%	340	388	362.00	362.00	15.96	409.89
	Sulphate	mg/L	2001-11-14 - 2005-06-01	8	75%	1	5	1.59	1.00	1.39	5.75
	Potassium	mg/L	2001-11-14 - 2005-06-01	8	0%	1.7	2.7	2.06	2.00	0.29	2.93
	Sodium	mg/L	2001-11-14 - 2005-06-01	8	0%	300	350	315.38	316.50	16.81	365.80
	Bromide	mg/L	2003-05-13 - 2006-11-08	8	13%	0.6	3.5	1.16	0.78	0.97	4.07
	Fluoride	mg/L	2003-05-13 - 2006-11-08	8	0%	0.94	1.3	1.17	1.21	0.15	1.60
	Barium	mg/L	2003-05-13 - 2010-05-17	8	0%	0.25	0.34	0.28	0.27	0.03	0.36
	Boron	mg/L	2003-05-13 - 2010-05-17	8	0%	1.9	2.2	2.05	2.06	0.14	2.46
PW2-S(R11)	Chloride	mg/L	2011-06-16 - 2014-05-15	8	0%	212	600	389.25	363.50	135.78	796.58
	Sulphate	mg/L	2011-06-16 - 2014-05-15	8	50%	1	322	47.13	4.00	111.44	381.44
	Potassium	mg/L	2011-06-16 - 2014-05-15	8	0%	2	18000	2254.50	2.00	6362.15	21340.94
	Sodium	mg/L	2011-06-16 - 2014-05-15	8	0%	341	210000	26626.50	428.50	74094.13	248908.88
	Bromide	mg/L	2011-06-16 - 2014-05-15	8	13%	0.25	3	1.33	1.07	0.91	4.05
	Fluoride	mg/L	2011-06-16 - 2014-05-15	8	0%	0.94	8.2	2.07	1.29	2.48	9.52
	Barium	mg/L	2011-06-16 - 2014-11-05	8	0%	0.17	99	12.60	0.24	34.91	117.33
	Boron	mg/L	2011-06-16 - 2014-11-05	8	0%	2.1	580	74.99	2.90	204.06	687.16
TW21-94-II	Chloride	mg/L	1994-08-22 - 2000-11-13	8	0%	8.5	16	10.23	8.90	2.61	18.06
	Sulphate	mg/L	1994-08-22 - 2000-11-13	8	0%	85	189	136.44	141.00	39.48	254.88
	Potassium	mg/L	1994-08-22 - 2000-11-13	8	25%	1	3.2	1.81	1.65	0.90	4.51
	Sodium	mg/L	1994-08-22 - 2000-11-13	8	0%	28	43	34.29	33.10	6.09	52.56
	Bromide	mg/L	1994-08-22 - 2000-11-13	8	100%	0.02	0.5	0.31	0.35	0.14	0.73
	Fluoride	mg/L	1994-08-22 - 2000-11-13	8	0%	0.35	0.9	0.64	0.70	0.17	1.15
	Barium	mg/L	1994-08-22 - 2004-05-18	8	0%	0.051	0.073	0.06	0.06	0.01	0.08
	Boron	mg/L	1994-08-22 - 2004-05-18	8	13%	0.03	0.309	0.12	0.11	0.08	0.37
TW22-94	Chloride	mg/L	1994-08-13 - 2000-11-13	8	0%	30	66.4	48.73	47.85	13.11	88.04
	Sulphate	mg/L	1994-08-13 - 2000-11-13	8	0%	295	358	325.75	325.50	24.48	399.18
	Potassium	mg/L	1994-08-13 - 2000-11-13	8	0%	2	4.4	2.74	2.25	0.98	5.66
	Sodium	mg/L	1994-08-13 - 2000-11-13	8	0%	60.2	80	68.46	68.00	7.15	89.91
	Bromide	mg/L	1994-08-13 - 2000-11-13	8	88%	0.05	0.5	0.28	0.35	0.15	0.73
	Fluoride	mg/L	1994-08-13 - 2000-11-13	8	0%	0.79	1.3	1.01	1.00	0.18	1.55
	Barium	mg/L	1997-11-12 - 2004-05-18	8	13%	0.002	0.058	0.03	0.03	0.02	0.09
	Boron	mg/L	1997-11-12 - 2004-05-18	8	13%	0.03	0.295	0.16	0.16	0.07	0.37
TW22-99D	Chloride	mg/L	1999-06-09 - 2002-06-18	8	0%	1010	1690	1241.25	1105.00	249.94	1991.07
	Sulphate	mg/L	1999-06-09 - 2002-10-29	8	63%	0.5	3.6	1.55	1.00	1.11	4.89
	Potassium	mg/L	1999-06-09 - 2002-06-18	8	0%	2	3.3	2.86	3.00	0.41	4.08
	Sodium	mg/L	1999-06-09 - 2002-06-18	8	0%	820	1250	994.25	935.00	159.60	1473.06
	Bromide	mg/L	1999-06-09 - 2002-10-29	8	50%	0.2	4	1.94	1.90	1.56	6.60
	Fluoride	mg/L	1999-06-09 - 2002-10-29	8	13%	0.05	3.2	1.54	1.07	1.22	5.19
	Barium	mg/L	1999-06-09 - 2006-06-07	8	0%	0.35	0.597	0.42	0.40	0.08	0.66
	Boron	mg/L	1999-06-09 - 2006-06-07	8	0%	3.9	5.36	4.46	4.25	0.48	5.91
TW30-94	Chloride	mg/L	1999-06-07 - 2002-10-30	8	0%	4.6	5.6	5.05	4.99	0.35	6.10
	Sulphate	mg/L	1999-06-07 - 2002-10-30	8	0%	105	151	118.00	112.50	15.47	164.42
	Potassium	mg/L	1999-06-07 - 2002-10-30	8	0%	1	2.9	2.05	2.20	0.71	4.18
	Sodium	mg/L	1999-06-07 - 2002-10-30	8	0%	31.2	49	37.00	36.50	5.56	53.69
	Bromide	mg/L	1999-06-07 - 2002-10-30	8	100%	0.2	0.35	0.26	0.20	0.08	0.49
	Fluoride	mg/L	1999-06-07 - 2002-10-30	8	0%	1	1.7	1.24	1.20	0.21	1.86
	Barium	mg/L	1999-06-07 - 2005-05-31	8	0%	0.029	0.058	0.04	0.04	0.01	0.08
	Boron	mg/L	1999-06-07 - 2005-05-31	8	13%	0.03	0.172	0.15	0.16	0.05	0.29
TW30-99D	Chloride	mg/L	1999-06-07 - 2001-11-13	8	0%	236	365	309.88	307.00	43.28	439.71
	Sulphate	mg/L	1999-06-07 - 2002-10-30	8	38%	1	3.3	1.80	1.70	0.89	4.46
	Potassium	mg/L	1999-06-07 - 2002-10-30	8	13%	1	3	2.33	2.50	0.61	4.16
	Sodium	mg/L	1999-06-07 - 2002-10-30	8	0%	231	320	268.88	271.00	28.65	354.83
	Bromide	mg/L	1999-06-07 - 2002-10-30	8	38%	0.35	0.86	0.63	0.73	0.23	1.33
	Fluoride	mg/L	1999-06-07 - 2002-10-30	8	0%	1.2	1.6	1.41	1.40	0.17	1.93
	Barium	mg/L	1999-06-07 - 2006-06-06	8	0%	0.34	0.43	0.37	0.36	0.03	0.45
	Boron	mg/L	1999-06-07 - 2006-06-06	8	0%	1.6	1.99	1.70	1.67	0.13	2.10
TW32-94-I	Chloride	mg/L	1994-08-05 - 2013-11-13	8	0%	5380	7720	6483.75	6330.00	792.72	8861.90
	Sulphate	mg/L	1994-08-05 - 2013-11-13	8	25%	0.05	15	3.98	2.45	4.84	18.50
	Potassium	mg/L	1994-08-05 - 2013-11-13	8	0%	8	17	12.64	13.20	3.35	22.68
	Sodium	mg/L	1994-08-05 - 2013-11-13	8	0%	4300	5345	4865.75	4930.50	358.89	5942.42
	Bromide	mg/L	1994-08-05 - 2013-11-13	8	88%	0.02	50	8.25	1.88	17.01	59.28
	Fluoride	mg/L	1994-08-05 - 2013-11-13	8	0%	0.55	9.5	1.75	0.67	3.13	11.15
	Barium	mg/L	1994-08-05 - 2015-05-11	8	0%	1.3	2.5	1.94	1.97	0.39	3.11
	Boron	mg/L	1994-08-05 - 2015-05-11	8	0%	7	11.4	8.42	7.95	1.55	13.06
TW32-94-II	Chloride	mg/L	1994-08-05 - 2000-06-26	8	0%	227	408	318.38	313.00	63.24	508.09
	Sulphate	mg/L	1994-08-05 - 2000-11-13	8	0%	1.8	7	3.65	3.35	1.55	8.30
	Potassium	mg/L	1994-08-05 - 2000-11-13	8	0%	1	4	2.81	3.00	1.02	5.87
	Sodium	mg/L	1994-08-05 - 2000-11-13	8	0%	243	307	276.38	275.00	20.20	336.97
	Bromide	mg/L	1994-08-05 - 2000-11-13	8	38%	0.3	1	0.60	0.60	0.27	1.41
	Fluoride	mg/L	1994-08-05 - 2000-11-13	8	0%	1.1	1.7	1.35	1.30	0.21	1.97
	Barium	mg/L	1994-08-05 - 2004-05-18	8	0%	0.013	0.19	0.13	0.14	0.05	0.29
	Boron	mg/L	1994-08-05 - 2004-05-18	8	0%	0.27	3.83	2.49	2.61	1.13	5.89
TW32-94-IV	Chloride	mg/L	1994-08-05 - 2000-11-13	8	0%	17.2	23.7	20.19	20.05	2.58	27.94
	Sulphate	mg/L	1994-08-05 - 2000-11-13	8	0%	196	564	394.38	390.00	102.17	700.88
	Potassium	mg/L	1994-08-05 - 2000-11-13	8	0%	1	4	2.36	2.30	1.07	5.57
	Sodium	mg/L	1994-08-05 - 2000-11-13	8	0%	68.2	98	78.46	77.25	9.22	106.13
	Bromide	mg/L	1994-08-05 - 2000-11-13	8	75%	0.02	0.5	0.28	0.35	0.15	0.74
	Fluoride	mg/L	1994-08-05 - 2000-11-13	8	0%	0.85	1.2	1.06	1.06	0.12	1.41
	Barium	mg/L	1997-11-12 - 2004-05-18	8	0%	0.014	0.19	0.04	0.02	0.06	0.22
	Boron	mg/L	1997-11-12 - 2004-05-18	8	0%	0.13	1.8	0.47	0.29	0.54	2.10

Table 5 - Upper Confidence Limit Summary Table
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Clean Harbours Labton Facility Landfill

Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
TW39-99D	Chloride	mg/L	1999-06-09 - 2001-11-14	8	0%	296	528	400.63	386.50	91.50	675.14
	Sulphate	mg/L	1999-06-09 - 2002-10-29	8	13%	1	5.9	2.84	1.70	2.04	8.97
	Potassium	mg/L	1999-06-09 - 2002-10-29	8	0%	1	2.1	1.58	1.70	0.46	2.95
	Sodium	mg/L	1999-06-09 - 2002-10-29	8	0%	289	397	330.00	327.50	31.69	425.06
	Bromide	mg/L	1999-06-09 - 2002-10-29	8	25%	0.35	3	1.09	0.71	0.95	3.94
	Fluoride	mg/L	1999-06-09 - 2002-10-29	8	0%	1.3	2	1.48	1.35	0.25	2.24
	Barium	mg/L	1999-06-09 - 2005-06-01	8	0%	0.18	0.312	0.23	0.23	0.04	0.35
	Boron	mg/L	1999-06-09 - 2005-06-01	8	0%	1.9	2.27	2.02	2.00	0.14	2.44
TW39-99I	Chloride	mg/L	1999-06-09 - 2002-10-29	8	0%	17	28.8	20.14	18.45	3.90	31.84
	Sulphate	mg/L	1999-06-09 - 2002-10-29	8	0%	315	389	336.13	329.00	23.85	407.69
	Potassium	mg/L	1999-06-09 - 2002-10-29	8	13%	1	2.2	1.46	1.40	0.44	2.77
	Sodium	mg/L	1999-06-09 - 2002-10-29	8	0%	68.1	94	77.75	77.00	8.29	102.63
	Bromide	mg/L	1999-06-09 - 2002-10-29	8	50%	0.2	0.38	0.30	0.34	0.07	0.51
	Fluoride	mg/L	1999-06-09 - 2002-10-29	8	0%	0.75	1.5	1.02	1.00	0.23	1.70
	Barium	mg/L	1999-06-09 - 2005-06-01	8	0%	0.042	0.066	0.05	0.05	0.01	0.08
	Boron	mg/L	1999-06-09 - 2005-06-01	8	0%	0.12	0.18	0.14	0.14	0.02	0.20
TW39-99S	Chloride	mg/L	1999-06-09 - 2002-06-19	8	0%	17.5	22.8	19.36	18.95	1.81	24.80
	Sulphate	mg/L	1999-06-09 - 2002-06-19	8	0%	298	477	340.00	321.00	56.87	510.61
	Potassium	mg/L	1999-06-09 - 2002-06-19	8	13%	1	2.4	1.93	2.00	0.41	3.15
	Sodium	mg/L	1999-06-09 - 2002-06-19	8	0%	50	79.6	66.43	64.25	9.93	96.22
	Bromide	mg/L	1999-06-09 - 2002-10-29	8	38%	0.22	0.4	0.33	0.35	0.06	0.51
	Fluoride	mg/L	1999-06-09 - 2002-10-29	8	0%	0.6	1.3	0.88	0.85	0.21	1.51
	Barium	mg/L	1999-06-09 - 2005-06-01	8	0%	0.033	0.044	0.04	0.04	0.00	0.05
	Boron	mg/L	1999-06-09 - 2005-06-01	8	0%	0.211	0.289	0.24	0.24	0.03	0.33
TW40-99D	Chloride	mg/L	1999-06-08 - 2001-11-14	8	0%	247	733	370.38	299.00	163.74	861.61
	Sulphate	mg/L	1999-06-08 - 2002-10-29	8	0%	1.5	6	3.34	2.85	1.62	8.21
	Potassium	mg/L	1999-06-08 - 2002-10-29	8	0%	1.9	3	2.39	2.25	0.45	3.74
	Sodium	mg/L	1999-06-08 - 2002-10-29	8	0%	232	333	274.50	265.50	34.55	378.14
	Bromide	mg/L	1999-06-08 - 2002-10-29	8	38%	0.35	3.2	1.02	0.68	1.00	4.02
	Fluoride	mg/L	1999-06-08 - 2002-10-29	8	0%	0.99	1.4	1.24	1.20	0.15	1.69
	Barium	mg/L	1999-06-08 - 2006-06-07	8	0%	0.19	0.32	0.24	0.22	0.05	0.38
	Boron	mg/L	1999-06-08 - 2006-06-07	8	0%	1.62	2.2	1.80	1.75	0.19	2.36
TW40-99S	Chloride	mg/L	1999-06-08 - 2002-10-29	8	0%	17	26	19.83	18.95	2.94	28.64
	Sulphate	mg/L	1999-06-08 - 2002-10-29	8	0%	126	144	136.25	136.00	6.23	154.93
	Potassium	mg/L	1999-06-08 - 2002-10-29	8	0%	2	3	2.33	2.20	0.37	3.44
	Sodium	mg/L	1999-06-08 - 2002-10-29	8	0%	42.2	54.9	48.05	47.05	4.80	62.45
	Bromide	mg/L	1999-06-08 - 2002-10-29	8	88%	0.2	0.35	0.26	0.20	0.08	0.49
	Fluoride	mg/L	1999-06-08 - 2002-10-29	8	0%	0.85	1.4	1.02	0.98	0.17	1.53
	Barium	mg/L	1999-06-08 - 2006-06-07	8	0%	0.03	0.056	0.04	0.04	0.01	0.07
	Boron	mg/L	1999-06-08 - 2006-06-07	8	0%	0.15	0.215	0.18	0.18	0.02	0.23
TW41-99D	Chloride	mg/L	1999-06-07 - 2001-11-13	8	0%	218	278	243.88	241.00	20.93	306.67
	Sulphate	mg/L	1999-06-07 - 2002-10-30	8	0%	1.6	6	3.64	3.65	1.51	8.18
	Potassium	mg/L	1999-06-07 - 2002-10-30	8	0%	1.3	3.3	1.96	1.90	0.60	3.75
	Sodium	mg/L	1999-06-07 - 2002-10-30	8	0%	208	262	247.25	255.00	17.94	301.08
	Bromide	mg/L	1999-06-07 - 2002-10-30	8	25%	0.35	1.8	0.79	0.61	0.55	2.43
	Fluoride	mg/L	1999-06-07 - 2002-10-30	8	0%	1.1	1.5	1.28	1.20	0.15	1.72
	Barium	mg/L	1999-06-07 - 2006-06-06	8	0%	0.077	0.93	0.38	0.30	0.29	1.25
	Boron	mg/L	1999-06-07 - 2006-06-06	8	0%	1.8	2.1	1.95	1.94	0.11	2.28
TW41-99S	Chloride	mg/L	1999-06-07 - 2002-10-30	8	0%	10.9	15.3	12.13	11.90	1.38	16.25
	Sulphate	mg/L	1999-06-07 - 2002-10-30	8	0%	419	603	504.25	498.00	51.55	658.90
	Potassium	mg/L	1999-06-07 - 2002-10-30	8	0%	2	4	3.16	3.25	0.64	5.08
	Sodium	mg/L	1999-06-07 - 2002-10-30	8	0%	46.1	58.9	50.66	49.60	4.49	64.14
	Bromide	mg/L	1999-06-07 - 2002-10-30	8	88%	0.2	0.35	0.26	0.23	0.07	0.49
	Fluoride	mg/L	1999-06-07 - 2002-10-30	8	0%	0.72	1.3	1.04	1.00	0.20	1.63
	Barium	mg/L	1999-06-07 - 2006-06-06	8	0%	0.018	0.05	0.03	0.03	0.01	0.07
	Boron	mg/L	1999-06-07 - 2006-06-06	8	0%	0.16	0.342	0.22	0.21	0.06	0.39
TW42-99D	Chloride	mg/L	1999-06-07 - 2015-05-12	8	0%	2150	3730	2583.75	2445.00	524.51	4157.29
	Sulphate	mg/L	1999-06-07 - 2015-11-09	8	38%	1	6	3.64	3.75	1.74	8.85
	Potassium	mg/L	1999-06-07 - 2015-11-09	8	0%	3	8	5.83	5.50	1.76	11.11
	Sodium	mg/L	1999-06-07 - 2015-11-09	8	0%	1950	2620	2167.50	2085.00	233.41	2867.72
	Bromide	mg/L	1999-06-07 - 2015-11-09	8	50%	0.25	5.86	2.03	1.59	1.92	7.78
	Fluoride	mg/L	1999-06-07 - 2015-11-09	8	0%	0.67	6.4	2.06	0.75	2.30	8.94
	Barium	mg/L	1999-06-07 - 2021-12-13	8	0%	0.715	1.3	0.96	0.93	0.21	1.59
	Boron	mg/L	1999-06-07 - 2021-12-13	8	0%	4.43	6.6	5.45	5.39	0.70	7.54
TW42-99S	Chloride	mg/L	1999-06-07 - 2004-05-17	8	0%	11.8	42	25.78	28.30	9.74	54.99
	Sulphate	mg/L	1999-06-07 - 2004-05-17	8	0%	162	750	389.63	387.50	177.73	922.80
	Potassium	mg/L	1999-06-07 - 2004-05-17	8	0%	1	4	2.90	3.10	0.85	5.44
	Sodium	mg/L	1999-06-07 - 2004-05-17	8	0%	37.1	49.9	43.24	42.35	4.35	56.28
	Bromide	mg/L	1999-06-07 - 2004-05-17	8	100%	0.2	0.35	0.26	0.20	0.08	0.49
	Fluoride	mg/L	1999-06-07 - 2004-05-17	8	0%	0.56	1.1	0.75	0.76	0.17	1.26
	Barium	mg/L	1999-06-07 - 2007-05-14	8	0%	0.048	0.058	0.05	0.05	0.00	0.06
	Boron	mg/L	1999-06-07 - 2007-05-14	8	0%	0.12	0.2	0.17	0.18	0.03	0.25
TW43-99D	Chloride	mg/L	1999-06-07 - 2002-06-17	8	0%	229	367	265.50	243.00	46.78	405.83
	Sulphate	mg/L	1999-06-07 - 2002-10-28	8	63%	0.5	4.1	1.59	1.00	1.26	5.37
	Potassium	mg/L	1999-06-07 - 2002-10-28	8	0%	1	2.6	1.80	1.80	0.60	3.59
	Sodium	mg/L	1999-06-07 - 2002-10-28	8	0%	197	250	223.63	224.50	15.00	268.64
	Bromide	mg/L	1999-06-07 - 2002-10-28	8	25%	0.35	2	0.91	0.72	0.57	2.60
	Fluoride	mg/L	1999-06-07 - 2002-10-28	8	0%	0.97	1.6	1.20	1.20	0.21	1.83
	Barium	mg/L	1999-06-07 - 2006-06-06	8	0%	0.193	0.28	0.23	0.23	0.03	0.33
	Boron	mg/L	1999-06-07 - 2006-06-06	8	0%	1.27	1.4	1.32	1.30	0.05	1.47

Table 5 - Upper Confidence Limit Summary Table
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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
TW43-99S	Chloride	mg/L	1999-06-07 - 2002-10-28	8	0%	11.9	16	13.23	12.85	1.35	17.27
	Sulphate	mg/L	1999-06-07 - 2002-10-28	8	0%	336	455	396.75	403.00	38.82	513.21
	Potassium	mg/L	1999-06-07 - 2002-10-28	8	0%	2.7	3	2.85	2.85	0.14	3.27
	Sodium	mg/L	1999-06-07 - 2002-10-28	8	0%	33.5	56	41.84	39.05	8.70	67.95
	Bromide	mg/L	1999-06-07 - 2002-10-28	8	88%	0.2	36.5	4.78	0.20	12.82	43.23
	Fluoride	mg/L	1999-06-07 - 2002-10-28	8	13%	0.1	1.1	0.68	0.72	0.30	1.59
	Barium	mg/L	1999-06-07 - 2006-06-06	8	0%	0.02	0.063	0.04	0.04	0.01	0.08
	Boron	mg/L	1999-06-07 - 2006-06-06	8	0%	0.14	0.358	0.21	0.20	0.07	0.41
TW45-99D	Chloride	mg/L	1999-06-09 - 2001-11-13	8	0%	221	397	283.75	257.00	66.58	483.50
	Sulphate	mg/L	1999-06-09 - 2002-10-28	8	0%	1.2	5.4	2.33	1.65	1.45	6.67
	Potassium	mg/L	1999-06-09 - 2002-10-28	8	0%	1	3	1.48	1.15	0.70	3.57
	Sodium	mg/L	1999-06-09 - 2002-10-28	8	0%	217	320	255.63	257.00	36.59	365.38
	Bromide	mg/L	1999-06-09 - 2002-10-28	8	25%	0.35	1.4	0.77	0.63	0.42	2.02
	Fluoride	mg/L	1999-06-09 - 2002-10-28	8	0%	1.2	1.5	1.35	1.40	0.11	1.67
	Barium	mg/L	1999-06-09 - 2006-06-06	8	0%	0.069	0.222	0.15	0.14	0.05	0.29
	Boron	mg/L	1999-06-09 - 2006-06-06	8	0%	1.7	2.61	2.02	1.95	0.31	2.94
TW45-99S	Chloride	mg/L	1999-06-09 - 2002-10-28	8	0%	10.9	16.2	13.18	12.80	1.87	18.77
	Sulphate	mg/L	1999-06-09 - 2002-10-28	8	0%	30.4	122	88.84	90.25	26.94	169.65
	Potassium	mg/L	1999-06-09 - 2002-10-28	8	0%	1	3	2.06	2.05	0.57	3.77
	Sodium	mg/L	1999-06-09 - 2002-10-28	8	0%	32.4	48.5	37.86	35.35	6.03	55.96
	Bromide	mg/L	1999-06-09 - 2002-10-28	8	88%	0.2	0.35	0.26	0.23	0.07	0.49
	Fluoride	mg/L	1999-06-09 - 2002-10-28	8	0%	0.67	1.2	0.90	0.93	0.18	1.43
	Barium	mg/L	1999-06-09 - 2006-06-06	8	0%	0.057	0.095	0.07	0.07	0.01	0.11
	Boron	mg/L	1999-06-09 - 2006-06-06	8	0%	0.1	0.206	0.15	0.14	0.04	0.27
TW46-99D	Chloride	mg/L	1999-11-03 - 2002-10-29	8	0%	153	292	210.88	197.50	45.51	347.40
	Sulphate	mg/L	1999-11-03 - 2003-05-14	8	25%	1	4.7	2.04	1.40	1.37	6.16
	Potassium	mg/L	1999-11-03 - 2003-05-14	8	0%	1.3	3	1.89	1.85	0.51	3.43
	Sodium	mg/L	1999-11-03 - 2003-05-14	8	0%	220	251	233.50	233.50	10.54	265.13
	Bromide	mg/L	1999-11-03 - 2003-05-14	8	13%	0.35	1.6	0.80	0.64	0.42	2.06
	Fluoride	mg/L	1999-11-03 - 2003-05-14	8	0%	1.2	1.8	1.39	1.30	0.21	2.02
	Barium	mg/L	1999-11-03 - 2005-05-31	8	0%	0.091	0.189	0.12	0.11	0.03	0.23
	Boron	mg/L	1999-11-03 - 2005-05-31	8	0%	1.5	2.09	1.74	1.70	0.16	2.24
TW46-99I	Chloride	mg/L	1999-11-03 - 2003-05-14	8	0%	28.6	32.6	31.13	31.05	1.33	35.10
	Sulphate	mg/L	1999-11-03 - 2003-05-14	8	0%	213	330	280.25	288.50	34.48	383.70
	Potassium	mg/L	1999-11-03 - 2003-05-14	8	0%	1.4	3	2.05	2.00	0.45	3.39
	Sodium	mg/L	1999-11-03 - 2003-05-14	8	0%	37.6	41.6	40.06	40.80	1.50	44.56
	Bromide	mg/L	1999-11-03 - 2003-05-14	8	88%	0.2	0.35	0.25	0.20	0.07	0.45
	Fluoride	mg/L	1999-11-03 - 2003-05-14	8	0%	0.49	1.2	0.73	0.71	0.22	1.39
	Barium	mg/L	1999-11-03 - 2006-06-06	8	0%	0.04	0.068	0.05	0.05	0.01	0.08
	Boron	mg/L	1999-11-03 - 2006-06-06	8	0%	0.087	0.13	0.11	0.11	0.02	0.16
TW46-99S	Chloride	mg/L	1999-11-03 - 2003-05-14	8	0%	71	97.9	80.38	79.05	8.50	105.89
	Sulphate	mg/L	1999-11-03 - 2003-05-14	8	0%	675	949	845.63	861.50	77.08	1076.86
	Potassium	mg/L	1999-11-03 - 2003-05-14	8	0%	5	9	6.19	5.95	1.31	10.12
	Sodium	mg/L	1999-11-03 - 2003-05-14	8	0%	111	160	127.75	120.00	17.75	181.00
	Bromide	mg/L	1999-11-03 - 2003-05-14	8	13%	0.35	0.9	0.67	0.68	0.15	1.13
	Fluoride	mg/L	1999-11-03 - 2003-05-14	8	13%	0.05	1.5	0.78	0.78	0.42	2.04
	Barium	mg/L	1999-11-03 - 2006-06-06	8	0%	0.019	0.068	0.04	0.03	0.02	0.10
	Boron	mg/L	1999-11-03 - 2005-05-31	8	0%	0.81	31	8.23	4.27	10.45	39.58
TW47-00D	Chloride	mg/L	2000-11-13 - 2004-05-19	8	0%	240	347	275.38	268.00	35.96	383.26
	Sulphate	mg/L	2000-11-13 - 2004-05-19	8	38%	1	2.9	1.41	1.25	0.64	3.32
	Potassium	mg/L	2000-11-13 - 2004-05-19	8	0%	1.3	2.2	1.73	1.70	0.26	2.51
	Sodium	mg/L	2000-11-13 - 2004-05-19	8	0%	250	310	271.88	266.00	20.54	333.49
	Bromide	mg/L	2000-11-13 - 2004-05-19	8	0%	0.64	2.5	1.11	0.73	0.72	3.28
	Fluoride	mg/L	2000-11-13 - 2004-05-19	8	0%	1.1	1.5	1.33	1.30	0.14	1.74
	Barium	mg/L	2001-06-13 - 2008-05-13	8	0%	0.21	0.58	0.36	0.30	0.13	0.75
	Boron	mg/L	2001-06-13 - 2008-05-13	8	0%	2	2.65	2.30	2.30	0.26	3.07
TW48-00D	Chloride	mg/L	2001-06-11 - 2004-11-01	8	0%	433	610	526.38	510.00	60.48	707.83
	Sulphate	mg/L	2001-06-11 - 2004-11-01	8	13%	0.65	3	1.54	1.40	0.70	3.66
	Potassium	mg/L	2001-06-11 - 2004-11-01	8	0%	2.4	3.1	2.66	2.65	0.23	3.34
	Sodium	mg/L	2001-06-11 - 2004-11-01	8	0%	420	510	468.63	466.00	30.01	558.67
	Bromide	mg/L	2001-06-11 - 2004-11-01	8	0%	0.71	3.2	1.43	0.96	0.97	4.35
	Fluoride	mg/L	2001-06-11 - 2004-11-01	8	0%	1.2	1.6	1.40	1.35	0.18	1.93
	Barium	mg/L	2001-06-11 - 2008-05-12	8	0%	0.22	0.44	0.32	0.31	0.08	0.54
	Boron	mg/L	2001-06-11 - 2008-05-12	8	0%	2.7	2.9	2.77	2.75	0.09	3.03
TW48-16S	Chloride	mg/L	2016-05-06 - 2019-12-03	8	0%	19	23.7	20.55	20.10	1.56	25.24
	Sulphate	mg/L	2016-05-06 - 2019-12-03	8	0%	167	206	188.00	188.00	11.92	223.75
	Potassium	mg/L	2016-05-06 - 2019-06-11	8	0%	1.8	3	2.41	2.37	0.43	3.71
	Sodium	mg/L	2016-05-06 - 2019-06-11	8	0%	32.9	50	41.16	40.55	5.92	58.94
	Bromide	mg/L	2016-05-06 - 2019-12-03	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2016-05-06 - 2019-12-03	8	25%	0.25	1.2	0.56	0.50	0.31	1.48
	Barium	mg/L	2016-05-06 - 2021-06-17	8	0%	0.028	0.176	0.05	0.03	0.05	0.20
	Boron	mg/L	2016-05-06 - 2016-05-06	8	13%	0.172	0.3	0.22	0.23	0.04	0.35
TW49-00D	Chloride	mg/L	2001-06-11 - 2004-11-01	8	0%	83	92	87.15	86.80	3.31	97.09
	Sulphate	mg/L	2001-06-11 - 2004-11-01	8	0%	1.2	43.4	7.64	2.00	14.55	51.29
	Potassium	mg/L	2001-06-11 - 2004-11-01	8	13%	1	2	1.48	1.40	0.36	2.56
	Sodium	mg/L	2001-06-11 - 2004-11-01	8	0%	130	166	141.13	140.00	11.53	175.72
	Bromide	mg/L	2001-06-11 - 2004-11-01	8	0%	0.45	0.63	0.57	0.59	0.06	0.75
	Fluoride	mg/L	2001-06-11 - 2004-11-01	8	0%	1.1	1.7	1.44	1.40	0.24	2.17
	Barium	mg/L	2001-06-11 - 2007-05-14	8	0%	0.065	0.8	0.22	0.11	0.26	0.99
	Boron	mg/L	2001-06-11 - 2008-05-13	8	0%	1.02	1.3	1.15	1.13	0.08	1.40

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Clean Harbours Labton Facility Landfill

Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
TW53-03D	Chloride	mg/L	2003-10-28 - 2007-05-15	8	0%	268	520	336.88	307.50	83.21	586.50
	Sulphate	mg/L	2003-10-28 - 2007-05-15	8	13%	0.45	5	1.81	1.50	1.42	6.06
	Potassium	mg/L	2003-10-28 - 2007-05-15	8	0%	2	2.7	2.16	2.00	0.26	2.95
	Sodium	mg/L	2003-10-28 - 2007-05-15	8	0%	254	410	293.13	271.50	51.38	447.26
	Bromide	mg/L	2003-10-28 - 2007-05-15	8	13%	0.19	3.5	1.41	0.83	1.29	5.27
	Fluoride	mg/L	2003-10-28 - 2007-05-15	8	0%	1	1.51	1.29	1.32	0.20	1.87
	Barium	mg/L	2004-05-19 - 2009-08-18	8	0%	0.25	1.03	0.42	0.30	0.26	1.22
	Boron	mg/L	2004-05-19 - 2009-08-19	8	0%	1.3	3.6	2.00	1.80	0.69	4.07
TW53-03S	Chloride	mg/L	2003-10-28 - 2007-05-15	8	0%	11	13	11.76	12.00	0.71	13.90
	Sulphate	mg/L	2003-10-28 - 2007-05-15	8	0%	173	290	240.38	264.00	50.19	390.96
	Potassium	mg/L	2003-10-28 - 2007-05-15	8	0%	1	3	1.75	1.80	0.65	3.69
	Sodium	mg/L	2003-10-28 - 2007-05-15	8	0%	32	62	42.13	40.00	9.54	70.74
	Bromide	mg/L	2003-10-28 - 2007-05-15	8	63%	0.05	1.8	0.36	0.16	0.59	2.14
	Fluoride	mg/L	2003-10-28 - 2007-05-15	8	0%	0.52	0.97	0.74	0.72	0.15	1.18
	Barium	mg/L	2004-05-19 - 2011-06-15	8	0%	0.03	0.068	0.05	0.05	0.01	0.09
	Boron	mg/L	2004-05-19 - 2012-06-11	8	0%	0.09	0.19	0.16	0.17	0.04	0.26
TW54-09D	Chloride	mg/L	2009-11-03 - 2013-05-23	8	0%	116	144	131.50	135.50	9.70	160.59
	Sulphate	mg/L	2009-11-03 - 2013-05-23	8	0%	1	12	4.13	3.00	3.40	14.32
	Potassium	mg/L	2009-11-03 - 2013-05-23	8	0%	2	3	2.13	2.00	0.35	3.19
	Sodium	mg/L	2009-11-03 - 2013-05-23	8	0%	161	196	174.00	174.00	10.57	205.71
	Bromide	mg/L	2009-11-03 - 2013-05-23	8	0%	0.44	1.1	0.72	0.67	0.25	1.47
	Fluoride	mg/L	2009-11-03 - 2013-05-23	8	0%	1.43	1.59	1.51	1.51	0.06	1.69
	Barium	mg/L	2010-05-25 - 2017-06-05	8	0%	0.11	0.3	0.18	0.17	0.07	0.39
	Boron	mg/L	2010-05-25 - 2017-06-05	8	0%	1.4	1.7	1.58	1.60	0.10	1.90
TW55-09D	Chloride	mg/L	2010-05-26 - 2013-11-11	8	0%	362	411	380.13	376.50	15.05	425.27
	Sulphate	mg/L	2010-05-26 - 2013-11-11	8	0%	6	27	13.50	12.50	7.43	35.78
	Potassium	mg/L	2010-05-26 - 2013-11-11	8	0%	3	4	3.50	3.50	0.53	5.10
	Sodium	mg/L	2010-05-26 - 2013-11-11	8	0%	316	382	356.63	359.50	22.56	424.32
	Bromide	mg/L	2010-05-26 - 2013-11-11	8	13%	0.25	2.96	1.19	0.94	0.82	3.66
	Fluoride	mg/L	2010-05-26 - 2013-11-11	8	0%	1.54	1.8	1.69	1.70	0.09	1.95
	Barium	mg/L	2010-05-26 - 2017-06-05	8	0%	0.14	0.29	0.22	0.22	0.04	0.35
	Boron	mg/L	2010-05-26 - 2017-06-05	8	0%	1.3	1.9	1.71	1.75	0.20	2.31
TW55-09S	Chloride	mg/L	2010-05-26 - 2013-11-11	8	0%	14	15	14.75	15.00	0.46	16.14
	Sulphate	mg/L	2010-05-26 - 2013-11-11	8	0%	451	521	491.75	494.50	21.84	557.28
	Potassium	mg/L	2010-05-26 - 2013-11-11	8	0%	3	3	3.00	3.00	0.00	3.00
	Sodium	mg/L	2010-05-26 - 2013-11-11	8	0%	41	56	47.38	48.50	5.29	63.24
	Bromide	mg/L	2010-05-26 - 2013-11-11	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2010-05-26 - 2013-11-11	8	0%	0.73	0.98	0.83	0.80	0.09	1.10
	Barium	mg/L	2010-05-26 - 2017-06-05	8	0%	0.02	0.05	0.03	0.03	0.01	0.06
	Boron	mg/L	2010-05-26 - 2017-06-05	8	0%	0.17	0.42	0.27	0.28	0.07	0.49
TW56-11D	Chloride	mg/L	2012-06-13 - 2015-11-02	8	0%	282	334	302.63	302.50	17.34	354.63
	Sulphate	mg/L	2012-06-13 - 2015-11-02	8	0%	1	7	3.63	3.50	2.00	9.61
	Potassium	mg/L	2012-06-13 - 2015-11-02	8	0%	1	3	2.50	3.00	0.76	4.77
	Sodium	mg/L	2012-06-13 - 2015-11-02	8	0%	283	366	321.63	326.50	25.07	396.84
	Bromide	mg/L	2012-06-13 - 2015-11-02	8	0%	0.38	1.73	0.82	0.72	0.45	2.18
	Fluoride	mg/L	2012-06-13 - 2015-11-02	8	0%	1.21	1.48	1.34	1.36	0.09	1.62
	Barium	mg/L	2012-06-13 - 2019-06-11	8	0%	0.105	0.25	0.16	0.13	0.05	0.32
	Boron	mg/L	2012-06-13 - 2019-06-11	8	0%	1.85	2.5	2.17	2.20	0.22	2.82
TW56-11S	Chloride	mg/L	2012-06-13 - 2015-11-11	8	0%	58	64	61.88	62.00	1.81	67.30
	Sulphate	mg/L	2012-06-13 - 2015-11-11	8	0%	882	1050	976.25	994.50	57.00	1147.26
	Potassium	mg/L	2012-06-13 - 2015-11-11	8	0%	3	4	3.88	4.00	0.35	4.94
	Sodium	mg/L	2012-06-13 - 2015-11-11	8	0%	79	90	84.13	84.00	3.91	95.85
	Bromide	mg/L	2012-06-13 - 2015-11-11	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2012-06-13 - 2015-11-11	8	0%	0.73	0.95	0.85	0.86	0.08	1.10
	Barium	mg/L	2012-06-13 - 2019-06-11	8	0%	0.01	0.04	0.02	0.01	0.01	0.06
	Boron	mg/L	2012-06-13 - 2019-06-11	8	0%	0.251	0.43	0.35	0.36	0.05	0.52
TW57-11D	Chloride	mg/L	2012-06-12 - 2015-11-02	8	0%	299	448	367.38	358.00	56.72	537.53
	Sulphate	mg/L	2012-06-12 - 2015-11-02	8	75%	1	4	1.63	1.00	1.19	5.19
	Potassium	mg/L	2012-06-12 - 2015-11-02	8	0%	1	3	2.13	2.00	0.64	4.05
	Sodium	mg/L	2012-06-12 - 2015-11-02	8	0%	291	474	387.88	389.50	63.52	578.43
	Bromide	mg/L	2012-06-12 - 2015-11-02	8	0%	0.38	4.11	1.17	0.85	1.22	4.83
	Fluoride	mg/L	2012-06-12 - 2015-11-02	8	0%	1.22	1.69	1.43	1.41	0.15	1.88
	Barium	mg/L	2012-06-12 - 2019-06-11	8	0%	0.083	0.14	0.11	0.11	0.02	0.17
	Boron	mg/L	2012-06-12 - 2019-06-11	8	0%	1.6	2.4	1.98	1.98	0.28	2.83
TW57-11S	Chloride	mg/L	2012-06-12 - 2015-11-09	8	0%	23	31	27.50	27.50	2.88	36.14
	Sulphate	mg/L	2012-06-12 - 2015-11-09	8	0%	462	907	707.00	739.00	188.90	1273.71
	Potassium	mg/L	2012-06-12 - 2015-11-09	8	0%	4	5	4.63	5.00	0.52	6.18
	Sodium	mg/L	2012-06-12 - 2015-11-09	8	0%	39	68	54.50	57.00	11.34	88.52
	Bromide	mg/L	2012-06-12 - 2015-11-09	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2012-06-12 - 2015-11-09	8	0%	0.91	1.48	1.22	1.26	0.21	1.83
	Barium	mg/L	2012-06-12 - 2019-06-11	8	0%	0.02	0.031	0.03	0.03	0.01	0.04
	Boron	mg/L	2012-06-12 - 2019-06-11	8	0%	0.13	0.25	0.17	0.16	0.04	0.29
TW58-11S	Chloride	mg/L	2012-06-13 - 2015-11-11	8	0%	278	350	315.00	309.50	23.25	384.75
	Sulphate	mg/L	2012-06-13 - 2015-11-11	8	0%	992	1160	1091.50	1095.00	55.14	1256.93
	Potassium	mg/L	2012-06-13 - 2015-11-11	8	0%	4	7	5.63	5.50	1.06	8.81
	Sodium	mg/L	2012-06-13 - 2015-11-11	8	0%	106	138	124.75	125.50	11.02	157.80
	Bromide	mg/L	2012-06-13 - 2015-11-11	8	63%	0.25	0.5	0.32	0.27	0.10	0.61
	Fluoride	mg/L	2012-06-13 - 2015-11-11	8	0%	0.83	1.06	0.94	0.96	0.09	1.23
	Barium	mg/L	2012-06-13 - 2019-06-11	8	0%	0.01	0.05	0.02	0.02	0.01	0.06
	Boron	mg/L	2012-06-13 - 2019-06-11	8	0%	0.2	0.32	0.25	0.24	0.04	0.38

Table 5 - Upper Confidence Limit Summary Table
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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Min Result	Max Result	Mean	Median	Standard Deviation	UCL
TW59-13D	Chloride	mg/L	2013-05-16 - 2016-11-07	8	0%	110	129	120.13	120.50	5.54	136.75
	Sulphate	mg/L	2013-05-16 - 2016-11-07	8	13%	1	15	5.50	4.00	5.07	20.71
	Potassium	mg/L	2013-05-16 - 2016-11-07	8	0%	1	3	2.00	2.00	0.53	3.60
	Sodium	mg/L	2013-05-16 - 2016-11-07	8	0%	170	192	183.38	185.00	7.76	206.66
	Bromide	mg/L	2013-05-16 - 2016-11-07	8	0%	0.28	0.65	0.45	0.43	0.11	0.79
	Fluoride	mg/L	2013-05-16 - 2016-11-07	8	0%	1.13	1.65	1.46	1.48	0.16	1.93
	Barium	mg/L	2013-05-16 - 2020-06-03	8	0%	0.091	0.18	0.11	0.10	0.03	0.21
	Boron	mg/L	2013-05-16 - 2020-06-03	8	0%	1.12	1.4	1.27	1.26	0.10	1.58
TW59-13S	Chloride	mg/L	2013-05-21 - 2016-11-07	8	0%	11	13	11.75	11.00	1.04	14.86
	Sulphate	mg/L	2013-05-21 - 2016-11-07	8	0%	103	164	126.00	119.00	20.72	188.17
	Potassium	mg/L	2013-05-21 - 2016-11-07	8	0%	2	3	2.25	2.00	0.46	3.64
	Sodium	mg/L	2013-05-21 - 2016-11-07	8	0%	28	52	35.00	31.00	8.88	61.64
	Bromide	mg/L	2013-05-21 - 2016-11-07	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2013-05-21 - 2016-11-07	8	0%	0.63	1.13	1.00	1.07	0.16	1.49
	Barium	mg/L	2013-05-21 - 2020-06-03	8	0%	0.033	0.08	0.05	0.04	0.02	0.10
	Boron	mg/L	2013-05-21 - 2020-06-03	8	0%	0.1	0.15	0.12	0.12	0.02	0.17
TW60-13D	Chloride	mg/L	2013-11-05 - 2017-06-07	8	0%	696	1120	960.88	983.50	121.52	1325.43
	Sulphate	mg/L	2013-11-05 - 2017-06-07	8	88%	1	4.9	1.61	1.00	1.37	5.73
	Potassium	mg/L	2013-11-05 - 2017-06-07	8	0%	2.28	4	3.29	3.00	0.64	5.21
	Sodium	mg/L	2013-11-05 - 2017-06-07	8	0%	557	1010	908.50	955.50	146.21	1347.14
	Bromide	mg/L	2013-11-05 - 2016-11-08	8	38%	0.25	1.66	0.91	0.86	0.58	2.65
	Fluoride	mg/L	2013-11-05 - 2017-06-07	8	13%	0.58	1	0.80	0.80	0.12	1.17
	Barium	mg/L	2014-05-21 - 2015-05-06	8	0%	0.196	4.7	0.88	0.37	1.55	5.52
	Boron	mg/L	2014-05-21 - 2013-11-05	8	0%	1.52	5.6	3.87	4.11	1.27	7.68
TW61-13D	Chloride	mg/L	2013-11-07 - 2017-06-07	8	0%	128	225	165.63	150.50	38.15	280.07
	Sulphate	mg/L	2013-11-07 - 2017-06-07	8	0%	12	67	30.21	27.35	17.60	83.00
	Potassium	mg/L	2013-11-07 - 2017-06-07	8	0%	1	2	1.42	1.17	0.50	2.91
	Sodium	mg/L	2013-11-07 - 2017-06-07	8	0%	170	275	214.38	203.50	35.10	319.69
	Bromide	mg/L	2013-11-07 - 2017-06-07	8	25%	0.25	0.64	0.43	0.46	0.15	0.88
	Fluoride	mg/L	2013-11-07 - 2016-11-08	8	0%	0.9	1.69	1.34	1.37	0.23	2.02
	Barium	mg/L	2014-05-21 - 2021-05-17	8	0%	0.045	0.13	0.06	0.05	0.03	0.15
	Boron	mg/L	2014-05-21 - 2021-05-17	8	0%	1.4	1.73	1.53	1.53	0.12	1.90
TW61-13I	Chloride	mg/L	2013-11-05 - 2017-06-06	8	0%	22	24	23.04	23.00	0.76	25.33
	Sulphate	mg/L	2013-11-05 - 2017-06-06	8	0%	189	212	195.63	192.50	8.12	219.99
	Potassium	mg/L	2013-11-05 - 2017-06-06	8	50%	0.9	1	0.99	1.00	0.04	1.09
	Sodium	mg/L	2013-11-05 - 2017-06-06	8	0%	23	30	25.84	25.85	2.10	32.14
	Bromide	mg/L	2013-11-05 - 2017-06-06	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2013-11-05 - 2017-06-06	8	13%	0.25	0.48	0.38	0.40	0.07	0.59
	Barium	mg/L	2014-05-21 - 2021-05-17	8	0%	0.047	0.07	0.06	0.06	0.01	0.09
	Boron	mg/L	2014-05-21 - 2021-05-17	8	0%	0.08	0.44	0.18	0.13	0.13	0.57
TW61-13S	Chloride	mg/L	2013-11-07 - 2017-06-06	8	0%	20	21	20.23	20.00	0.42	21.49
	Sulphate	mg/L	2013-11-07 - 2017-06-06	8	0%	263	313	287.50	285.50	14.89	332.17
	Potassium	mg/L	2013-11-07 - 2017-06-06	8	0%	2.36	3	2.92	3.00	0.23	3.60
	Sodium	mg/L	2013-11-07 - 2017-06-06	8	0%	62.7	68	64.96	64.50	1.90	70.66
	Bromide	mg/L	2013-11-07 - 2017-06-06	8	13%	0.25	0.62	0.55	0.58	0.12	0.92
	Fluoride	mg/L	2013-11-07 - 2017-06-06	8	13%	0.25	0.99	0.77	0.87	0.25	1.51
	Barium	mg/L	2014-05-21 - 2021-05-17	8	0%	0.036	0.08	0.05	0.04	0.02	0.10
	Boron	mg/L	2014-05-21 - 2021-05-17	8	0%	0.267	0.4	0.34	0.34	0.04	0.46
TW62-13S	Chloride	mg/L	2013-11-12 - 2017-06-06	8	0%	25	34.8	27.85	26.50	3.67	38.85
	Sulphate	mg/L	2013-11-12 - 2017-06-06	8	0%	178	226	195.38	192.00	15.54	241.99
	Potassium	mg/L	2013-11-12 - 2017-06-06	8	0%	2	4	2.66	2.62	0.72	4.81
	Sodium	mg/L	2013-11-12 - 2017-06-06	8	0%	52	66	57.84	58.00	4.87	72.46
	Bromide	mg/L	2013-11-12 - 2017-06-06	8	100%	0.25	0.25	0.25	0.25	0.00	0.25
	Fluoride	mg/L	2013-11-12 - 2017-06-06	8	13%	0.25	0.93	0.76	0.86	0.24	1.49
	Barium	mg/L	2013-11-12 - 2020-06-03	8	0%	0.035	0.09	0.05	0.04	0.02	0.11
	Boron	mg/L	2013-11-12 - 2020-06-03	8	0%	0.12	0.18	0.16	0.16	0.02	0.21
TW63-13S	Chloride	mg/L	2013-11-12 - 2017-06-06	8	0%	552	668	603.00	595.50	36.34	712.01
	Sulphate	mg/L	2013-11-12 - 2017-06-06	8	0%	64	80	71.95	71.80	5.88	89.58
	Potassium	mg/L	2013-11-12 - 2017-06-06	8	0%	3	5	4.06	4.00	0.68	6.10
	Sodium	mg/L	2013-11-12 - 2017-06-06	8	0%	166	196	182.50	182.00	11.17	216.02
	Bromide	mg/L	2013-11-12 - 2017-06-06	8	0%	0.94	2.54	1.76	1.78	0.58	3.49
	Fluoride	mg/L	2013-11-12 - 2017-06-06	8	13%	0.37	0.76	0.63	0.68	0.13	1.02
	Barium	mg/L	2013-11-12 - 2020-06-03	8	0%	0.112	0.19	0.15	0.14	0.03	0.23
	Boron	mg/L	2013-11-12 - 2020-06-03	8	0%	0.2	0.38	0.26	0.25	0.05	0.42

Table 6 - Linear Regression Summary Table
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Clean Harbours Labton Facility Landfill

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
EW1a-01	Chloride	mg/L	2017-06-08 - 2021-12-17	8	0%	-0.106	4904.6	0.174	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	8	0%	-0.004	299.8	0.608	no trend
	Potassium	mg/L	2017-06-08 - 2021-12-17	8	0%	-0.001	64.7	0.133	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	8	0%	-0.060	2756.0	0.178	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	8	13%	-0.001	36.3	0.234	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	8	13%	0.000	-0.6	0.868	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	5	0%	0.000	0.4	0.461	no trend
	Boron	mg/L	2017-06-08 - 2021-12-17	5	0%	-0.001	24.2	0.131	no trend
EW1b-13	Chloride	mg/L	2017-06-08 - 2021-12-17	10	0%	-0.045	2261.3	0.057	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	10	0%	0.017	-601.9	0.440	no trend
	Potassium	mg/L	2017-06-08 - 2021-12-17	11	0%	0.000	18.4	0.120	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	11	0%	-0.001	214.8	0.923	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	10	10%	0.000	-7.6	0.740	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	10	30%	0.000	1.9	0.902	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	0.3	0.345	no trend
	Boron	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	-5.6	0.745	no trend
EW1c-13	Chloride	mg/L	2017-06-08 - 2021-12-17	10	0%	-0.022	1283.3	0.030	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	10	0%	0.001	79.4	0.856	no trend
	Potassium	mg/L	2017-06-08 - 2021-12-17	11	0%	0.000	15.9	0.200	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	11	0%	-0.007	491.0	0.296	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	10	10%	0.000	-14.0	0.672	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	10	20%	0.000	-4.2	0.620	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	0.2	0.185	no trend
	Boron	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	11.9	0.228	no trend
EW2a-01	Chloride	mg/L	2017-06-08 - 2021-12-17	8	0%	0.002	34.6	0.471	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	8	0%	-0.001	60.0	0.012	**Decreasing**
	Potassium	mg/L	2017-06-08 - 2021-12-17	8	13%	0.000	5.5	0.490	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	8	0%	0.001	66.3	0.855	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	8	0%	0.000	-1.6	0.531	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	8	0%	0.000	-0.3	0.506	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	5	0%	0.000	-2.5	0.396	no trend
	Boron	mg/L	2017-06-08 - 2021-12-17	5	0%	0.000	9.6	0.403	no trend
EW2b-13	Chloride	mg/L	2017-06-08 - 2021-12-17	10	0%	0.000	103.8	0.969	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	10	0%	-0.002	108.3	0.000	**Decreasing**
	Potassium	mg/L	2017-06-08 - 2021-12-17	11	0%	0.000	3.0	0.919	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	11	0%	-0.001	119.9	0.767	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	10	20%	0.001	-19.0	0.138	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	10	20%	0.000	-4.1	0.681	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	0.8	0.013	**Decreasing**
	Boron	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	8.5	0.377	no trend
EW2c-13	Chloride	mg/L	2017-06-08 - 2021-12-17	10	0%	-0.002	186.5	0.372	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-12-17	10	0%	0.002	-100.6	0.278	no trend
	Potassium	mg/L	2017-06-08 - 2021-12-17	11	0%	0.000	3.8	0.896	no trend
	Sodium	mg/L	2017-06-08 - 2021-12-17	11	0%	0.001	60.5	0.787	no trend
	Bromide	mg/L	2017-06-08 - 2021-12-17	10	30%	0.000	-8.1	0.502	no trend
	Fluoride	mg/L	2017-06-08 - 2021-12-17	10	20%	0.000	-2.5	0.769	no trend
	Barium	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	0.9	0.069	no trend
	Boron	mg/L	2017-06-08 - 2021-12-17	6	0%	0.000	6.8	0.409	no trend
OW32-90D	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.018	1111.6	0.031	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	0%	0.000	5.5	0.894	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.065	3050.2	0.056	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	10%	0.000	-11.9	0.109	no trend
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	2.3	0.005	**Decreasing**
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	7.3	0.669	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
OW32-90S	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.003	138.3	0.082	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	0%	0.035	-1114.0	0.196	no trend
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	9%	0.000	7.7	0.546	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.003	134.9	0.276	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	0.4	0.026	**Decreasing**
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	2.2	0.005	**Decreasing**
OW35-05D	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.070	3304.2	0.088	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	80%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	0%	0.001	-45.0	0.008	**Increasing**
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.040	1959.7	0.143	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	20%	0.000	-8.9	0.211	no trend
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	2.2	0.044	**Decreasing**
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.001	-36.5	0.033	**Increasing**
OW35-90S	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.002	113.0	0.029	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	0%	0.054	-1763.0	0.238	no trend
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	0%	0.000	-3.8	0.565	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.002	102.7	0.438	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	0.4	0.118	no trend
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	-1.0	0.599	no trend
PW1-N	Chloride	mg/L	2017-06-08 - 2021-06-18	9	0%	0.026	-780.4	0.386	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-06-18	9	0%	0.003	-102.5	0.050	no trend
	Potassium	mg/L	2017-06-08 - 2021-06-18	10	10%	0.000	-2.6	0.514	no trend
	Sodium	mg/L	2017-06-08 - 2021-06-18	10	0%	0.024	-741.0	0.252	no trend
	Bromide	mg/L	2017-06-08 - 2021-06-18	9	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-08 - 2021-06-18	9	56%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-08 - 2021-06-18	5	0%	0.000	4.4	0.020	**Decreasing**
	Boron	mg/L	2017-06-08 - 2021-06-18	5	0%	0.000	-0.7	0.672	no trend
PW2-S(R11)	Chloride	mg/L	2017-06-08 - 2021-06-09	9	0%	-0.018	1096.6	0.520	no trend
	Sulphate (SO4)	mg/L	2017-06-08 - 2021-06-09	9	11%	0.003	-108.5	0.100	no trend
	Potassium	mg/L	2017-06-08 - 2021-06-09	10	0%	0.000	-15.4	0.033	**Increasing**
	Sodium	mg/L	2017-06-08 - 2021-06-09	10	0%	-0.008	651.2	0.718	no trend
	Bromide	mg/L	2017-06-08 - 2021-06-09	9	89%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-08 - 2021-06-09	9	22%	0.000	-1.7	0.785	no trend
	Barium	mg/L	2017-06-08 - 2021-06-09	5	0%	0.000	1.8	0.057	no trend
	Boron	mg/L	2017-06-08 - 2021-06-09	5	0%	0.000	-7.5	0.606	no trend
TW21-94-II	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.001	58.5	0.266	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.015	932.6	0.639	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.000	-1.8	0.853	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	-0.005	225.8	0.124	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.2	0.411	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	-0.4	0.208	no trend
TW22-94	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	-0.003	169.6	0.489	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	0%	0.061	-2076.1	0.124	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	-10.0	0.144	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	-0.002	160.3	0.624	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.0	0.602	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	-0.5	0.312	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW22-99D	Chloride	mg/L	2017-06-07 - 2020-12-16	8	0%	0.053	-1149.3	0.272	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2020-12-16	8	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2020-12-16	9	0%	0.000	-14.9	0.241	no trend
	Sodium	mg/L	2017-06-07 - 2020-12-16	9	0%	0.022	-22.2	0.611	no trend
	Bromide	mg/L	2017-06-07 - 2020-12-16	8	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2020-12-16	8	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2020-06-02	4	0%	0.000	-2.4	0.161	no trend
	Boron	mg/L	2017-06-07 - 2020-06-02	4	0%	0.000	-14.1	0.551	no trend
TW30-94	Chloride	mg/L	2017-06-07 - 2021-12-14	9	0%	0.000	19.9	0.457	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	9	0%	-0.021	1028.2	0.047	**Decreasing**
	Potassium	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.001	24.9	0.066	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.006	297.8	0.056	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	9	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	9	33%	0.000	-1.6	0.843	no trend
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	0.3	0.005	**Decreasing**
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	2.1	0.068	no trend
TW30-99D	Chloride	mg/L	2017-06-07 - 2021-12-15	10	0%	-0.007	555.5	0.186	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2021-12-15	11	0%	0.000	1.4	0.843	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-15	11	0%	0.000	196.9	0.967	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-15	10	20%	0.000	-14.9	0.066	no trend
	Barium	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	0.0	0.650	no trend
	Boron	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	6.1	0.677	no trend
TW32-94-I	Chloride	mg/L	2017-06-06 - 2021-12-15	4	0%	0.031	2049.8	0.991	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	4	75%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-15	4	0%	0.000	3.0	0.983	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	4	0%	0.178	-5328.3	0.932	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	4	75%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	4	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	3	0%	-0.001	24.8	0.636	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	3	0%	-0.001	56.1	0.722	no trend
TW32-94-II	Chloride	mg/L	2017-06-06 - 2021-12-15	7	0%	1.334	-57129.0	0.352	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	7	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-15	8	13%	0.006	-245.4	0.281	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	8	0%	0.936	-40100.0	0.250	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	7	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	7	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	5	0%	0.001	-26.9	0.353	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	5	0%	0.002	-92.6	0.421	no trend
TW32-94-IV	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.001	78.3	0.745	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.019	1029.6	0.768	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.001	-26.3	0.256	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	-0.003	167.7	0.805	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	70%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.0	0.532	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	1.4	0.306	no trend
TW39-99D	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	-0.045	2234.6	0.001	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	90%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	-5.7	0.344	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	-0.030	1548.9	0.016	**Decreasing**
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	20%	0.000	-18.4	0.023	**Increasing**
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	1.4	0.034	**Decreasing**
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	11.6	0.266	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW39-99I	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.001	49.7	0.451	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.003	426.2	0.794	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.000	-11.5	0.180	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.000	73.3	0.977	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	30%	0.000	-1.3	0.760	no trend
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.0	0.987	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.4	0.571	no trend
TW39-99S	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.001	-6.2	0.460	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.003	387.0	0.720	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.000	-5.4	0.552	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	-0.002	133.4	0.522	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	30%	0.000	-5.7	0.304	no trend
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.0	0.532	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	2.1	0.195	no trend
TW40-99D	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.041	-1469.4	0.041	**Increasing**
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.000	-4.4	0.168	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.026	-864.0	0.062	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	40%	0.000	-8.1	0.320	no trend
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	-0.9	0.427	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	1.1	0.900	no trend
TW40-99S	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.012	-483.6	0.047	**Increasing**
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	0.156	-6463.7	0.002	**Increasing**
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.000	-0.5	0.845	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.013	-494.9	0.014	**Increasing**
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	20%	0.000	-9.0	0.062	no trend
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.1	0.042	**Decreasing**
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	-0.2	0.645	no trend
TW41-99D	Chloride	mg/L	2017-06-07 - 2021-12-15	10	0%	-0.001	227.6	0.918	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2021-12-15	11	9%	0.000	-11.6	0.061	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-15	11	0%	0.004	62.2	0.723	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-15	10	80%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-15	10	20%	0.000	-14.4	0.061	no trend
	Barium	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	0.3	0.246	no trend
	Boron	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	7.0	0.466	no trend
TW41-99S	Chloride	mg/L	2017-06-07 - 2021-12-15	10	0%	-0.003	189.7	0.561	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-15	10	0%	0.051	-1779.1	0.098	no trend
	Potassium	mg/L	2017-06-07 - 2021-12-15	11	9%	0.000	-10.1	0.203	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-15	11	0%	0.000	46.1	0.984	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-15	10	60%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-15	10	80%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	0.2	0.367	no trend
	Boron	mg/L	2017-06-07 - 2021-12-15	6	0%	0.000	-1.3	0.042	**Increasing**
TW42-99D	Chloride	mg/L	2017-06-05 - 2021-12-13	3	0%	-0.253	13484.0	0.006	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	3	33%	0.008	-342.5	0.028	**Increasing**
	Potassium	mg/L	2017-06-05 - 2021-12-13	3	33%	0.002	-71.1	0.645	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	3	0%	-0.253	12915.0	0.221	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	3	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	3	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-12-13	3	0%	0.000	14.1	0.059	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	3	0%	0.000	9.3	0.845	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW42-99S	Chloride	mg/L	2017-06-05 - 2021-12-13	9	0%	0.002	-43.1	0.780	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	9	0%	0.114	-3148.0	0.239	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-13	10	10%	0.001	-40.1	0.095	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	10	0%	0.014	-525.4	0.015	Increasing
	Bromide	mg/L	2017-06-05 - 2021-12-13	9	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	9	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	0.1	0.124	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	-0.6	0.504	no trend
TW43-99D	Chloride	mg/L	2017-06-05 - 2021-12-13	10	0%	0.005	6.3	0.274	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-13	11	9%	0.000	-2.5	0.488	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	11	0%	-0.012	733.9	0.223	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	10	20%	0.000	-12.1	0.059	no trend
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	-0.1	0.760	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	1.7	0.851	no trend
TW43-99S	Chloride	mg/L	2017-06-05 - 2021-12-13	10	0%	0.006	-237.8	0.041	Increasing
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	10	0%	-0.009	506.3	0.822	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.000	2.6	0.919	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	11	0%	-0.005	222.3	0.238	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	10	60%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	-0.2	0.079	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	2.3	0.314	no trend
TW45-99D	Chloride	mg/L	2017-06-06 - 2020-12-17	8	0%	-0.269	12529.0	0.167	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2020-12-17	8	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2020-12-17	9	0%	0.000	2.8	0.980	no trend
	Sodium	mg/L	2017-06-06 - 2020-12-17	9	0%	-0.137	6861.7	0.276	no trend
	Bromide	mg/L	2017-06-06 - 2020-12-17	8	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2020-12-17	8	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2020-06-03	4	0%	0.000	-2.0	0.372	no trend
	Boron	mg/L	2017-06-06 - 2020-06-03	4	0%	0.001	-36.6	0.024	Increasing
TW45-99S	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	0.019	-772.3	0.035	Increasing
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	0%	0.012	-408.8	0.618	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	0.1	0.855	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	0.002	-63.5	0.506	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	70%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	-0.1	0.595	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	17%	0.000	-0.8	0.063	no trend
TW46-99D	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	0.002	143.2	0.786	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	-12.6	0.020	Increasing
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	0.010	-199.4	0.247	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	30%	0.000	-12.6	0.133	no trend
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.7	0.080	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	7.2	0.481	no trend
TW46-99I	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.000	59.6	0.706	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.004	614.6	0.734	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.000	-4.0	0.415	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.002	-38.3	0.335	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	80%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.2	0.231	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	1.0	0.549	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW46-99S	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.005	-195.2	0.493	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	0%	-0.026	1951.8	0.613	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	0%	-0.001	52.7	0.021	**Decreasing**
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.001	54.0	0.894	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	0.0	0.544	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	-0.001	22.7	0.280	no trend
TW47-00D	Chloride	mg/L	2017-06-06 - 2021-12-15	10	0%	0.152	-5095.1	0.749	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-06 - 2021-12-15	11	9%	0.001	-24.9	0.563	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-15	11	0%	0.219	-8498.6	0.439	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-15	6	0%	-0.001	41.4	0.103	no trend
	Boron	mg/L	2017-06-06 - 2021-12-15	6	0%	0.000	16.8	0.558	no trend
TW48-00D	Chloride	mg/L	2017-06-05 - 2021-12-15	10	0%	0.028	-885.8	0.029	**Increasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-15	11	0%	0.000	-8.4	0.116	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-15	11	0%	-0.002	407.0	0.863	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-15	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-15	10	40%	0.000	-5.2	0.602	no trend
	Barium	mg/L	2017-06-05 - 2021-12-15	6	0%	0.000	-0.6	0.333	no trend
	Boron	mg/L	2017-06-05 - 2021-12-15	6	0%	0.000	-5.8	0.491	no trend
TW48-16S	Chloride	mg/L	2017-06-05 - 2021-12-15	10	0%	-0.001	65.6	0.425	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-15	10	0%	0.007	-92.8	0.437	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-15	11	9%	0.000	-0.6	0.662	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-15	11	0%	0.003	-69.1	0.310	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-15	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-15	10	30%	0.000	-5.2	0.380	no trend
	Barium	mg/L	2017-06-05 - 2021-12-15	6	0%	0.000	0.0	0.804	no trend
	Boron	mg/L	2017-06-05 - 2021-12-15	6	0%	0.000	1.0	0.464	no trend
TW49-00D	Chloride	mg/L	2017-06-05 - 2021-12-13	10	0%	0.001	45.1	0.547	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.000	3.6	0.308	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	11	0%	-0.005	353.0	0.174	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	10	30%	0.000	4.3	0.409	no trend
	Fluoride	mg/L	2017-06-05 - 2021-12-13	10	10%	0.000	-5.7	0.404	no trend
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	0.2	0.623	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	1.8	0.788	no trend
TW53-03D	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	-0.196	8844.4	0.005	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	70%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	0%	0.000	-5.7	0.411	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.146	6611.9	0.002	**Decreasing**
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	30%	0.000	-2.9	0.668	no trend
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	4.8	0.028	**Decreasing**
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	8.4	0.264	no trend
TW53-03S	Chloride	mg/L	2017-06-07 - 2021-12-14	10	0%	0.000	14.5	0.879	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-14	10	0%	0.052	-1864.9	0.111	no trend
	Potassium	mg/L	2017-06-07 - 2021-12-14	11	9%	0.000	-13.2	0.347	no trend
	Sodium	mg/L	2017-06-07 - 2021-12-14	11	0%	-0.003	133.8	0.502	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	0.2	0.187	no trend
	Boron	mg/L	2017-06-07 - 2021-12-14	6	0%	0.000	1.1	0.089	no trend

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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW54-09D	Chloride	mg/L	2017-06-05 - 2021-12-14	10	0%	0.017	-594.1	0.089	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-14	11	9%	0.000	-9.4	0.143	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-14	11	0%	0.008	-161.2	0.210	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	10	10%	0.000	-10.6	0.167	no trend
	Barium	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	0.0	0.759	no trend
	Boron	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	-1.8	0.714	no trend
TW55-09D	Chloride	mg/L	2017-06-05 - 2021-12-13	10	0%	0.036	-1150.7	0.074	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	10	80%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.000	1.6	0.805	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.019	-492.4	0.111	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	10	30%	0.000	-2.8	0.757	no trend
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	0.2	0.944	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	-1.8	0.499	no trend
TW55-09S	Chloride	mg/L	2017-06-05 - 2021-12-13	10	0%	0.000	30.2	0.658	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-13	10	0%	0.001	372.3	0.951	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.000	-6.3	0.083	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-13	11	0%	0.003	-95.9	0.136	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-13	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-13	10	40%	0.000	-2.2	0.606	no trend
	Barium	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	0.1	0.552	no trend
	Boron	mg/L	2017-06-05 - 2021-12-13	6	0%	0.000	-1.0	0.046	**Increasing**
TW56-11D	Chloride	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.043	2170.4	0.035	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	10	80%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-14	11	0%	0.000	-8.7	0.096	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-14	11	0%	-0.030	1558.1	0.018	**Decreasing**
	Bromide	mg/L	2017-06-05 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	10	20%	0.000	-10.7	0.075	no trend
	Barium	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	1.2	0.107	no trend
	Boron	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	10.5	0.458	no trend
TW56-11S	Chloride	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.015	684.8	0.038	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.359	16433.0	0.004	**Decreasing**
	Potassium	mg/L	2017-06-05 - 2021-12-14	11	9%	-0.001	39.7	0.002	**Decreasing**
	Sodium	mg/L	2017-06-05 - 2021-12-14	11	0%	-0.015	718.1	0.001	**Decreasing**
	Bromide	mg/L	2017-06-05 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	10	90%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	0.1	0.116	no trend
	Boron	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	4.8	0.039	**Decreasing**
TW57-11D	Chloride	mg/L	2017-06-05 - 2021-06-10	9	0%	0.039	-1293.1	0.244	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-06-10	9	100%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-06-10	10	10%	0.000	-11.2	0.024	**Increasing**
	Sodium	mg/L	2017-06-05 - 2021-06-10	10	0%	0.010	-102.5	0.690	no trend
	Bromide	mg/L	2017-06-05 - 2021-06-10	9	78%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-06-10	9	44%	0.000	-5.6	0.652	no trend
	Barium	mg/L	2017-06-05 - 2021-06-10	5	0%	0.000	0.8	0.314	no trend
	Boron	mg/L	2017-06-05 - 2021-06-10	5	0%	0.000	-3.8	0.334	no trend
TW57-11S	Chloride	mg/L	2017-06-05 - 2021-06-10	9	0%	-0.002	111.6	0.318	no trend
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-06-10	9	0%	-0.213	9828.0	0.055	no trend
	Potassium	mg/L	2017-06-05 - 2021-06-10	10	0%	-0.001	32.7	0.126	no trend
	Sodium	mg/L	2017-06-05 - 2021-06-10	10	0%	-0.002	144.4	0.560	no trend
	Bromide	mg/L	2017-06-05 - 2021-06-10	9	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-06-10	9	56%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-06-10	5	0%	0.000	0.1	0.861	no trend
	Boron	mg/L	2017-06-05 - 2021-06-10	5	0%	0.000	0.0	0.870	no trend

Table 6 - Linear Regression Summary Table
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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW58-11S	Chloride	mg/L	2017-06-05 - 2021-12-14	9	0%	-0.050	2452.1	0.016	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	9	0%	-0.007	1494.1	0.878	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-14	10	0%	0.000	8.3	0.875	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.002	189.2	0.706	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-14	9	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	9	89%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-05 - 2021-12-14	5	0%	0.000	0.1	0.026	**Decreasing**
	Boron	mg/L	2017-06-05 - 2021-12-14	5	0%	0.000	-0.4	0.237	no trend
TW59-13D	Chloride	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.038	1786.4	0.034	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	10	80%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-05 - 2021-12-14	11	0%	0.000	3.2	0.456	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-14	11	0%	-0.053	2457.3	0.005	**Decreasing**
	Bromide	mg/L	2017-06-05 - 2021-12-14	10	80%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	10	10%	0.000	-3.7	0.624	no trend
	Barium	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	1.6	0.091	no trend
	Boron	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	19.1	0.098	no trend
TW59-13S	Chloride	mg/L	2017-06-05 - 2021-12-14	10	0%	0.002	-90.3	0.021	**Increasing**
	Sulphate (SO4)	mg/L	2017-06-05 - 2021-12-14	10	0%	-0.004	286.6	0.378	no trend
	Potassium	mg/L	2017-06-05 - 2021-12-14	11	9%	0.000	-5.4	0.178	no trend
	Sodium	mg/L	2017-06-05 - 2021-12-14	11	0%	0.003	-113.3	0.069	no trend
	Bromide	mg/L	2017-06-05 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-05 - 2021-12-14	10	40%	0.000	-7.8	0.249	no trend
	Barium	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	0.0	0.531	no trend
	Boron	mg/L	2017-06-05 - 2021-12-14	6	0%	0.000	-1.0	0.062	no trend
TW60-13D	Chloride	mg/L	2017-06-07 - 2021-06-09	9	0%	0.278	-11237.0	0.000	**Increasing**
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-06-09	9	67%	---	---	---	>50% non-detect
	Potassium	mg/L	2017-06-07 - 2020-12-16	9	0%	0.001	-27.5	0.054	no trend
	Sodium	mg/L	2017-06-07 - 2020-12-16	9	0%	0.255	-10419.0	0.005	**Increasing**
	Bromide	mg/L	2017-06-07 - 2021-06-09	9	89%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-06-09	9	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-07 - 2020-06-02	4	0%	0.000	-6.2	0.069	no trend
	Boron	mg/L	2017-06-07 - 2020-06-02	4	0%	0.001	-48.2	0.070	no trend
TW61-13D	Chloride	mg/L	2017-06-07 - 2021-12-16	10	0%	-0.003	271.4	0.411	no trend
	Sulphate (SO4)	mg/L	2017-06-07 - 2021-12-16	10	0%	0.076	-3233.3	0.002	**Increasing**
	Potassium	mg/L	2017-06-07 - 2021-12-16	11	9%	0.001	-21.0	0.004	**Increasing**
	Sodium	mg/L	2017-06-07 - 2021-12-16	11	0%	-0.003	306.5	0.555	no trend
	Bromide	mg/L	2017-06-07 - 2021-12-16	10	70%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-07 - 2021-12-16	10	10%	0.000	-9.8	0.166	no trend
	Barium	mg/L	2017-06-07 - 2021-12-16	6	0%	0.000	0.0	0.244	no trend
	Boron	mg/L	2017-06-07 - 2021-12-16	6	0%	0.000	6.3	0.635	no trend
TW61-13I	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	-0.005	233.5	0.001	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	0%	0.167	-6976.8	0.000	**Increasing**
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	-17.0	0.134	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	0.009	-347.1	0.002	**Increasing**
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	-0.2	0.381	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	-4.5	0.057	no trend
TW61-13S	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	-0.002	89.7	0.266	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	0%	0.057	-2207.1	0.366	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	0%	0.000	-1.4	0.563	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	0.020	-782.0	0.066	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	90%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	40%	0.000	-6.5	0.233	no trend
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.1	0.758	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.0	0.766	no trend

Table 6 - Linear Regression Summary Table
2021 Groundwater Monitoring Report
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Well	Analyte	Unit	Date Range	Number of Samples	Percent Non-Detect	Linear Regression			
						Slope	Intercept	Probability	Conclusion
TW62-13S	Chloride	mg/L	2017-06-06 - 2021-12-16	10	0%	0.004	-149.2	0.056	no trend
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-16	10	0%	-0.008	547.1	0.169	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-16	11	9%	0.000	-1.4	0.491	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-16	11	0%	-0.002	137.4	0.356	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-16	10	100%	---	---	---	>50% non-detect
	Fluoride	mg/L	2017-06-06 - 2021-12-16	10	30%	0.000	-6.4	0.254	no trend
	Barium	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.1	0.542	no trend
	Boron	mg/L	2017-06-06 - 2021-12-16	6	0%	0.000	0.5	0.230	no trend
TW63-13S	Chloride	mg/L	2017-06-06 - 2021-12-14	10	0%	-0.050	2747.1	0.013	**Decreasing**
	Sulphate (SO4)	mg/L	2017-06-06 - 2021-12-14	10	0%	-0.003	173.7	0.547	no trend
	Potassium	mg/L	2017-06-06 - 2021-12-14	11	0%	0.000	11.9	0.131	no trend
	Sodium	mg/L	2017-06-06 - 2021-12-14	11	0%	-0.007	485.7	0.335	no trend
	Bromide	mg/L	2017-06-06 - 2021-12-14	10	50%	0.000	-17.4	0.676	no trend
	Fluoride	mg/L	2017-06-06 - 2021-12-14	10	100%	---	---	---	>50% non-detect
	Barium	mg/L	2017-06-06 - 2021-12-14	6	0%	0.000	0.6	0.301	no trend
	Boron	mg/L	2017-06-06 - 2021-12-14	6	0%	0.000	-0.7	0.045	**Increasing**

Table 7 - Reasonable Use Concept Derived Criteria
2021 Annual Groundwater Monitoring Report
Clean Harbours Canada Lambton Facility

DILLON CONSULTING

					General Chemistry										Metals														
					Ammonia (as N)	Nitrate (as N)	Nitrite (as N)	Electrical conductivity (Lab)	Chloride	Fluoride	Bromide	pH (Lab)	Sulphate (SO4)	Alkalinity (Bicarbonate as CaCO3)	Total Dissolved Solids (TDS)	Arsenic	Barium	Boron	Cadmium	Calcium	Chromium Total (III+VI)	Iron	Lead	Magnesium	Mercury	Nickel	Potassium	Sodium	Zinc
					mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	pH Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RDL					0.02	0.05	0.05	2	0.1	0.05	0.05	0	0.1	5	10	0.001	0.002	0.01	0.0001	0.05	0.002	0.01	0.0005	0.05	0.0001	0.001	0.05	0.05	0.005
ODWS			Source		-	MAC	MAC	-	AO	MAC	-	OG	AO	OG	AO	IMAC	MAC	IMAC	MAC	-	MAC	AO	MAC	-	MAC	-	-	AO	AO
			min									6.5		30															
			max		-	10	1	-	250	1.5	-	8.5	500	500	500	0.01	1	5	0.005	-	0.05	0.3	0.01	-	0.001	-	-	20	5
RUC			shallow		-	2.69	0.44	-	134.2	0.75	-	-	471.25	438	500	0.0048	0.265	1.4	0.0013	-	0.014	0.16	0.003	-	0.0003	-	-	125.33	2.5
			deep		-	2.69	0.44	-	250	1.04	-	-	250.5	416	500	0.0048	0.332	2.6	0.0013	-	0.015	0.3	0.003	-	0.0003	-	-	200	2.5
Location			Date	Sample Type																									
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.02	<0.05	<0.05	837	5.31	0.79	<0.05	7.95	116	411	446	<0.001	0.025	0.098	<0.0001	71.6	<0.002	<0.010	<0.0005	46.8	<0.0001	<0.003	1.81	26.9	<0.005
			2021-12-14	Normal	<0.02	<0.05	<0.05	868	5.36	<0.05	<0.05	7.83	124	376	504	<0.001	0.025	0.042	<0.0001	80.7	<0.002	0.041	<0.0005	57.3		0.005	1.11	37.5	<0.005
		TW41-99S	2021-06-11	Normal	<0.02	<0.05	<0.05	1,580	34.7	0.56	<0.05	7.23	495	496	1,210	<0.001	0.017	0.191	<0.0001	203	<0.002	0.028	<0.0005	88.6	<0.0001	<0.003	<2.50	50.7	<0.005
			2021-12-15	Normal	<0.02	<0.05	<0.05	1,460	30.9	<0.05	<0.05	7.69	489	417	1,050	<0.001	0.024	0.18	<0.0001	191	<0.002	<0.010	<0.0005	74.9		0.004	1.73	50.2	<0.005
		TW42-99S	2021-06-17	Normal	0.09	<0.14	<0.11	3,250	49.4	<0.05	<0.11	7.09	1,900	397	3,300	<0.001	0.015	0.194	<0.0001	478	<0.002	0.039	<0.0005	232	<0.0001	<0.003	<5.0	76.1	<0.005
			2021-12-13	Normal	<0.02	<0.07	0.88	3,090	23.5	<0.05	<0.06	7.54	2,120	373	3,040	0.003	0.012	0.257	<0.0001	532	<0.002	0.063	<0.0005	268		0.006	6.3	78.8	0.005
		TW43-99S	2021-06-17	Normal	<0.02	<0.05	<0.05	805	16.3	<0.05	<0.05	7.25	107	348	548	<0.001	0.034	0.09	<0.0001	89.9	<0.002	<0.010	<0.0005	32.3	<0.0001	<0.003	1.8	22.7	<0.005
			2021-12-13	Normal	<0.02	0.05	<0.05	808	20.1	0.37	<0.05	7.81	111	320	500	<0.001	0.04	0.096	<0.0001	102	<0.002	0.131	<0.0005	34.7		0.001	1.89	24.6	<0.005
		TW45-99S	2021-05-17	Normal	<0.02	<0.05	<0.05	1,060	63.2	0.42	<0.05	7.66	120	425	668	<0.001	0.059	0.115	0.0009	103	<0.002	<0.010	<0.0005	40.7	<0.0001	<0.003	<2.50	34.2	<0.005
			2021-12-16	Normal	<0.02	<0.05	<0.05	1,080	76.5	<0.05	<0.05	7.71	115	386	662	<0.001	0.066	0.109	<0.0001	123	<0.002	0.067	<0.0005	45.8		0.002	2.08	43.3	<0.005
		TW48-16S	2021-06-17	Normal	<0.02	<0.05	<0.05	1,090	23.3	0.52	<0.05	7.28	186	449	736	<0.001	0.034	0.176	<0.0001	102	<0.002	<0.010	<0.0005	57.6	<0.0001	<0.003	<2.50	37.4	<0.005
			2021-12-15	Normal	<0.02	<0.05	<0.05	1,060	17.1	0.64	<0.05	7.86	205	408	676	<0.001	0.036	0.172	<0.0001	106	<0.002	0.014	<0.0005	60.4		0.001	2.19	43.2	0.007
		TW62-13S	2021-05-17	Normal	<0.02	<0.05	<0.05	969	43.1	0.54	<0.05	7.82	179	282	600	<0.001	0.033	0.158	<0.0001	93.5	<0.002	0.011	<0.0005	40	<0.0001	<0.003	<2.50	53.7	<0.005
			2021-12-16	Normal	<0.02	<0.05	<0.05	947	36.4	0.65	<0.05	7.96	192	295	600	<0.001	0.038	0.136	<0.0001	92.7	<0.002	0.046	<0.0005	40.8		0.001	2.37	56.9	<0.005
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.02	<0.05	<0.05	1,240	6.83	<0.05	<0.05	7.21	346	422	982	<0.001	0.052	0.122	0.0001	178	<0.002	<0.010	<0.0005	63.3	<0.0001	<0.003	<2.50	22.1	<0.005
			2021-12-15	Normal	<0.02	<0.05	<0.05	1,050	6.06	<0.05	<0.05	7.71	228	399	676	<0.001	0.035	0.103	<0.0001	164	<0.002	<0.010	<0.0005	49		0.001	0.65	16.7	<0.005
		OW32-90S	2021-05-18	Normal	<0.02	<0.05	<0.05	1,370	9.52	<0.05	<0.05	7.84	467	321	1,020	<0.001	0.025	0.179	<0.0001	179	<0.002	0.023	<0.0005	63.7	<0.0001	<0.003	<2.50	22.2	<0.005
			2021-12-14	Normal	<0.02	<0.05	<0.05	1,250	9.04	<0.05	<0.05	7.7	475	322	908	<0.001	0.019	0.146	<0.0001	178	<0.002	<0.010	<0.0005	64.6		<0.001	1.92	24.6	<0.005
		OW35-90S	2021-05-18	Normal	<0.02	<0.05	<0.05	1,660	7.35	<0.05	<0.05	7.85	709	321	1,350	<0.001	0.024	0.201	<0.0001	202	<0.002	0.05	<0.0005	90.3	<0.0001	<0.003	3.08	34.3	<0.005
			2021-12-14	Normal	<0.02	<0.05	<0.05	1,300	5.13	<0.05	<0.05	7.65	518	320	990	<0.001	0.021	0.189	<0.0001	176	<0.002	0.084	<0.0005	76.9		0.002	3.14	33.8	<0.005
		TW22-94	2021-06-09	Normal	<0.02	<0.07	<0.05	1,880	60.4	<0.05	<0.06	7.1	662	491	1,470	<0.001	0.016	0.171	<0.0001	182	<0.002	0.035	<0.0005	119	<0.0001	<0.003	<2.50	81.3	0.008
			2021-06-10	Field_D	<0.02	<0.07	<0.05	1,720	18.3	<0.05	<0.06	7.13	341	573	1,370	<0.001	0.019	0.16	<0.0001	176	<0.002	0.023	<0.0005	106	<0.0001	<0.003	3.11	50.5	<0.005
			2021-12-16	Normal	<0.02	<0.07	<0.05	1,740	60.2	<0.05	<0.06	7.82	646	414	1,320	<0.001	0.018	0.199	<0.0001	181	<0.002	0.07	<0.0005	120		0.002	2.23	88.8	<0.005
		TW32-94-IV	2021-05-18	Normal	<0.02	<0.05	<0.05	1,080	25.5	0.45	<0.05	7.87	211	381	666	<0.001	0.018	0.133	<0.0001	96.8	<0.002	0.369	<0.0005	62.8	<0.0001	0.013	<2.50	53.6	<0.005
			2021-12-15	Normal	<0.02	<0.05	<0.05	1,100	19	<0.05	<0.05	7.88	239	382	710	<0.001	0.021	0.078	<0.0001	100	<0.002	0.087	<0.0005	62.7		0.003	1.48	56.1	0.005
		TW40-99S	2021-06-18	Normal	<0.02	<0.05	<0.05	1,590	25.4	0.7	<0.05	7.35	437	522	1,150	0.002	0.026	0.213	<0.0001	147	<0.002	1.01	<0.0005	113	<0.0001	<0.003	<2.50	60.8	<0.005
			2021-12-15	Normal	<0.02	<0.05	<0.05	1,670	51.7	0.7	<0.05	7.81	584	439	1,220	<0.001	0.025	0.206	<0.0001	154	<0.002	0.025	<0.0005	118		0.001	1.76	77	<0.005
		TW53-03S	2021-05-18	Normal	<0.02	<0.05	<0.05	1,390	6.37	<0.05	<0.05	7.63	445	375	1,060	<0.001	0.028	0.114	<0.0001	184	<0.002	0.02	<0.0005	67.5	<0.0001	<0.003	<2.50	19.6	<0.005
			2021-12-14	Normal	<0.02	<0.05	<0.05	1,270	5.6	<0.05	<0.05	7.77	461	364	934	<0.001	0.025	0.123	<0.0001	180	<0.002	0.025	<0.0005	65.9		<0.001	1.48	24	<0.005
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	0.32	<0.05	<0.05	1,410	295	1.21	<0.05	7.95	<0.10	251	690	0.001	0.063	2	<0.0001	21.7	<0.002	5.19	0.0026	7.82	<0.0001	<0.003	4.18	244	<0.005
			2021-12-14	Normal	0.38	<0.05	<0.05	1,350	301	1	<0.05	7.82	<0.10	244	698	<0.001	0.047	0.92	<0.0001	5.19	<0.002	1.51	<0.0005	1.78		<0.001	0.58	54	<0.005
		OW35-05D	2021-06-18	Field_D	<0.02	<0.05	<0.05	914	141	0.82	<0.05	7.35	20	264	502	0.003	0.078	2.4	<0.0001	31	<0.002	0.019	<0.0005	7.17	<0.0001	0.003	3.83	141	<0.005
				Normal	<0.02	<0.05	<0.05	915	143	0.83	<0.05	7.46	20.3	258	552	0.003	0.084	2.52	<0.0001	31.9	<0.002	0.025	<0.0005	7.46	<0.0001	<0.003	3.92	143	<0.005
			2021-12-14	Normal	<0.02	<0.05	<0.05	883	137	0.8	<0.05	7.88	17.5	227	472	0.002	0.089	2.99	<0.0001	32	<0.002	0.047	<0.0005	7.12		0.005	3.87	148	<0.005
		TW30-99D	2021-05-18	Normal	0.17	<0.05	<0.05	1,220	244	1.11	2.08	8.13	<0.10	242	624	<0.001	0.375	1.93	<0.0001	22.9	<0.002	0.039	<0.0005	8.41	<0.0001	<0.003	2.71	224	<0.005
			2021-12-15	Normal	0.18	<0.05	<0.05	1,180	243	0.98	<0.05	7.91	<0.10	237	618	<0.001	0.32	1.11	<0.0001	21.9	<0.002	0.423	<0.0005	7.66		<0.001	2.43	222	<0.005
		TW32-94-II	2021-05-18	Normal	0.1	<1.4	<1.1	18,300	5,660	<0.5	<1.1	8.41	<3.8	1,880	10,000	0.008	2.15	9.59	<0.0001	42.8	0.002	0.879	<0.0005	52.8	<0.0001	<0.003	<25.0	3,830	<0.005
			2021-12-15	Normal	0.44	<0.14	<0.11	2,800	828	<0.05	<0.11	8.32	<0.38	254	1,580	<0.001	0.535	2.47	<0.0001	19.3	<0.002	0.049	<0.0005	21.2		0.001	4.02	719	<0.005
		TW40-99D	2021-06-18	Normal	0.15	<0.05	<0.05	1,460	328	0.8	0.72	7.47	<0.10	282	752	<0.001	0.17	1.73	<0.0001	32	<0.002	0.668	<0.0005	11.8	<0.0001	<0.003	2.58	247	<0.005
			2021-12-15	Normal	0.3	<0.05	<0.05	1,680	413	0.82	<0.05	7.88	<0.10	255	902	<0.001	0.284	1.52	<0.0001	36.6	<0.002	0.666	<0.0005	13.6		<0.001	2.69	302	<0.005
		TW41-99D	2021-06-11	Normal	0.1	<0.05	<0.05	1,140	217	1.03	2.56	7.54	<0.10	327	612	<0.001	0.073	1.88	<0.0001	16.2	<0.002	0.078	<0.0005	5.8	<0.0001	<0.003	<2.50	216	<0.005
			2021-12-15	Normal	0.09	<0.05	<0.05	1,120	204	0.88	<0.05	8.09	<0.10	274	580	<0.001	0.075	1.37	<0.0001	17.1	<0.002	0.11	<0.0005	5.86		0.003	1.88	238	<0.005
		TW43-99D	2021-06-17	Field_D	0.1	<0.05	<0.05	1,190	237	0.86	<0.05	7.35	<0.10	284	612	<0.001	0.142	1.35	<0.0001	25.7	<0.002	0.283	<0.0005	9.49	<0.0001	<0.003	<2.50	190	0.012
				Normal	0.11	<0.05	<0.05	1,190	238	0.86	<0.05	7.47	<0.10	285	606	0.001	0.145	1.28	<0.0001	25.3	<0.002	0.296	<0.0005	9.34	<0.0001	<0.003	<2.50	189	0.008
			2021-12-13	Normal	0.18	<0.05	<0.05	1,180	243	0.76	<0.05	8.14	<0.10	263	608	<0.001	0.186	1.39	<0.0001	26.4	<0.002	0.465	<0.0005	9.6		0.001	1.82	213	<0.005
		TW47-00D	2021-06-18	Normal	<0.02	<0.05	<0.05	1,370	265	0.99	<0.05	7.46	<0.10	318	700	<0.001	0.26	2.11	<0.0001	26.3	<0.002	0.311	<0.0005	9.51	<0.0001	<0.003	<2.50	227	<0.005
			2021-12-15	Field_D	0.39	<0.36	<0.27	5,190	1,470	<0.13	<0.28	8.02	<0.95	687	3,020	<0.001	1.61	4.05	<0.0001	55.6	<0.002	2.98	<0.0005	26.4		0.001	5.1	1,460	<0.005
				Normal	0.41	<0.36	<0.27	4,970	1,400	<0.13	<0.28	8	<0.95	661	2,970	0.001	1.49	3.7	<0.0001	53.5	<0.002	3.36	<0.0005	25.3		<0.001	4.5	1,380	<0.005
		TW48-00D	2021-06-17	Normal	<0.02	<0.07	<0.05	1,720	374	0.78	<0.06	7.61	<0.19	353	898	<0.001	0.174	2.66	<0.0001	26.5	<0.002	0.146	<0.0005	9.7	<0.0001	<0.003	2.74	292	<0.005
			2021-12-15	Field_D	0.07	<0.05	<0.05	1,600	357	1.12	<0.05	8.13	<0.10	308	834	<0.001	0.162	1.66	<0.0001	27.3	<0.002	0.205	<0.0005	9.79		0.001	2.79	316	<0.005
				Normal	0.07	<0.05	<0.05	1,600	357	1.08	<0.05	8.12	<0.10	312	840	<0.001	0.198	1.79	0.0001	28	<0.002	0.221	0.0006	10		0.002	2.79	321	<0.005
		TW49-00D	2021-06-17	Normal	0.08	<0.05	<0.05	746	97	1.2	0.49	7.44	<0.10	279	410	0.002	0.08	1.14	<0.0001	17.6	<0.002	0.208	<0.0005	5.21	<0.0001	<0.003	1.29	125	0.023
			2021-12-13	Field_D	0.09	<0.05	<0.05	711	93.7	0.9	0.44	8.06	<0.10	245	374	0.001	0.083	0.96	<0.0001	17.9	<0.002	0.054	<0.0005	5.5		<0.001	1.34	133	<0.005
				Normal	0.09	<0.05	<0.05	713	94.1	0.9	0.42	8.08	<0.10	246	376	0.001	0.081	0.98	0.0001	17.9	<0.002	0.055	<0.0005	5.45		<0.001	1.28	134	<0.005
		TW53-03D	2021-06-18	Normal	0.05	<0.05	<0.05	655	102	0.71	<0.05	7.2	12.3	186	348	0.001	0.059	1.65	<0.0001	29.2	<0.002	0.225	<0.0005	7.37	<0.0001	<0.003	2.15	82.9	<0.005
			2021-12-14	Normal	4.13	<0.05	<0.05	666	101	0.65	<0.05	7.51	7.19	179	322	<0.001	0.045	1.5	<0.0001	29.8	<0.002	0.083	<0.0005	7.77		0.001	3.24	91.4	<0.005
		TW60-13D	2021-06-09	Normal	0.05	<0.36	<0.27	4,190	1,100	<0.13	<0.28	7.95	<0.95	692	2,290															

Notes:

ODWS	Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
RUC	Reasonable Use Concept
1.09	Detected result exceeds associated RUC standard
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Table 7 - Reasonable Use Concept Derived Criteria
2021 Annual Groundwater Monitoring Report
Clean Harbours Canada Lambton Facility

DILLON CONSULTING

				Volatile Organic Compounds (VOCs)																									
				Bromodichloromethane	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	1,2-Dibromoethane	1,4-Dichlorobenzene	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Dichloromethane	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RDL				0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.4	0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.2	0.2	0.4
ODWS			Source	-	-	-	MAC	MAC	-	-	-	-	-	MAC	-	IMAC	MAC	-	-	MAC	-	-	-	-	-	MAC	-	-	MAC	-
			min																											
			max	-	-	-	2	80	-	-	-	-	-	5	-	5	14	-	-	50	-	-	-	-	-	10	-	-	5	-
RUC			shallow	-	-	-	0.5	20	-	-	-	-	-	1.25	-	1.25	3.5	-	-	12.5	-	-	-	-	-	2.5	-	-	1.25	-
			deep	-	-	-	0.5	20	-	-	-	-	-	1.25	-	1.25	3.5	-	-	12.5	-	-	-	-	-	2.5	-	-	1.25	-
Location		Date	Sample Type																											
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		TW41-99S	2021-06-11	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW42-99S	2021-06-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-13	Normal																										
		TW43-99S	2021-06-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-13	Normal																										
		TW45-99S	2021-05-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-16	Normal																										
		TW48-16S	2021-06-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW62-13S	2021-05-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-16	Normal																										
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		OW32-90S	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		OW35-90S	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		TW22-94	2021-06-09	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-06-10	Field_D	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-16	Normal																										
		TW32-94-IV	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW40-99S	2021-06-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW53-03S	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		OW35-05D	2021-06-18	Field_D	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
				Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		TW30-99D	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW32-94-II	2021-05-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW40-99D	2021-06-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW41-99D	2021-06-11	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Normal																										
		TW43-99D	2021-06-17	Field_D	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
				Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-13	Normal																										
		TW47-00D	2021-06-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Field_D																										
				Normal																										
		TW48-00D	2021-06-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-15	Field_D																										
				Normal																										
		TW49-00D	2021-06-17	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-13	Field_D																										
				Normal																										
		TW53-03D	2021-06-18	Normal	<0.20	<0.10	<0.20	<0.20	<0.10	<0.10	<0.20	<0.20	<0.40	<0.10	<0.10	<0.30	<0.20	<0.2	<0.20	<0.20	<0.30	<0.20	<0.20	<0.30	<0.10	<0.10	<0.20	<0.30	<0.20	<0.40
			2021-12-14	Normal																										
		TW60-13D	2021-06-09	Normal																										

Notes:

ODWS	Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
RUC	Reasonable Use Concept
1.09	Detected result exceeds associated RUC standard
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Table 7 - Reasonable Use Concept Derived Criteria
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					BTEX						(VOCs)	(sVOCs)		Other										
				Vinyl chloride	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,1,1,2-Tetrachloroethane	1,3-Dichloropropene	2-hexanone (MBK)	Acetone	Dichlorodifluoromethane	Di-isobutyl ketone	Hexane	Methyl Ethyl Ketone (MEK)	Methyl tert-Butyl Ether (MTBE)	Cyanide, free
				µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RDL				0.17	0.0002	0.0002	0.0001	0.0002	0.0001	0.0002	0.3	0.1	0.1	0.0001	0.0003	0.001	0.001	0.0002	0.001	0.0002	0.001	0.0002	0.002
ODWS			Source	MAC	MAC	MAC	MAC	-	-	MAC	-	MAC	-	-	-	-	-	-	-	-	-	AO	-
			min																				
			max	1	0.001	0.06	0.14	-	-	0.09	-	200	-	-	-	-	-	-	-	-	-	0.015	-
RUC			shallow	0.25	0.00096	0.01515	0.035	-	-	0.02265	-	50	-	-	-	-	-	-	-	-	-	0.0075	0.05
			deep	0.25	0.00096	0.01515	0.035	-	-	0.02265	-	50	-	-	-	-	-	-	-	-	-	0.0075	0.05
Location		Date	Sample Type																				
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		TW41-99S	2021-06-11	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW42-99S	2021-06-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-13	Normal																				<0.002
		TW43-99S	2021-06-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-13	Normal																				<0.002
		TW45-99S	2021-05-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-16	Normal																				<0.002
		TW48-16S	2021-06-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW62-13S	2021-05-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-16	Normal																				<0.002
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		OW32-90S	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		OW35-90S	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		TW22-94	2021-06-09	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-06-10	Field_D	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-16	Normal																				<0.002
		TW32-94-IV	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW40-99S	2021-06-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW53-03S	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		OW35-05D	2021-06-18	Field_D	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
				Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		TW30-99D	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW32-94-II	2021-05-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW40-99D	2021-06-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW41-99D	2021-06-11	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Normal																				<0.002
		TW43-99D	2021-06-17	Field_D	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
				Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-13	Normal																				<0.002
		TW47-00D	2021-06-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Field_D																				<0.002
				Normal																				<0.002
		TW48-00D	2021-06-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-15	Field_D																				<0.002
				Normal																				<0.002
		TW49-00D	2021-06-17	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-13	Field_D																				<0.002
				Normal																				<0.002
		TW53-03D	2021-06-18	Normal	<0.17	<0.00020	<0.00020	<0.00010	<0.00020	<0.00010	<0.00020	<0.30	<0.10	<0.10	<0.00010	<0.00030	<0.0010	<0.0010	<0.00020	<0.0010	<0.00020	<0.0010	<0.00020	<0.002
			2021-12-14	Normal																				<0.002
		TW60-13D	2021-06-09	Normal																				

Notes:

ODWS	Ontario Drinking Water Standards, Objectives and Guidelines, Ontario Ministry of the Environment, as revised June 2006 (ODWS)
RUC	Reasonable Use Concept
1.09	Detected result exceeds associated RUC standard
OG	Operational Guideline
AO	Aesthetic Objective
MAC	Maximum Acceptable Concentration
IMAC	Interim Maximum Acceptable Concentration
-	Not applicable or not analysed

Well ID	Well Condition	Comments	Recommendations
TW60-13D	Does not meet O.Reg. 903	potential disconnection in the well casing below the ground surface, missing lock	decommission and reinstall the well, insall new lock
PW2-S(R11)	Does not meet O.Reg. 903	well casing is open to the environment and cannot be closed or capped, pedestal lid does not close, level logger not functional and stuck in the well so it is unable to be removed for repair, missing lock	decommission and reinstall the well, insall new lock
TW22-94	Does not meet O.Reg. 903	well casing is open to the environment and cannot be closed or capped, well casing rusted, plastic cover in place over the well, missing lock	decommission and reinstall the well, insall new lock
TW22-99D	Does not meet O.Reg. 903	potential disconnection in the well casing below the ground surface, pedestal rusted, plastic cover used instead of a well cap, missing lock	decommission and reinstall the well, insall new lock
TW40-99D	Does not meet O.Reg. 903	well is artesian, well pedestal rusted, pedestal lid does not close, unable to put on well cap, missing lock	decommission and reinstall the well, insall new lock
TW45-99D	Does not meet O.Reg. 903	obstruction in well below ground surface, lock missing	decommission and reinstall the well, insall new lock
EW1a-01	Does not meet O.Reg. 903	extraction well is artesian and causing standing water on the ground, a pail is being used as a well cap, level logger not installed, missing lock	re-install level logger, finish the extraction well installation and install the pump
EW2a-01	Does not meet O.Reg. 903	a pail is being used as a well cap, level logger not installed, missing lock, there is standing water around the extraction well	re-install level logger, finish the extraction well installation and install the pump
PW1-N	Destroyed		reinstall the well
TW30-94	Moderate	well pedestal rusted, lid broken	replace well pedestal
TW30-99D	Moderate	well pedestal rusted, lid broken	replace well pedestal
TW32-94-I	Moderate	well pedestal rusted, lid broken, missing lock	replace well casing, install new lock
TW32-94-II	Moderate	well pedestal rusted, lid broken, missing lock	replace well casing, install new lock
TW32-94-III	Moderate	well pedestal rusted, lid broken, missing lock	replace well casing, install new lock
TW32-94-IV	Moderate	well pedestal rusted, lid broken, missing lock	replace well casing, install new lock
TW39-99D	Moderate	pedestal lid does not close, level logger not functional, removed for repair, well casing rusted, missing lock	repair and re-install level logger, cut PVC well pipe, install new lock
TW39-99I	Moderate	cap missing, well pedestal rusted, missing cap, missing lock	install new well cap, install new lock
TW42-99S	Moderate	pedestal lid does not close, level logger cap missing, level logger not functional, removed for repair, re-installed	replace level logger cap, cut PVC well pipe
TW45-99S	Moderate	pedestal lid does not close, lock missing	cut PVC well pipe, install new lock
TW46-99D	Moderate	pedestal lid does not close, lock missing, missing well cap, rusty well pedestal	cut PVC well pipe, install new well cap, install new lock, install new level logger
TW46-99I	Moderate	pedestal lid does not close, lock missing, rusty well pedestal	cut PVC well pipe, install new lock
TW48-16S	Moderate	lock needs to be replaced, well cap split, pedestal lid diifcult to close, level logger cap missing, level logger not functional, removed for repair, re-installed	replace lock, replace level logger cap, repair and re-install level logger
TW61-13D	Moderate	pedestal lid does not close, well cap split and drilled, missing lock	cut PVC well pipe, replace well cap, install new lock
TW64-16-I	Moderate	pedestal tilted	replace well pedestal - assess casing for additional damage
TW64-16-IV	Moderate	pedestal tilted	replace well pedestal - assess casing for additional damage
EW1b-13	Moderate	Standing water on the ground around the well, missing lock	install new lock
EW1c-13	Moderate	Standing water on the ground around the well, missing lock	install new lock
EW2b-13	Moderate	Standing water on the ground around the well, missing lock	install new lock
EW2c-13	Moderate	Standing water on the ground around the well, missing lock	install new lock
LCSOW1-15	Good	level logger not working, not removed for repair, missing lock	with appropriate PPE remove, repair, and re-install level logger, install new lock
LCSOW2-15	Good	designated water level tape missing, level logger not working, not removed for repair, missing lock	with appropriate PPE remove, repair, and re-install level logger, install designated water level tape, install new lock
TW47-00D	Good	level logger not functional, removed for repair, pump wire corroded, removed from well, missing lock	repair and re-install level logger, determine if pump remains in well, install new lock
TW41-99D	Good		
TW41-99S	Good		
TW55-09S	Good		
TW56-11D	Good		
TW56-11S	Good		
TW58-11S	Good		
TW59-13S	Good		
OW32-90D	Good		
OW32-90S	Good	lock needs to be replaced	install new lock
TW21-94-II	Good		
TW39-99S	Good		
TW40-99S	Good		
TW42-99D	Good	unable to install well cap, rusty well pedestal	lengthen PVC well pipe
TW43-99D	Good	rusty well pedestal	
TW43-99S	Good	rusty well pedestal	
TW46-99S	Good	lock missing, rusty well pedestal	install new lock
TW48-00D	Good		
TW49-00D	Good		
TW53-03D	Good	old tubing stuck in well, vole nest in pedestal	remove old tubing
TW54-09D	Good	level logger not functional, removed for repair	repair and re-install level logger
TW55-09D	Good	level logger storage full	refresh level logger
TW59-13D	Good	level logger storage full	refresh level logger
TW61-13I	Good	well cap missing, level logger not functional, removed for repair, re-installed	replace well cap
TW61-13S	Good		
TW63-13S	Good	lock missing	replace lock
TW64-16-II	Good		
TW64-16-III	Good	level logger not functional, removed for repair	re-install level logger
OW35-05D	Not Assessed		
OW35-90S	Not Assessed		
TW53-03S	Not Assessed		
TW57-11D	Not Assessed		
TW57-11S	Not Assessed		
TW62-13S	Not Assessed		

Appendix A

Quality Assurance/Quality Control Data

DILLON CONSULTING

Memo

To: Clean Harbors Canada Inc.
4090 Telfer Road, Rural Route #1
Corunna, Ontario
N0N 1G0

From: David Lake

Date: March 4, 2022

Subject: Quality Assurance/Quality Control Data Validation – Lambton Facility, Lambton, Ontario

Our File: File # 21-1519

1. Introduction

This document contains the details on the results of the quality assurance analytical methods for groundwater samples collected in May, June and December 2021 at Clean Harbors Canada Inc. in Sarnia, Ontario. Samples were submitted to AGAT Laboratories (AGAT) located in Mississauga, Ontario, for analysis. Table 1 presents a summary of groundwater sample collection and the analysis completed. The final analysis and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the certificate of analysis, including the method blank data, laboratory and field duplicate results, laboratory control samples (LCS), matrix spikes and surrogate spikes. The analytical methods used are referenced in Table 2.

The analytical methods used by the laboratory are provided in Table 2. The data was assessed to the following QA/QC criteria:

i. "National Functional Guidelines for Superfund Organic Methods Data Review", USEPA-540-R-2016-002, September 2016
ii. "National Functional Guidelines for Inorganic Superfund Methods Data Review", USEPA-540-R-2016-001, September 2016

2. Sample Holding Time and Preservation

The sample hold times, as summarized in Table 2, were followed. The certificate of analysis includes the temperature that the samples were when they arrived at the laboratory in Mississauga. All samples were properly preserved, delivered with ice and stored at the appropriate temperature (<10°C).

3. Laboratory Quality Assurance Methodology

AGAT laboratories utilize multiple QA/QC procedures described herein for samples analyses.

Laboratory Method Blanks

Laboratory method blanks are used to determine background contamination or interferences in the analytical system. Laboratory method blanks in the certificates of analyses were non-detect. This indicates laboratory contamination was not a factor in the investigation.

Surrogate Spike Recovery

Surrogate spike recoveries are analyzed and reported when a known concentration of an analyte is added a random selection of primary samples. The surrogate recoveries assess sample matrix interference effects and laboratory performance. In addition, all samples submitted for volatile organic compounds (VOC), cations, anions, and dissolved metals underwent surrogate spike recovery and were within laboratory control limits.

Laboratory Control Samples

To assess the analytical efficiencies of the methodologies independent of the sample matrix effects, laboratory control samples (LCS) were prepared and analyzed by the laboratory. The purpose of LCS is to demonstrate the reproducibility of the analyses. AGAT completed the LCS at a minimum frequency of one per analytical batch and/or 1 per 20 investigative samples. The laboratory duplicate samples were within the acceptable relative percent differences (RPDs) limit of 20%.

The method blank spikes and matrix spikes completed were within the acceptable lower and upper limits.

4. Field Quality Assurance Methodology

A minimum of one blind field duplicate sample for every ten samples was collected and analyzed for each parameter group in each medium. In total 13 duplicates where collected.

The RPD between duplicate samples was calculated in accordance with the CCME Guidance Manual for Environmental Site Characterization In Support of Environmental and Human Health Risk Assessment, Volume 1, Table 3-2. The calculated RPD values were assessed against the recommended performance criteria of 40% for duplicate groundwater samples. For parameter concentrations less than five times the detection limit, the difference between the two samples should be less than twice the detection limit to be acceptable. The results of the field duplicate RPD analyses are provided in Table 3.

The QA/QC results for the analysis generally met the recommended performance criteria with eight exceptions, as shown in Table 3. However, differences between the duplicate samples are likely the result of sample heterogeneity. Given the uncertainty, Dillon has taken a conservative approach and used the higher of the two concentrations between the original sample and the duplicate in summary tables. For reported analyses, tables and figures, both the original sample and the duplicate concentrations were used.

5. Conclusion

Based on the quality assurance assessments discussed above, the data used in this report are considered acceptable based on the specific qualifications of this report.

Table A1 - Appendix A - Sample Collection and Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Labton Facility Landfill

Monitoring Zone	Location Description	Location Code	Date	Parameters											Comments
				Alkalinity	Ammonia (as N)	pH (Lab)	Cations	Metals	Mercury	Cyanide, free	Electrical conductivity (Lab)	Total Dissolved Solids (TDS)	Anions (Cl, Br, F, NO2-N, NO3-N, SO4)	Volatile Organic Compounds	
Active Aquitard	Along Property Boundary	TW30-94	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW41-99S	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW42-99S	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		
		TW43-99S	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		
		TW45-99S	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
		TW48-16S	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW62-13S	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
	Downgradient of Northern Berm	TW21-94-II	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		OW32-90S	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		OW35-90S	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW22-94	2021-06-09	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
			2021-12-16	X	X	X	X	X		X	X	X	X		
		TW32-94-IV	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW40-99S	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW53-03S	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
	Internal to Property	TW63-13S	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
			2021-12-14	X	X	X	X	X		X	X	X	X		
	Located off the Facility Property	TW55-09S	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		
		TW56-11S	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW57-11S	2021-06-10	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
		TW58-11S	2021-12-14	X	X	X	X	X		X	X	X	X		
		TW59-13S	2021-06-10	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
	Northern Berm	TW39-99I	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW39-99S	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW46-99I	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW46-99S	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW61-13I	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		Field Duplicate
		TW61-13S	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
Deep Hydraulic Control Layer	HCL	EW1a-01	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
			2021-12-17	X	X	X	X	X		X	X	X	X		
		EW1b-13	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-17	X	X	X	X	X		X	X	X	X		
		EW1c-13	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-17	X	X	X	X	X		X	X	X	X		
		EW2a-01	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-17	X	X	X	X	X		X	X	X	X		
		EW2b-13	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-17	X	X	X	X	X		X	X	X	X		
		EW2c-13	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-17	X	X	X	X	X		X	X	X	X		Field Duplicate
Inactive Aquifer	Along Property Boundary	TW32-94-III	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
Interface Aquifer	Along Property Boundary (Compliance)	OW32-90D	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		OW35-05D	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW30-99D	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW32-94-II	2021-05-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW40-99D	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW41-99D	2021-06-11	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
		TW43-99D	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	Field Duplicate
			2021-12-13	X	X	X	X	X		X	X	X	X		
		TW47-00D	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		Field Duplicate
		TW48-00D	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		Field Duplicate
		TW49-00D	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		Field Duplicate
		TW53-03D	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW60-13D	2021-06-09	X	X	X	X	X		X	X	X	X		
	Internal to Property	TW39-99D	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
		TW46-99D	2021-06-09	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
		TW54-09D	2021-06-09	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		Field Duplicate
		TW61-13D	2021-05-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-16	X	X	X	X	X		X	X	X	X		
	Located off the Facility Property	TW55-09D	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		
		TW56-11D	2021-06-10	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
		TW57-11D	2021-06-10	X	X	X	X	X	X	X	X	X	X	X	
		TW59-13D	2021-06-10	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-14	X	X	X	X	X		X	X	X	X		
	Nearby Interface Aquifer	PW1-N	2021-06-18	X	X	X	X	X	X	X	X	X	X	X	
		PW2-S(R11)	2021-06-09	X	X	X	X	X	X	X	X	X	X	X	
Shale Aquitard	Along Property Boundary	TW32-94-I	2021-06-09	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-15	X	X	X	X	X		X	X	X	X		
	Off-Site	TW42-99D	2021-06-17	X	X	X	X	X	X	X	X	X	X	X	
			2021-12-13	X	X	X	X	X		X	X	X	X		

Table 2 - Analytical Method and Holding Time Criteria
Quality Assurance/Quality Control Data Validation
2021 Groundwater Monitoring Report
Clean Harbors Labton Facility Landfill

Parameters	Methodology	Hold Time Criteria (days)
Alkalinity	Modified SM 2320 B	14
Ammonia-N (preserved)	Modified SM 4500 NH3-H	28
pH	Modified 4500-H+B	28
Metals	Modified EPA 200.8/EPA 3005A	60
Cations	Modified EPA 6010D	60
Mercury	Modified EPA 245.2/SM 3112B	28
Cyanide, free	Modified ON MOECC E3015,SM 4500-CN- I, G-387	14
Conductivity	Modified SM 2510 B	28
Total Dissolved Solids	Modified EPA 1684,ON MOECC E3139,SM 2540C,D	7
Anions (Chloride, Bromide, Fluoride, Sulphate)	Modified SM 4110B	28
Anions (Nitrite-N, Nitrate-N)	Modified SM 4110B	7
Volatile Organic Compounds	Modified EPA 5030B/8260D	14

Notes:
Methods referenced from the following:
SM - "Standard Methods for the Examination of Water and Wastewater", 21st Ed., APHA, September 2005 with subsequent revisions
EPA - U.S. Environmental protection Agency. Analytical Methodology (October, 2007)
N - Nitrogen

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

			Location Code	TW63-13S			TW32-94-III			TW2
			Field ID	TW63-13S	DUP1	RPD (%)	TW32-94-III	DUP2	RPD (%)	TW22-94
			Matrix Type	Water	Water		Water	Water		Water
			Lab Report Number	21L749543	21L749543		21L749543	21L749543		21L760673
			Date	2021-05-17	2021-05-17		2021-05-18	2021-05-18		2021-06-09
Parameters	Unit	RDL								
General Chemistry										
pH (Lab)	pH Unit	-	7.65	7.59	1	8.17	8.06	1	7.10	
Electrical conductivity (Lab)	µS/cm	2	2,310	2,340	1	951	934	2	1,880	
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	385	433	12	234	228	3	491	
Ammonia (as N)	mg/L	0.02	<0.02	<0.02	NC	0.10	0.20	NC	<0.02	
Nitrate (as N)	mg/L	0.05	<0.14	<0.14	NC	<0.05	<0.05	NC	<0.07	
Nitrite (as N)	mg/L	0.05	<0.11	<0.11	NC	<0.05	<0.05	NC	<0.05	
Cyanide, free	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Calcium	mg/L	0.05	168	160	5	23.0	22.6	2	182	
Chloride	mg/L	0.1	528	522	1	167	166	1	60.4	
Fluoride	mg/L	0.05	<0.05	<0.05	NC	1.21	1.20	1	<0.05	
Bromide	mg/L	0.05	5.74	<0.11	NC	<0.05	<0.05	NC	<0.06	
Magnesium	mg/L	0.05	76.5	72.8	5	6.84	6.78	1	119	
Potassium	mg/L	0.05	3.06	3.27	7	<2.50	<2.50	NC	<2.50	
Sulphate (SO4)	mg/L	0.1	54.1	54.3	0	<0.10	<0.10	NC	662	
Total Dissolved Solids (TDS)	mg/L	10	1,610	1,600	1	600	468	25	1,470	
Metals										
Arsenic (filtered)	mg/L	0.001	<0.001	<0.001	NC	<0.001	<0.001	NC	<0.001	
Barium (filtered)	mg/L	0.002	0.112	0.115	3	0.084	0.082	2	0.016	
Boron (filtered)	mg/L	0.01	0.281	0.292	4	1.38	1.29	7	0.171	
Cadmium (filtered)	mg/L	0.0001	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Iron (filtered)	mg/L	0.01	<0.010	<0.010	NC	0.143	0.150	5	0.035	
Lead (filtered)	mg/L	0.0005	<0.0005	<0.0005	NC	<0.0005	<0.0005	NC	<0.0005	
Mercury	mg/L	0.0001	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	
Nickel (filtered)	mg/L	0.001	0.078	0.080	3	<0.003	<0.003	NC	<0.003	
Sodium (filtered)	mg/L	0.05	160	149	7	152	154	1	81.3	
Zinc (filtered)	mg/L	0.005	<0.005	<0.005	NC	<0.005	<0.005	NC	0.008	
BTEX										
Benzene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Toluene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Ethylbenzene	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	
Xylene (m & p)	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Xylene (o)	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	
Xylene Total	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Volatile Organic Compounds (VOCs)										
Bromodichloromethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Bromoform	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
Bromomethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Carbon tetrachloride	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Chlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
Chlorodibromomethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
Chloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Chloroform	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Chloromethane	µg/L	0.4	<0.40	<0.40	NC	<0.40	<0.40	NC	<0.40	
1,2-Dibromoethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
1,2-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
1,3-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
1,4-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
1,1-Dichloroethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC	<0.30	
1,2-Dichloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
1,1-Dichloroethene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
1,2,4-Trichlorobenzene	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC	<0.30	
cis-1,2-Dichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
trans-1,2-Dichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Dichloromethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC	<0.30	
1,2-Dichloropropane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
cis-1,3-Dichloropropene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
trans-1,3-Dichloropropene	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC	<0.30	
Styrene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
1,1,2,2-Tetrachloroethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC	<0.10	
Tetrachloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
1,1,1-Trichloroethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC	<0.30	
1,1,2-Trichloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Trichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC	<0.20	
Trichlorofluoromethane	µg/L	0.4	<0.40	<0.40	NC	<0.40	<0.40	NC	<0.40	
Vinyl chloride	µg/L	0.17	<0.17	<0.17	NC	<0.17	<0.17	NC	<0.17	
1,1,1,2-Tetrachloroethane	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	
1,3-Dichloropropene	µg/L	0.3	<0.3	<0.3	NC	<0.3	<0.3	NC	<0.3	
2-hexanone (MBK)	µg/L	1	<1	<1	NC	<1	<1	NC	<1	
Acetone	µg/L	1	<1	<1	NC	<1	<1	NC	<1	
Dichlorodifluoromethane	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Di-isobutyl Ketone	µg/L	1	<1	<1	NC	<1	<1	NC	<1	
Hexane	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	
Methyl Ethyl Ketone (MEK)	µg/L	1	<1	<1	NC	<1	<1	NC	<1	
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

DILLON CONSULTING

			Location Code	2-94		TW57-11S			EW1a-01		
			Field ID	DUP B	RPD (%)	TW57-11S	DUP A	RPD (%)	EW1a-01	DUP C	RPD (%)
			Matrix Type	Water		Water	Water		Water	Water	
			Lab Report Number	21L760673		21L760673	21L760673		21L760673	21L760673	
			Date	2021-06-10		2021-06-10	2021-06-09		2021-06-11	2021-06-11	
Parameters	Unit	RDL									
General Chemistry											
pH (Lab)	pH Unit	-	7.13	0	7.15	7.23	1	7.07	7.02	1
Electrical conductivity (Lab)	µS/cm	2	1,720	9	1,780	1,890	6	594	596	0
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	573	15	566	504	12	123	132	7
Ammonia (as N)	mg/L	0.02	<0.02	NC	<0.02	<0.02	NC	0.04	0.03	NC
Nitrate (as N)	mg/L	0.05	<0.07	NC	<0.07	<0.07	NC	0.71	0.72	1
Nitrite (as N)	mg/L	0.05	<0.05	NC	<0.05	<0.05	NC	0.38	0.48	23
Cyanide, free	mg/L	0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	<0.002	NC
Calcium	mg/L	0.05	176	3	170	183	7	54.3	54.2	0
Chloride	mg/L	0.1	18.3	107	24.5	59.5	83	61.8	60.9	1
Fluoride	mg/L	0.05	<0.05	NC	<0.05	<0.05	NC	0.65	0.56	15
Bromide	mg/L	0.05	<0.06	NC	<0.06	<0.06	NC	0.73	0.76	4
Magnesium	mg/L	0.05	106	12	102	119	15	14.5	14.5	0
Potassium	mg/L	0.05	3.11	NC	2.76	<2.50	NC	1.59	1.62	2
Sulphate (SO4)	mg/L	0.1	341	64	304	649	72	106	107	1
Total Dissolved Solids (TDS)	mg/L	10	1,370	7	994	1,490	40	380	374	2
Metals										
Arsenic (filtered)	mg/L	0.001	<0.001	NC	<0.001	<0.001	NC	<0.001	<0.001	NC
Barium (filtered)	mg/L	0.002	0.019	17	0.021	0.016	27	0.026	0.025	4
Boron (filtered)	mg/L	0.01	0.160	7	0.190	0.191	1	0.347	0.298	15
Cadmium (filtered)	mg/L	0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	<0.002	NC
Iron (filtered)	mg/L	0.01	0.023	NC	0.012	0.035	NC	<0.010	<0.010	NC
Lead (filtered)	mg/L	0.0005	<0.0005	NC	<0.0005	<0.0005	NC	<0.0005	<0.0005	NC
Mercury	mg/L	0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC
Nickel (filtered)	mg/L	0.001	<0.003	NC	<0.003	0.003	NC	<0.003	<0.003	NC
Sodium (filtered)	mg/L	0.05	50.5	47	48.9	81.6	50	34.7	34.8	0
Zinc (filtered)	mg/L	0.005	<0.005	NC	<0.005	<0.005	NC	0.009	0.010	NC
BTEX										
Benzene	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Toluene	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Ethylbenzene	µg/L	0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.1	NC
Xylene (m & p)	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Xylene (o)	µg/L	0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.1	NC
Xylene Total	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Volatile Organic Compounds (VOCs)										
Bromodichloromethane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Bromoform	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
Bromomethane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Carbon tetrachloride	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Chlorobenzene	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
Chlorodibromomethane	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
Chloroethane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Chloroform	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Chloromethane	µg/L	0.4	<0.40	NC	<0.40	<0.40	NC	<0.40	<0.40	NC
1,2-Dibromoethane	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
1,2-Dichlorobenzene	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
1,3-Dichlorobenzene	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
1,4-Dichlorobenzene	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
1,1-Dichloroethane	µg/L	0.3	<0.30	NC	<0.30	<0.30	NC	<0.30	<0.30	NC
1,2-Dichloroethane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
1,1-Dichloroethene	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
1,2,4-Trichlorobenzene	µg/L	0.3	<0.30	NC	<0.30	<0.30	NC	<0.30	<0.30	NC
cis-1,2-Dichloroethene	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
trans-1,2-Dichloroethene	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Dichloromethane	µg/L	0.3	<0.30	NC	<0.30	<0.30	NC	<0.30	<0.30	NC
1,2-Dichloropropane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
cis-1,3-Dichloropropene	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
trans-1,3-Dichloropropene	µg/L	0.3	<0.30	NC	<0.30	<0.30	NC	<0.30	<0.30	NC
Styrene	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
1,1,2,2-Tetrachloroethane	µg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.10	<0.10	NC
Tetrachloroethene	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
1,1,1-Trichloroethane	µg/L	0.3	<0.30	NC	<0.30	<0.30	NC	<0.30	<0.30	NC
1,1,2-Trichloroethane	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Trichloroethene	µg/L	0.2	<0.20	NC	<0.20	<0.20	NC	<0.20	<0.20	NC
Trichlorofluoromethane	µg/L	0.4	<0.40	NC	<0.40	<0.40	NC	<0.40	<0.40	NC
Vinyl chloride	µg/L	0.17	<0.17	NC	<0.17	<0.17	NC	<0.17	<0.17	NC
1,1,1,2-Tetrachloroethane	µg/L	0.1	<0.1	NC	<0.1	<0.1	NC	<0.1	<0.1	NC
1,3-Dichloropropene	µg/L	0.3	<0.3	NC	<0.3	<0.3	NC	<0.3	<0.3	NC
2-hexanone (MBK)	µg/L	1	<1	NC	<1	<1	NC	<1	<1	NC
Acetone	µg/L	1	<1	NC	<1	<1	NC	<1	<1	NC
Dichlorodifluoromethane	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Di-isobutyl Ketone	µg/L	1	<1	NC	<1	<1	NC	<1	<1	NC
Hexane	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC
Methyl Ethyl Ketone (MEK)	µg/L	1	<1	NC	<1	<1	NC	<1	<1	NC
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2	<0.2	NC	<0.2	<0.2	NC	<0.2	<0.2	NC

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

			Location Code	TW43-99D			OW35-05D			TW4
			Field ID	TW43-99D	DUP-F	RPD (%)	35D	DUP-10	RPD (%)	TW49-00D
			Matrix Type	Water	Water		Water	Water		Water
			Lab Report Number	21L763966	21L763966		21L763966	21L763966		21T846728
			Date	2021-06-17	2021-06-17		2021-06-18	2021-06-18		2021-12-13
Parameters	Unit	RDL								
General Chemistry										
pH (Lab)	pH Unit	-	7.47	7.35	2	7.46	7.35	1	8.08	
Electrical conductivity (Lab)	µS/cm	2	1,190	1,190	0	915	914	0	713	
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	285	284	0	258	264	2	246	
Ammonia (as N)	mg/L	0.02	0.11	0.10	NC	<0.02	<0.02	NC	0.09	
Nitrate (as N)	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	<0.05	
Nitrite (as N)	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	<0.05	
Cyanide, free	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Calcium	mg/L	0.05	25.3	25.7	2	31.9	31.0	3	17.9	
Chloride	mg/L	0.1	238	237	0	143	141	1	94.1	
Fluoride	mg/L	0.05	0.86	0.86	0	0.83	0.82	1	0.90	
Bromide	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	0.42	
Magnesium	mg/L	0.05	9.34	9.49	2	7.46	7.17	4	5.45	
Potassium	mg/L	0.05	<2.50	<2.50	NC	3.92	3.83	2	1.28	
Sulphate (SO4)	mg/L	0.1	<0.10	<0.10	NC	20.3	20.0	1	<0.10	
Total Dissolved Solids (TDS)	mg/L	10	606	612	1	552	502	9	376	
Metals										
Arsenic (filtered)	mg/L	0.001	0.001	<0.001	NC	0.003	0.003	NC	0.001	
Barium (filtered)	mg/L	0.002	0.145	0.142	2	0.084	0.078	7	0.081	
Boron (filtered)	mg/L	0.01	1.28	1.35	5	2.52	2.40	5	0.98	
Cadmium (filtered)	mg/L	0.0001	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC	0.0001	
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Iron (filtered)	mg/L	0.01	0.296	0.283	4	0.025	0.019	NC	0.055	
Lead (filtered)	mg/L	0.0005	<0.0005	<0.0005	NC	<0.0005	<0.0005	NC	<0.0005	
Mercury	mg/L	0.0001	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC		
Nickel (filtered)	mg/L	0.001	<0.003	<0.003	NC	<0.003	0.003	NC	<0.001	
Sodium (filtered)	mg/L	0.05	189	190	1	143	141	1	134	
Zinc (filtered)	mg/L	0.005	0.008	0.012	NC	<0.005	<0.005	NC	<0.005	
BTEX										
Benzene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Toluene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Ethylbenzene	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC		
Xylene (m & p)	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Xylene (o)	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC		
Xylene Total	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Volatile Organic Compounds (VOCs)										
Bromodichloromethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Bromoform	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
Bromomethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Carbon tetrachloride	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Chlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
Chlorodibromomethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
Chloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Chloroform	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Chloromethane	µg/L	0.4	<0.40	<0.40	NC	<0.40	<0.40	NC		
1,2-Dibromoethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
1,2-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
1,3-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
1,4-Dichlorobenzene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
1,1-Dichloroethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC		
1,2-Dichloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
1,1-Dichloroethene	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
1,2,4-Trichlorobenzene	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC		
cis-1,2-Dichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
trans-1,2-Dichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Dichloromethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC		
1,2-Dichloropropane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
cis-1,3-Dichloropropene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
trans-1,3-Dichloropropene	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC		
Styrene	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
1,1,2,2-Tetrachloroethane	µg/L	0.1	<0.10	<0.10	NC	<0.10	<0.10	NC		
Tetrachloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
1,1,1-Trichloroethane	µg/L	0.3	<0.30	<0.30	NC	<0.30	<0.30	NC		
1,1,2-Trichloroethane	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Trichloroethene	µg/L	0.2	<0.20	<0.20	NC	<0.20	<0.20	NC		
Trichlorofluoromethane	µg/L	0.4	<0.40	<0.40	NC	<0.40	<0.40	NC		
Vinyl chloride	µg/L	0.17	<0.17	<0.17	NC	<0.17	<0.17	NC		
1,1,1,2-Tetrachloroethane	µg/L	0.1	<0.1	<0.1	NC	<0.1	<0.1	NC		
1,3-Dichloropropene	µg/L	0.3	<0.3	<0.3	NC	<0.3	<0.3	NC		
2-hexanone (MBK)	µg/L	1	<1	<1	NC	<1	<1	NC		
Acetone	µg/L	1	<1	<1	NC	<1	<1	NC		
Dichlorodifluoromethane	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Di-isobutyl Ketone	µg/L	1	<1	<1	NC	<1	<1	NC		
Hexane	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		
Methyl Ethyl Ketone (MEK)	µg/L	1	<1	<1	NC	<1	<1	NC		
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2	<0.2	<0.2	NC	<0.2	<0.2	NC		

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

			Location Code	9-00D		TW54-09D			TW47-00D		
			Field ID	DUP A	RPD (%)	TW54-09D	DUP B	RPD (%)	TW47-00D	DUP C	RPD (%)
			Matrix Type	Water		Water	Water		Water	Water	
			Lab Report Number	21T846728		21T846728	21T846728		21T846728	21T846728	
			Date	2021-12-13		2021-12-14	2021-12-14		2021-12-15	2021-12-15	
Parameters	Unit	RDL									
General Chemistry											
pH (Lab)	pH Unit	-	8.06	0	8.04	8.03	0	8.00	8.02	0
Electrical conductivity (Lab)	µS/cm	2	711	0	935	937	0	4,970	5,190	4
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	245	0	254	253	0	661	687	4
Ammonia (as N)	mg/L	0.02	0.09	NC	<0.02	<0.02	NC	0.41	0.39	5
Nitrate (as N)	mg/L	0.05	<0.05	NC	<0.05	<0.05	NC	<0.36	<0.36	NC
Nitrite (as N)	mg/L	0.05	<0.05	NC	<0.05	<0.05	NC	<0.27	<0.27	NC
Cyanide, free	mg/L	0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	<0.002	NC
Calcium	mg/L	0.05	17.9	0	17.0	16.7	2	53.5	55.6	4
Chloride	mg/L	0.1	93.7	0	154	152	1	1,400	1,470	5
Fluoride	mg/L	0.05	0.90	0	1.05	1.13	7	<0.13	<0.13	NC
Bromide	mg/L	0.05	0.44	5	<0.05	<0.05	NC	<0.28	<0.28	NC
Magnesium	mg/L	0.05	5.50	1	5.63	5.60	1	25.3	26.4	4
Potassium	mg/L	0.05	1.34	5	1.73	1.77	2	4.5	5.1	12
Sulphate (SO4)	mg/L	0.1	<0.10	NC	<0.10	<0.10	NC	<0.95	<0.95	NC
Total Dissolved Solids (TDS)	mg/L	10	374	1	490	488	0	2,970	3,020	2
Metals										
Arsenic (filtered)	mg/L	0.001	0.001	NC	<0.001	<0.001	NC	0.001	<0.001	NC
Barium (filtered)	mg/L	0.002	0.083	2	0.119	0.114	4	1.49	1.61	8
Boron (filtered)	mg/L	0.01	0.96	2	1.26	1.21	4	3.70	4.05	9
Cadmium (filtered)	mg/L	0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	<0.0001	NC
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	<0.002	NC
Iron (filtered)	mg/L	0.01	0.054	2	0.091	0.057	46	3.36	2.98	12
Lead (filtered)	mg/L	0.0005	<0.0005	NC	<0.0005	<0.0005	NC	<0.0005	<0.0005	NC
Mercury	mg/L	0.0001								
Nickel (filtered)	mg/L	0.001	<0.001	NC	0.004	0.002	NC	<0.001	0.001	NC
Sodium (filtered)	mg/L	0.05	133	1	185	181	2	1,380	1,460	6
Zinc (filtered)	mg/L	0.005	<0.005	NC	0.007	<0.005	NC	<0.005	<0.005	NC
BTEX										
Benzene	µg/L	0.2								
Toluene	µg/L	0.2								
Ethylbenzene	µg/L	0.1								
Xylene (m & p)	µg/L	0.2								
Xylene (o)	µg/L	0.1								
Xylene Total	µg/L	0.2								
Volatile Organic Compounds (VOCs)										
Bromodichloromethane	µg/L	0.2								
Bromoform	µg/L	0.1								
Bromomethane	µg/L	0.2								
Carbon tetrachloride	µg/L	0.2								
Chlorobenzene	µg/L	0.1								
Chlorodibromomethane	µg/L	0.1								
Chloroethane	µg/L	0.2								
Chloroform	µg/L	0.2								
Chloromethane	µg/L	0.4								
1,2-Dibromoethane	µg/L	0.1								
1,2-Dichlorobenzene	µg/L	0.1								
1,3-Dichlorobenzene	µg/L	0.1								
1,4-Dichlorobenzene	µg/L	0.1								
1,1-Dichloroethane	µg/L	0.3								
1,2-Dichloroethane	µg/L	0.2								
1,1-Dichloroethene	µg/L	0.2								
1,2,4-Trichlorobenzene	µg/L	0.3								
cis-1,2-Dichloroethene	µg/L	0.2								
trans-1,2-Dichloroethene	µg/L	0.2								
Dichloromethane	µg/L	0.3								
1,2-Dichloropropane	µg/L	0.2								
cis-1,3-Dichloropropene	µg/L	0.2								
trans-1,3-Dichloropropene	µg/L	0.3								
Styrene	µg/L	0.1								
1,1,2,2-Tetrachloroethane	µg/L	0.1								
Tetrachloroethene	µg/L	0.2								
1,1,1-Trichloroethane	µg/L	0.3								
1,1,2-Trichloroethane	µg/L	0.2								
Trichloroethene	µg/L	0.2								
Trichlorofluoromethane	µg/L	0.4								
Vinyl chloride	µg/L	0.17								
1,1,1,2-Tetrachloroethane	µg/L	0.1								
1,3-Dichloropropene	µg/L	0.3								
2-hexanone (MBK)	µg/L	1								
Acetone	µg/L	1								
Dichlorodifluoromethane	µg/L	0.2								
Di-isobutyl Ketone	µg/L	1								
Hexane	µg/L	0.2								
Methyl Ethyl Ketone (MEK)	µg/L	1								
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2								

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

			Location Code	TW48-00D			TW61-13I			EW2
			Field ID	TW48-00D	DUP D	RPD (%)	TW61-13I	DUP E	RPD (%)	EW2c-13
			Matrix Type	Water	Water		Water	Water		Water
			Lab Report Number	21T846728	21T846728		21T846728	21T846728		21T846728
			Date	2021-12-15	2021-12-15		2021-12-16	2021-12-16		2021-12-17
Parameters	Unit	RDL								
General Chemistry										
pH (Lab)	pH Unit	-	8.12	8.13	0	7.79	7.83	1	8.05	
Electrical conductivity (Lab)	µS/cm	2	1,600	1,600	0	1,360	1,370	1	696	
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	312	308	1	346	349	1	209	
Ammonia (as N)	mg/L	0.02	0.07	0.07	NC	<0.02	<0.02	NC	0.22	
Nitrate (as N)	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	<0.05	
Nitrite (as N)	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	<0.05	
Cyanide, free	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Calcium	mg/L	0.05	28.0	27.3	3	160	161	1	31.8	
Chloride	mg/L	0.1	357	357	0	14.5	15.0	3	97.8	
Fluoride	mg/L	0.05	1.08	1.12	4	<0.05	<0.05	NC	1.12	
Bromide	mg/L	0.05	<0.05	<0.05	NC	<0.05	<0.05	NC	0.74	
Magnesium	mg/L	0.05	10.0	9.79	2	75.9	76.8	1	14.2	
Potassium	mg/L	0.05	2.79	2.79	0	1.05	1.13	7	2.34	
Sulphate (SO4)	mg/L	0.1	<0.10	<0.10	NC	512	513	0	1.61	
Total Dissolved Solids (TDS)	mg/L	10	840	834	1	1,040	1,020	2	360	
Metals										
Arsenic (filtered)	mg/L	0.001	<0.001	<0.001	NC	<0.001	<0.001	NC	<0.001	
Barium (filtered)	mg/L	0.002	0.198	0.162	20	0.058	0.060	3	0.125	
Boron (filtered)	mg/L	0.01	1.79	1.66	8	0.246	0.265	7	0.79	
Cadmium (filtered)	mg/L	0.0001	0.0001	<0.0001	NC	<0.0001	<0.0001	NC	<0.0001	
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	<0.002	NC	<0.002	<0.002	NC	<0.002	
Iron (filtered)	mg/L	0.01	0.221	0.205	8	0.013	0.016	21	0.036	
Lead (filtered)	mg/L	0.0005	0.0006	<0.0005	18	<0.0005	<0.0005	NC	<0.0005	
Mercury	mg/L	0.0001								
Nickel (filtered)	mg/L	0.001	0.002	0.001	NC	0.001	0.001	NC	0.004	
Sodium (filtered)	mg/L	0.05	321	316	2	46.1	43.6	6	96.9	
Zinc (filtered)	mg/L	0.005	<0.005	<0.005	NC	<0.005	<0.005	NC	<0.005	
BTEX										
Benzene	µg/L	0.2								
Toluene	µg/L	0.2								
Ethylbenzene	µg/L	0.1								
Xylene (m & p)	µg/L	0.2								
Xylene (o)	µg/L	0.1								
Xylene Total	µg/L	0.2								
Volatile Organic Compounds (VOCs)										
Bromodichloromethane	µg/L	0.2								
Bromoform	µg/L	0.1								
Bromomethane	µg/L	0.2								
Carbon tetrachloride	µg/L	0.2								
Chlorobenzene	µg/L	0.1								
Chlorodibromomethane	µg/L	0.1								
Chloroethane	µg/L	0.2								
Chloroform	µg/L	0.2								
Chloromethane	µg/L	0.4								
1,2-Dibromoethane	µg/L	0.1								
1,2-Dichlorobenzene	µg/L	0.1								
1,3-Dichlorobenzene	µg/L	0.1								
1,4-Dichlorobenzene	µg/L	0.1								
1,1-Dichloroethane	µg/L	0.3								
1,2-Dichloroethane	µg/L	0.2								
1,1-Dichloroethene	µg/L	0.2								
1,2,4-Trichlorobenzene	µg/L	0.3								
cis-1,2-Dichloroethene	µg/L	0.2								
trans-1,2-Dichloroethene	µg/L	0.2								
Dichloromethane	µg/L	0.3								
1,2-Dichloropropane	µg/L	0.2								
cis-1,3-Dichloropropene	µg/L	0.2								
trans-1,3-Dichloropropene	µg/L	0.3								
Styrene	µg/L	0.1								
1,1,2,2-Tetrachloroethane	µg/L	0.1								
Tetrachloroethene	µg/L	0.2								
1,1,1-Trichloroethane	µg/L	0.3								
1,1,2-Trichloroethane	µg/L	0.2								
Trichloroethene	µg/L	0.2								
Trichlorofluoromethane	µg/L	0.4								
Vinyl chloride	µg/L	0.17								
1,1,1,2-Tetrachloroethane	µg/L	0.1								
1,3-Dichloropropene	µg/L	0.3								
2-hexanone (MBK)	µg/L	1								
Acetone	µg/L	1								
Dichlorodifluoromethane	µg/L	0.2								
Di-isobutyl Ketone	µg/L	1								
Hexane	µg/L	0.2								
Methyl Ethyl Ketone (MEK)	µg/L	1								
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2								

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Table 3 - Appendix A - Relative Percent Difference Analysis Summary
2021 Groundwater Monitoring Report
Clean Harbors Lambton Facility Landfill

	Location Code		c-13	RPD (%)
	Field ID		DUP F	
	Matrix Type		Water	
	Lab Report Number		21T846728	
	Date		2021-12-17	
Parameters	Unit	RDL		
General Chemistry				
pH (Lab)	pH Unit	-	8.00	1
Electrical conductivity (Lab)	µS/cm	2	695	0
Alkalinity (Bicarbonate as CaCO3)	mg/L	5	209	0
Ammonia (as N)	mg/L	0.02	0.23	4
Nitrate (as N)	mg/L	0.05	<0.05	NC
Nitrite (as N)	mg/L	0.05	<0.05	NC
Cyanide, free	mg/L	0.002	<0.002	NC
Calcium	mg/L	0.05	32.0	1
Chloride	mg/L	0.1	98.6	1
Fluoride	mg/L	0.05	1.13	1
Bromide	mg/L	0.05	0.71	4
Magnesium	mg/L	0.05	13.9	2
Potassium	mg/L	0.05	2.32	1
Sulphate (SO4)	mg/L	0.1	1.56	3
Total Dissolved Solids (TDS)	mg/L	10	358	1
Metals				
Arsenic (filtered)	mg/L	0.001	<0.001	NC
Barium (filtered)	mg/L	0.002	0.123	2
Boron (filtered)	mg/L	0.01	0.62	24
Cadmium (filtered)	mg/L	0.0001	<0.0001	NC
Chromium Total (III+VI) (filtered)	mg/L	0.002	<0.002	NC
Iron (filtered)	mg/L	0.01	0.128	NC
Lead (filtered)	mg/L	0.0005	<0.0005	NC
Mercury	mg/L	0.0001		
Nickel (filtered)	mg/L	0.001	0.001	NC
Sodium (filtered)	mg/L	0.05	97.4	1
Zinc (filtered)	mg/L	0.005	0.010	NC
BTEX				
Benzene	µg/L	0.2		
Toluene	µg/L	0.2		
Ethylbenzene	µg/L	0.1		
Xylene (m & p)	µg/L	0.2		
Xylene (o)	µg/L	0.1		
Xylene Total	µg/L	0.2		
Volatile Organic Compounds (VOCs)				
Bromodichloromethane	µg/L	0.2		
Bromoform	µg/L	0.1		
Bromomethane	µg/L	0.2		
Carbon tetrachloride	µg/L	0.2		
Chlorobenzene	µg/L	0.1		
Chlorodibromomethane	µg/L	0.1		
Chloroethane	µg/L	0.2		
Chloroform	µg/L	0.2		
Chloromethane	µg/L	0.4		
1,2-Dibromoethane	µg/L	0.1		
1,2-Dichlorobenzene	µg/L	0.1		
1,3-Dichlorobenzene	µg/L	0.1		
1,4-Dichlorobenzene	µg/L	0.1		
1,1-Dichloroethane	µg/L	0.3		
1,2-Dichloroethane	µg/L	0.2		
1,1-Dichloroethene	µg/L	0.2		
1,2,4-Trichlorobenzene	µg/L	0.3		
cis-1,2-Dichloroethene	µg/L	0.2		
trans-1,2-Dichloroethene	µg/L	0.2		
Dichloromethane	µg/L	0.3		
1,2-Dichloropropane	µg/L	0.2		
cis-1,3-Dichloropropene	µg/L	0.2		
trans-1,3-Dichloropropene	µg/L	0.3		
Styrene	µg/L	0.1		
1,1,2,2-Tetrachloroethane	µg/L	0.1		
Tetrachloroethene	µg/L	0.2		
1,1,1-Trichloroethane	µg/L	0.3		
1,1,2-Trichloroethane	µg/L	0.2		
Trichloroethene	µg/L	0.2		
Trichlorofluoromethane	µg/L	0.4		
Vinyl chloride	µg/L	0.17		
1,1,1,2-Tetrachloroethane	µg/L	0.1		
1,3-Dichloropropene	µg/L	0.3		
2-hexanone (MBK)	µg/L	1		
Acetone	µg/L	1		
Dichlorodifluoromethane	µg/L	0.2		
Di-isobutyl Ketone	µg/L	1		
Hexane	µg/L	0.2		
Methyl Ethyl Ketone (MEK)	µg/L	1		
Methyl tert-Butyl Ether (MTBE)	µg/L	0.2		

Notes:

µg/L	Micrograms per gram
mg/L	Milligram per gram
µS/cm	MicroSiemens per centimetre
RDL	Laboratory detection limit
RPD	Relative percent difference
NC	Non-calculable. RPD only calculated when both results are >5X RDL
100	RPD exceeds the industry standard of 40% for groundwater

Appendix B

Datalogger Hydrographs

Figure B-1
Active Aquitard Hydrograph - OW35-90S
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

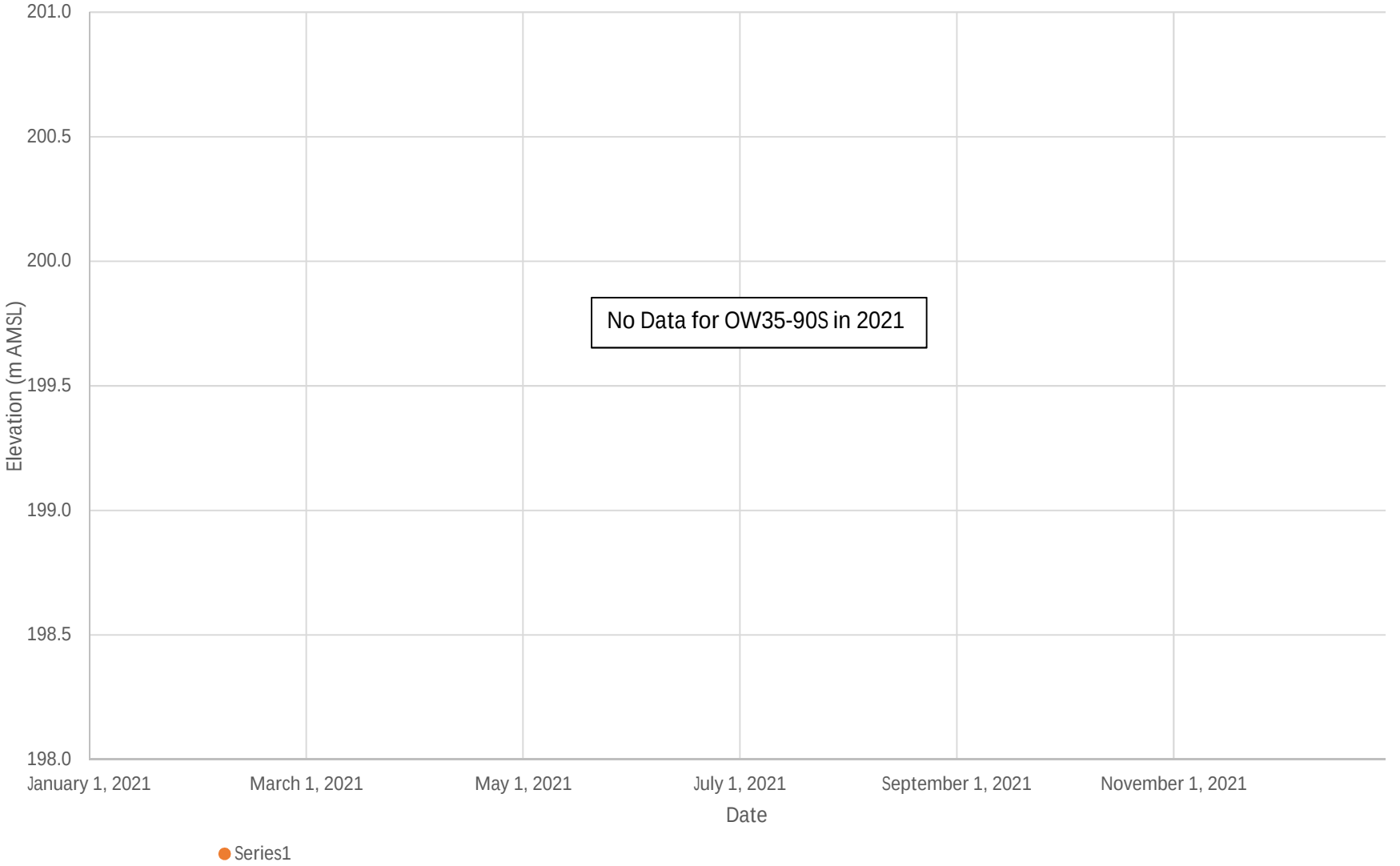

Figure B-2
Active Aquitard Hydrograph - TW22-94
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

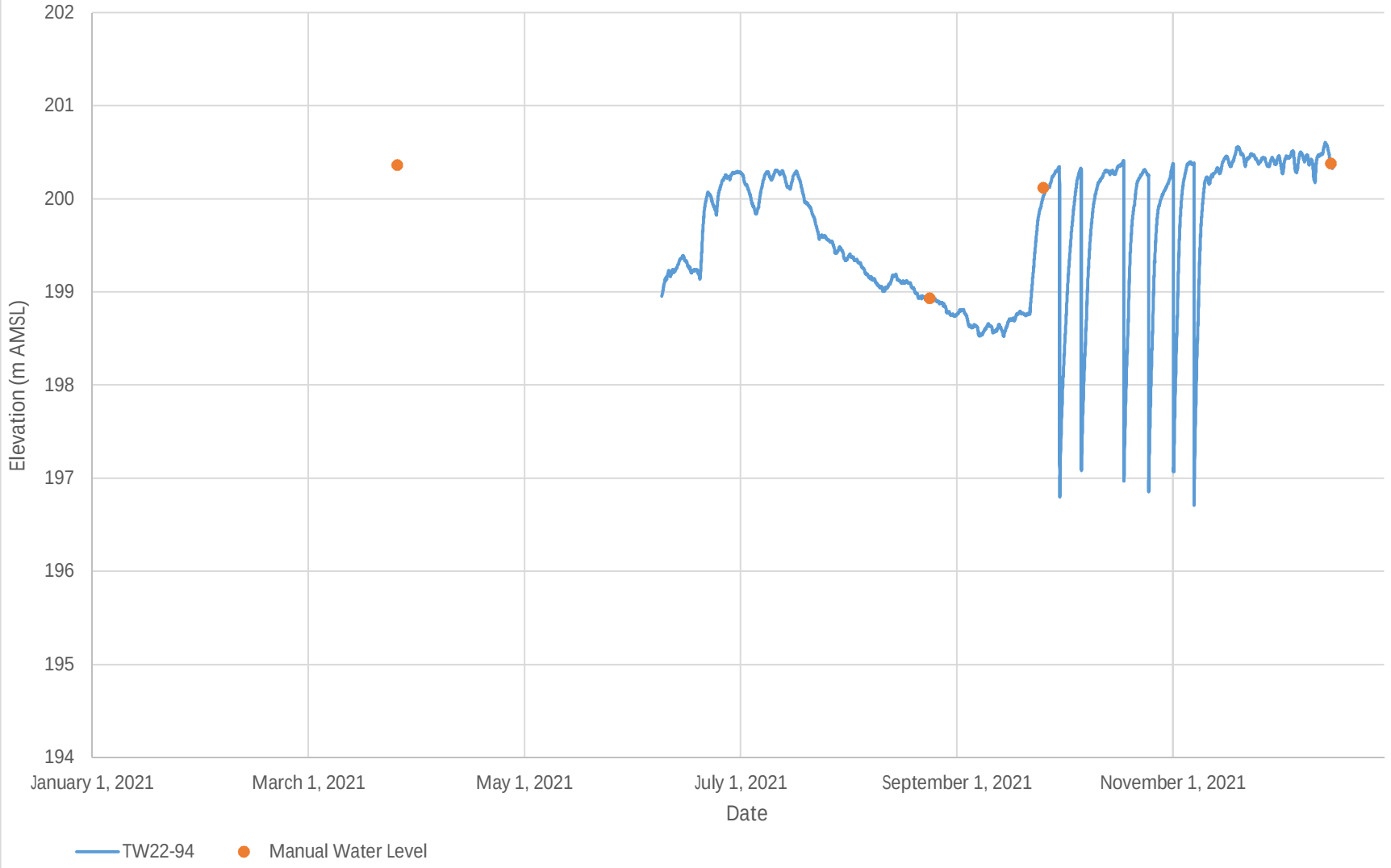

Figure B-3
Active Aquitard Hydrograph - TW30-94
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

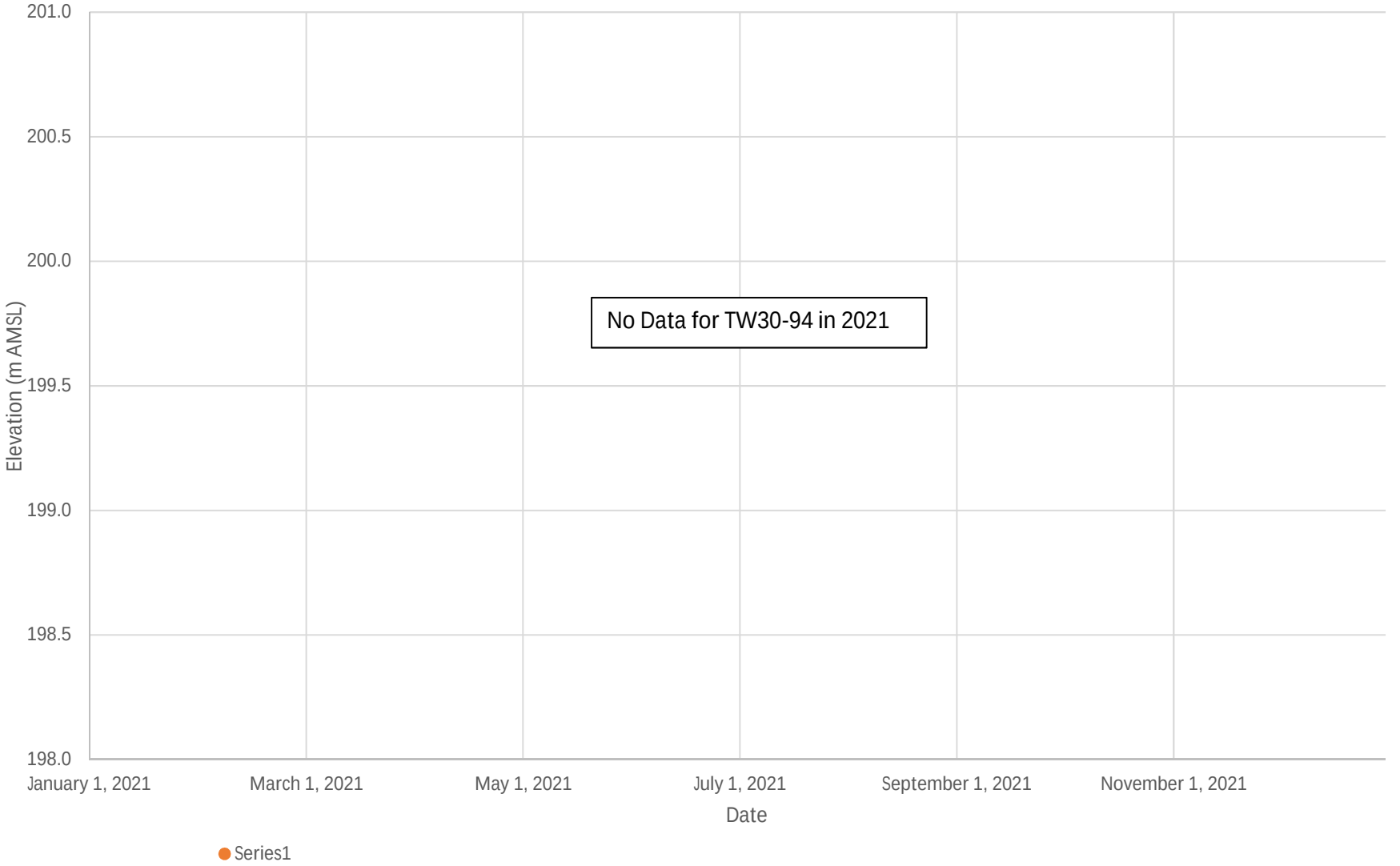

Figure B-4
Active Aquitard Hydrograph - TW39-99I
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

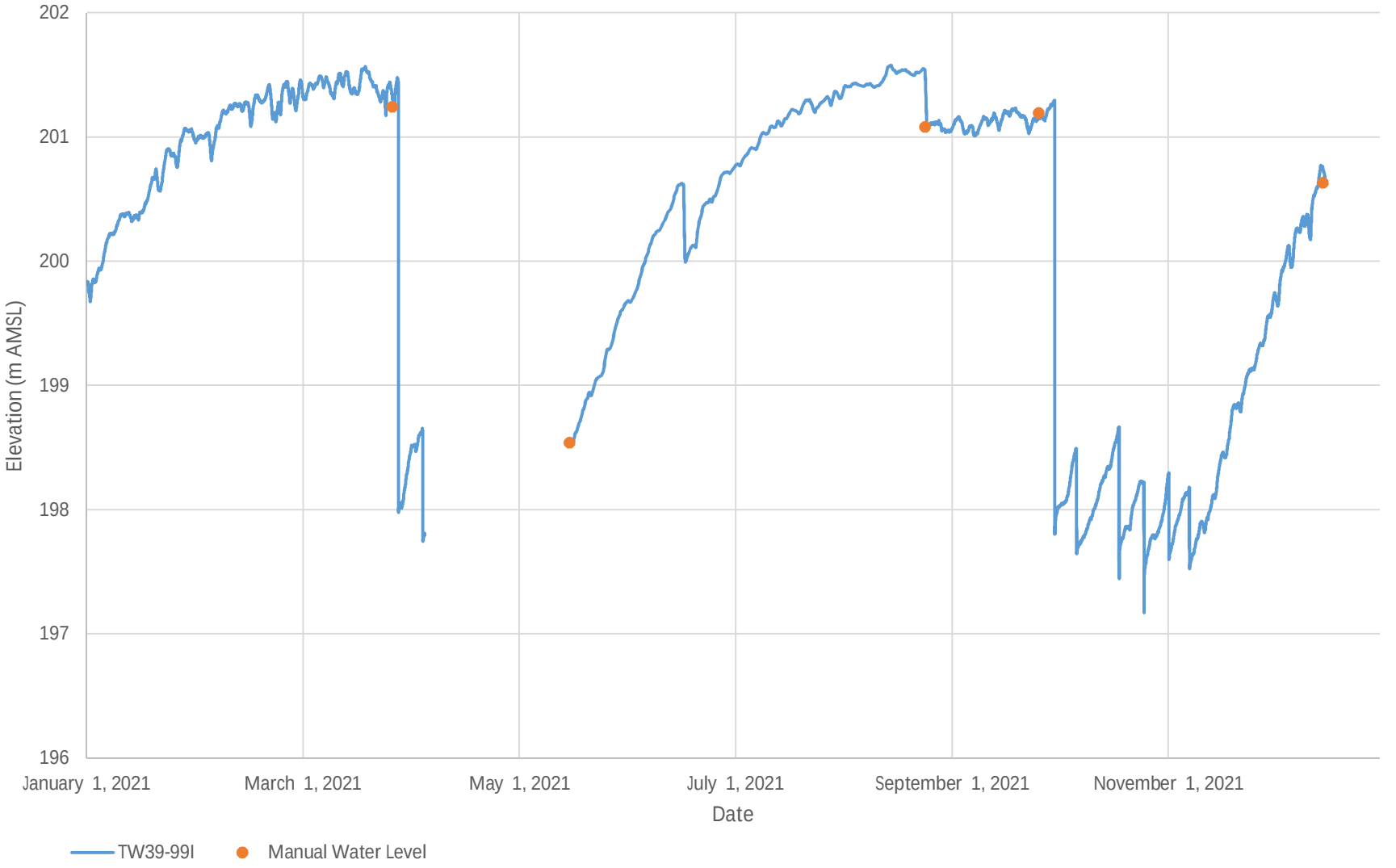

Figure B-5
Active Aquitard Hydrograph - TW42-99S
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

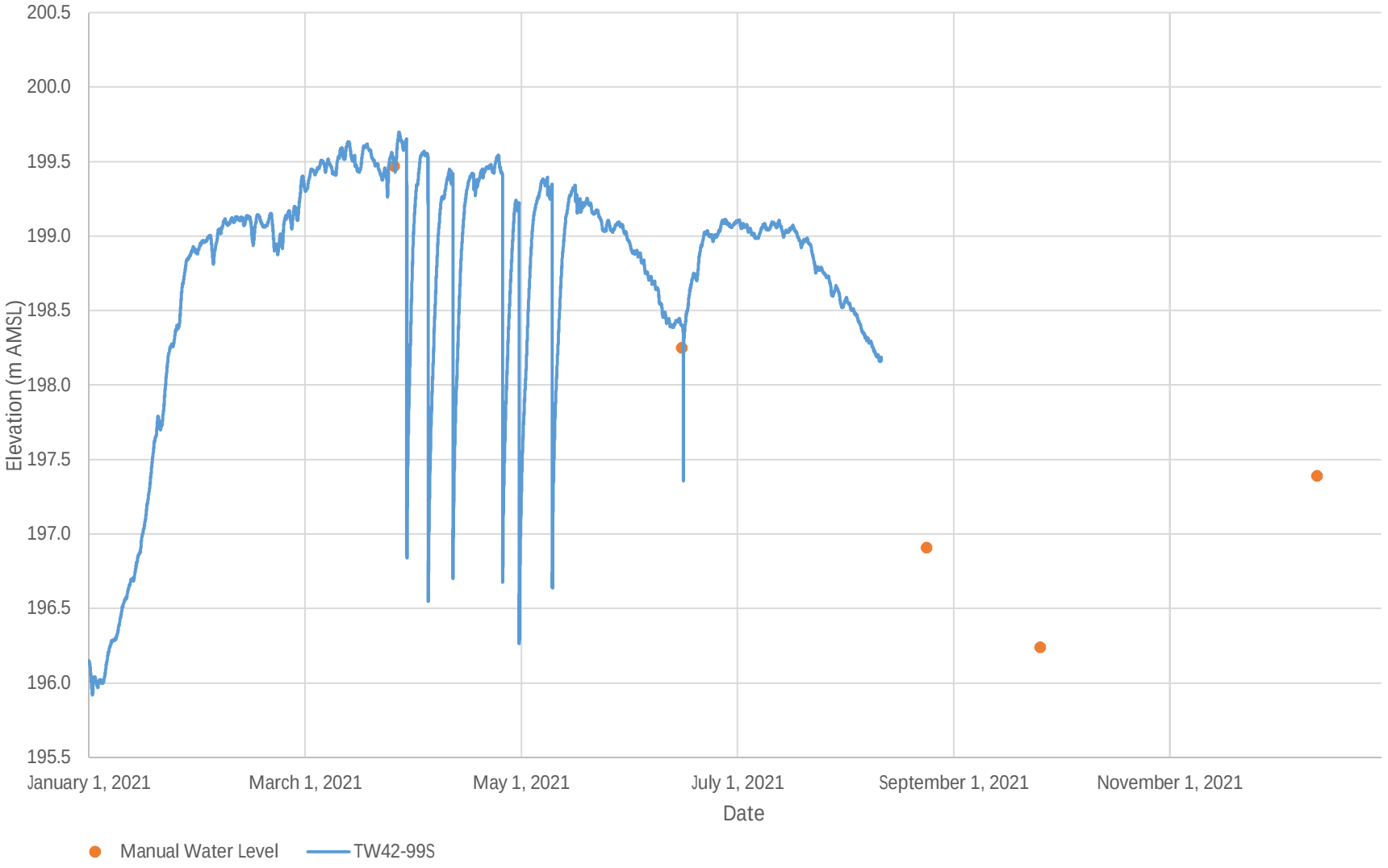

Figure B-6
Active Aquitard Hydrograph - TW48-16S
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

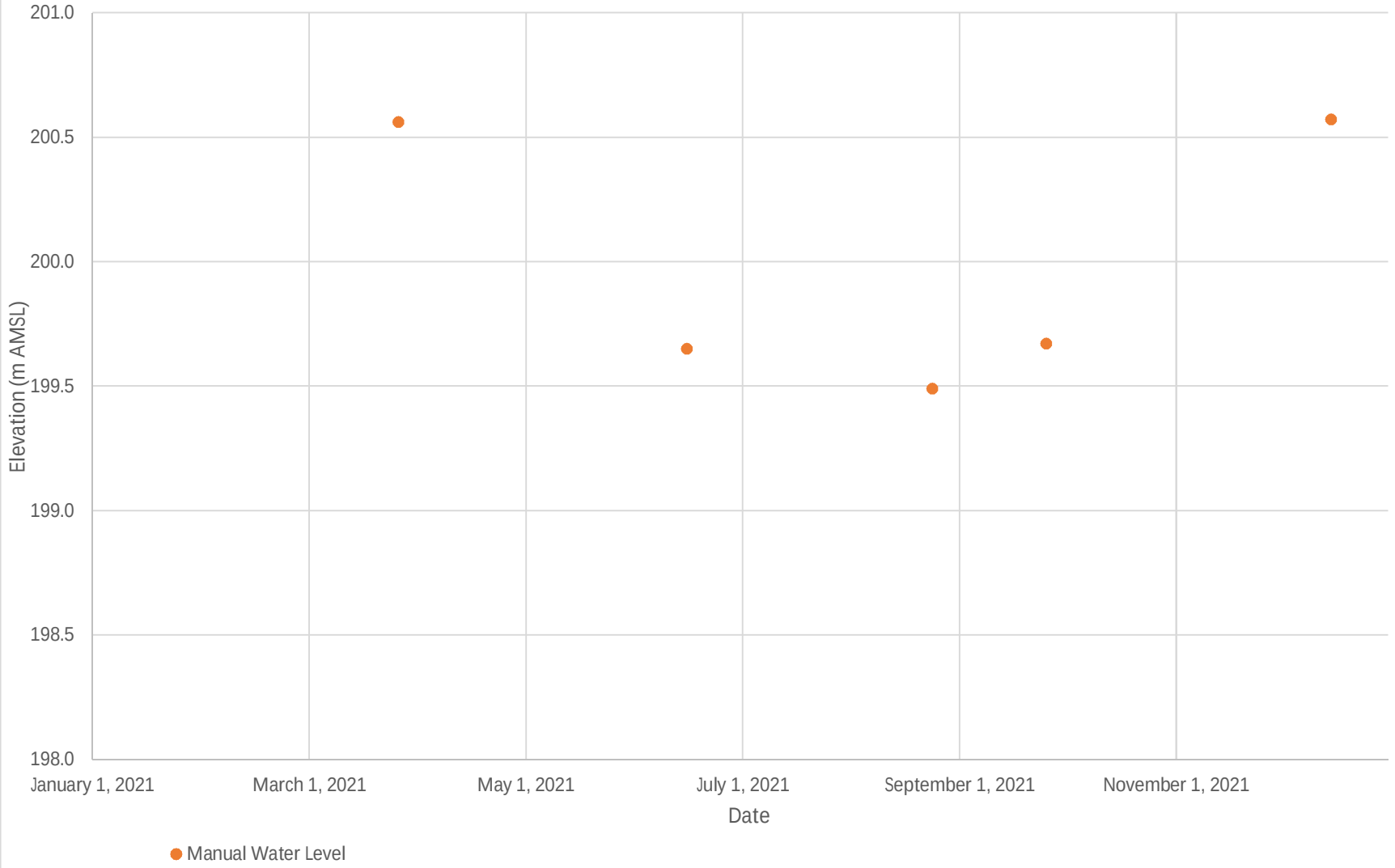

Figure B-7
Active Aquitard Hydrograph - TW61-13I
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

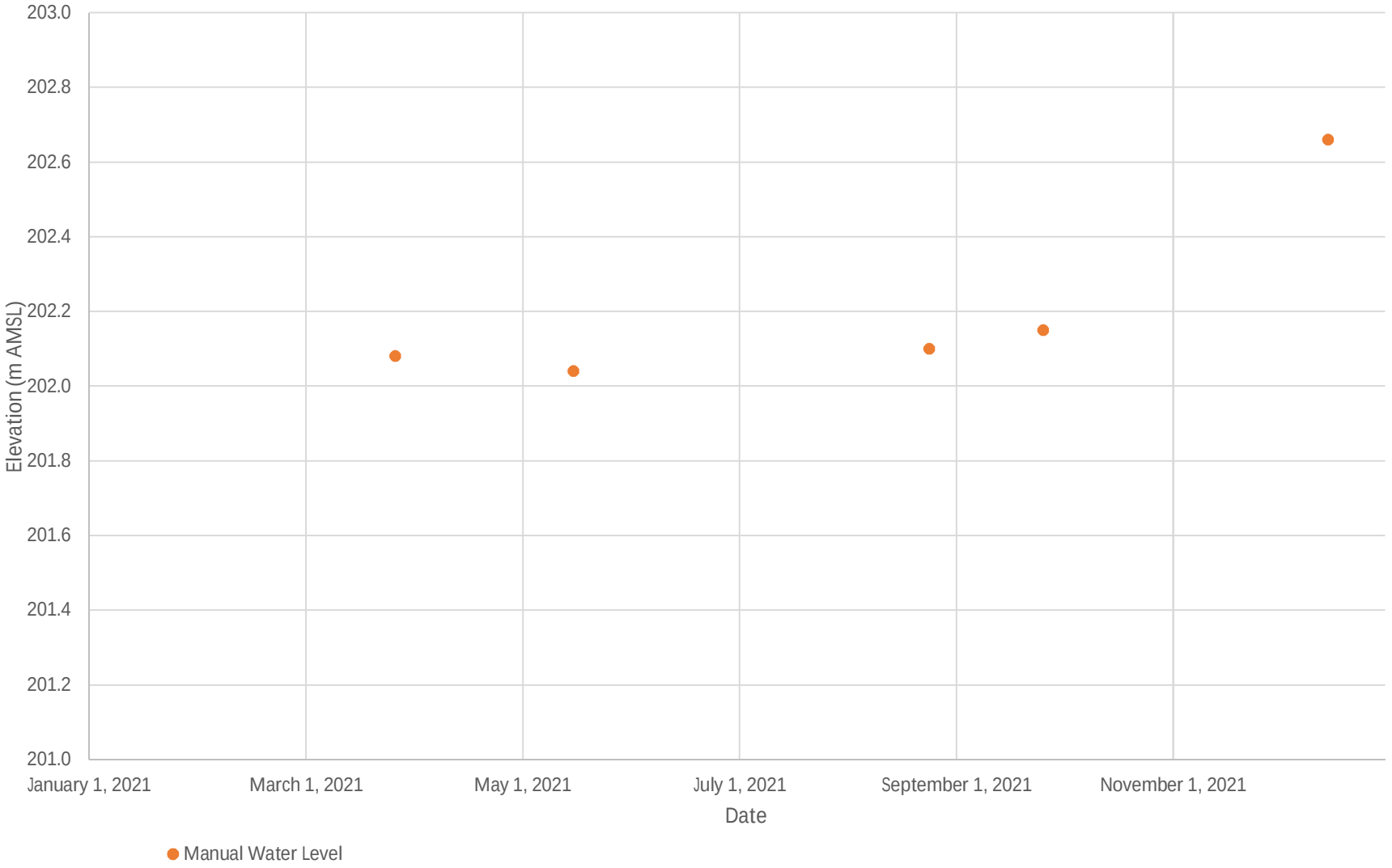

Figure B-8
Interface Aquifer Hydrograph - OW35-5D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

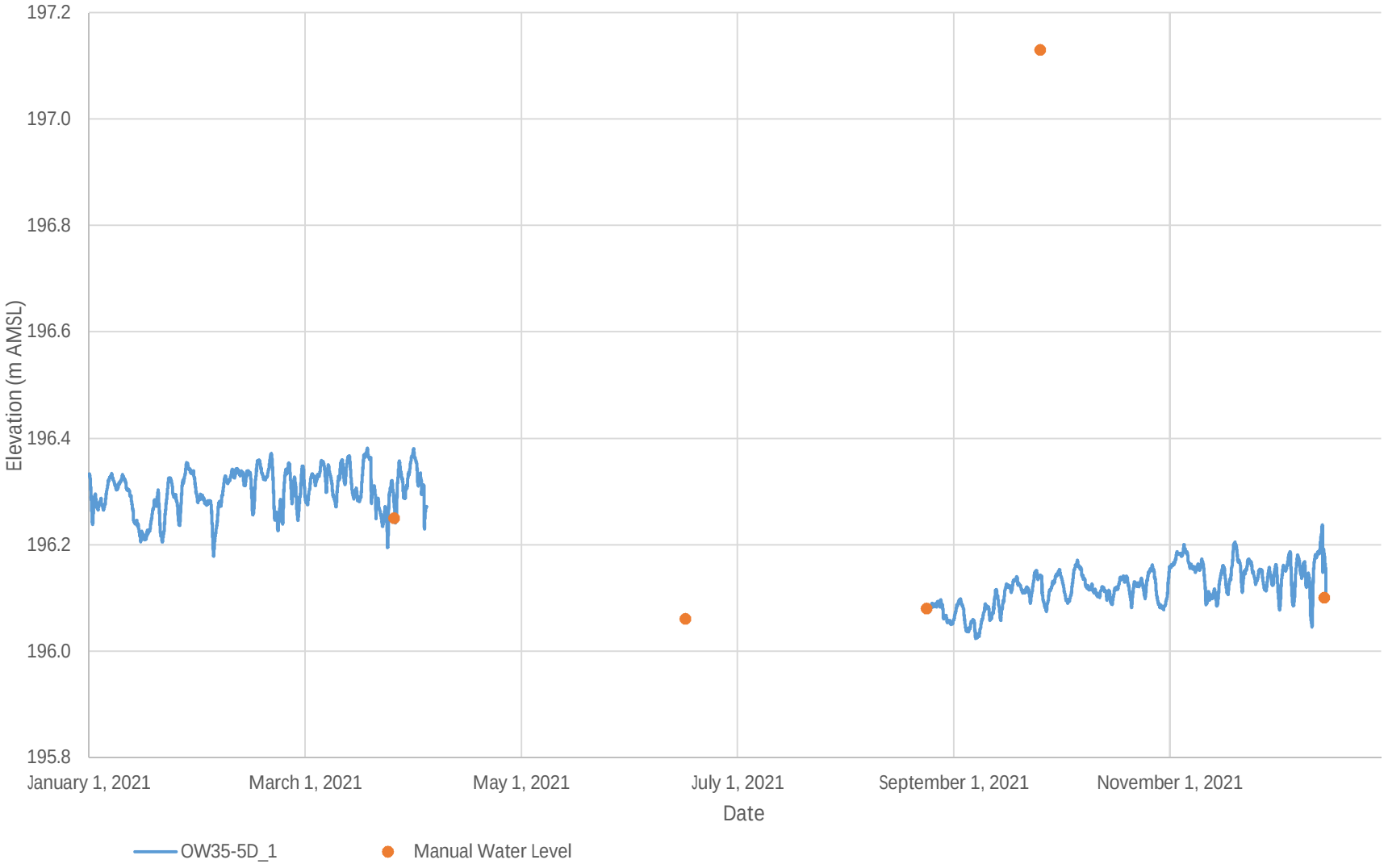

Figure B-9
Interface Aquifer Hydrograph - PW1-N
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

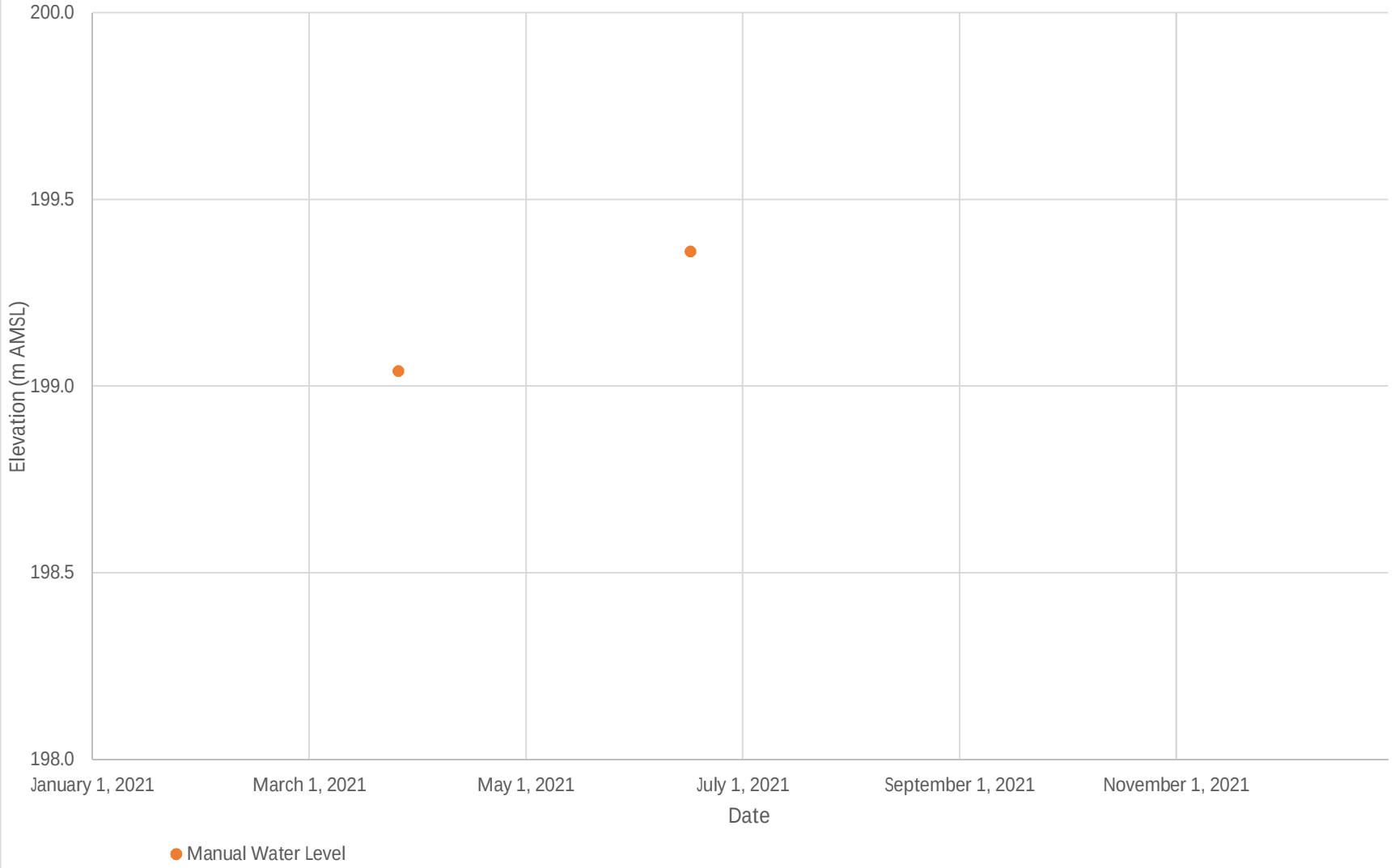

Figure B-10
Interface Aquifer Hydrograph - PW2-S(R11)
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

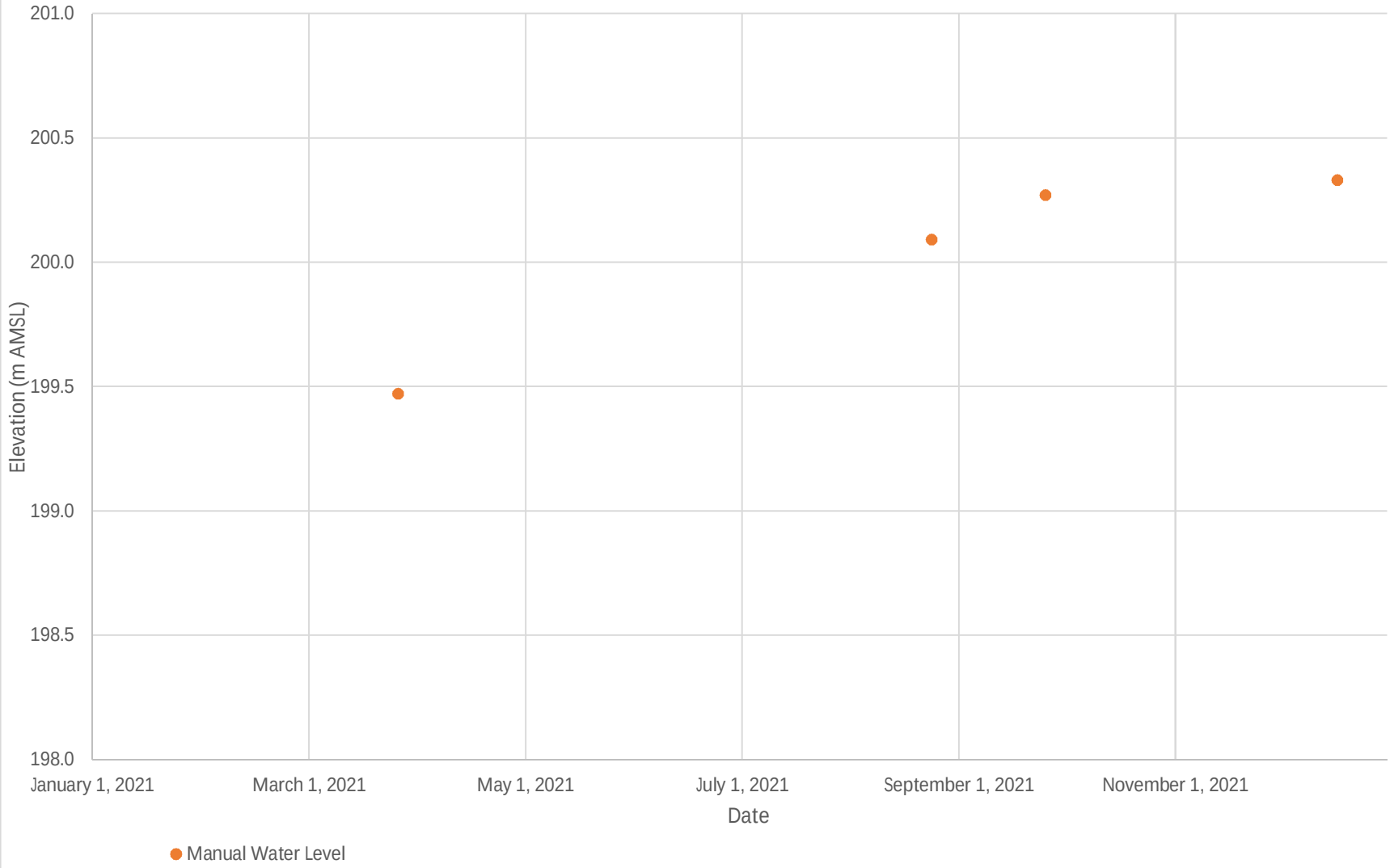

Figure B-11
Interface Aquifer Hydrograph - TW30-99D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

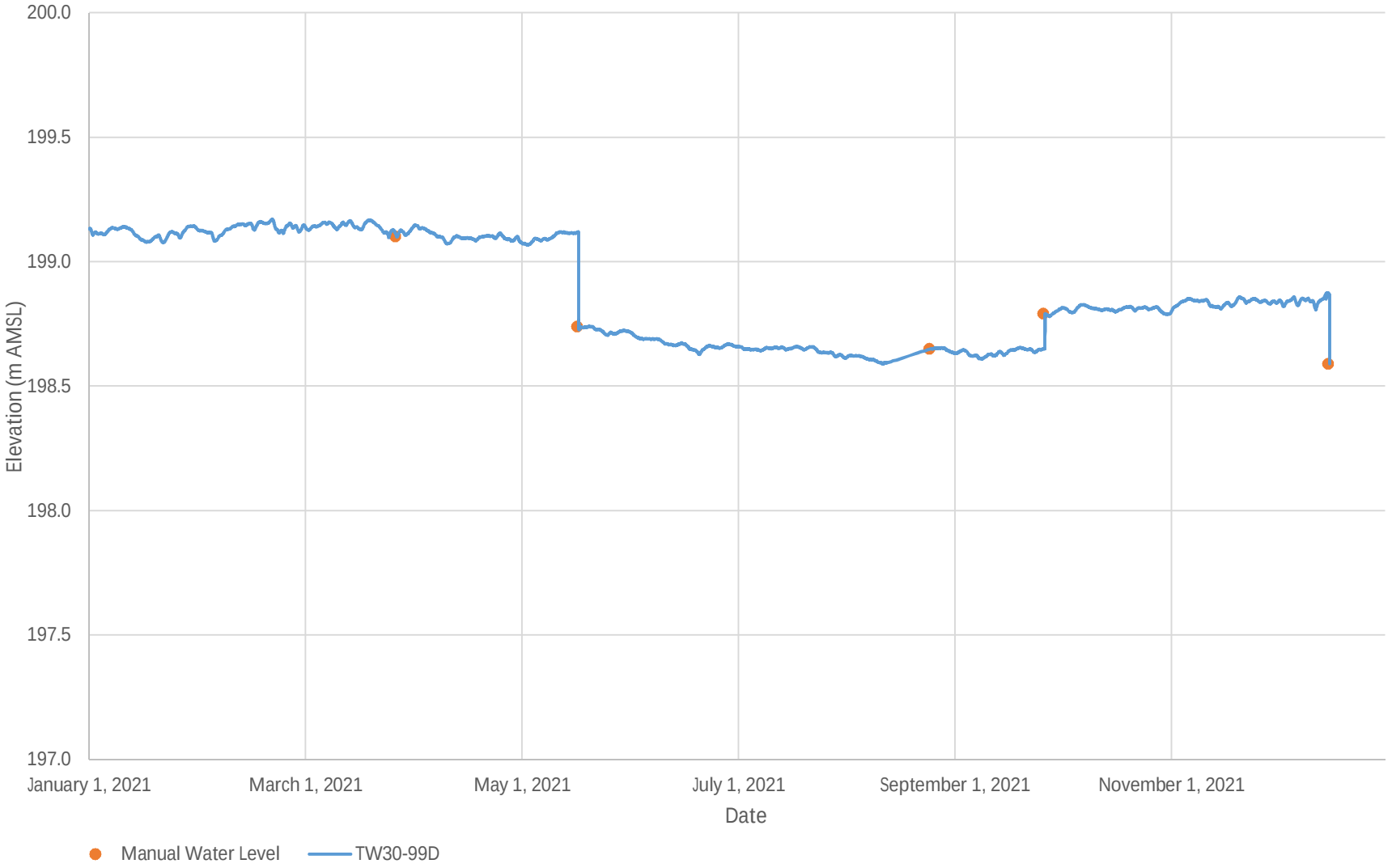

Figure B-12
Interface Aquifer Hydrograph - TW32-94-II
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

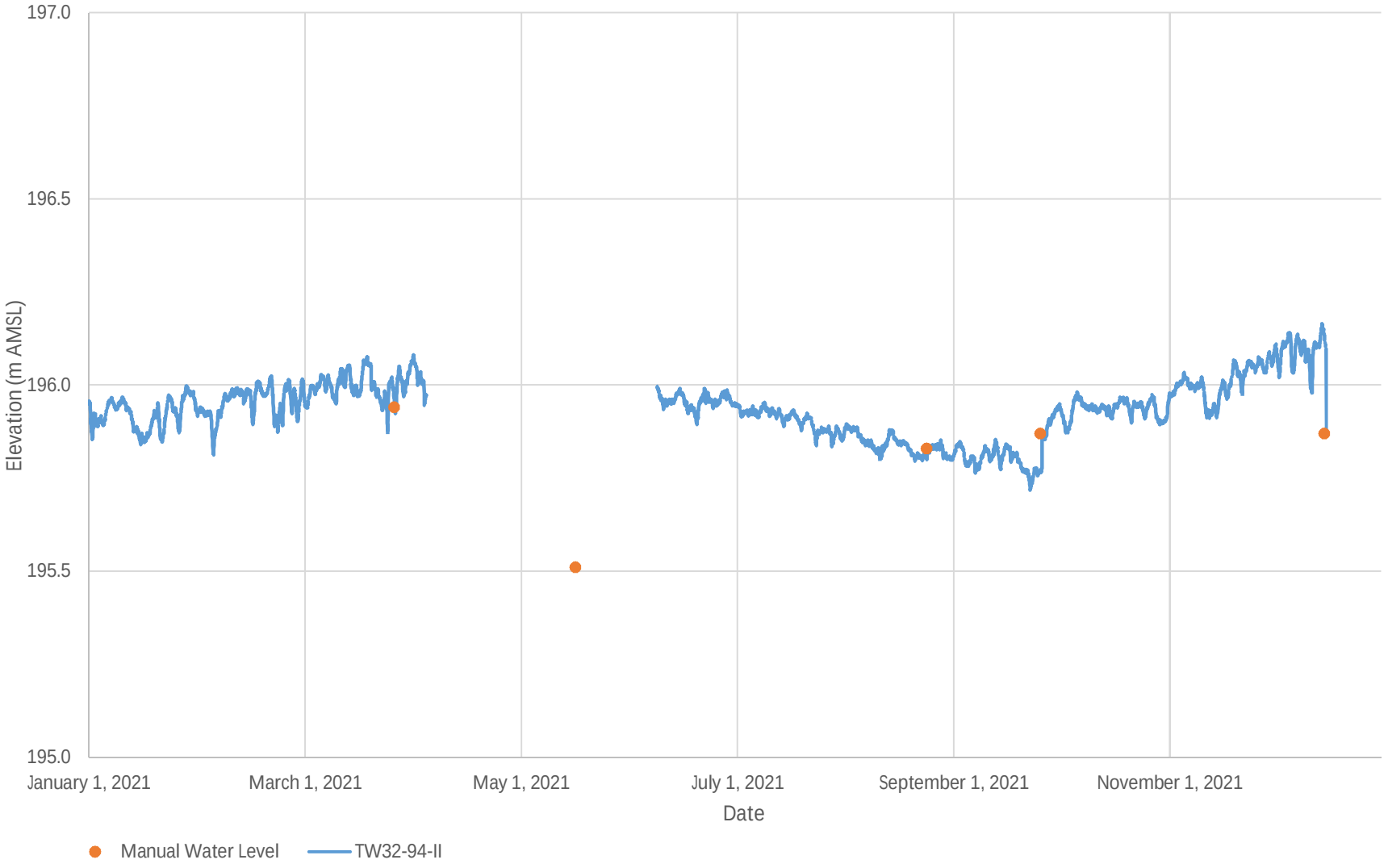

Figure B-13
Interface Aquifer Hydrograph - TW40-99D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

Figure B-14
Interface Aquifer Hydrograph - TW48-00D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

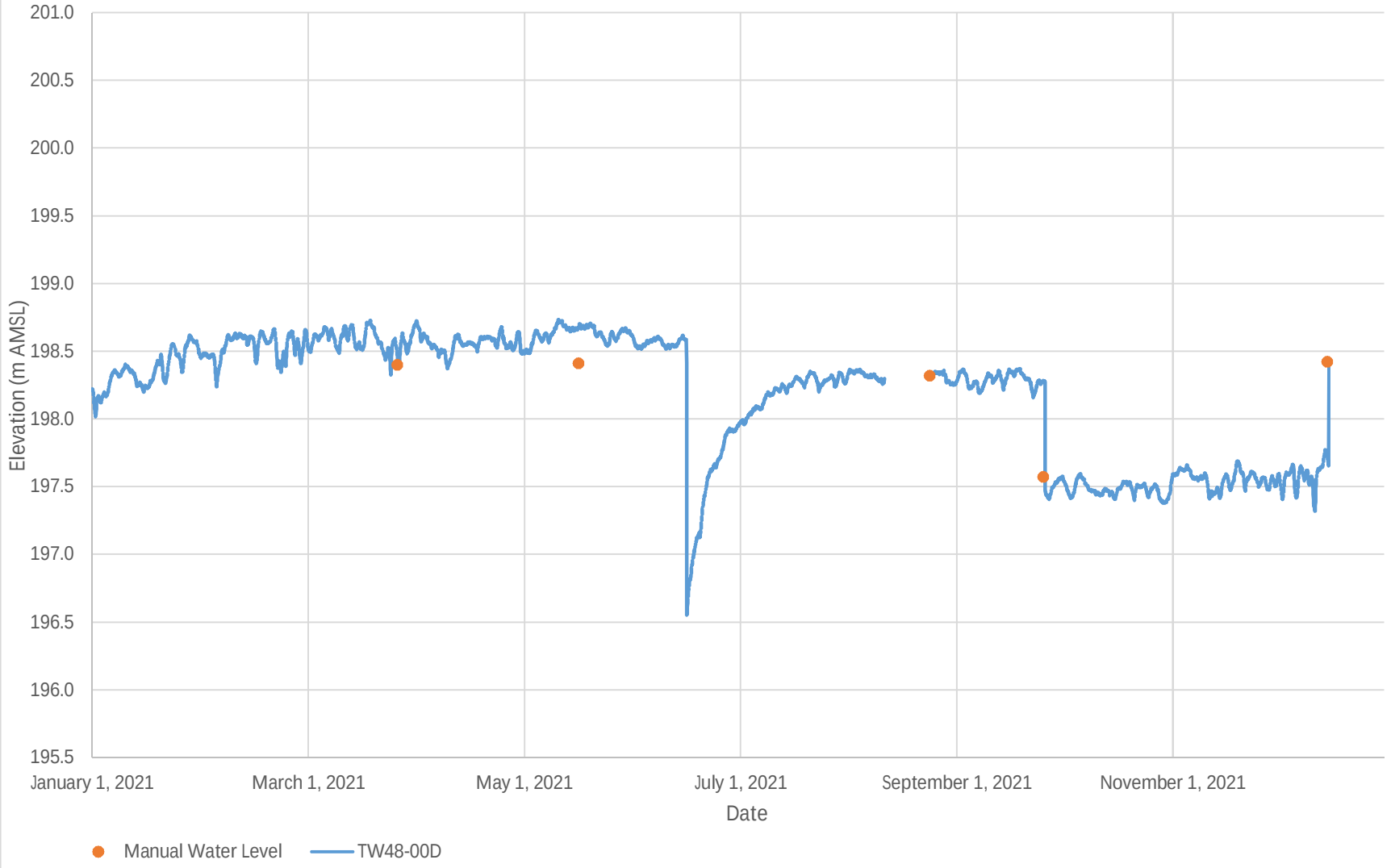

Figure B-15
Interface Aquifer Hydrograph - TW49-00D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

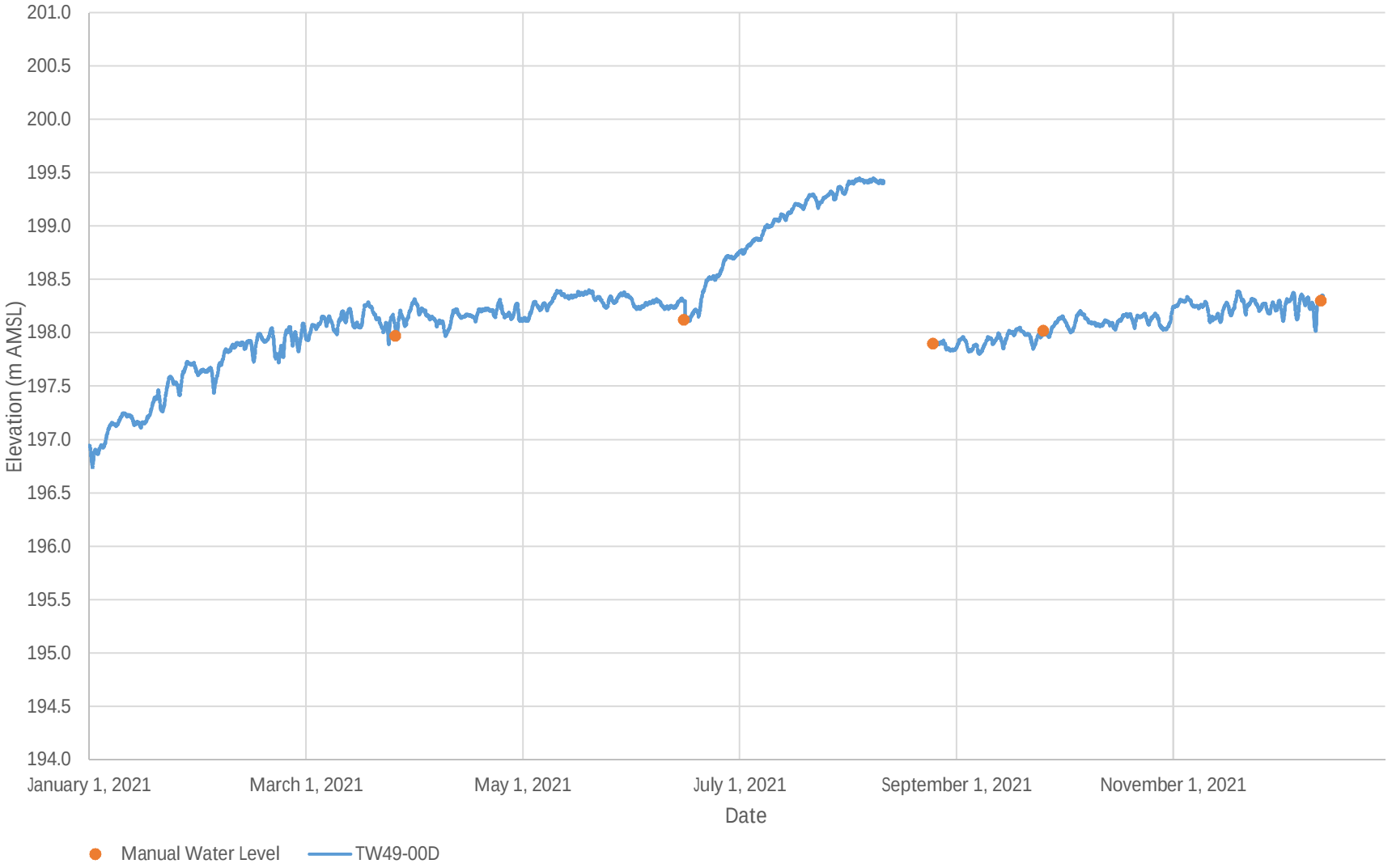

Figure B-16
Interface Aquifer Hydrograph - TW54-09D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

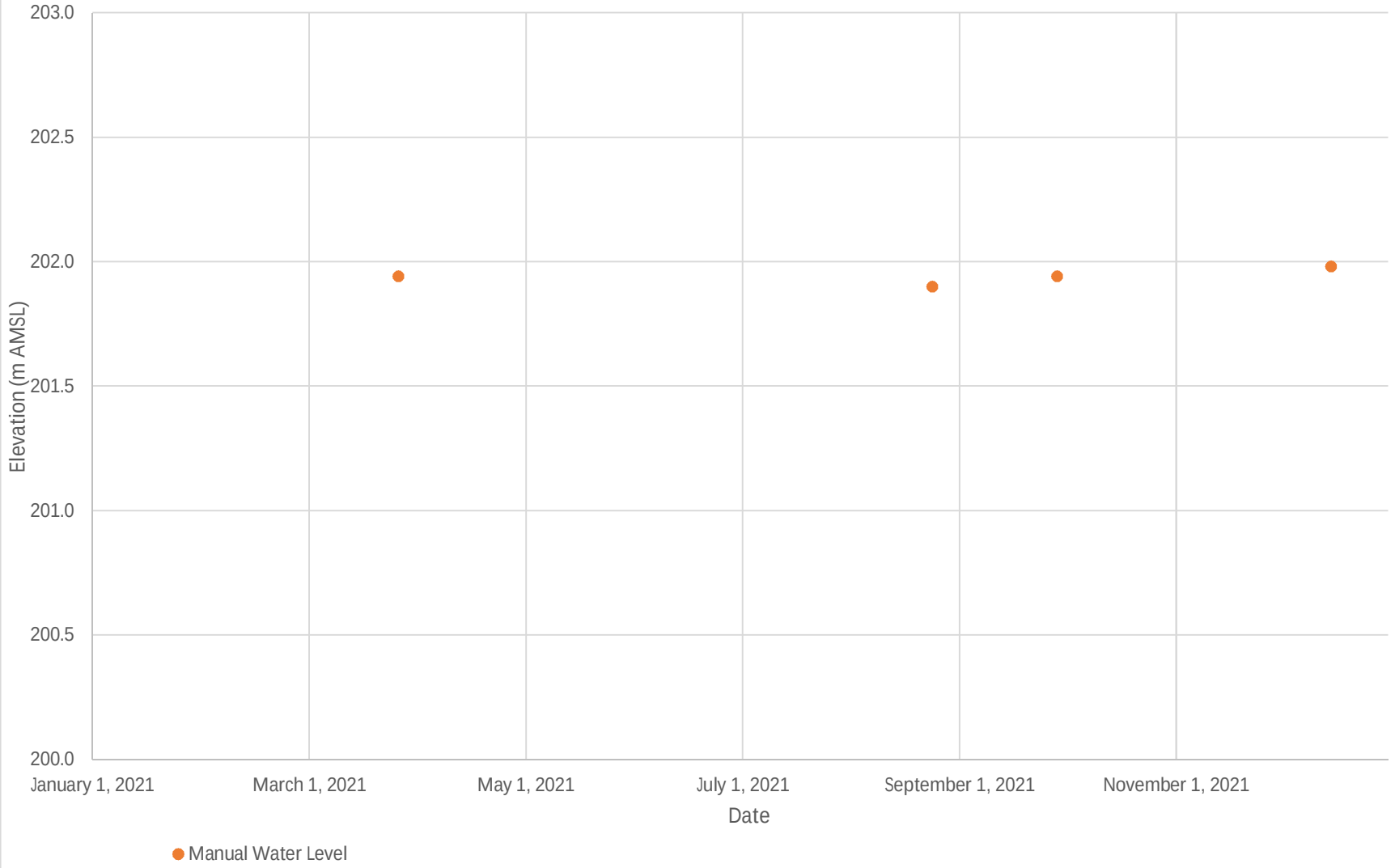

Figure B-17
Interface Aquifer Hydrograph - TW61-13D
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

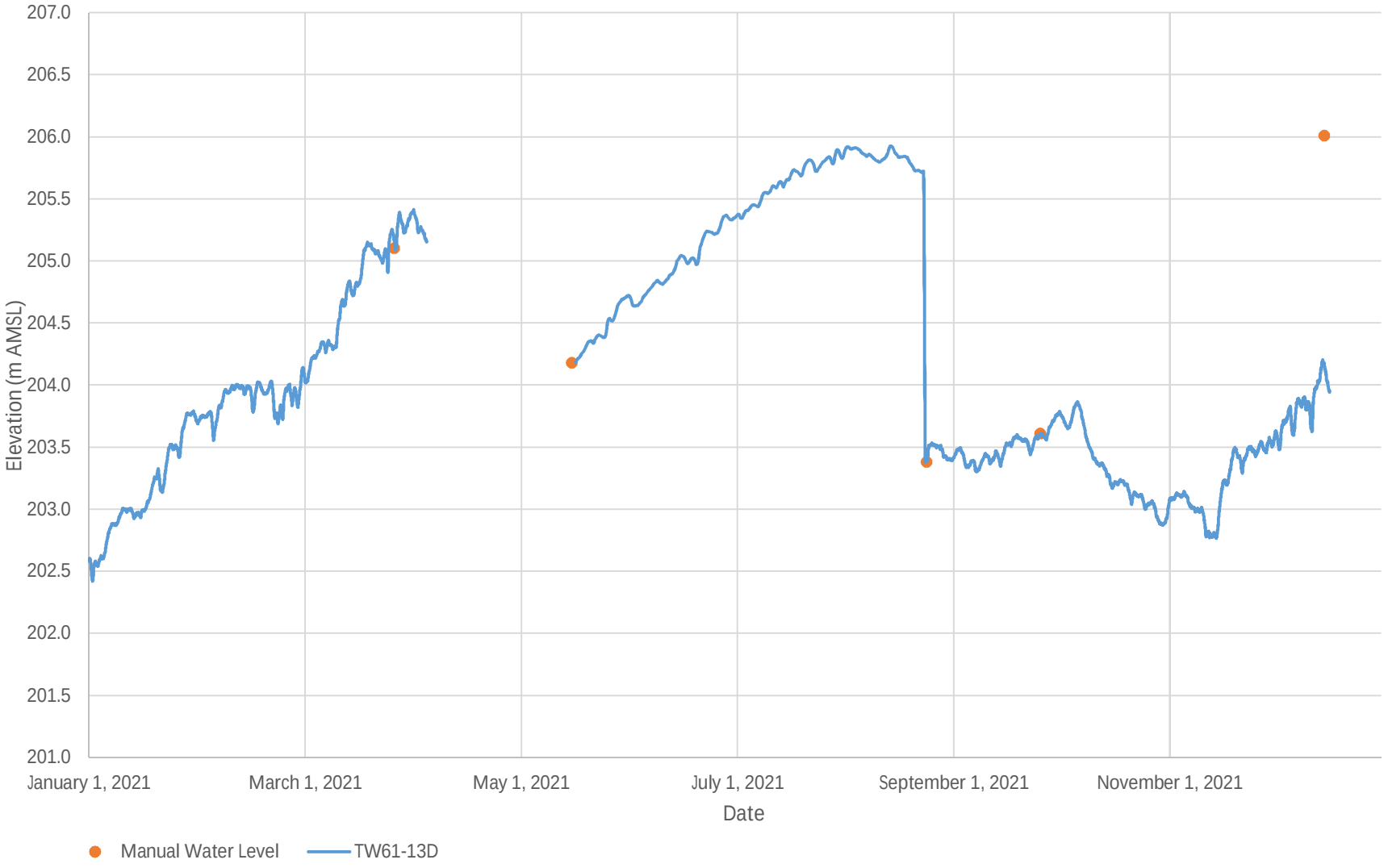

Figure B-18
Sub-Cell 3 Hydraulic Control Layer Hydrograph - EW1b-13
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

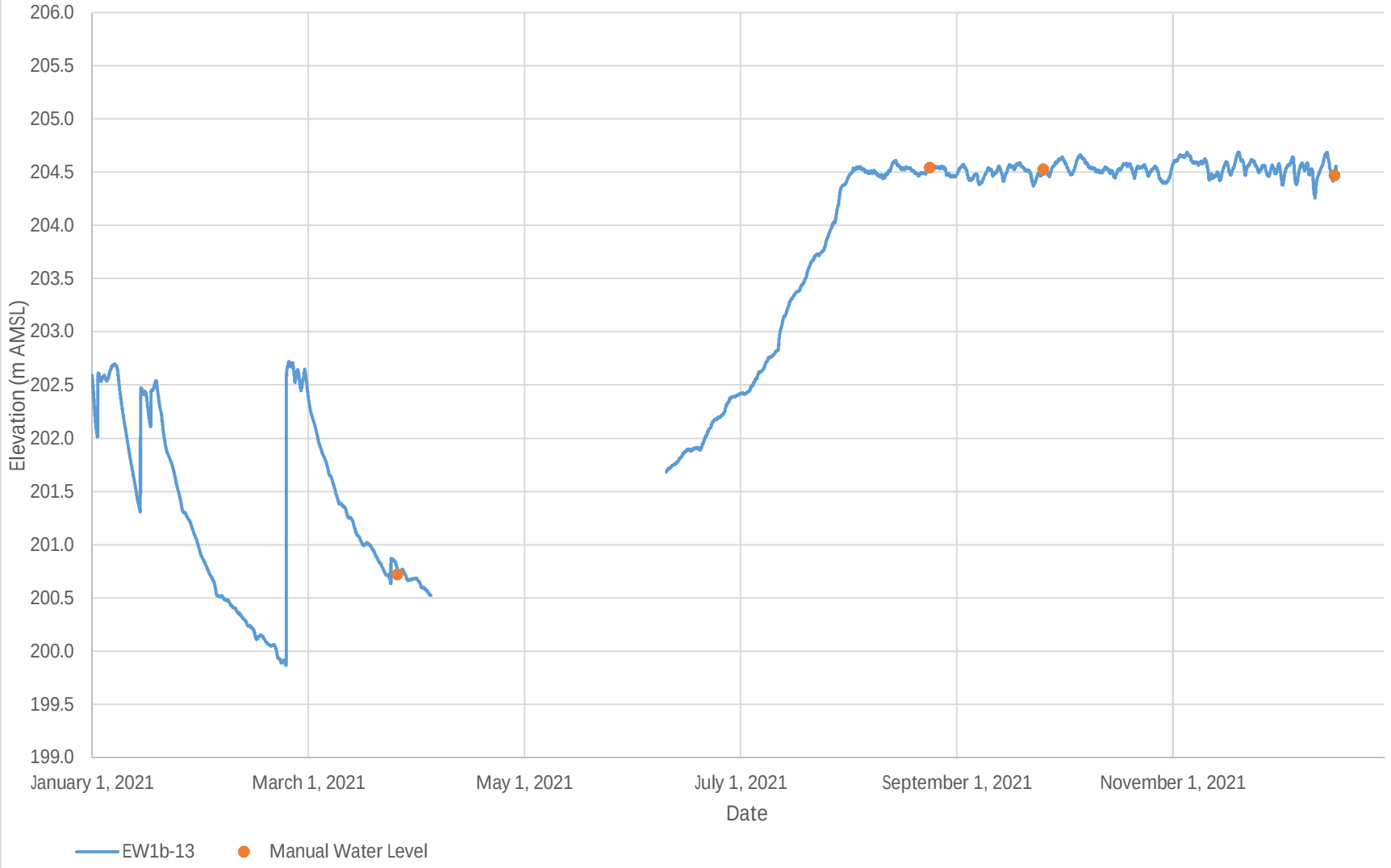

Figure B-19
Sub-Cell 3 Hydraulic Control Layer Hydrograph - EW1c-13
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

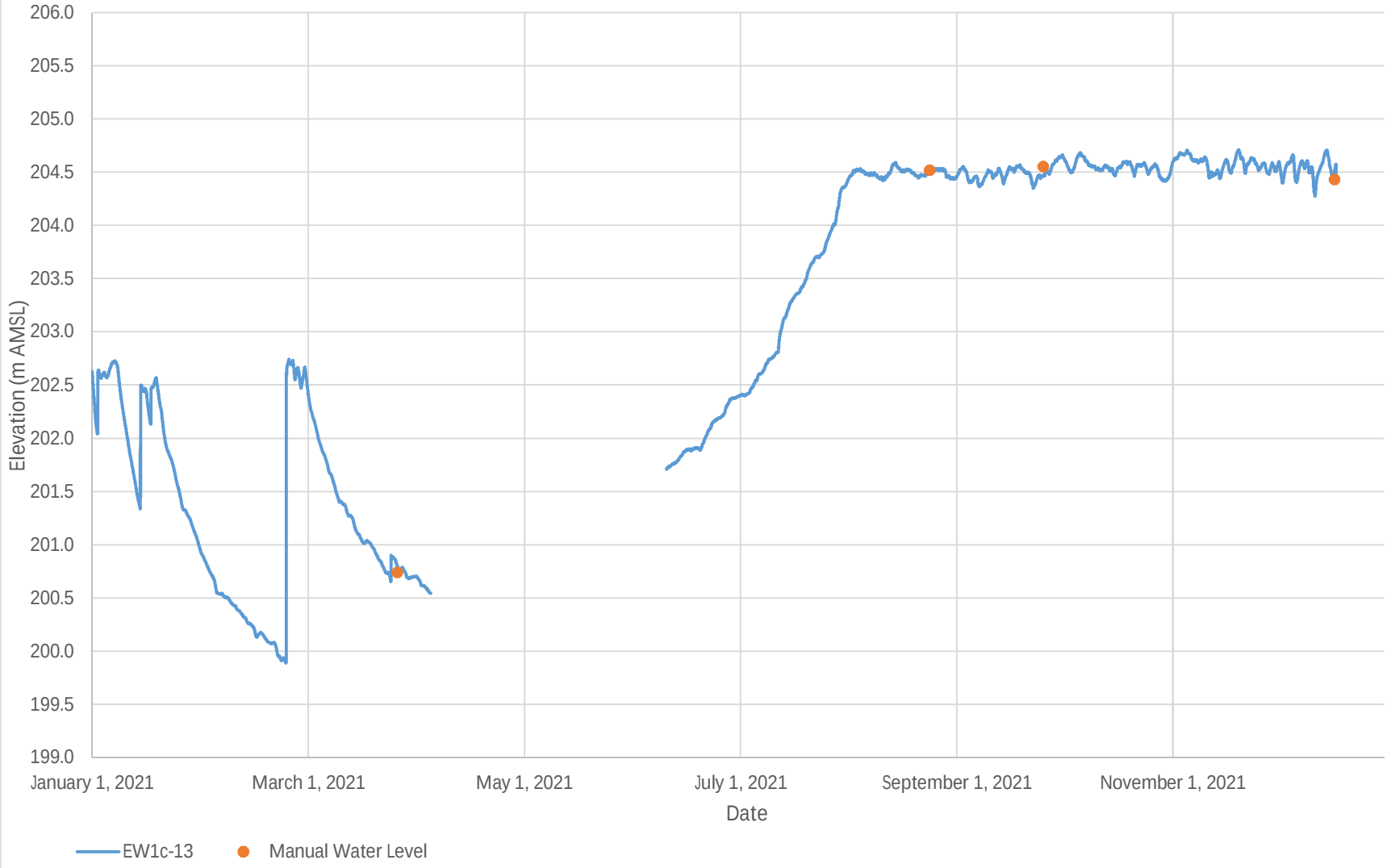

Figure B-20
Sub-Cell 3 Hydraulic Control Layer Hydrograph - EW2b-13
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

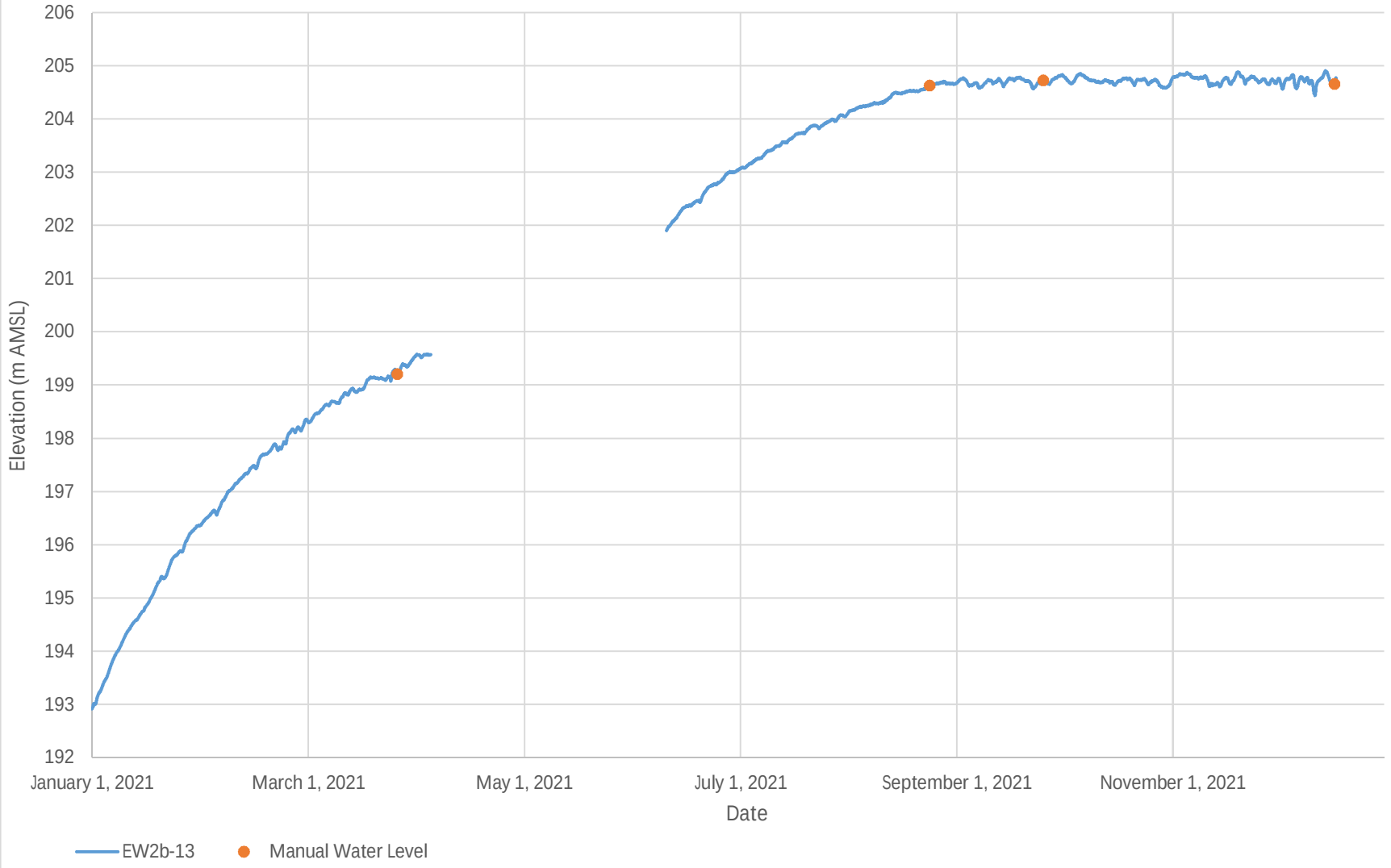

Figure B-21
Sub-Cell 3 Hydraulic Control Layer Hydrograph - EW2c-13
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

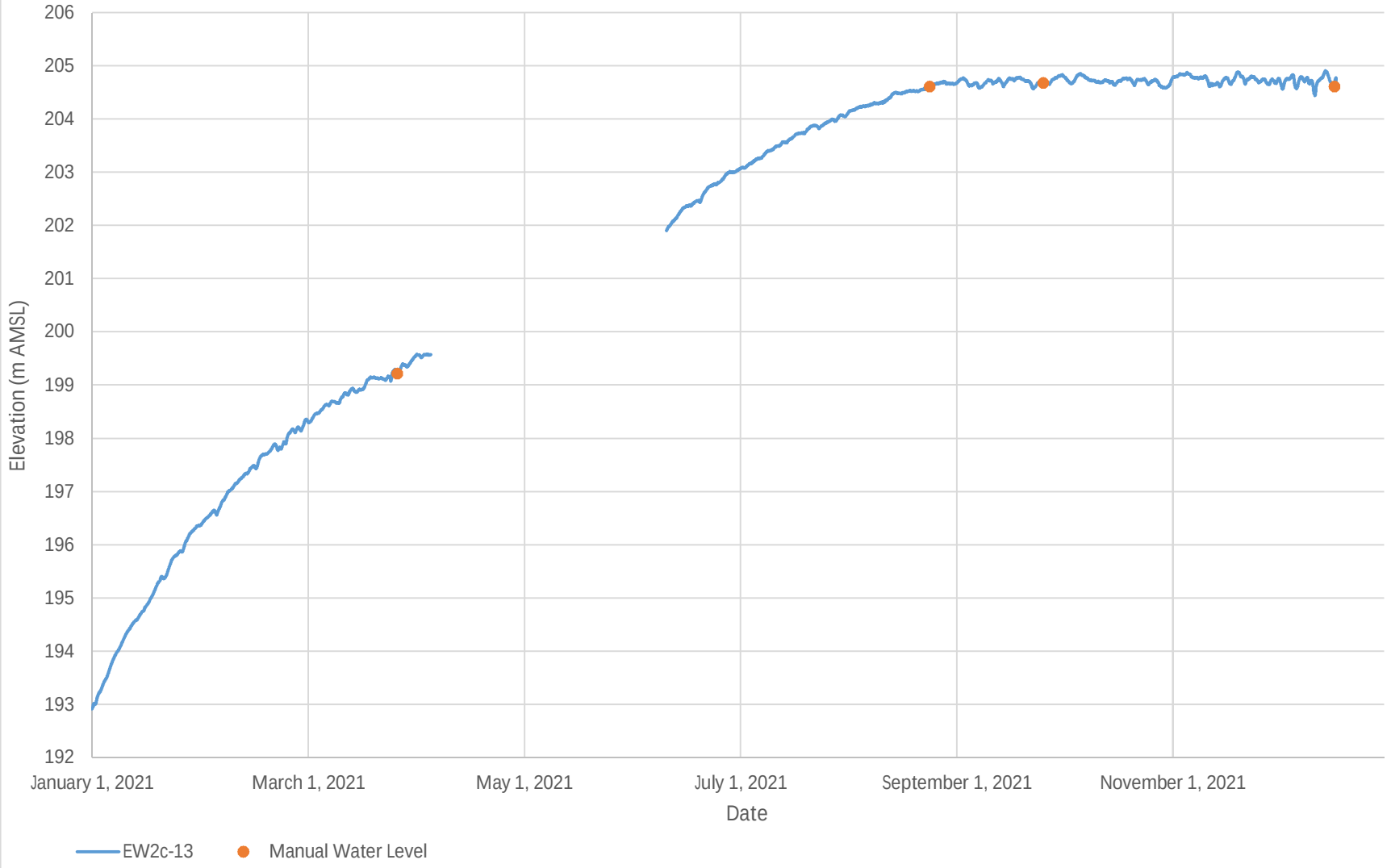

Figure B-22
Southwest Berm Transect Inactive Aquitard Hydrograph - TW64-16-I
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

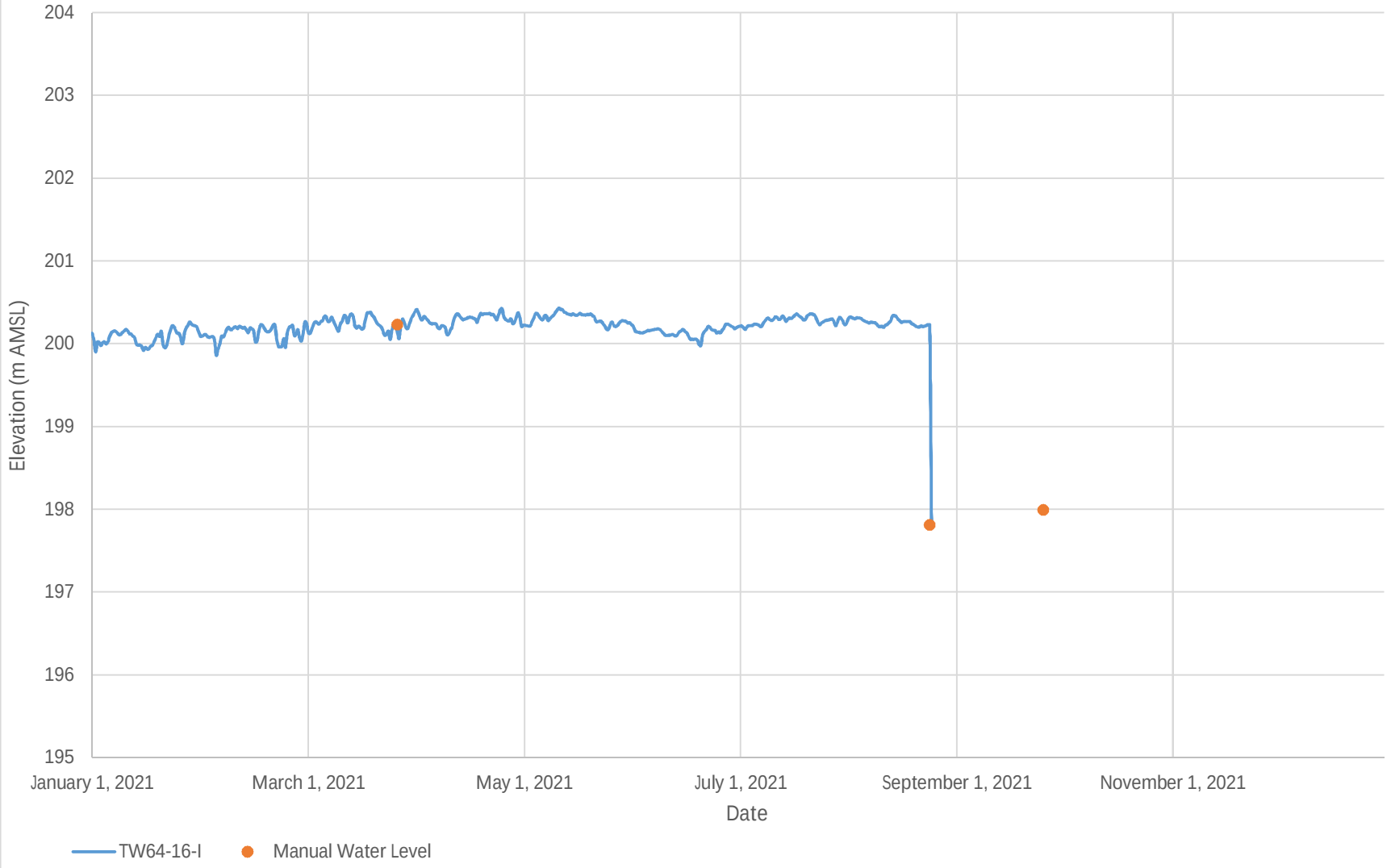

Figure B-23
Southwest Berm Transect Inactive Aquitard Hydrograph - TW64-16-II
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

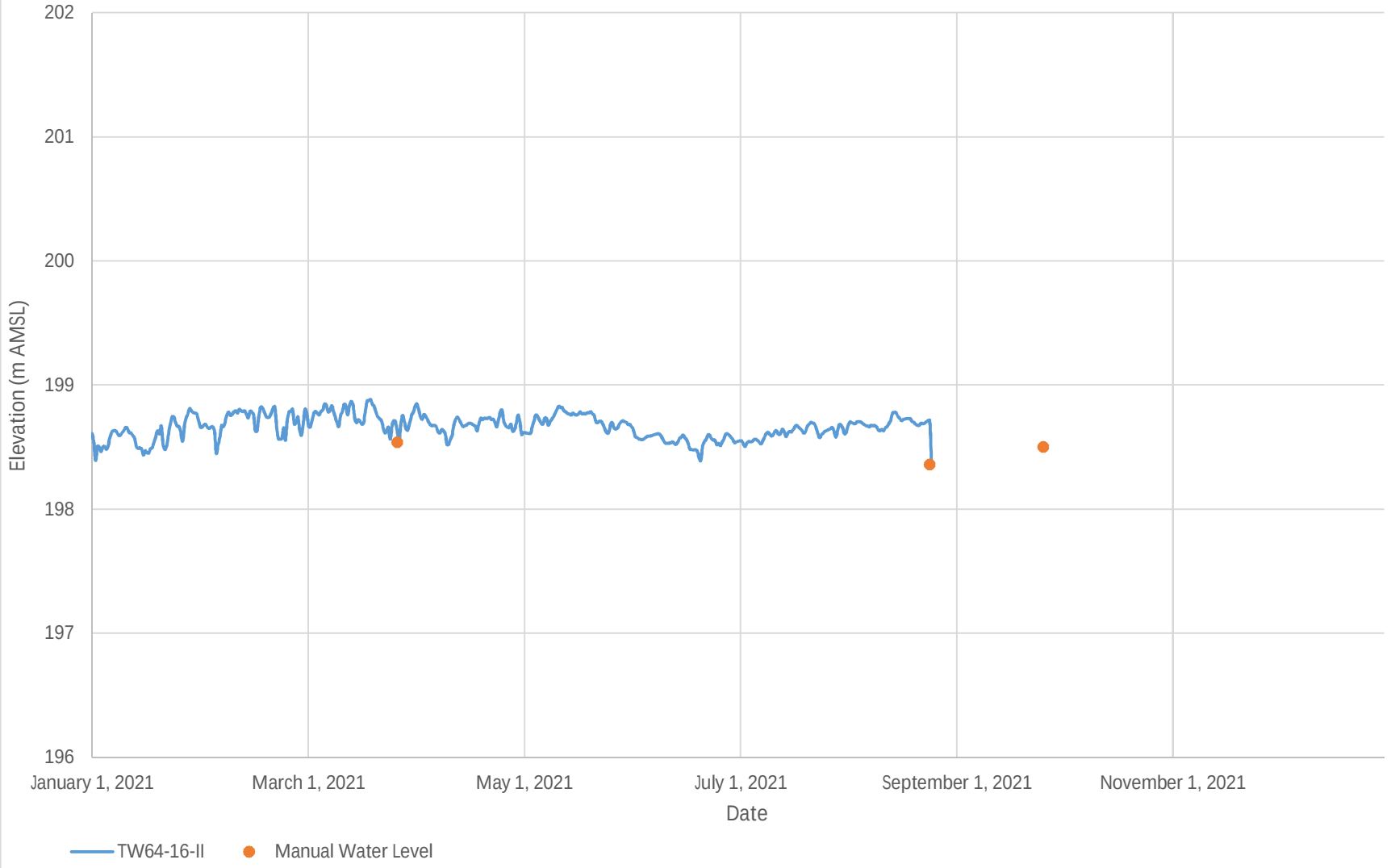

Figure B-24
Southwest Berm Transect Inactive Aquitard Hydrograph - TW64-16-III
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

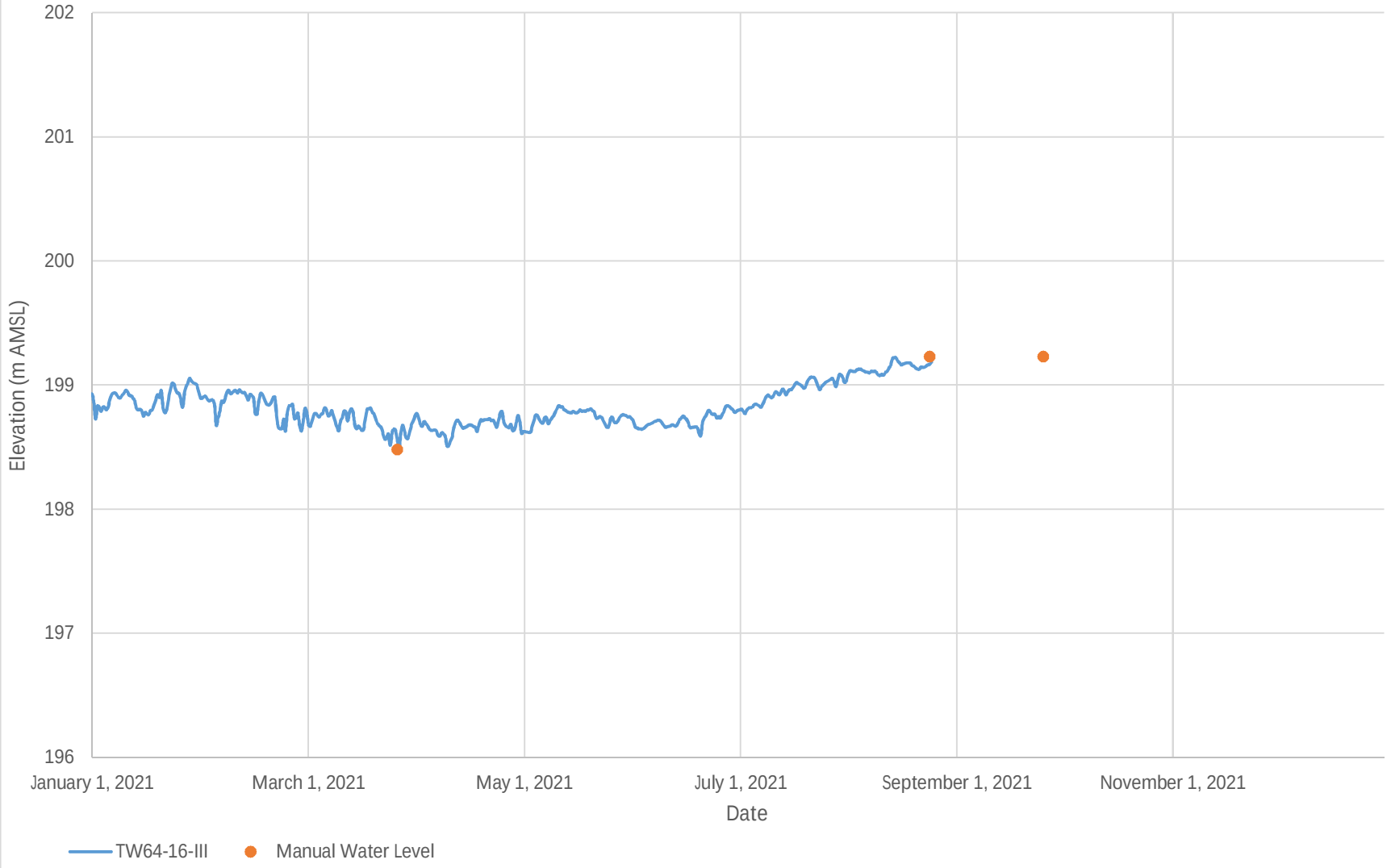

Figure B-25
Southwest Berm Transect Inactive Aquitard Hydrograph - TW64-16-IV
2021 Annual Groundwater Monitoring Report
Clean Harbors Canada Inc.
Lambton Facility

Appendix C

Historical Manual Hydrographs

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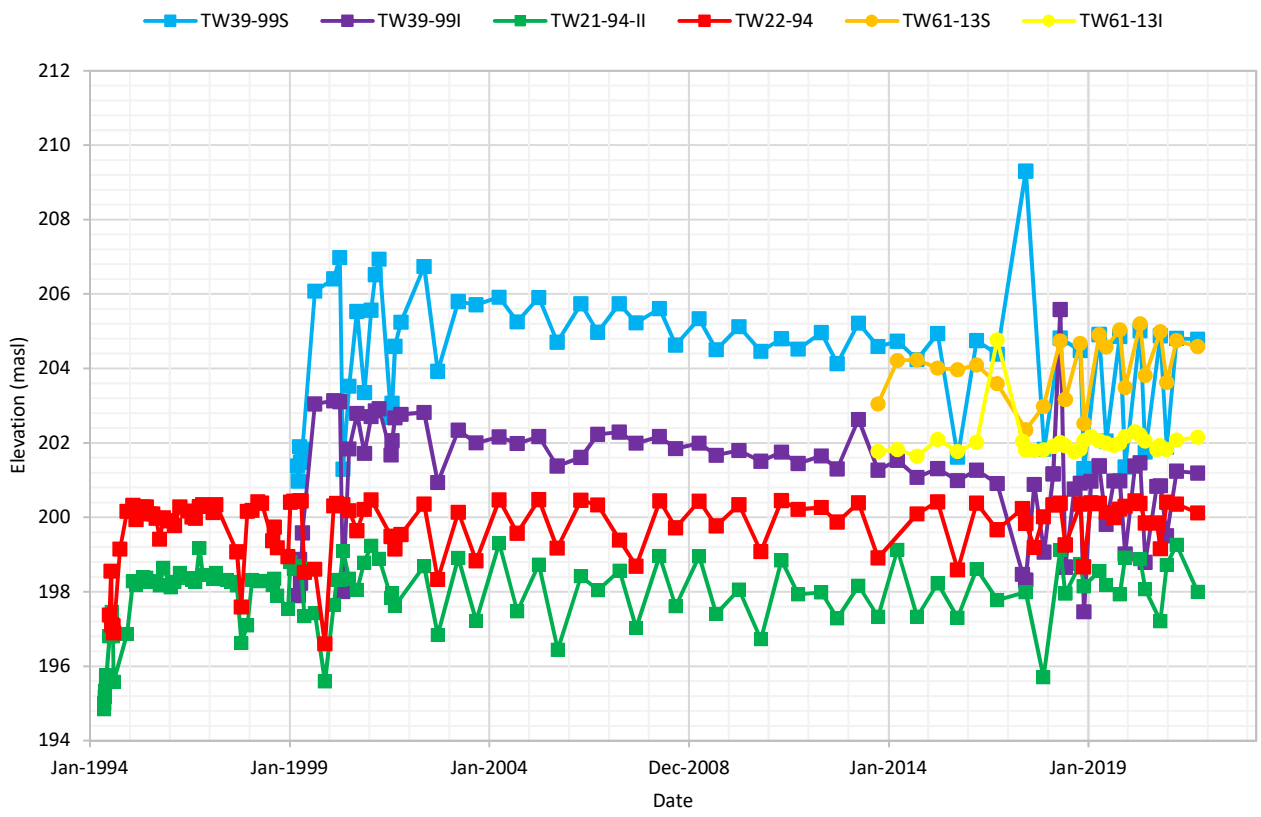
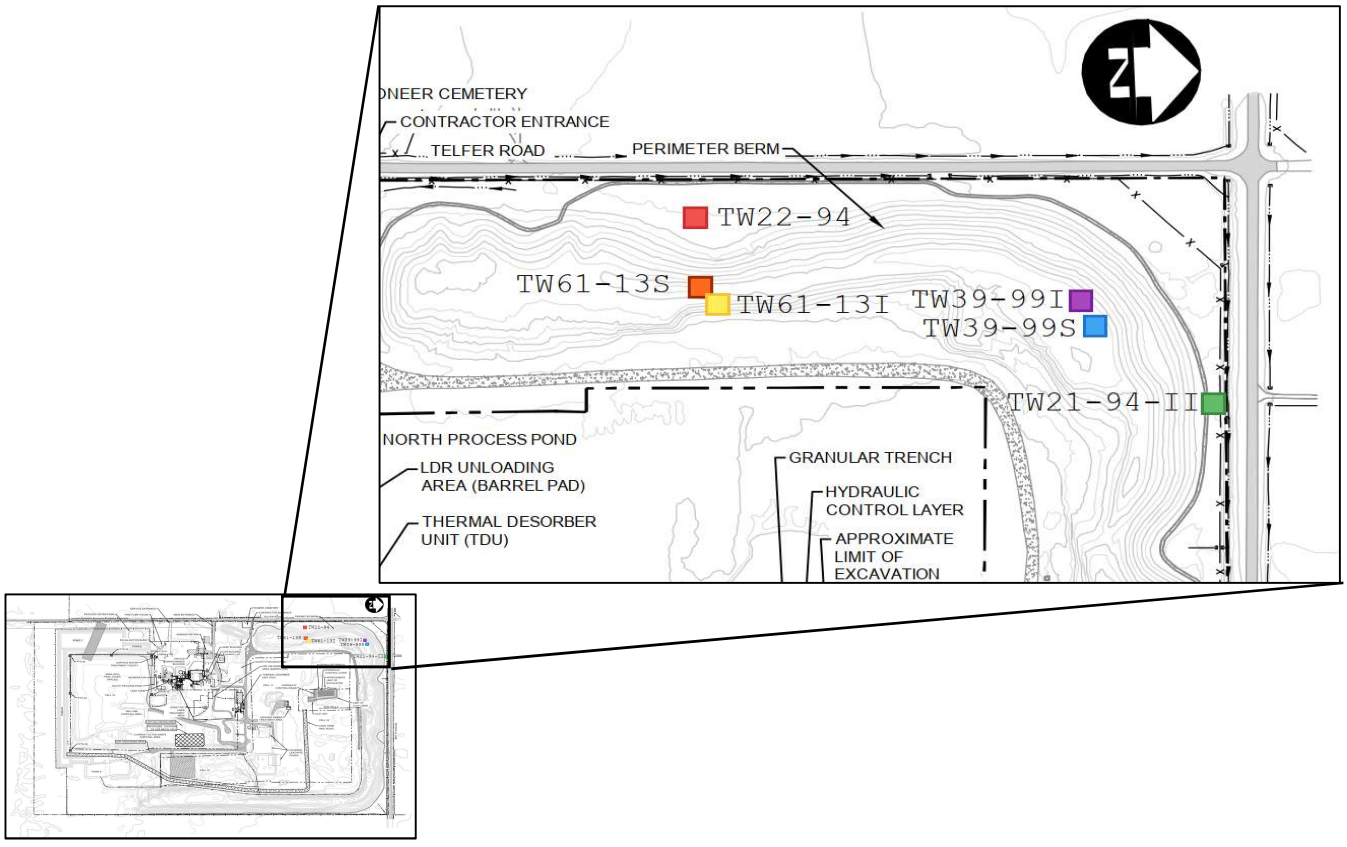
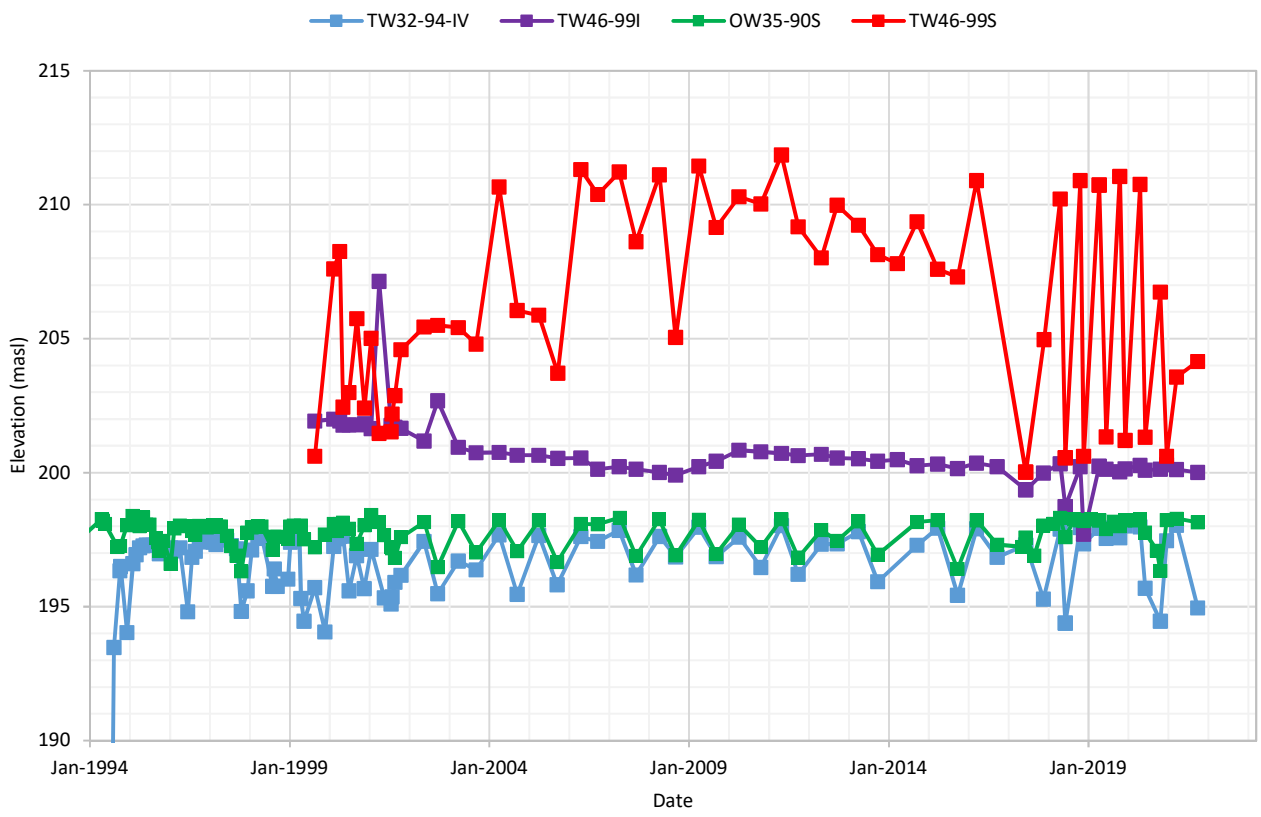
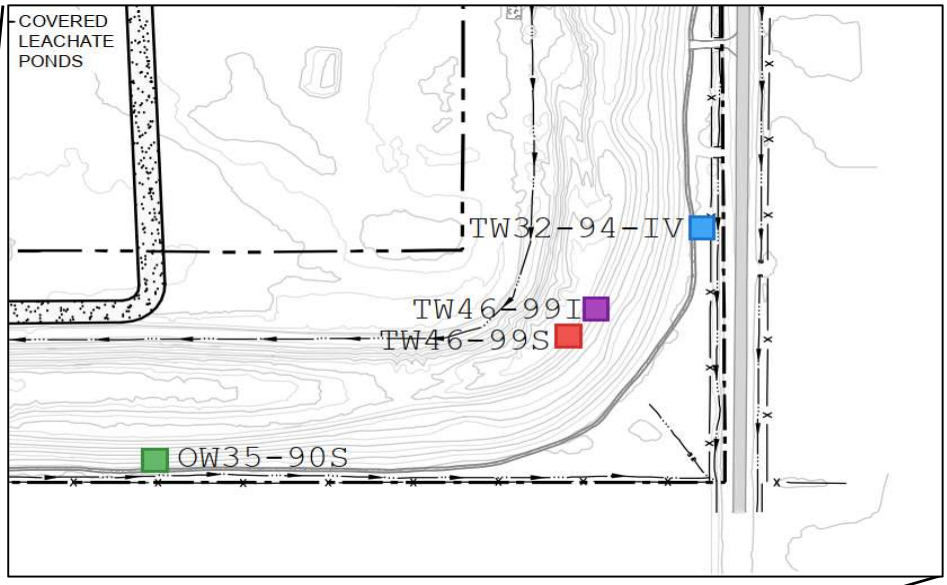
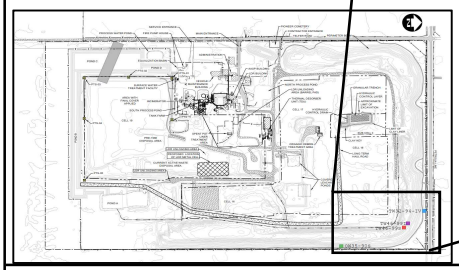




Hydrograph - Shallow Wells NW Berm	**Figure C.01**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING

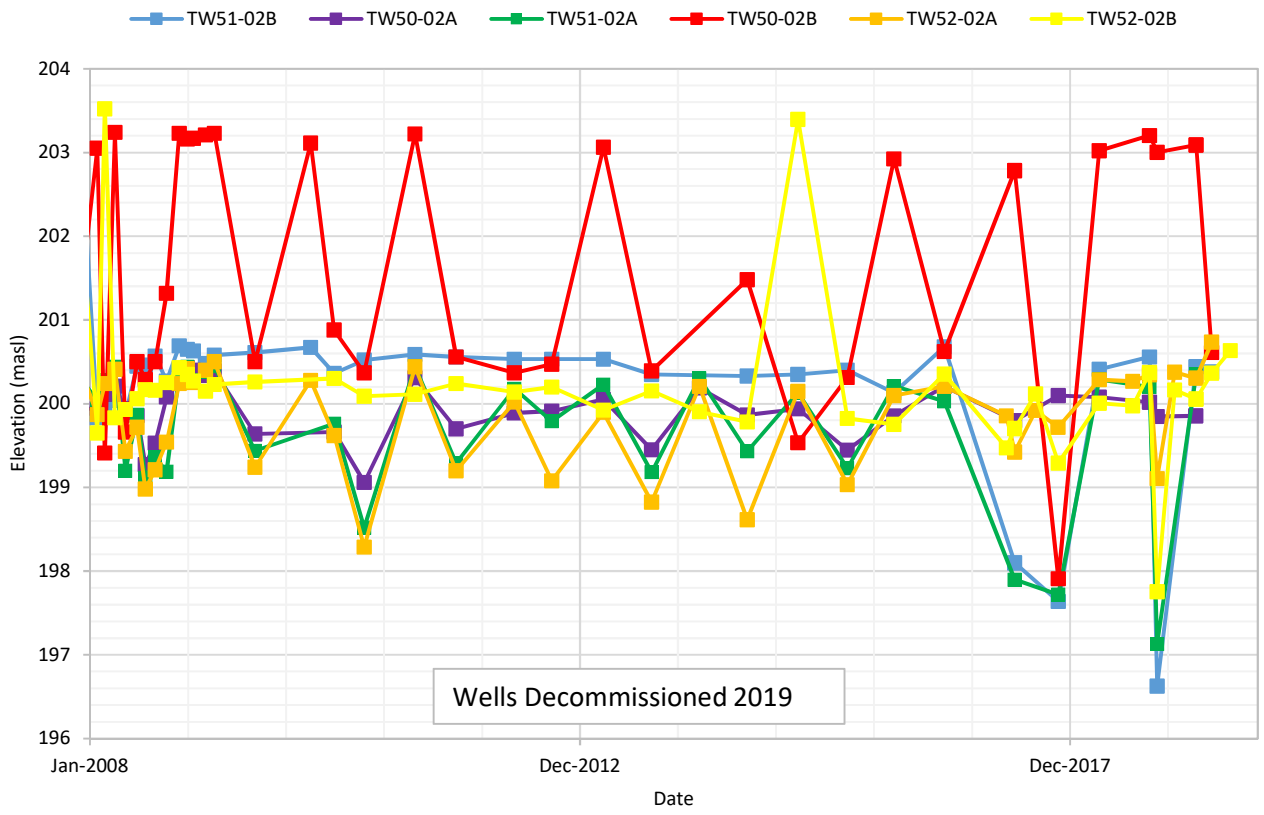


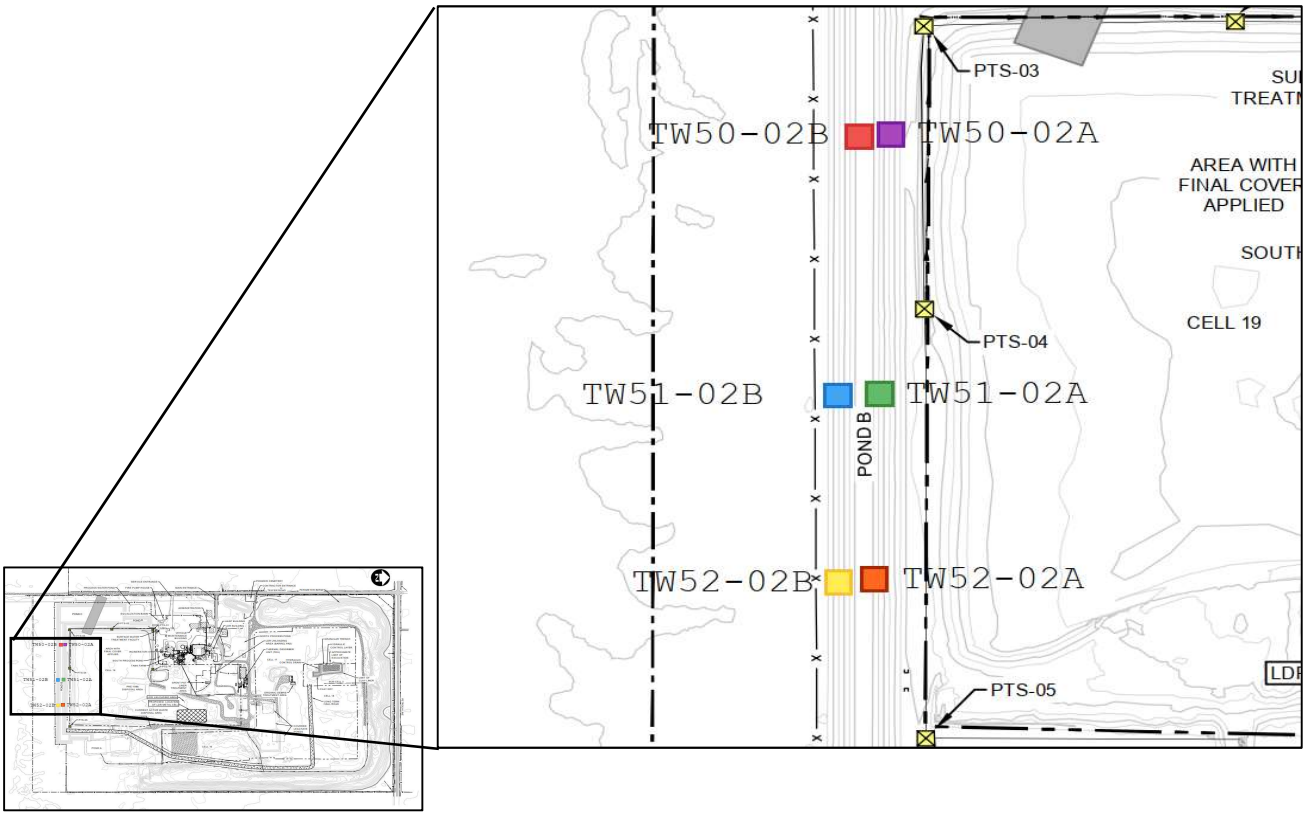




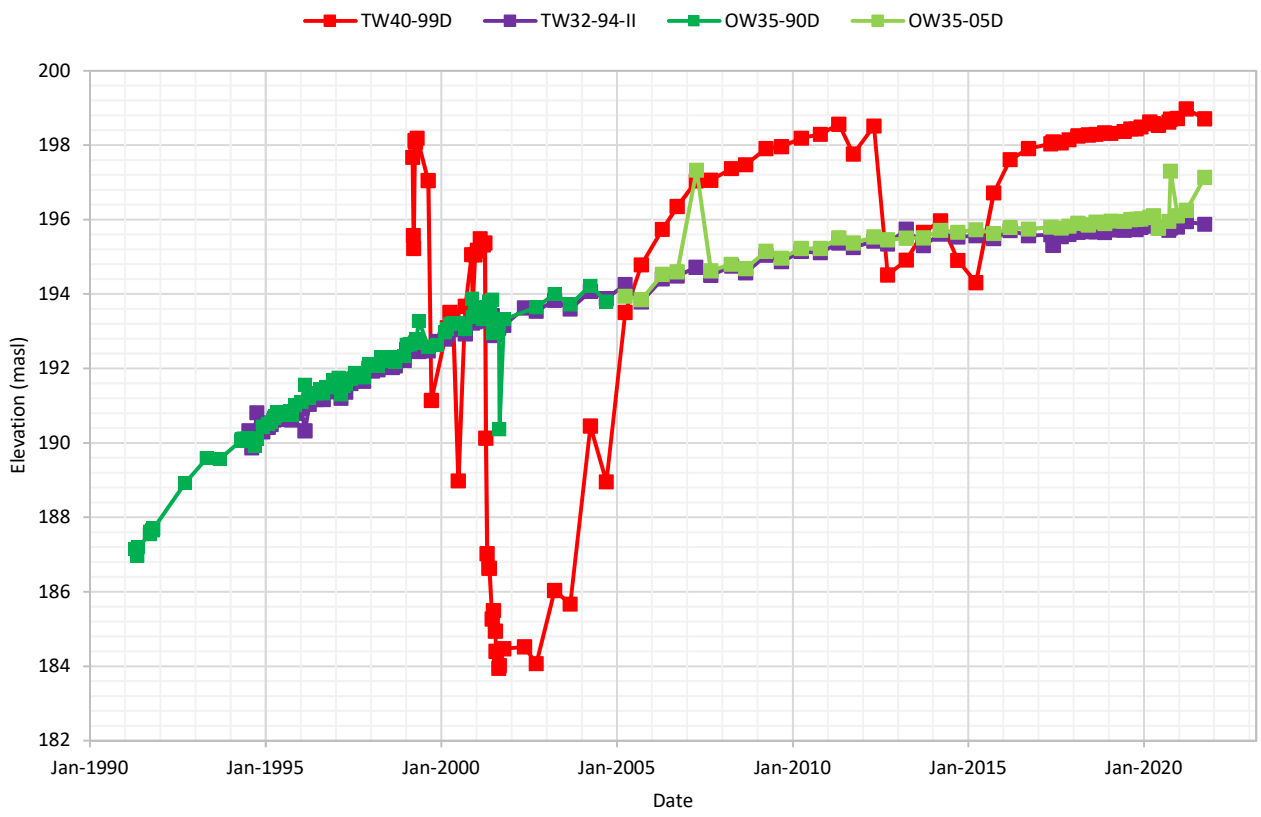
Hydrograph - Shallow Wells NE Berm	**Figure C.02**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

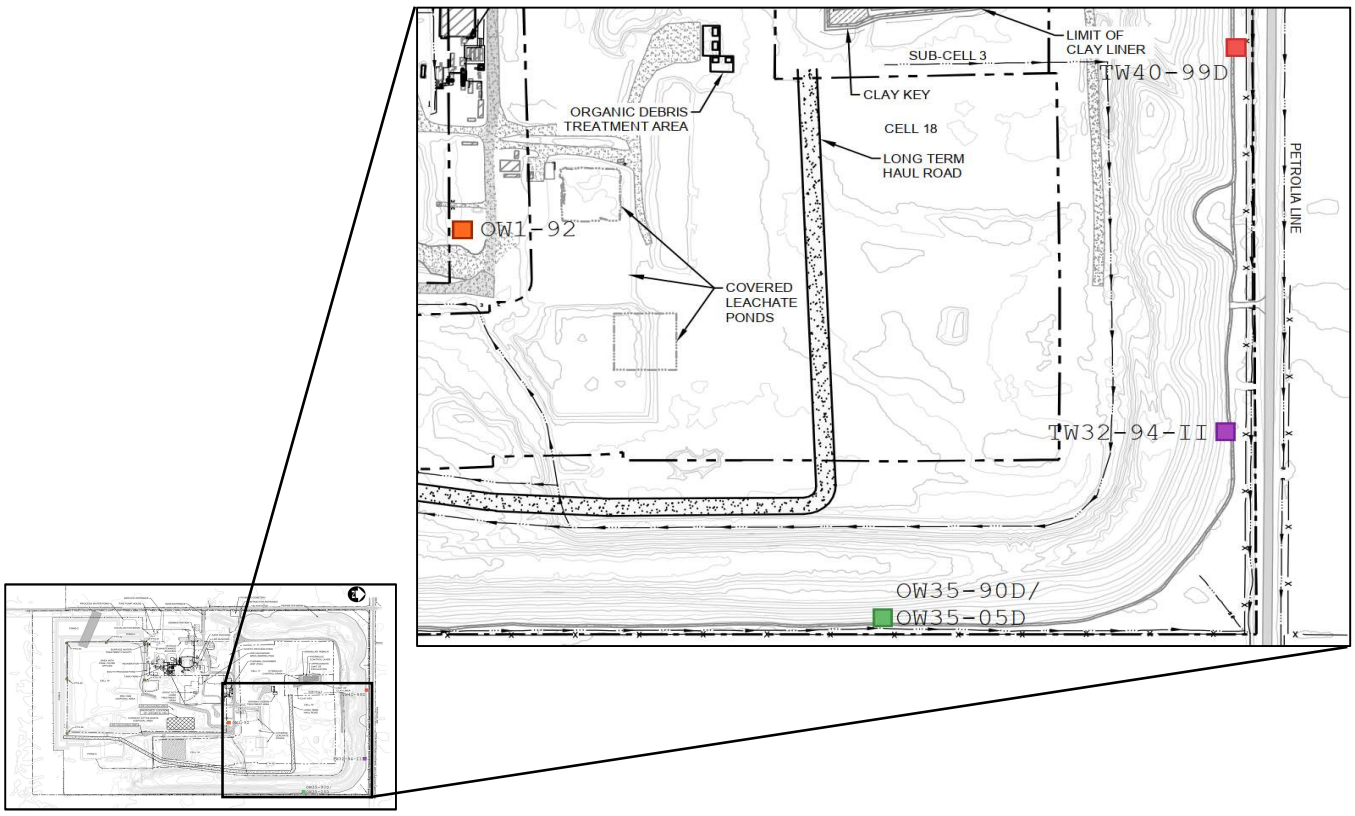
DILLON CONSULTING



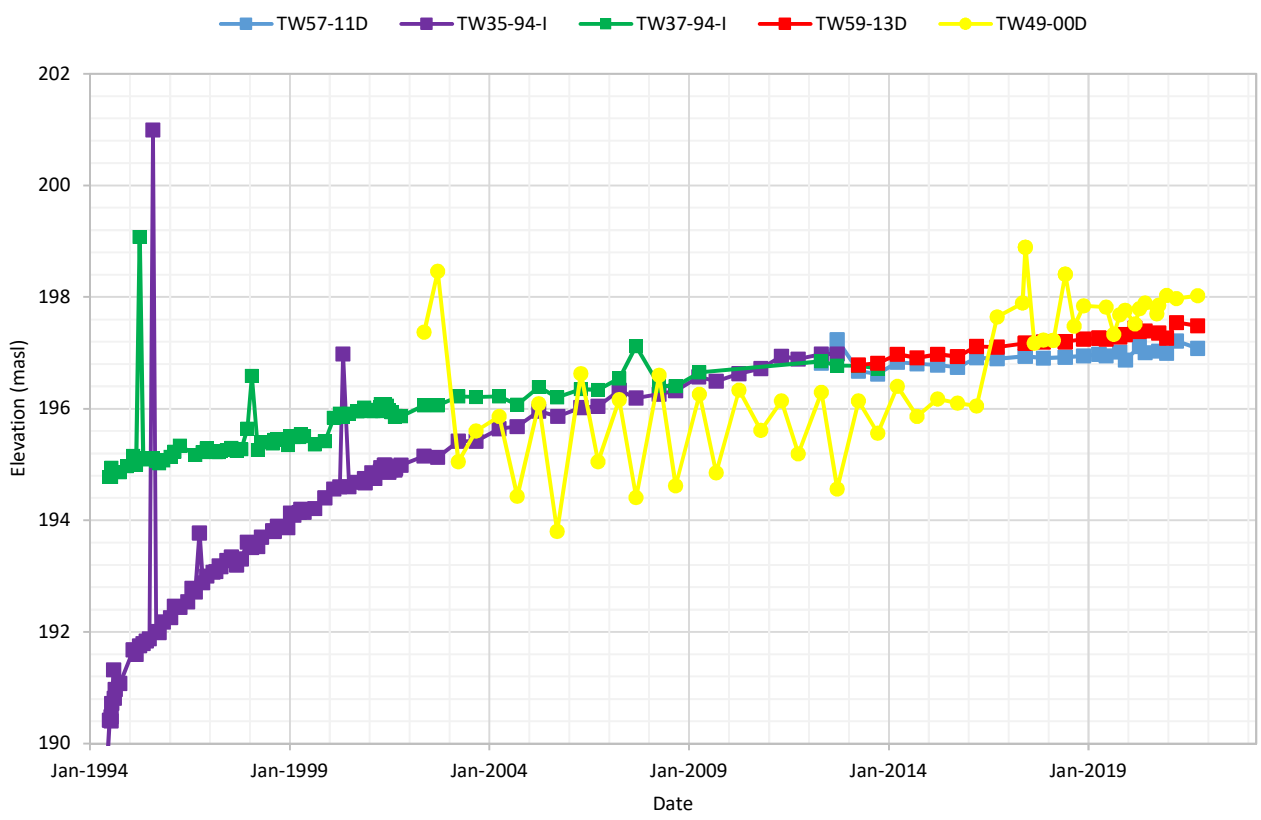


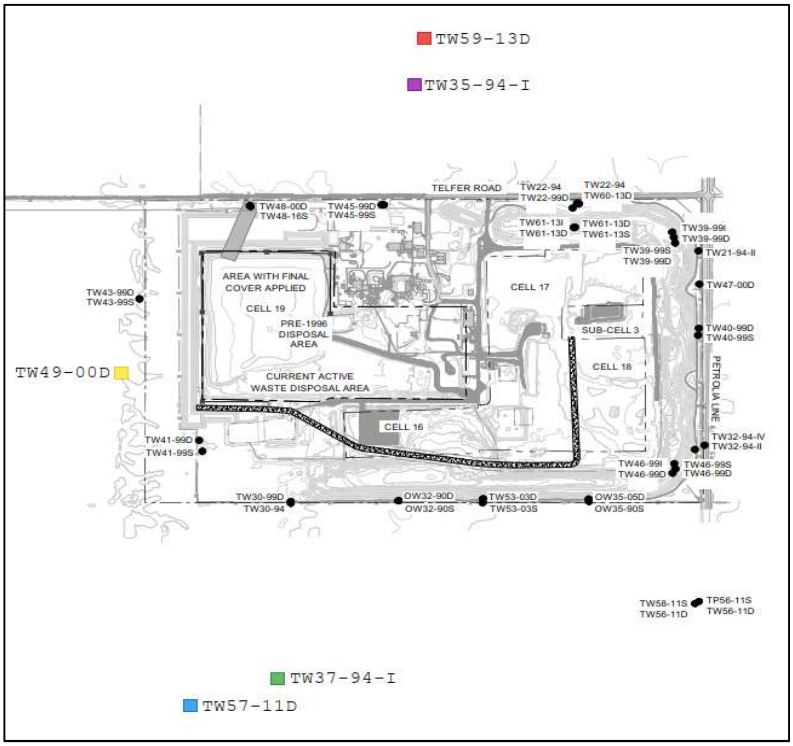
Hydrograph - Shallow Wells S Berm	**Figure C.03**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING





Hydrograph - On-Site Interface Aquifer	**Figure C.04**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING





Hydrograph - Off-Site Interface Aquifer	**Figure C.05**	
Clean Harbors Canada Inc.	**Date:** 2022-02-14	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING

Appendix D

Concentration Versus Time Plots

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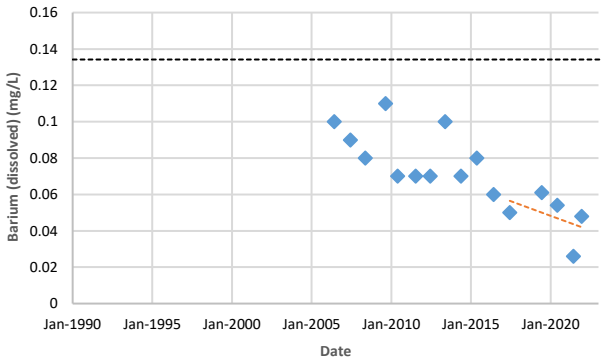
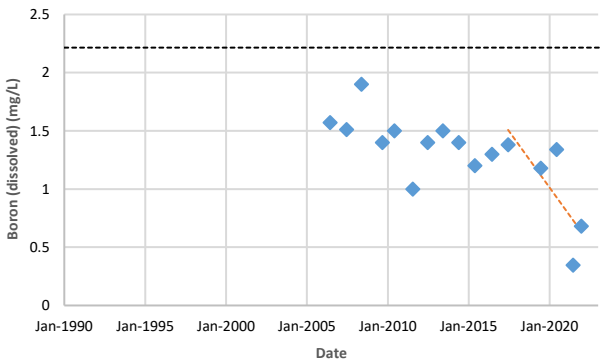
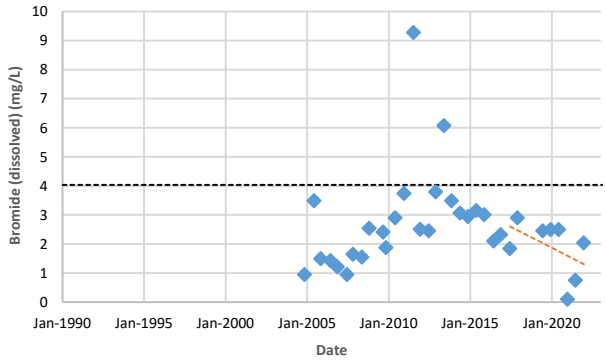
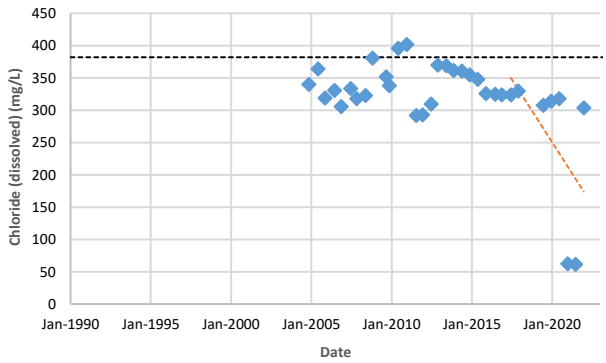
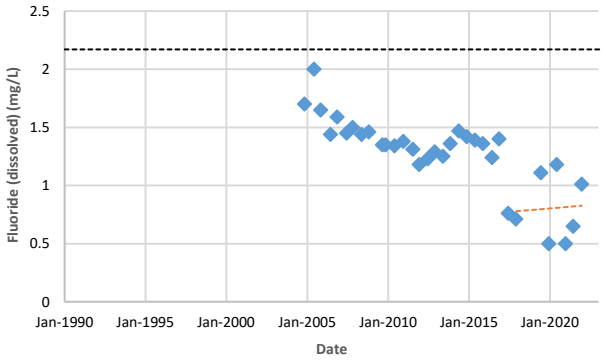
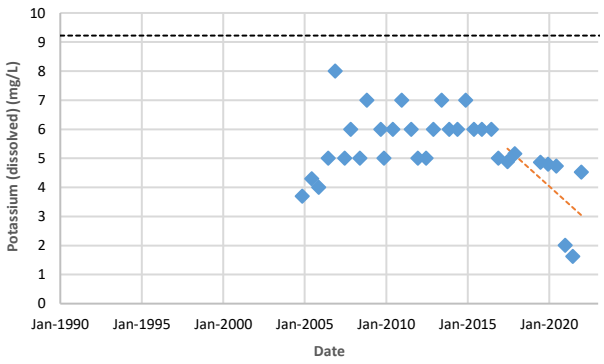


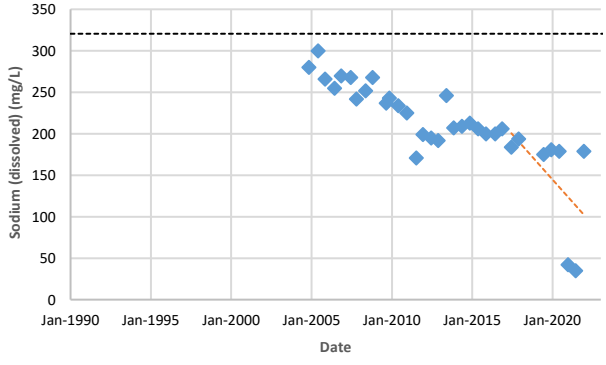


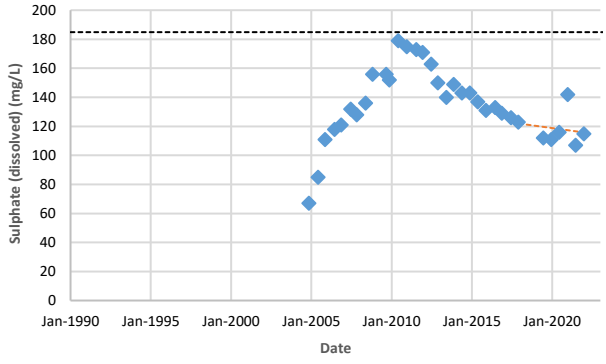




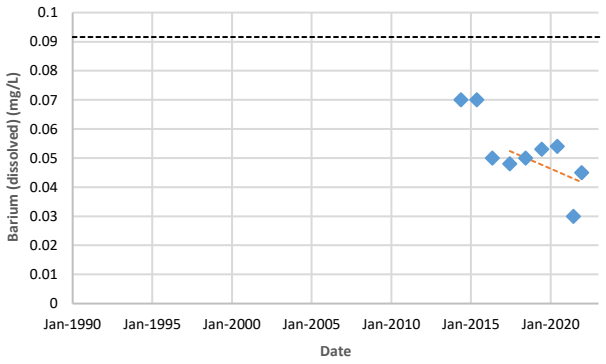


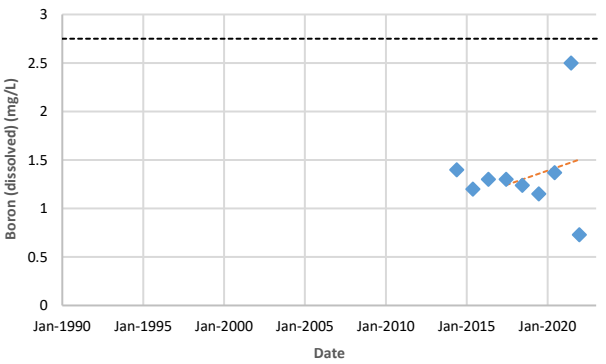


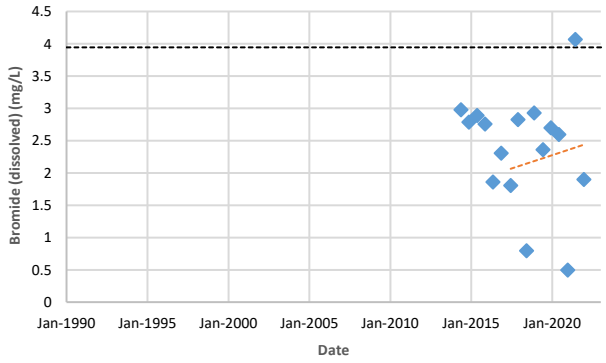


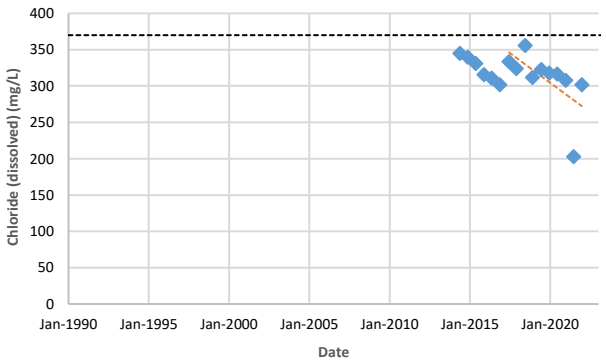


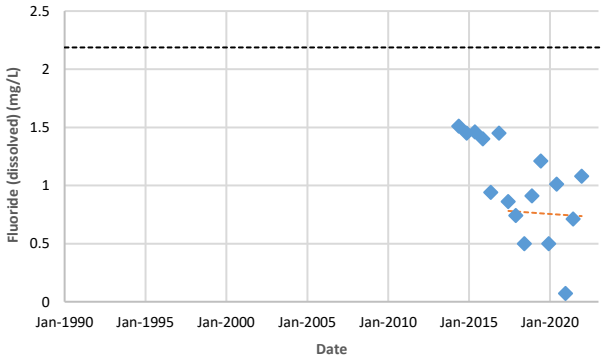
Well EW1a-01	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

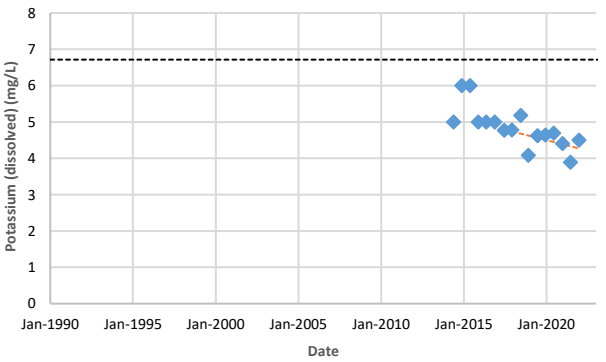


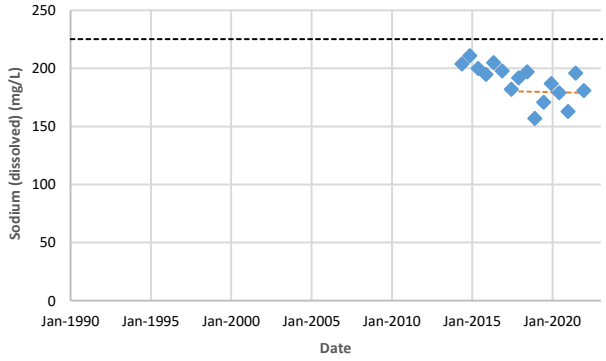


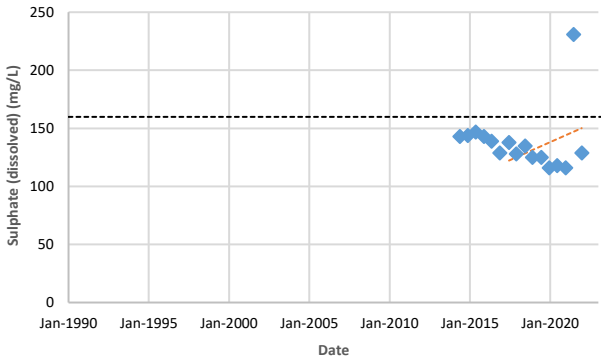






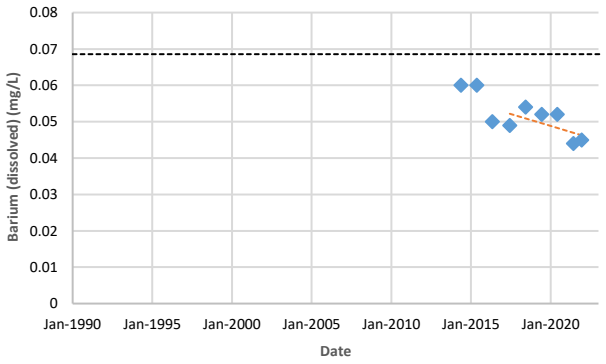


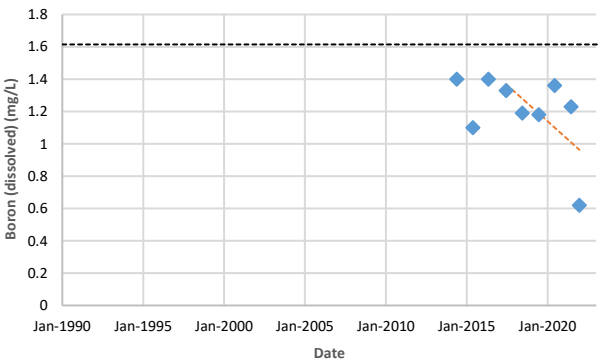


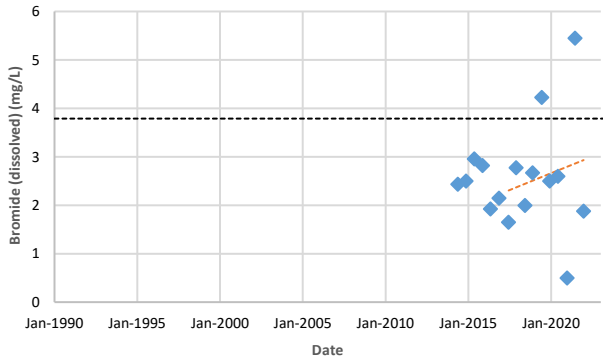


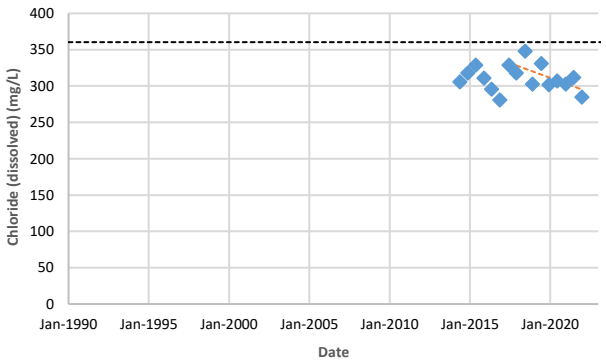
Concentration — Linear Regression Trendline (2017-2021) — Upper Confidence Limit — Reasonable Use Criteria

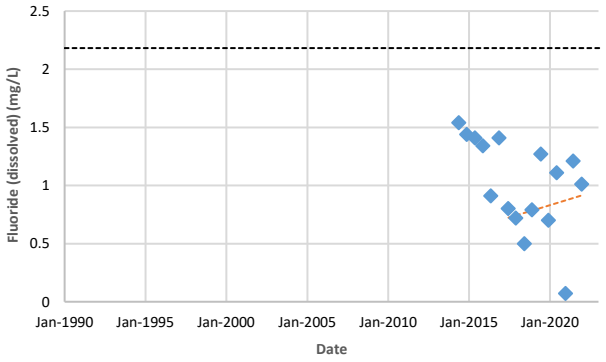
Well EW1b-13	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

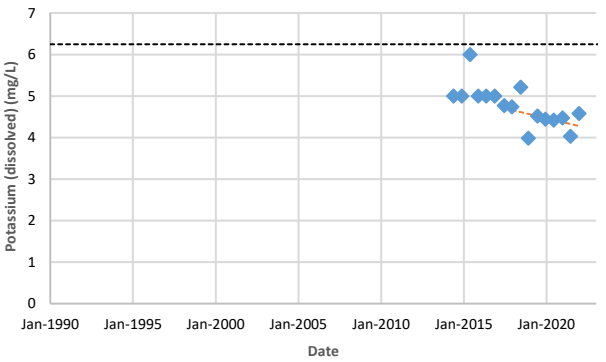


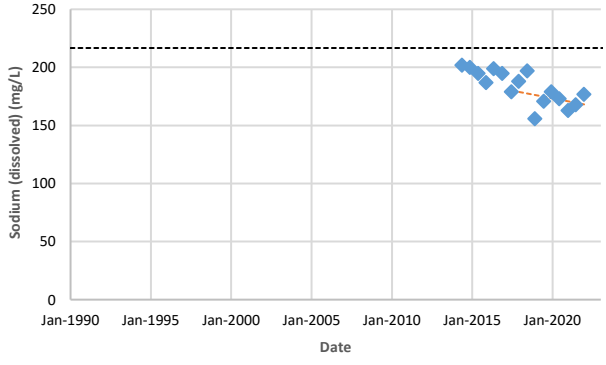


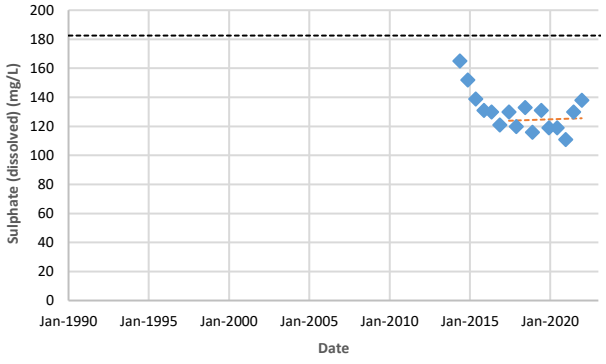


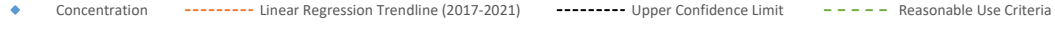




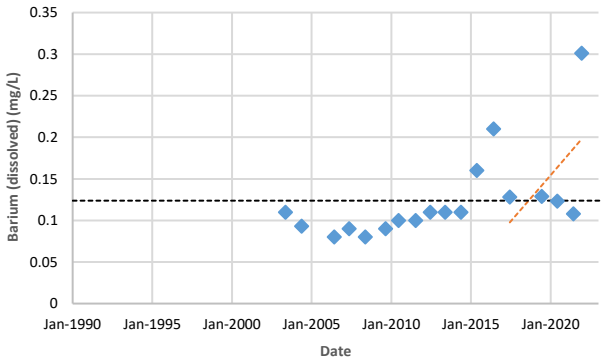


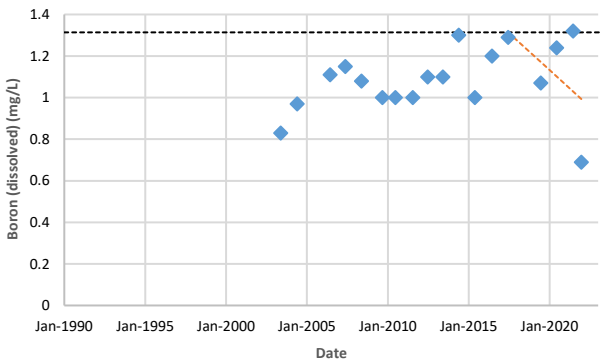


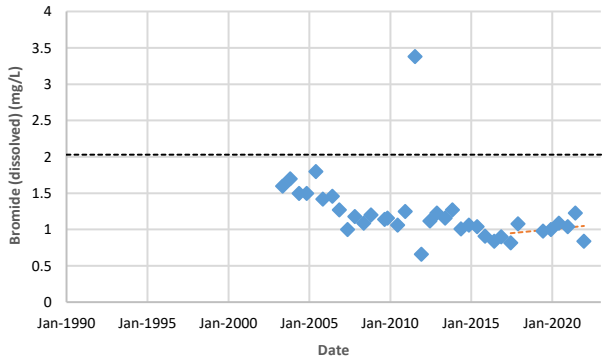


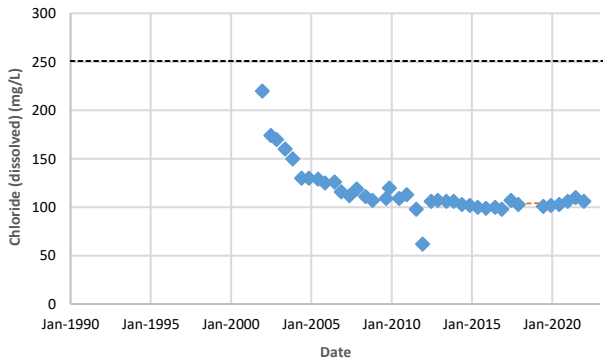


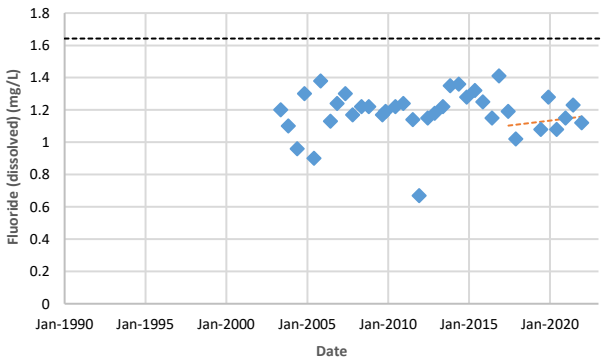
Well EW1c-13	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

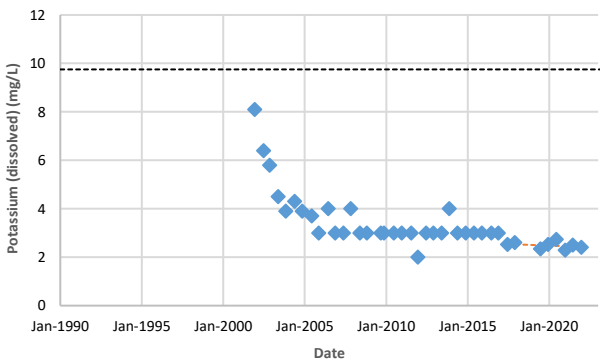


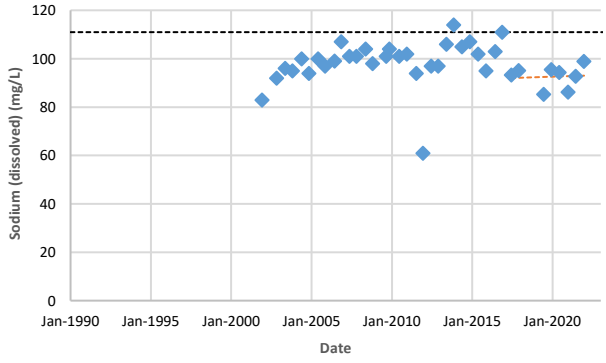


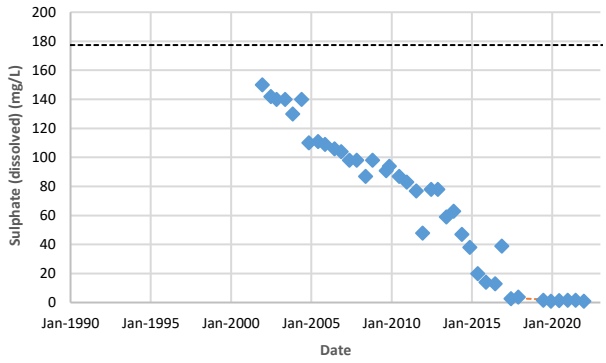




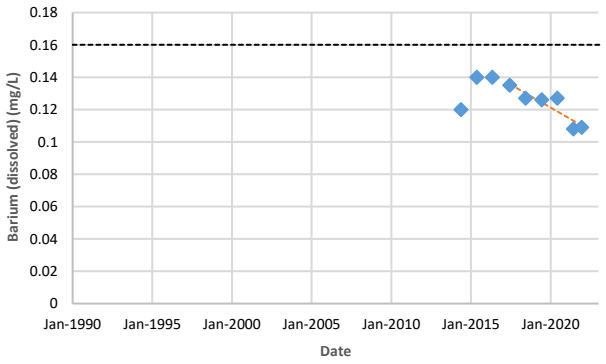


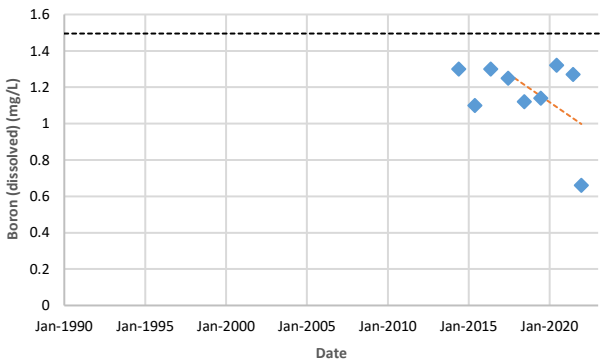


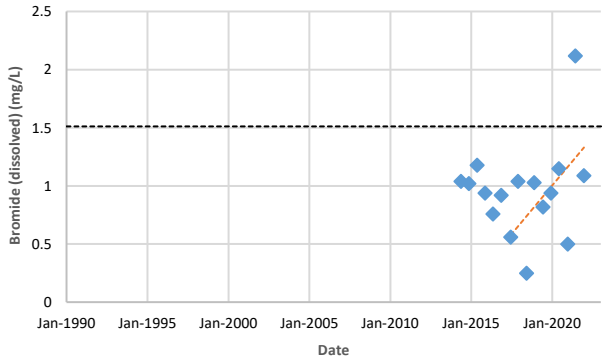


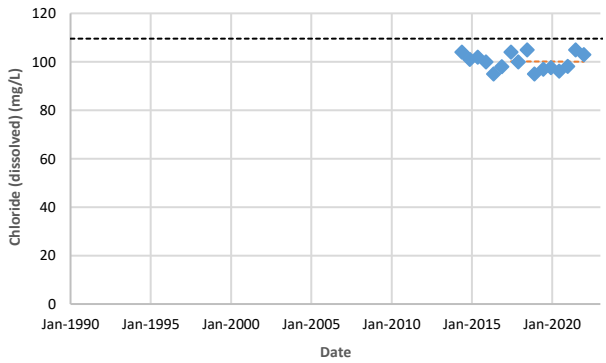


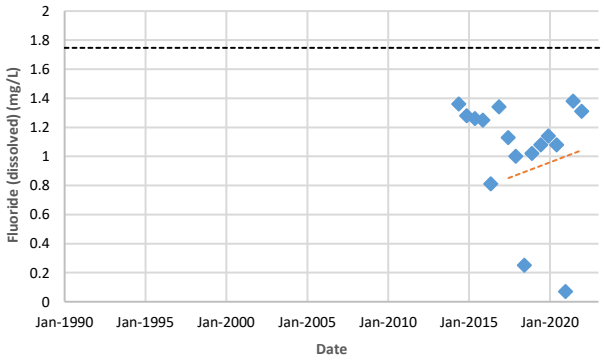
Well EW2a-01	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

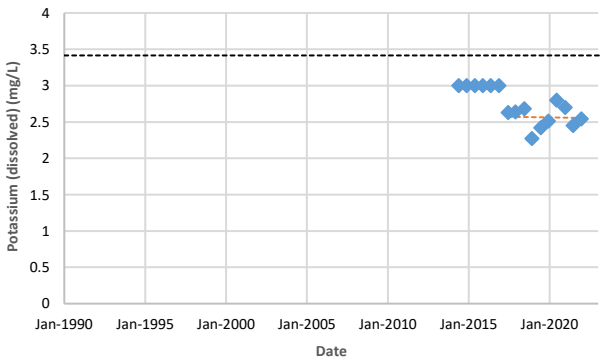


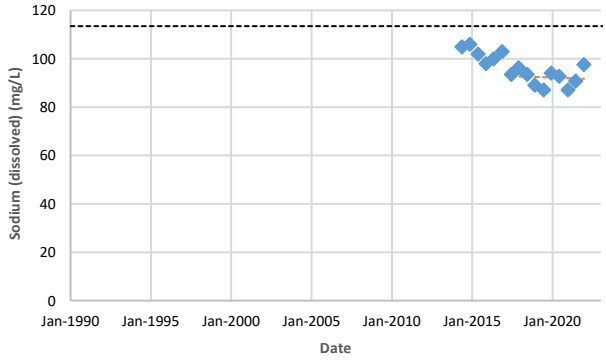


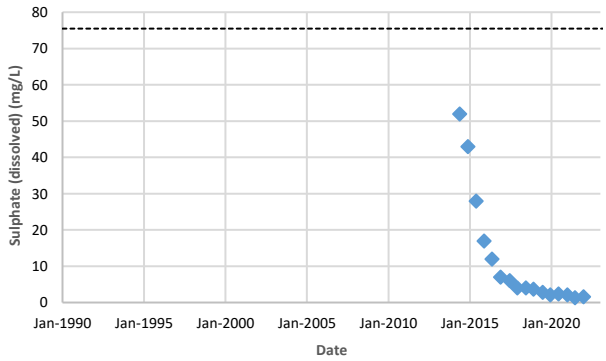


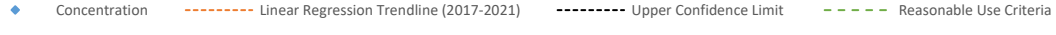




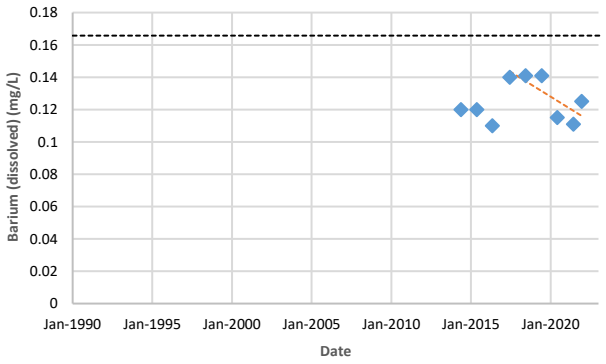


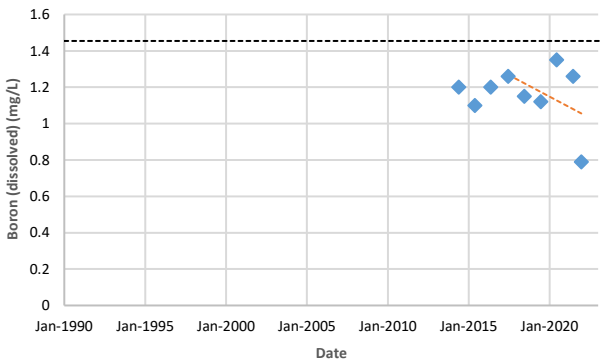


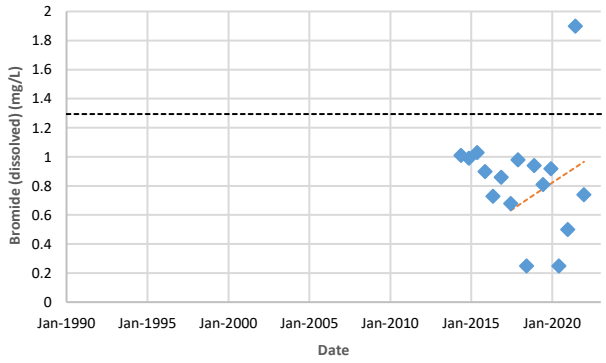


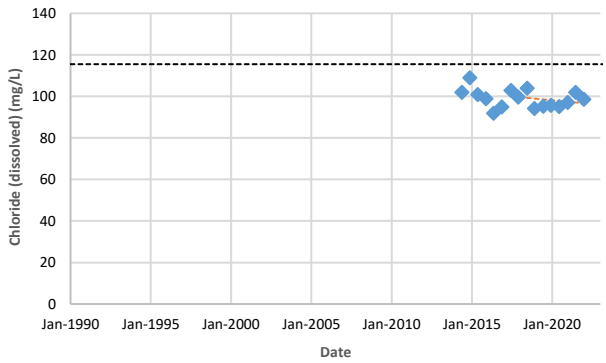


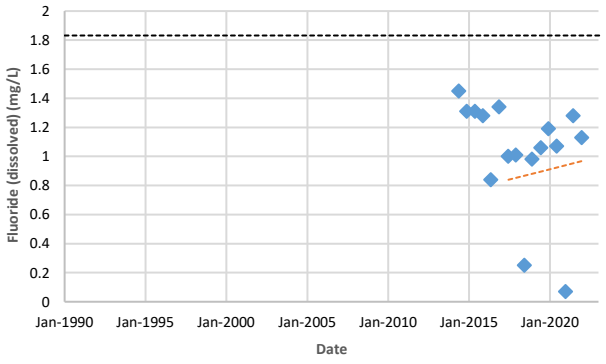
Well EW2b-13	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

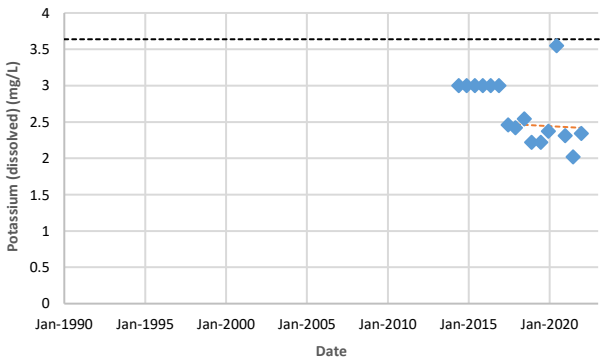


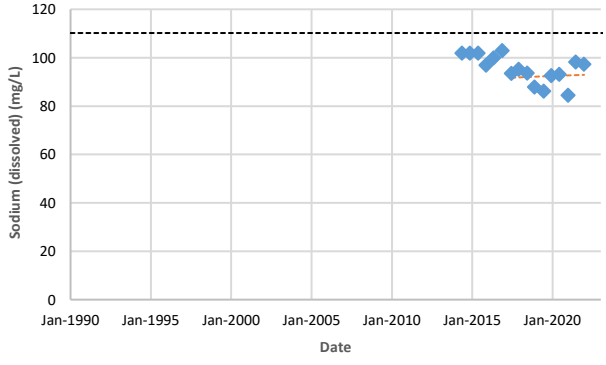


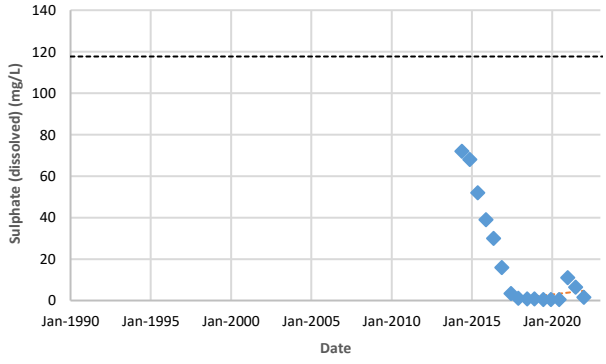




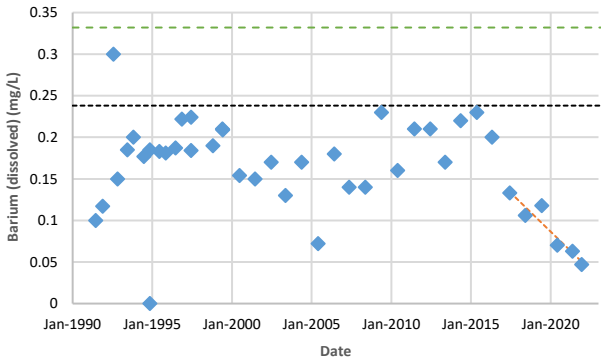


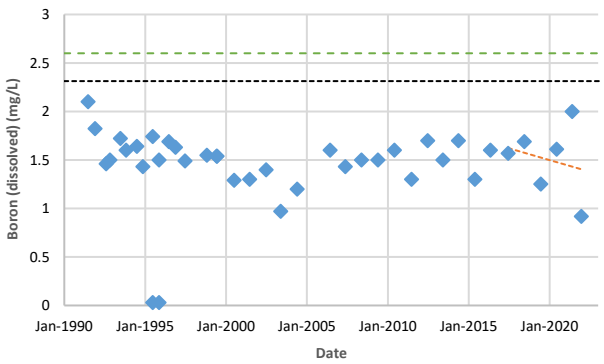


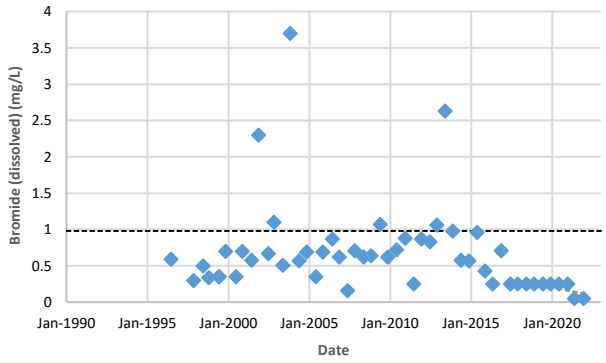


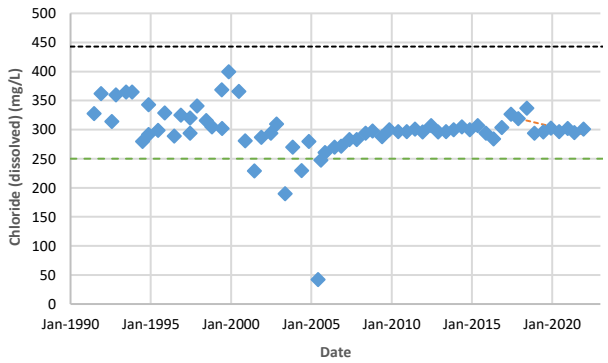


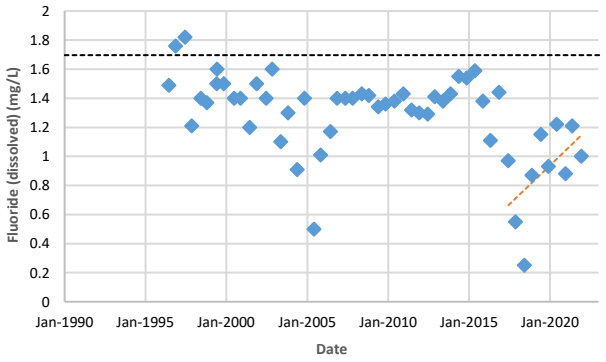
Well EW2c-13	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

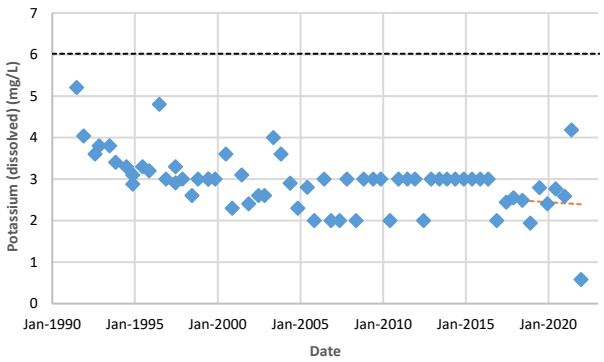


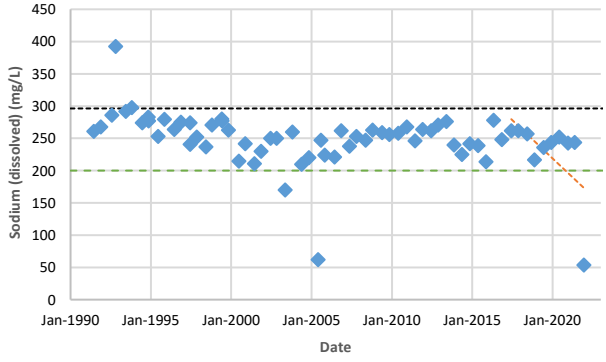


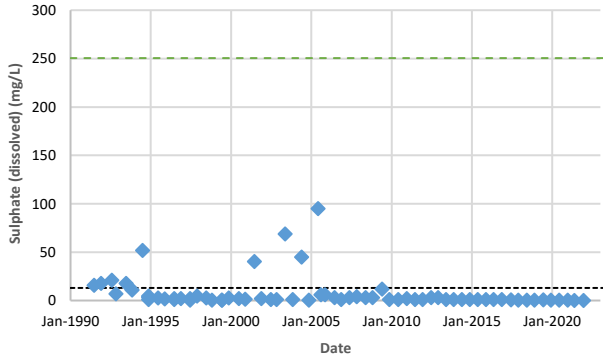




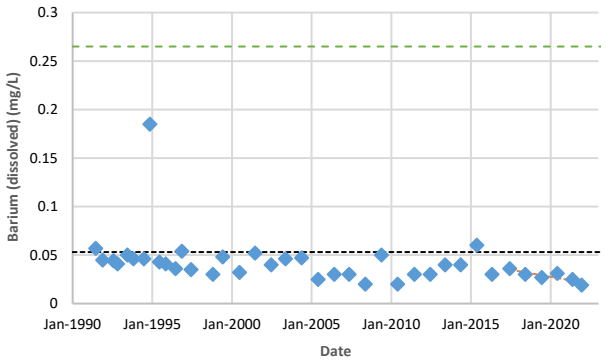


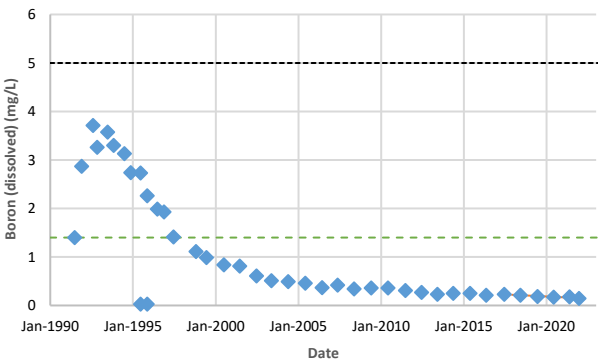


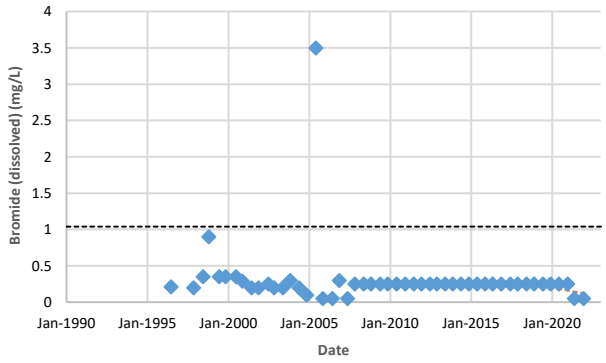


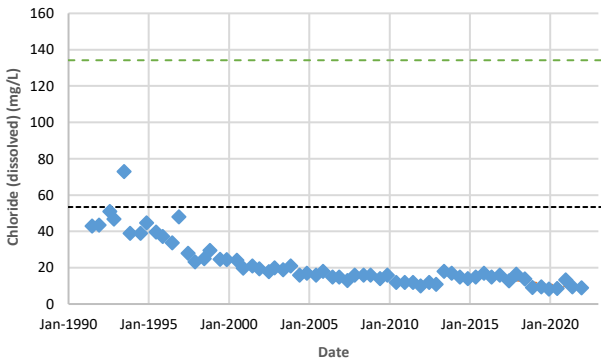


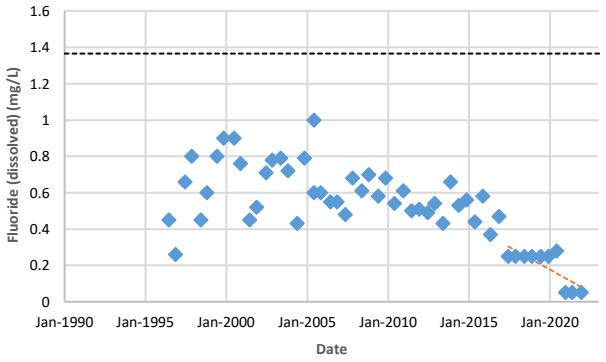
Well OW32-90D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

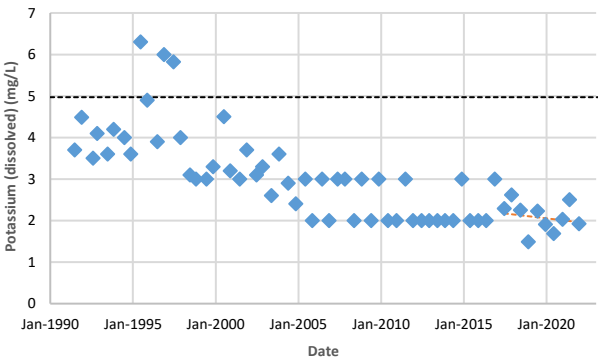


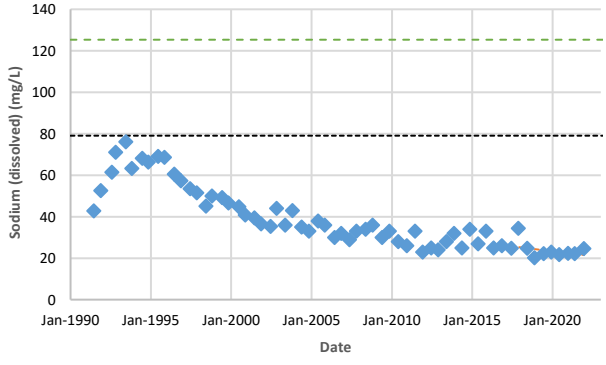


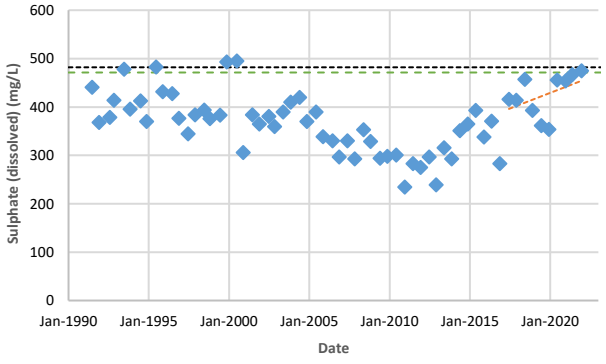


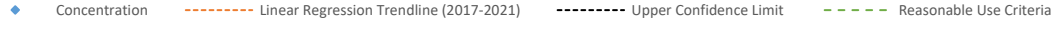




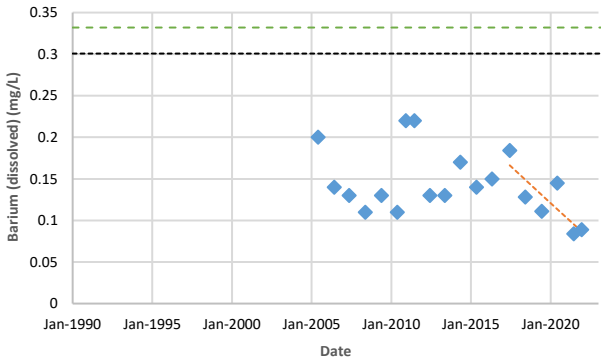


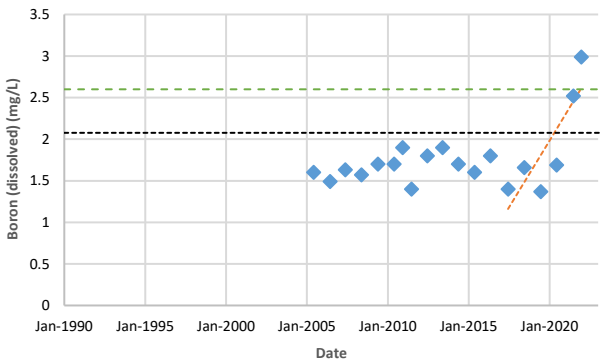


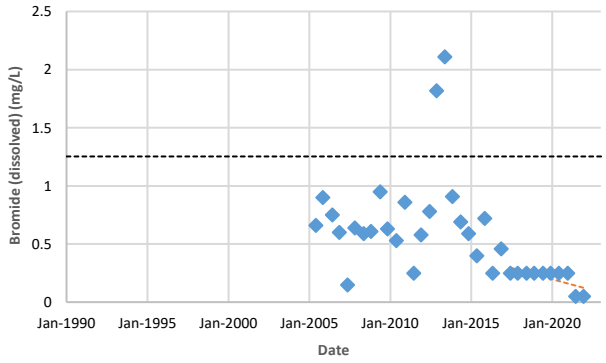


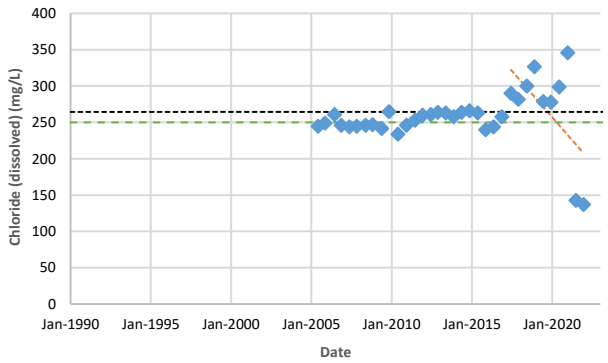


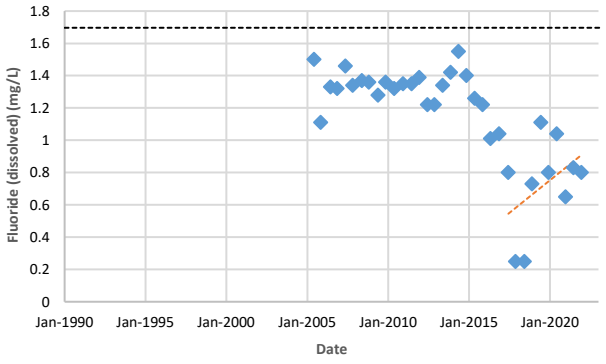
Well OW32-90S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

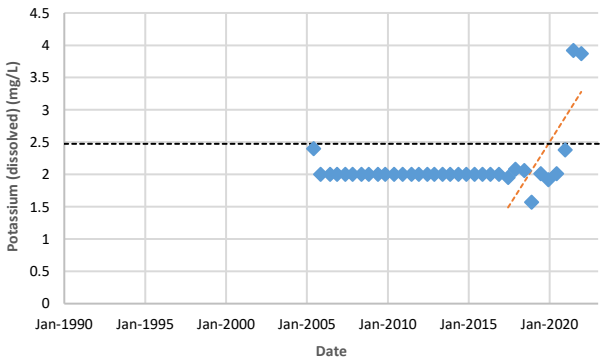


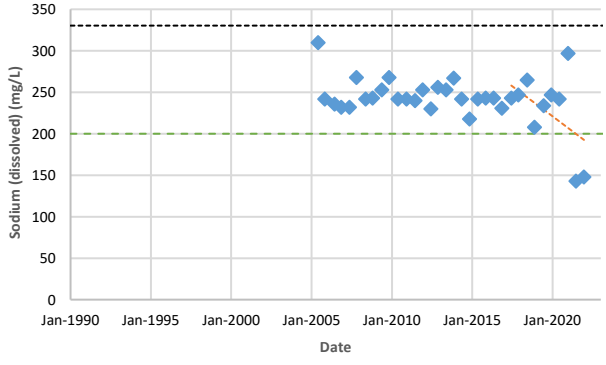


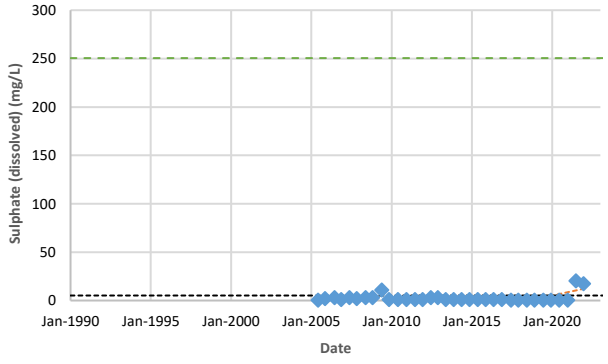


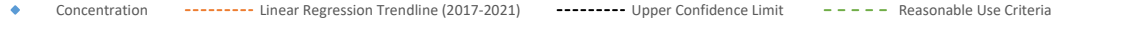




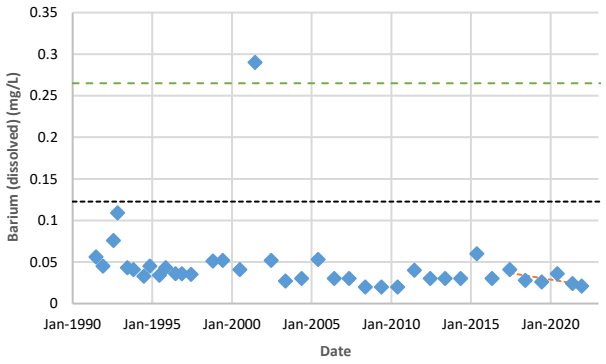


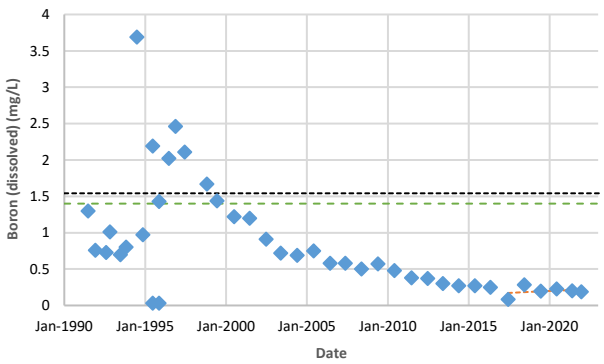


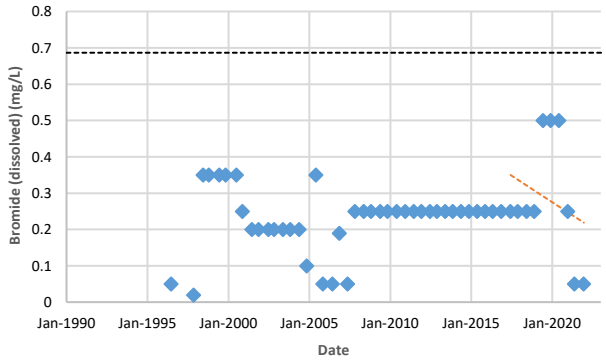


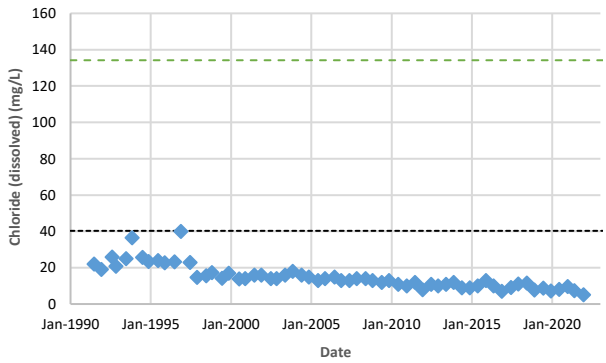


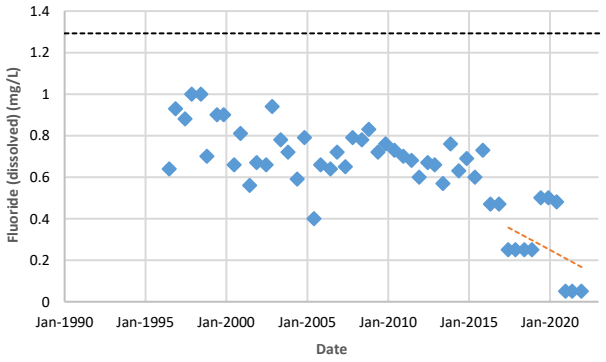
Well OW35-05D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

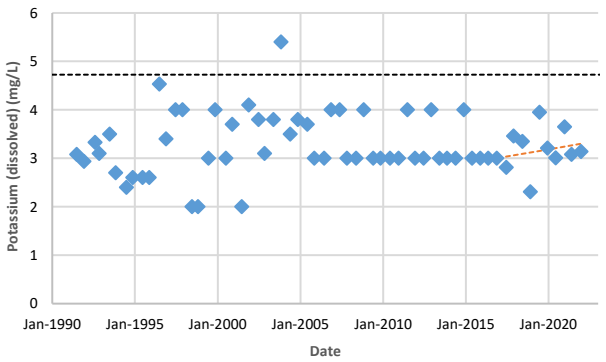


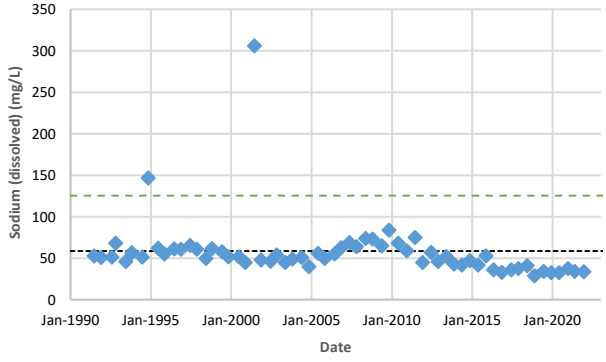


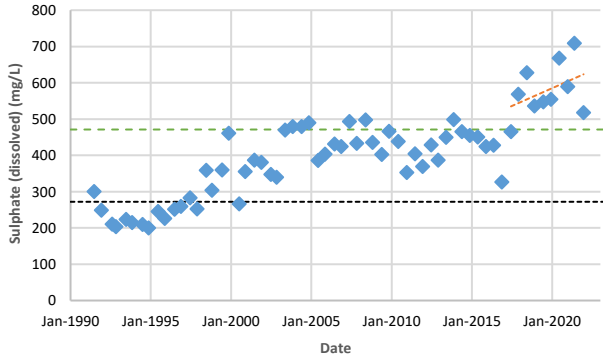




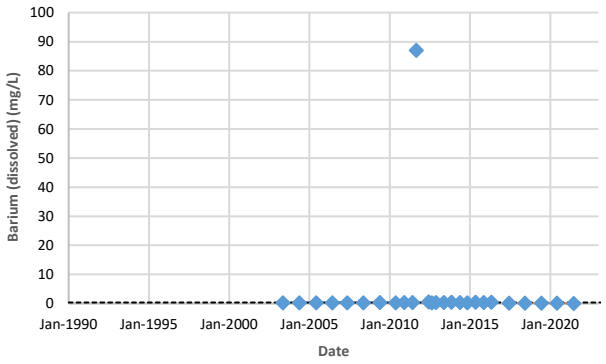


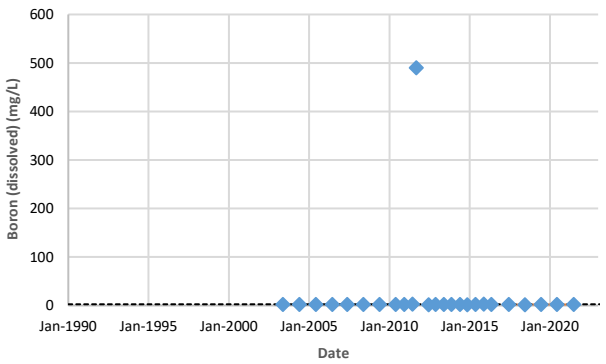


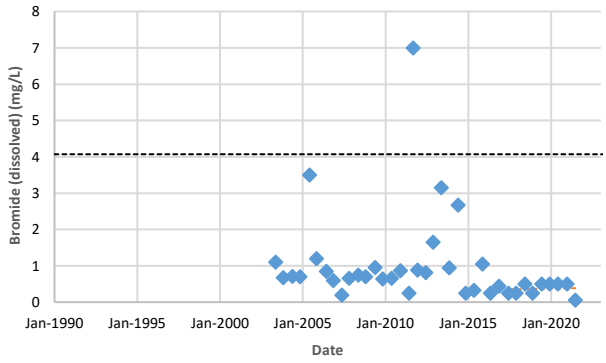


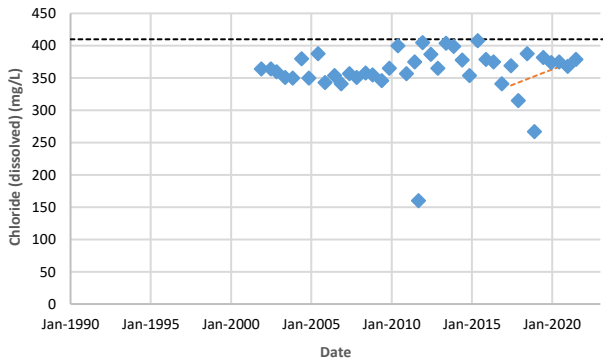


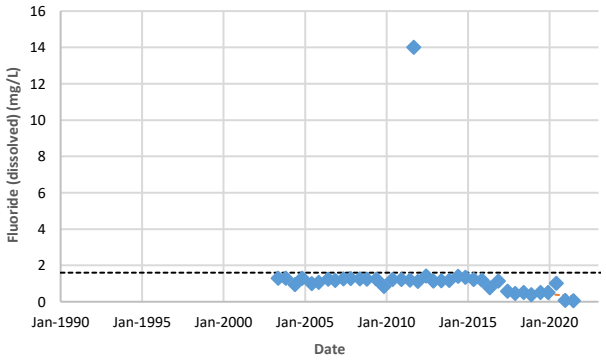
Well OW35-90S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

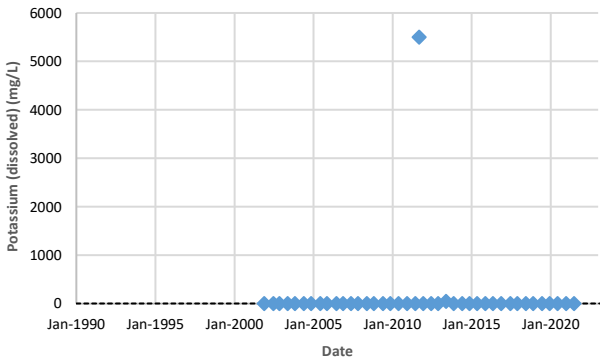


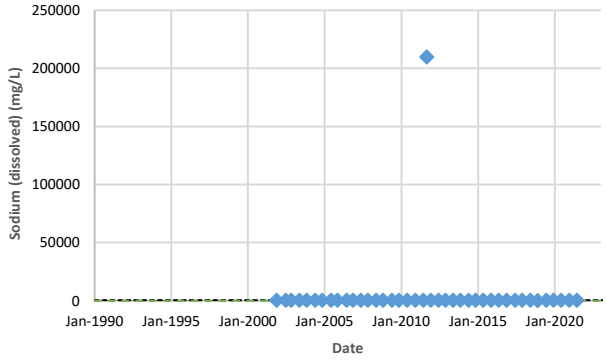


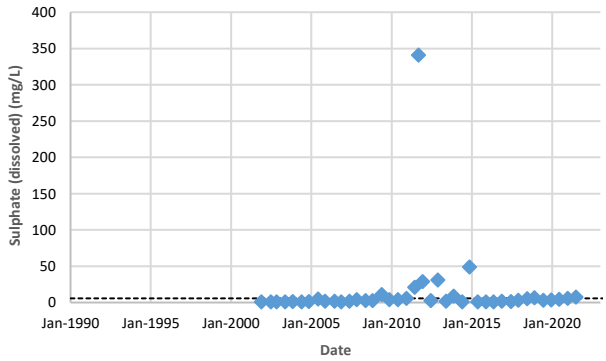




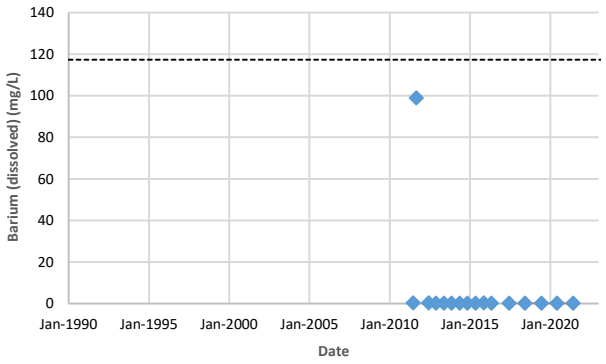


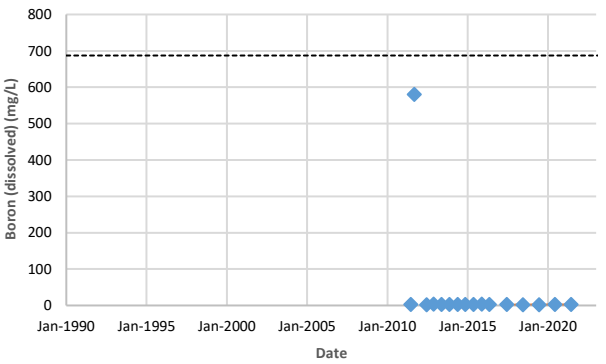


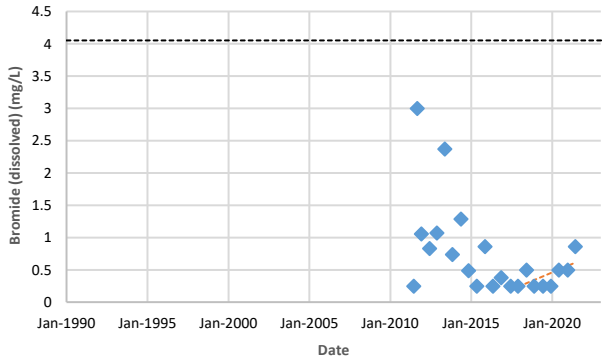


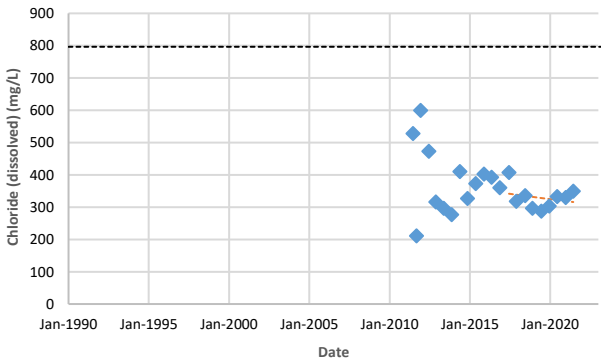


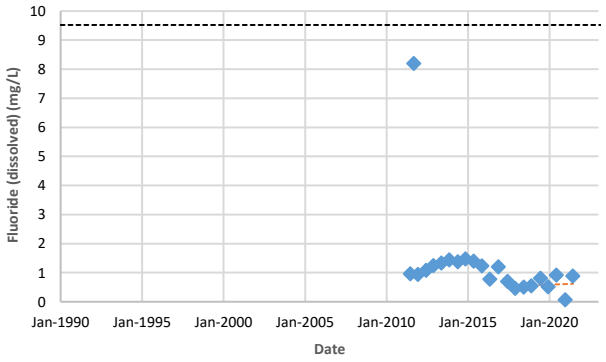
Well PW1-N	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

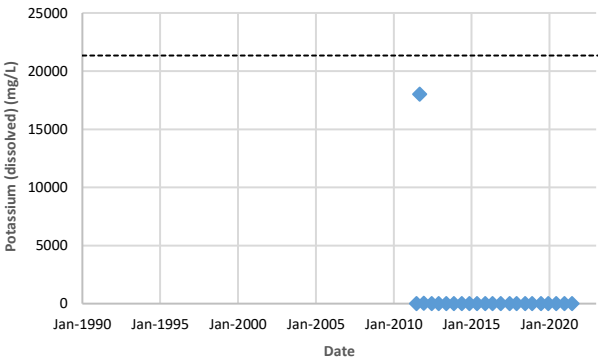


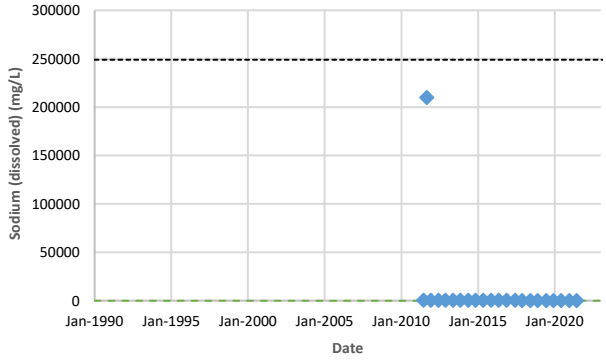


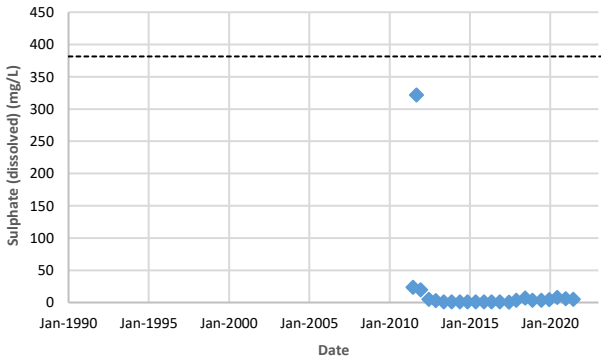


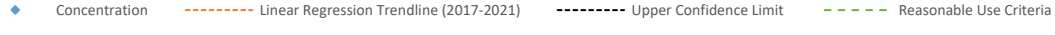




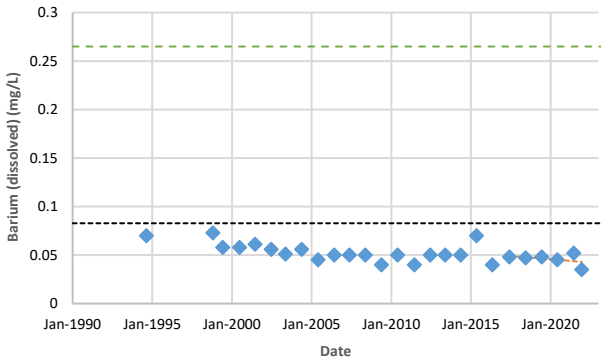


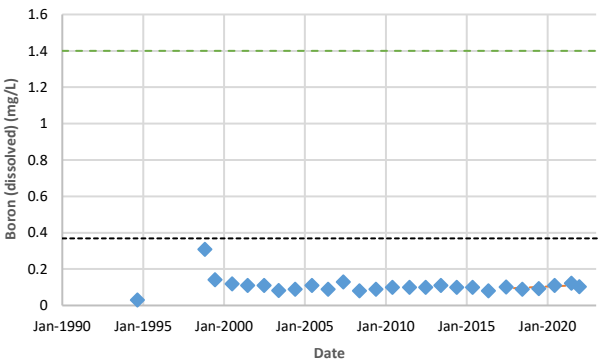


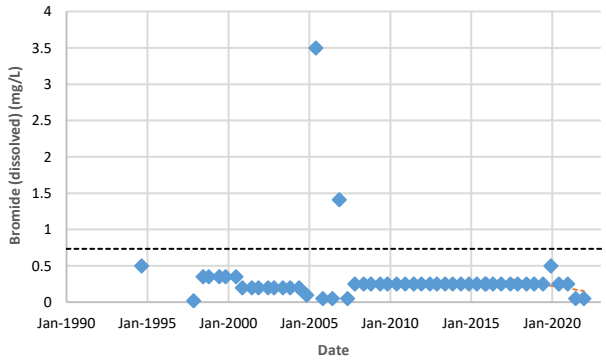


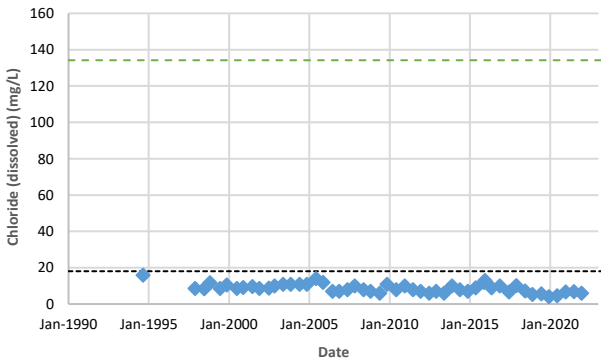


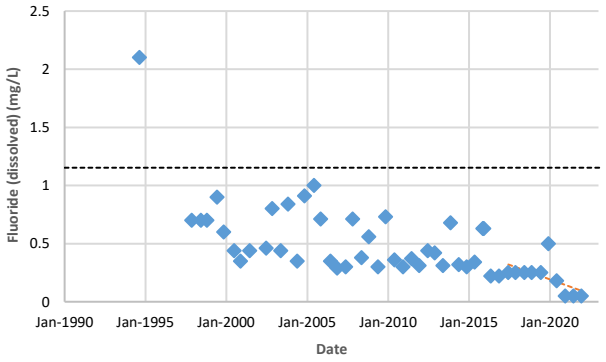
Well PW2-S(R11)	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

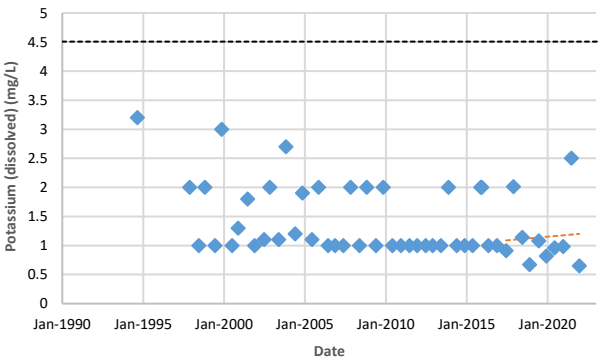


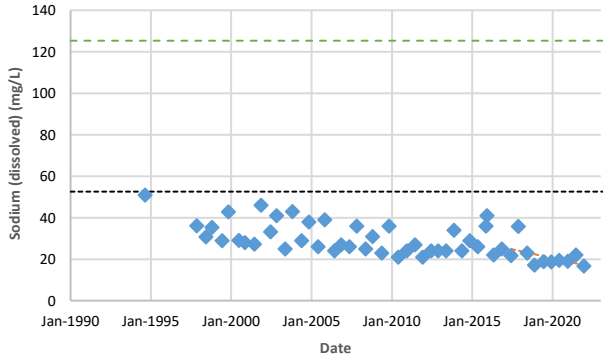


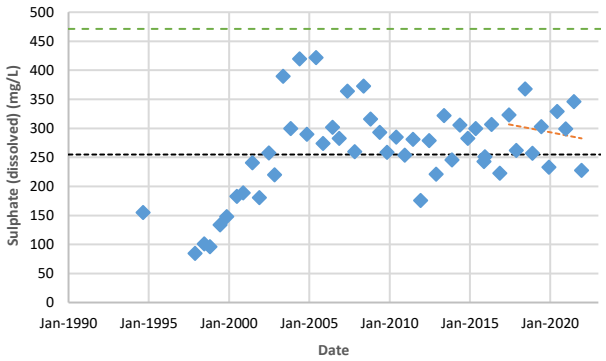




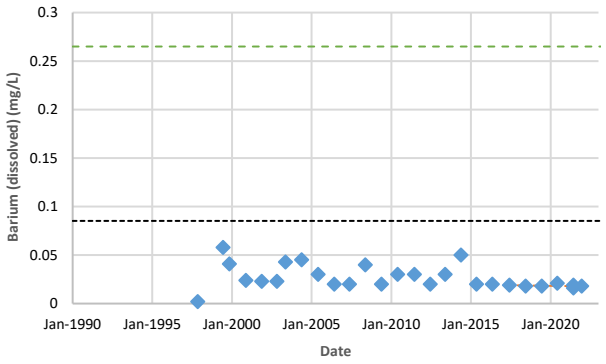


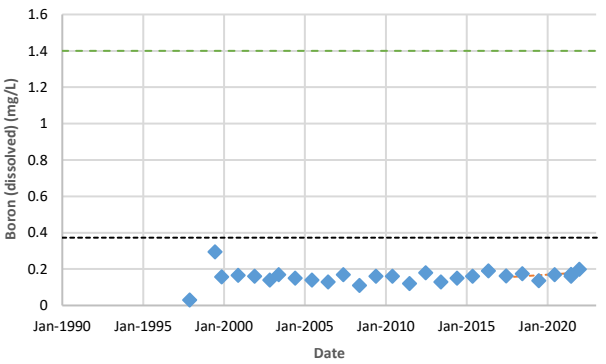


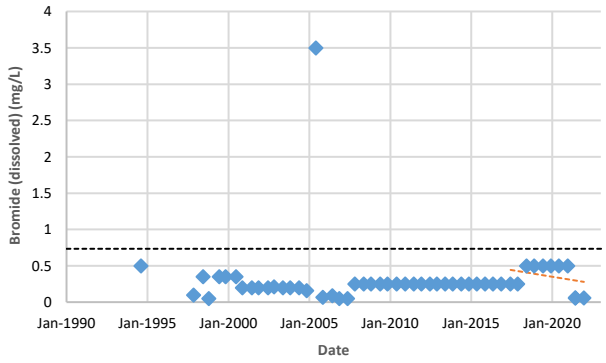


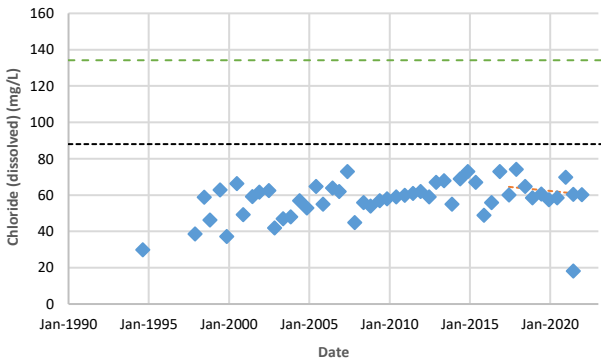


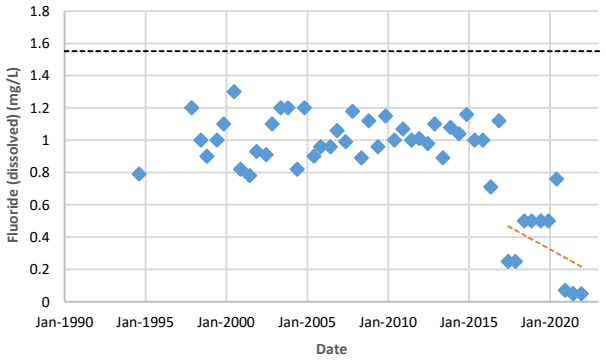
Well TW21-94-II	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

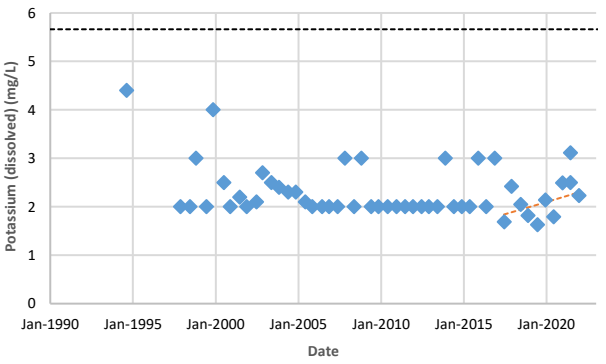


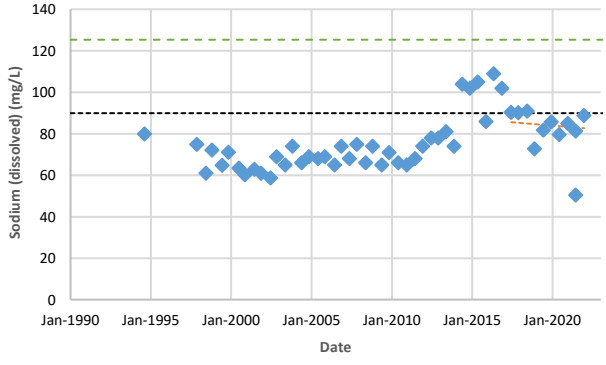


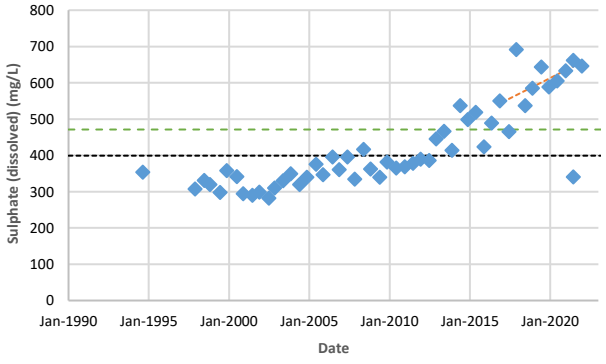




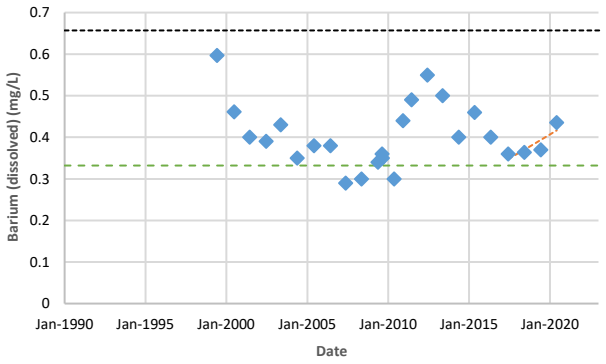


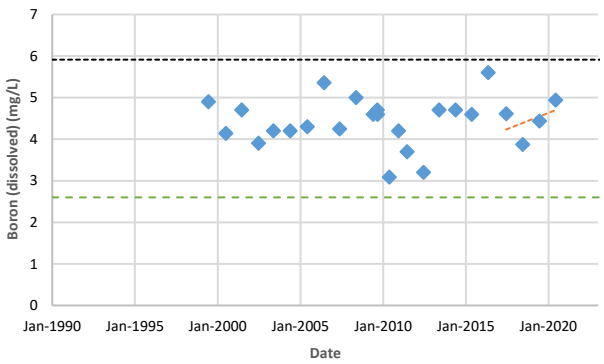


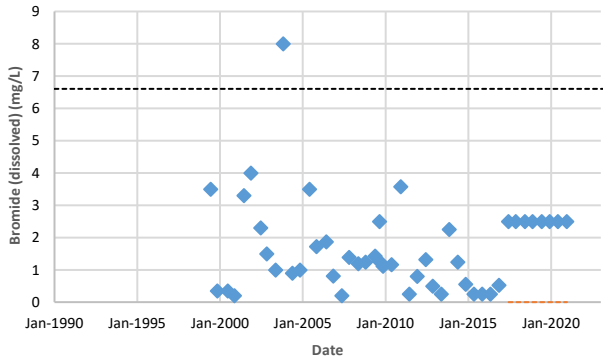


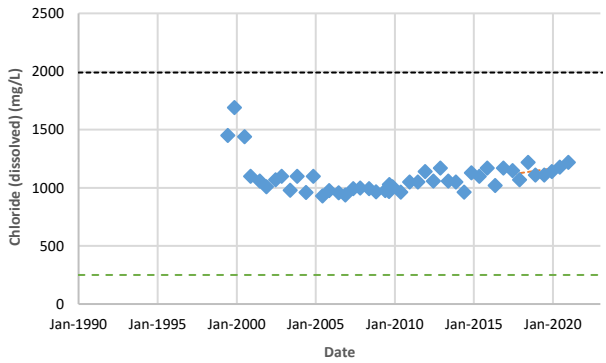


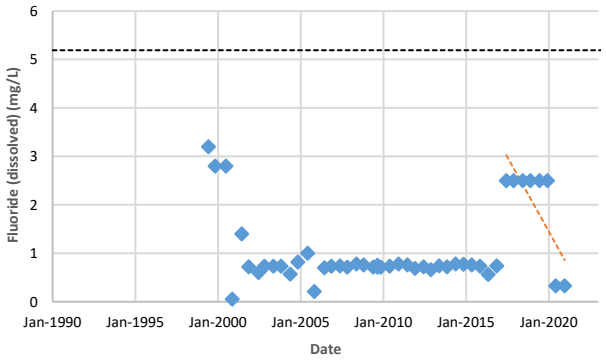
Well TW22-94	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

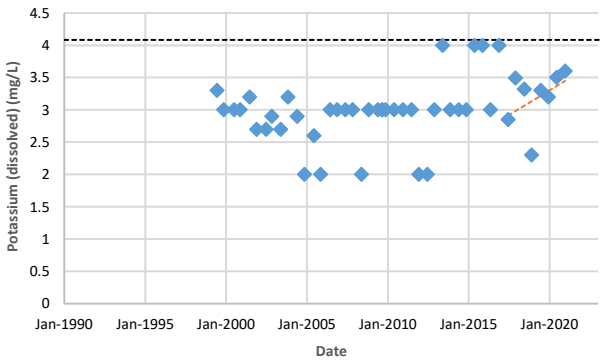


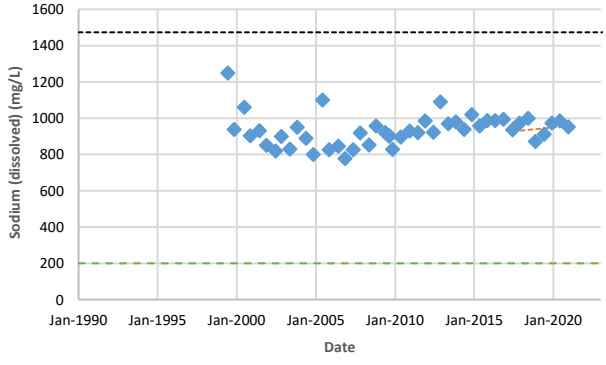


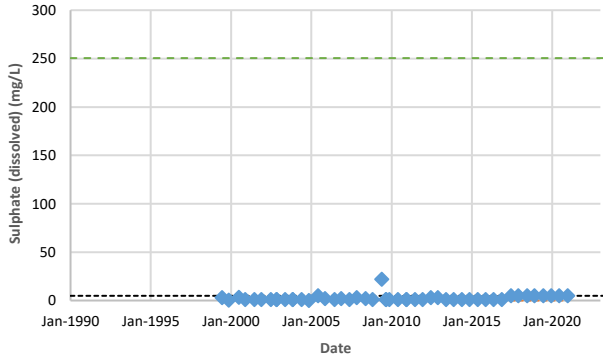


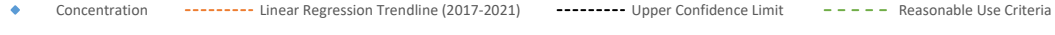




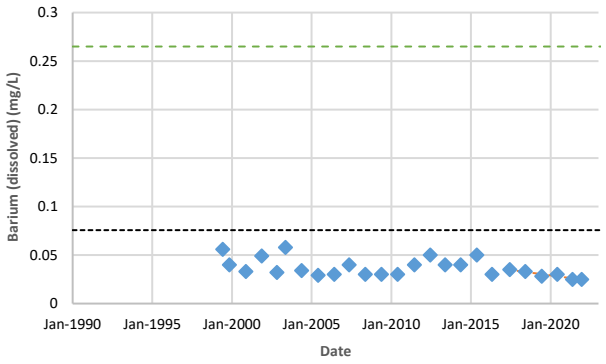


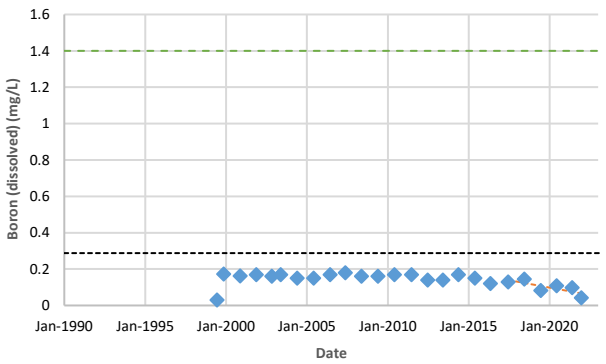


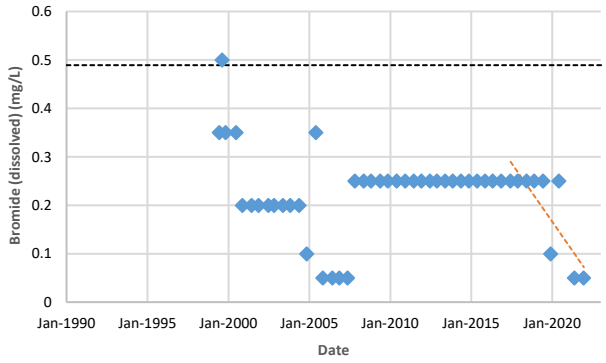


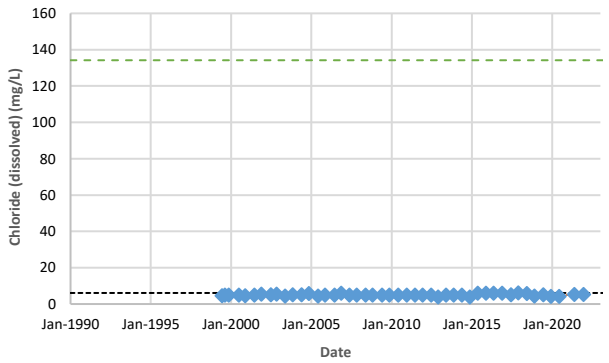


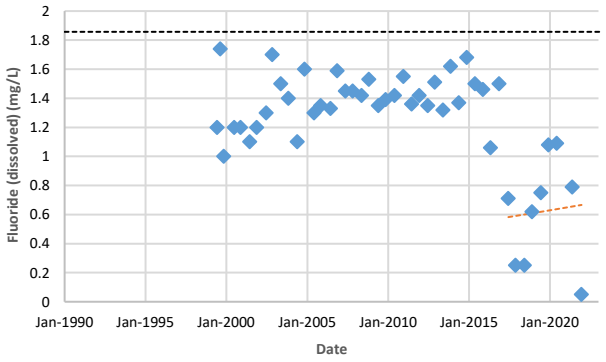
Well TW22-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

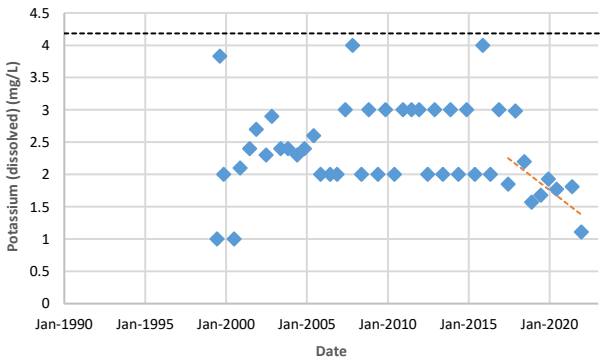


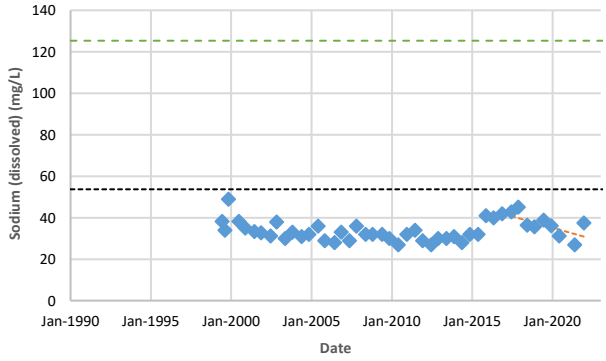


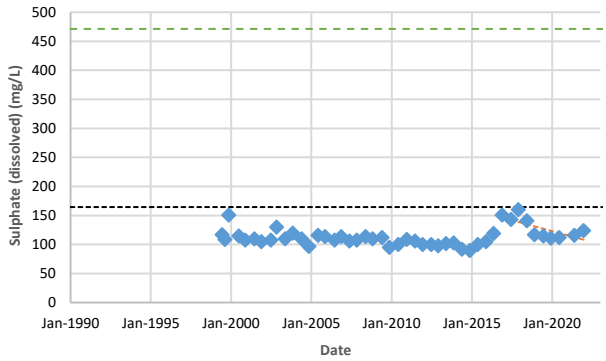






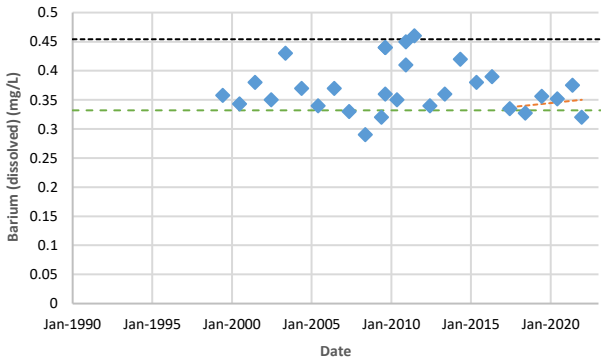


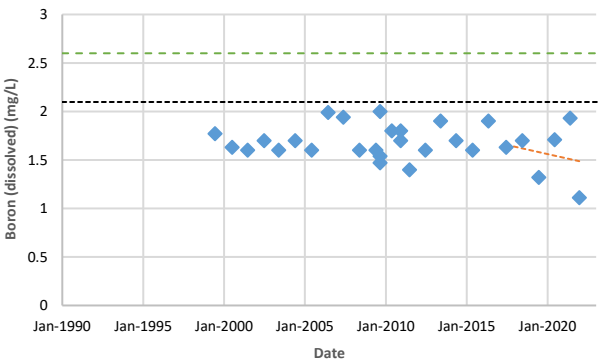


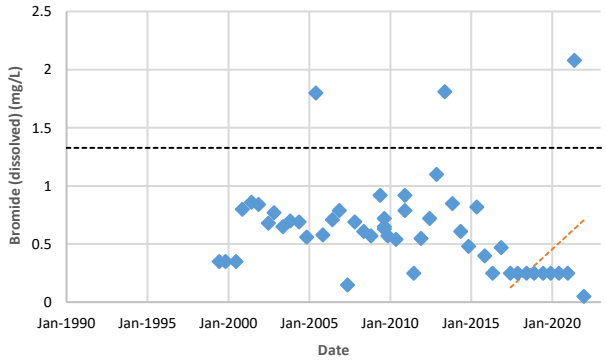


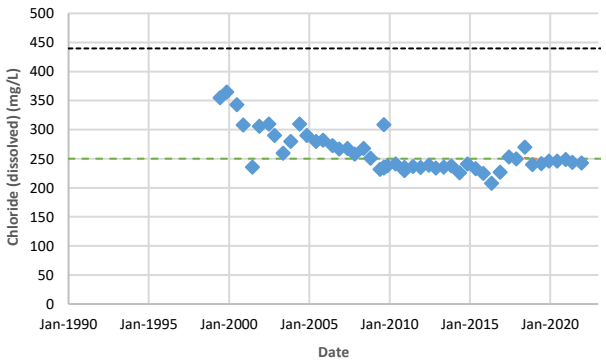
Concentration | Linear Regression Trendline (2017-2021) | Upper Confidence Limit | Reasonable Use Criteria

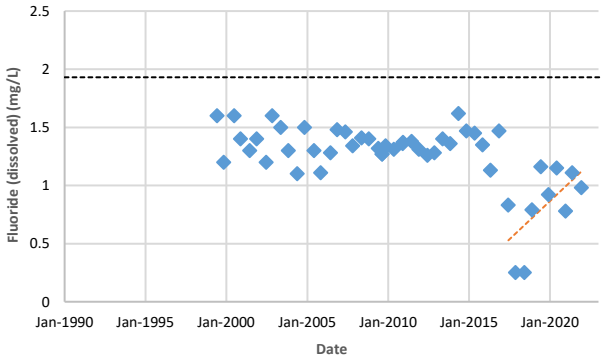
Well TW30-94	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

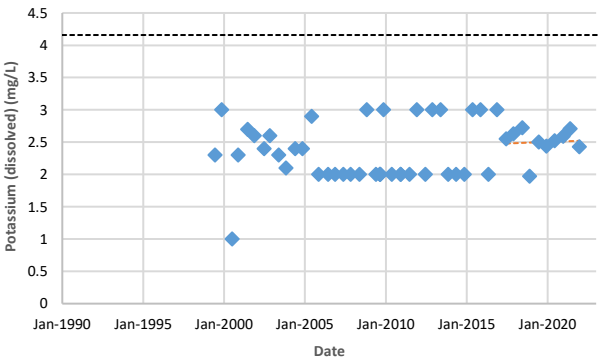


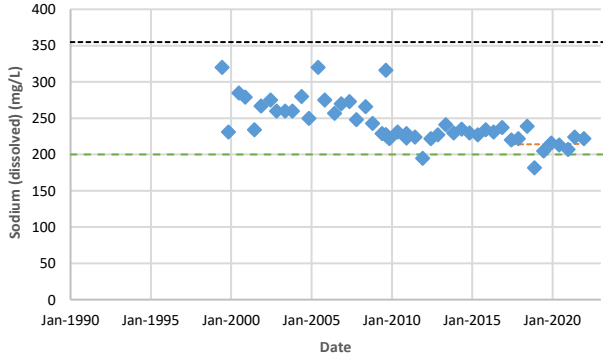


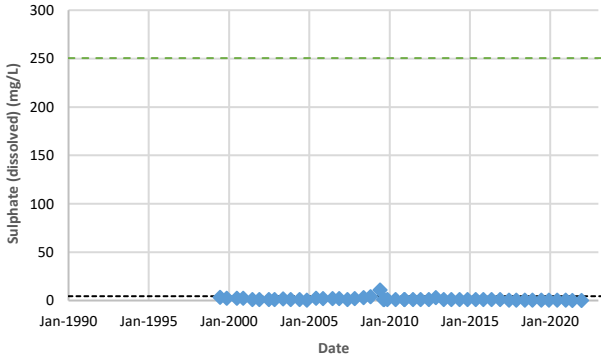




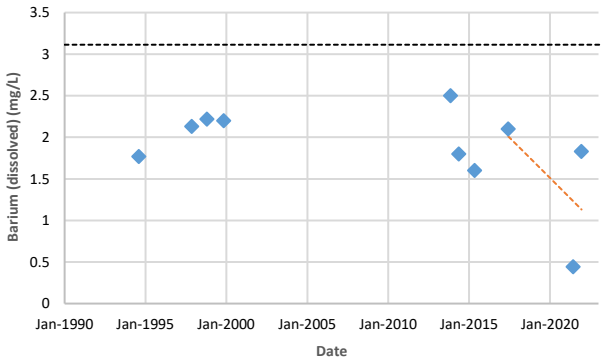


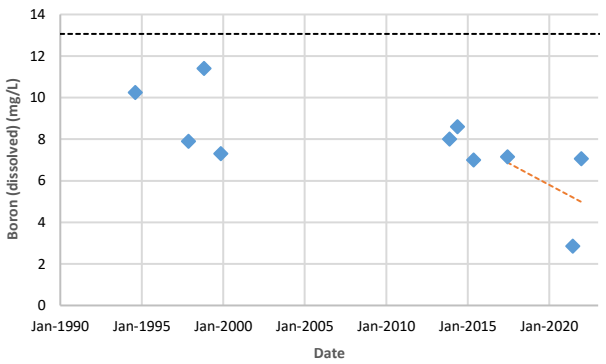


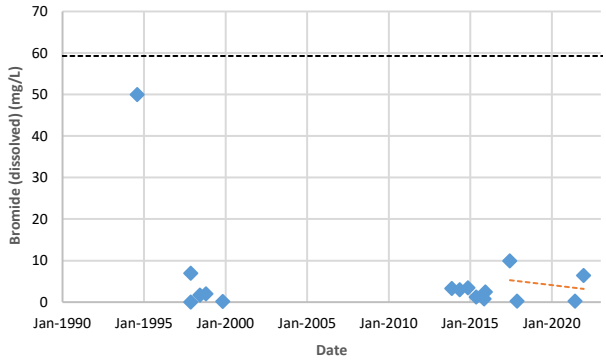


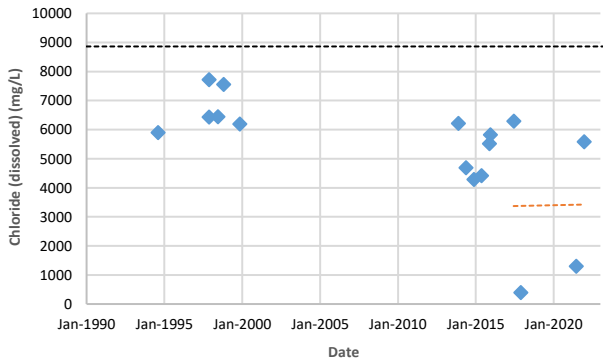


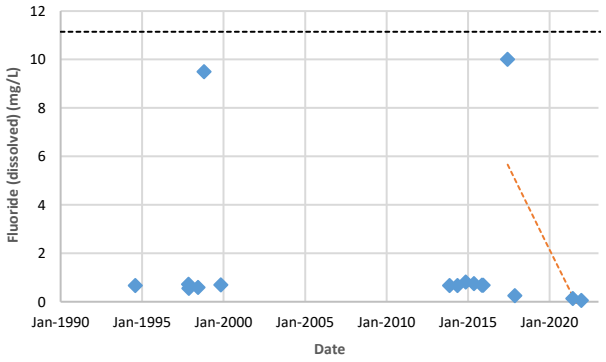
Well TW30-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

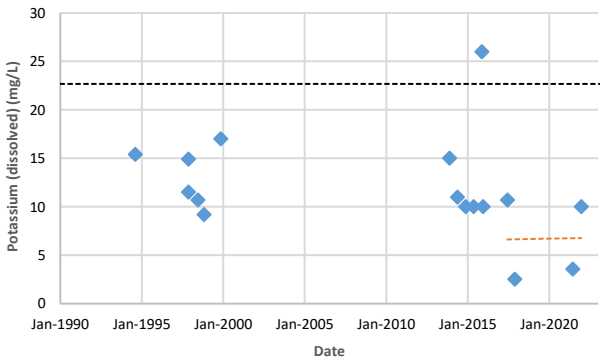


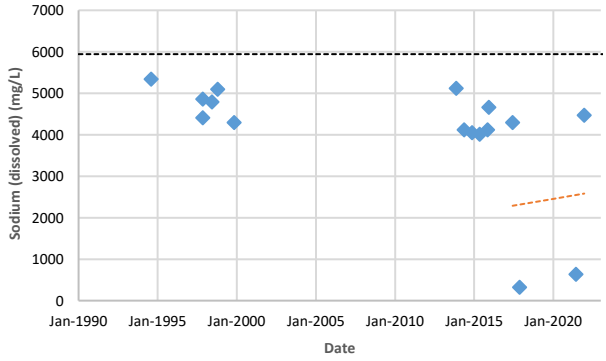


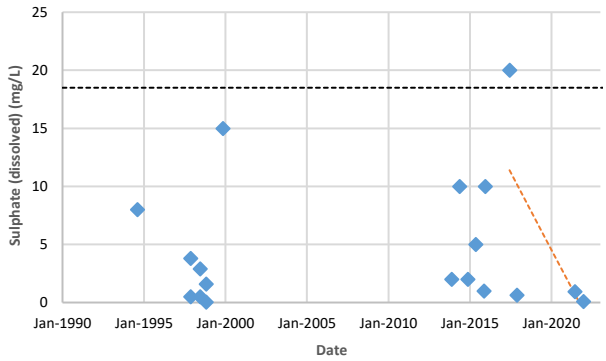




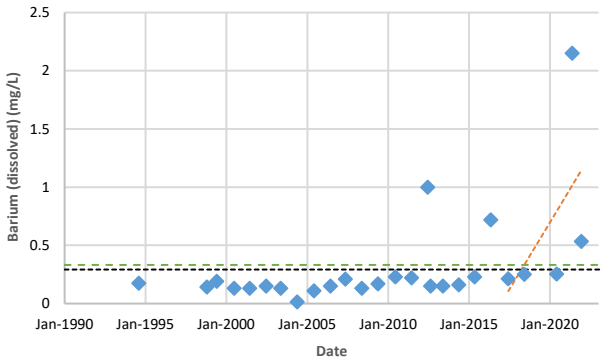


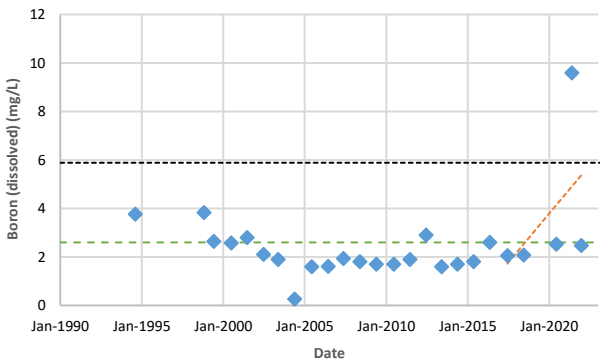


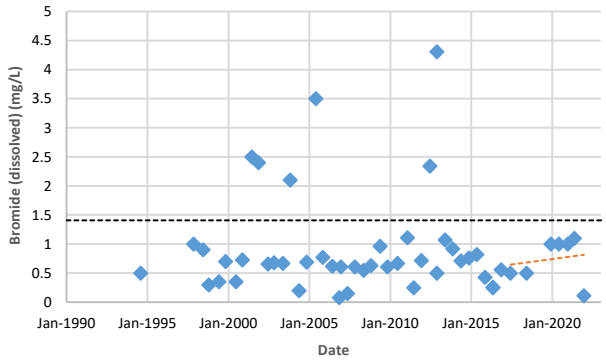


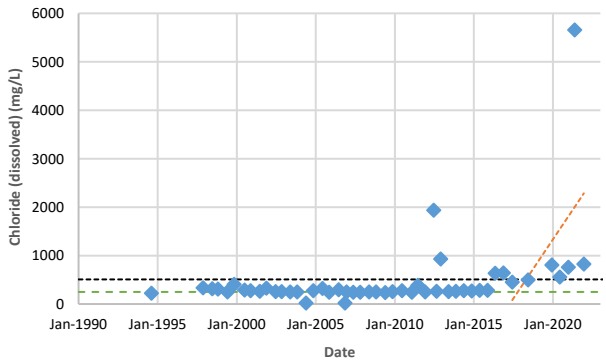


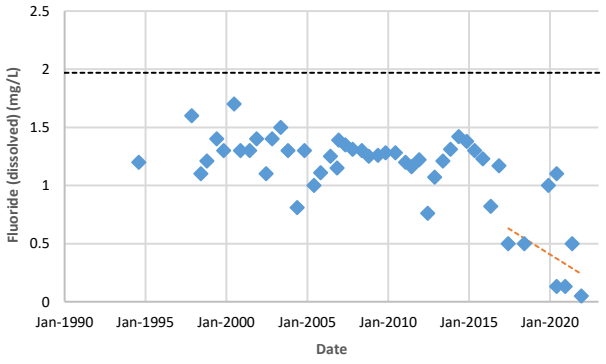
Well TW32-94-I	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

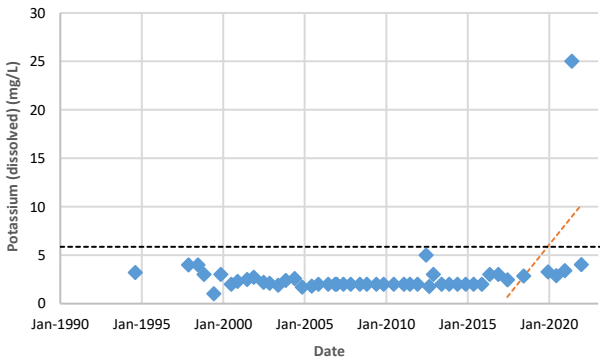


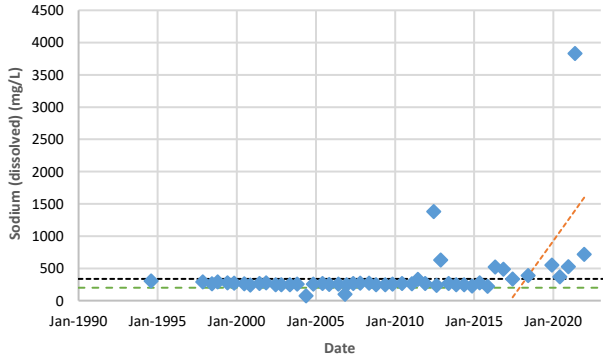


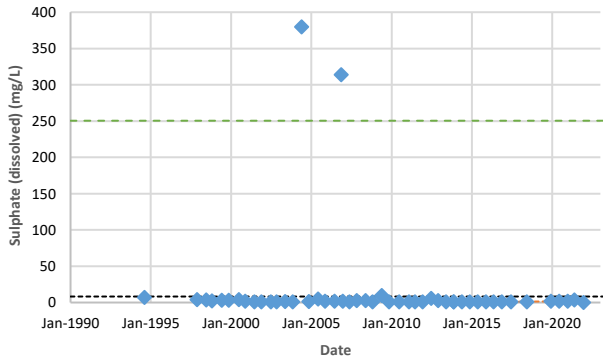


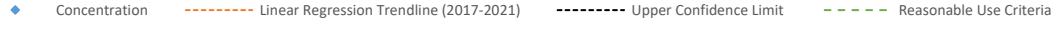




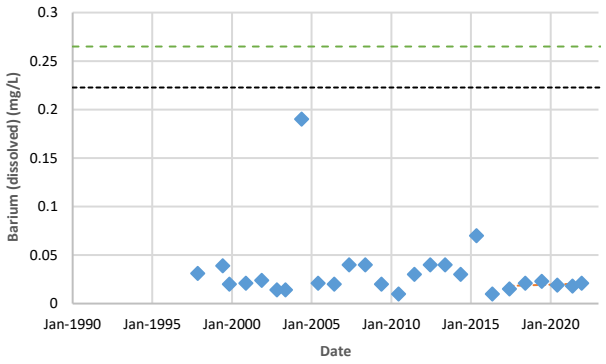


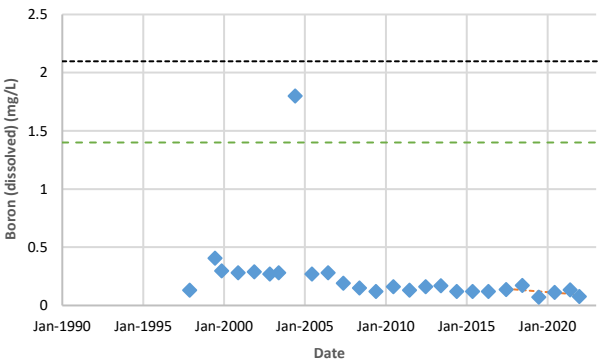


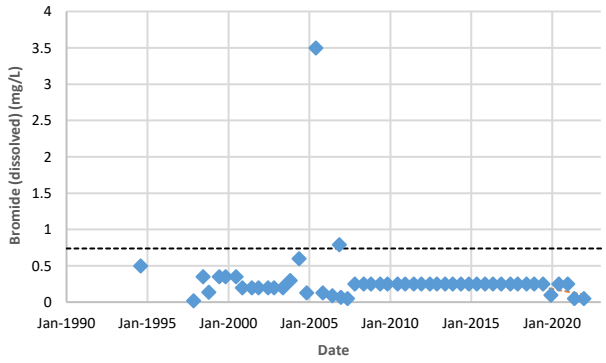


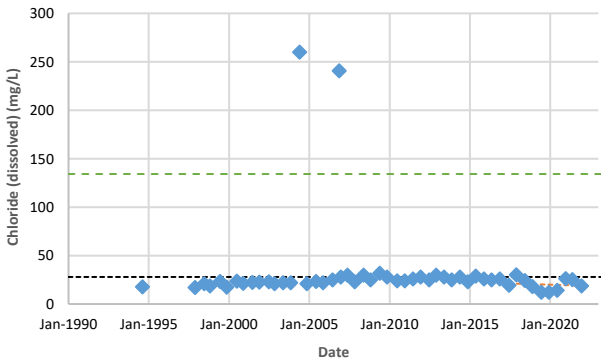


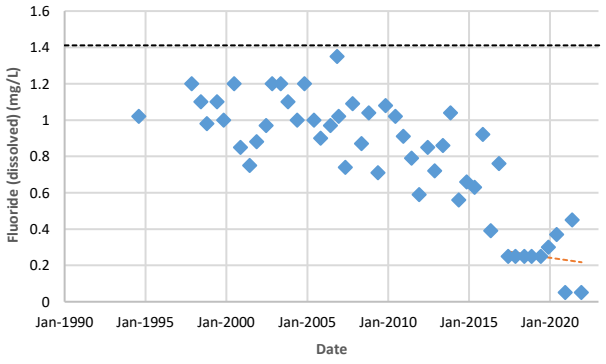
Well TW32-94-II	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

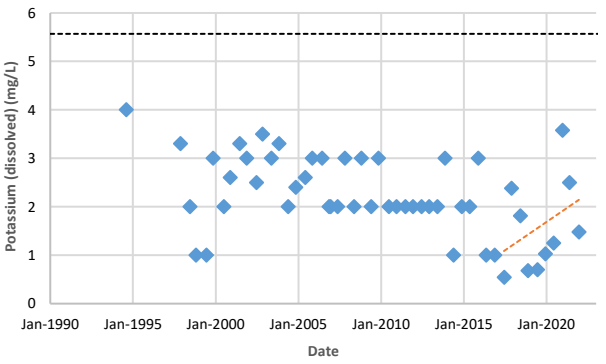


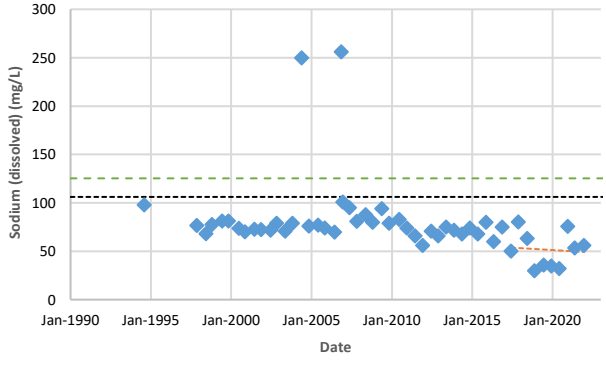


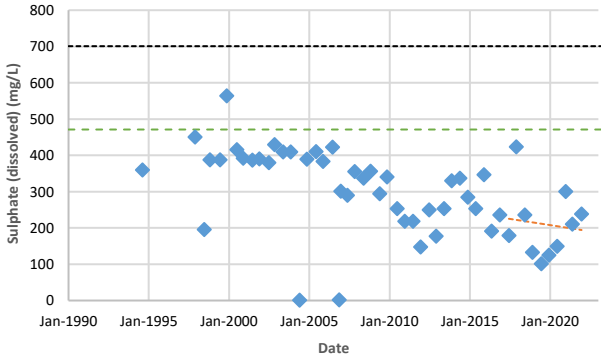




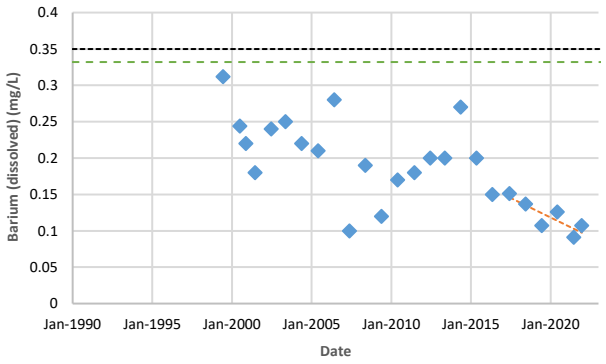


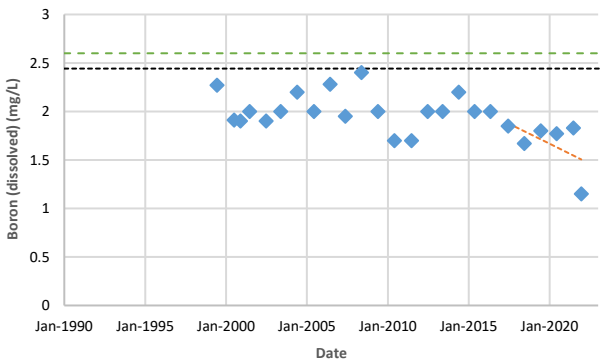


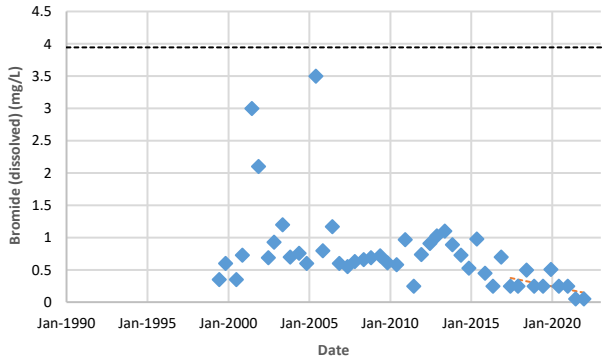


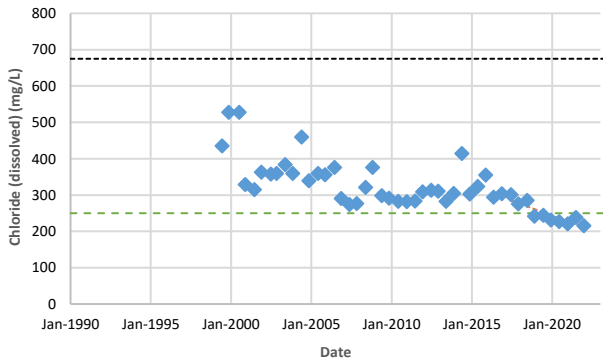


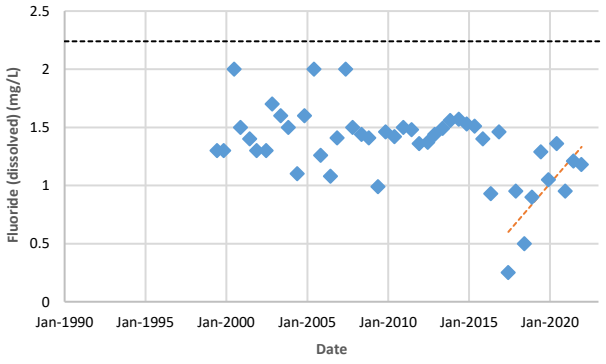
Well TW32-94-IV	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

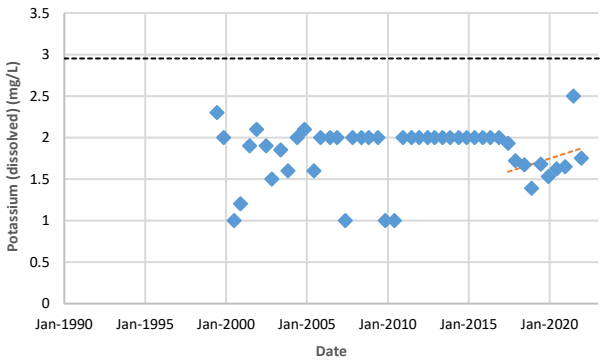


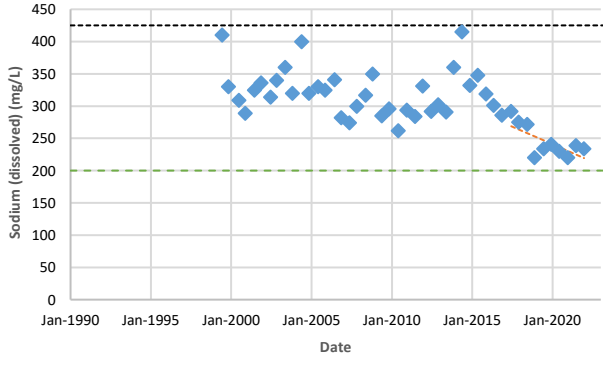


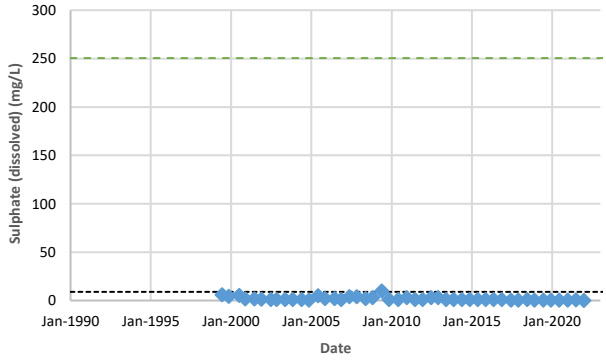




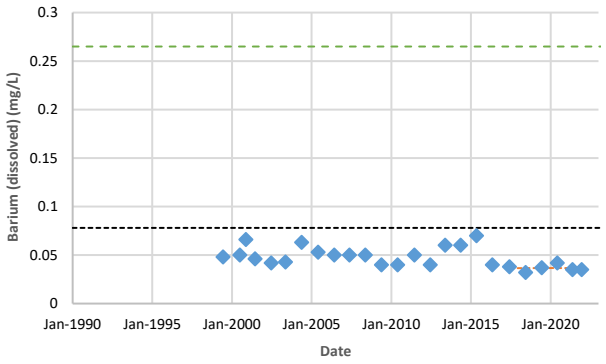


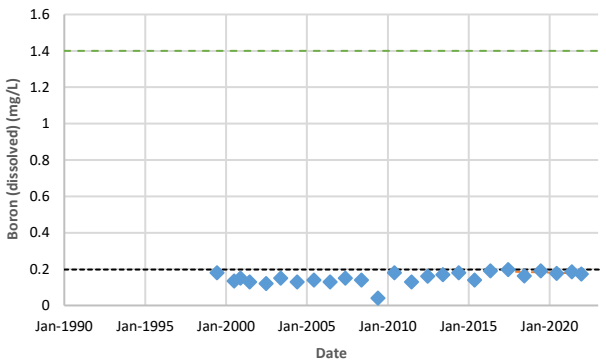


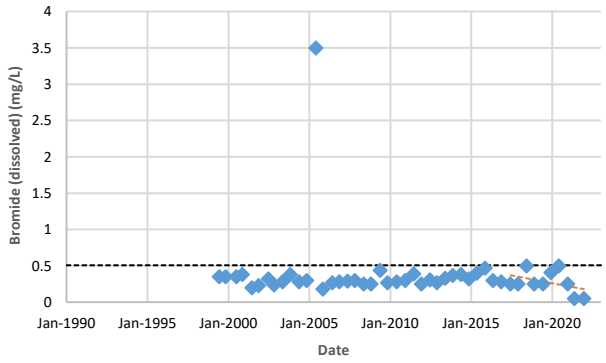


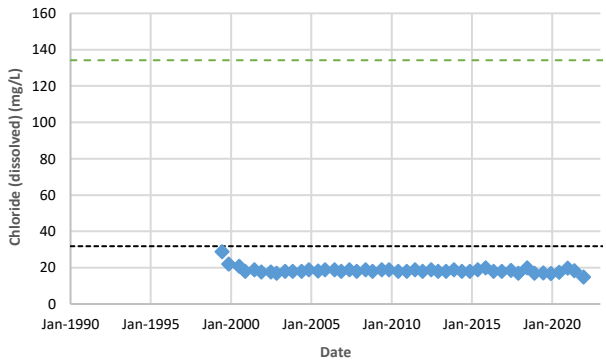


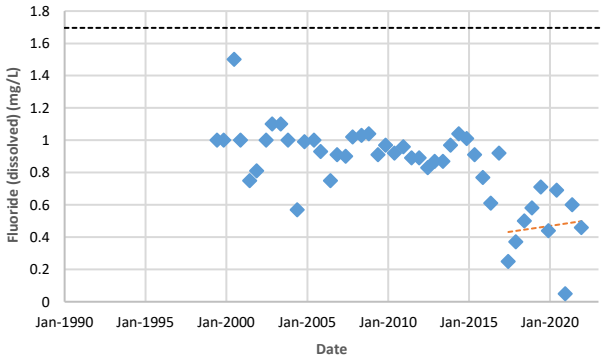
Well TW39-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

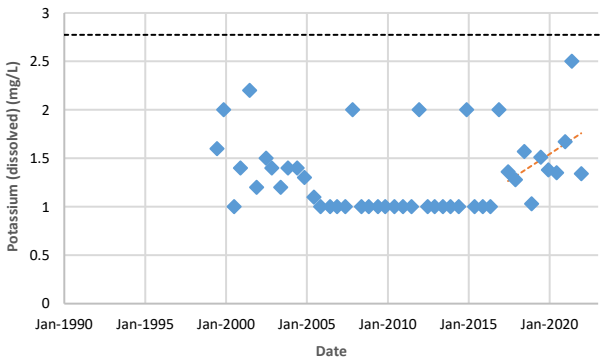


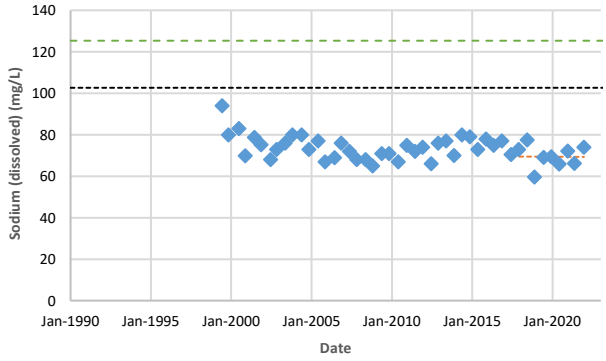


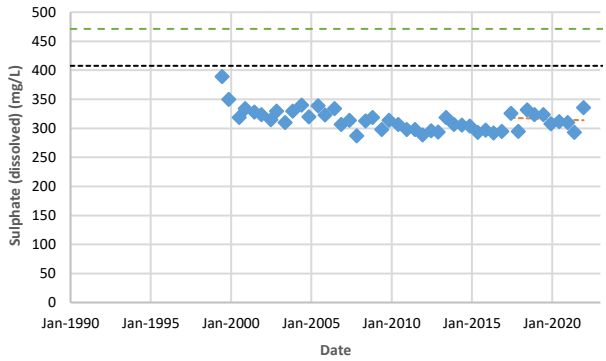




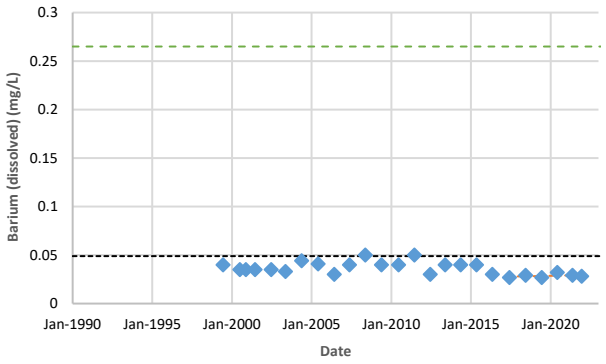


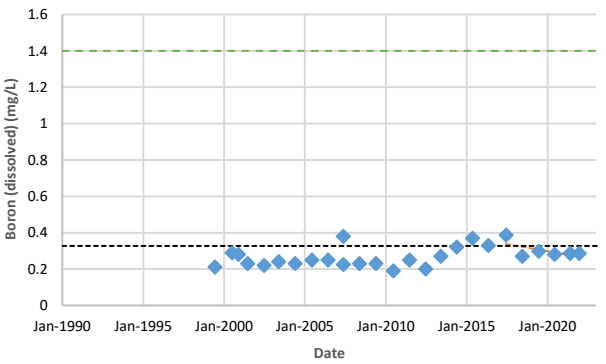


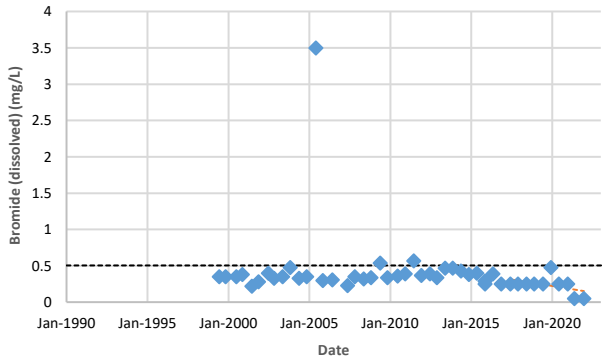


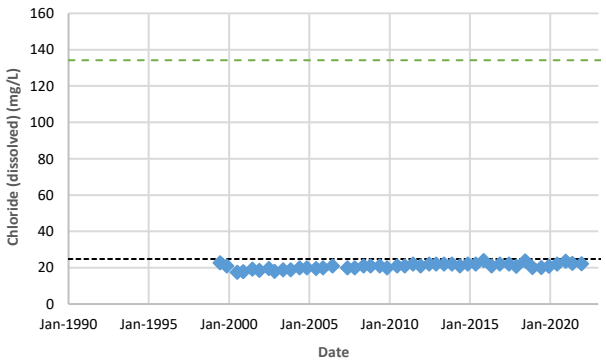


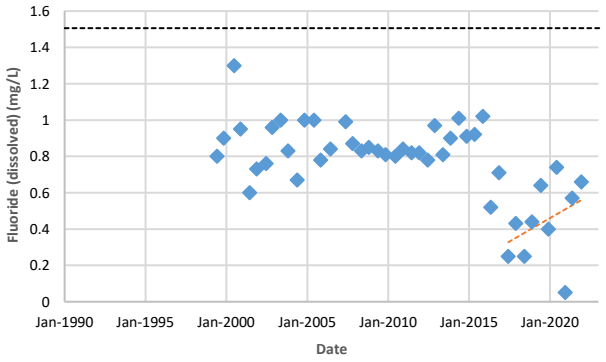
Well TW39-99I	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

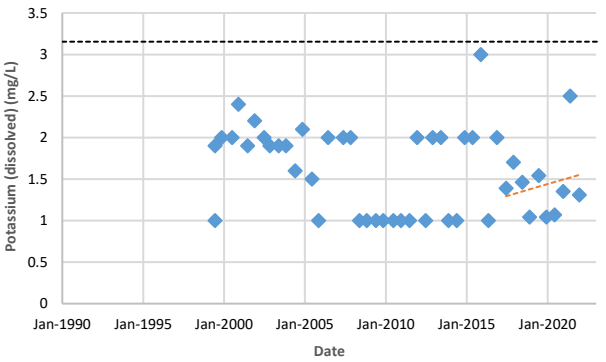


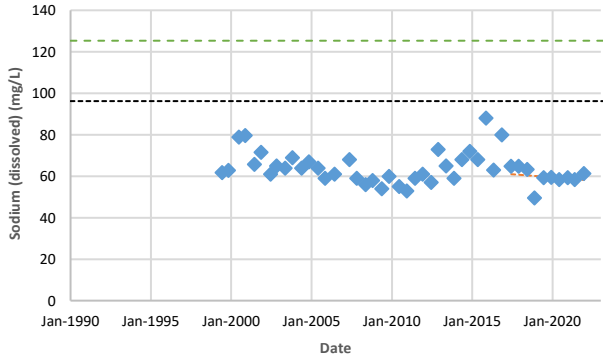


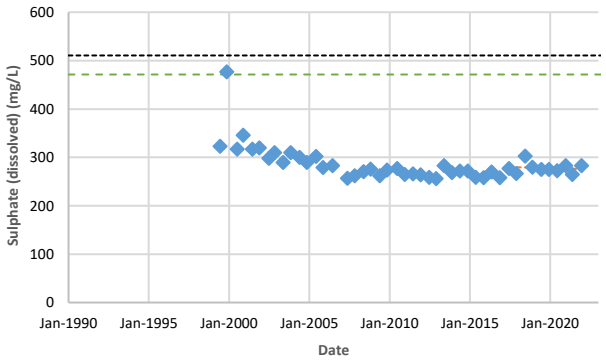




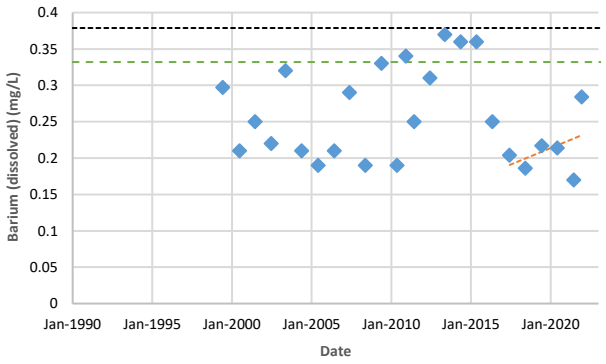


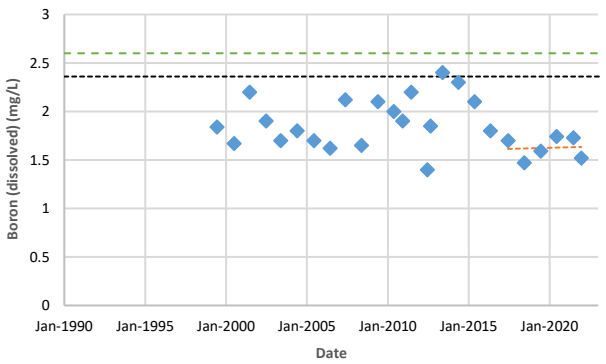


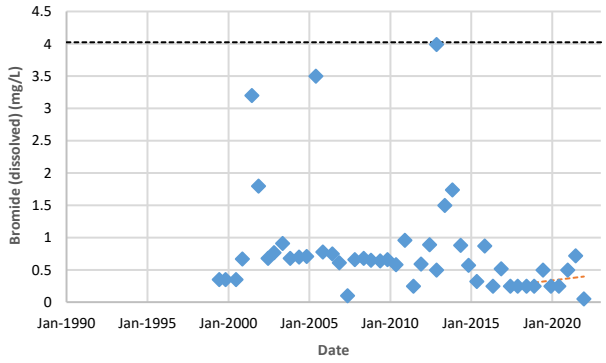


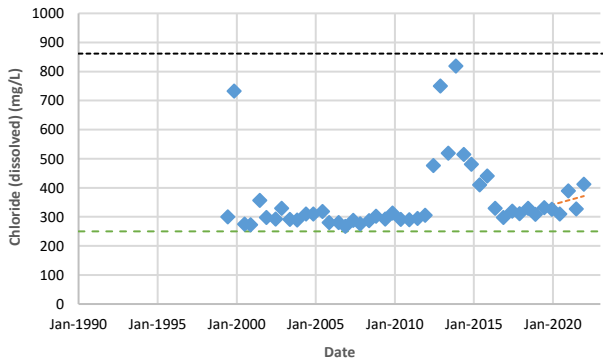


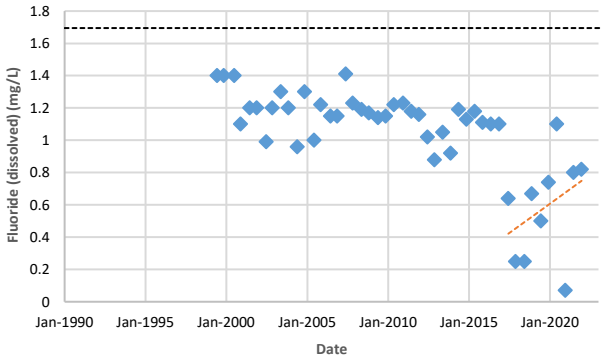
Well TW39-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING

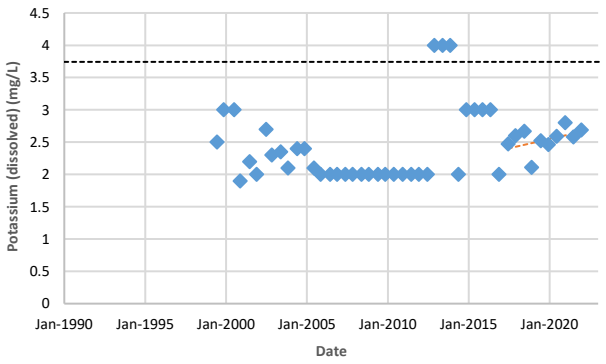


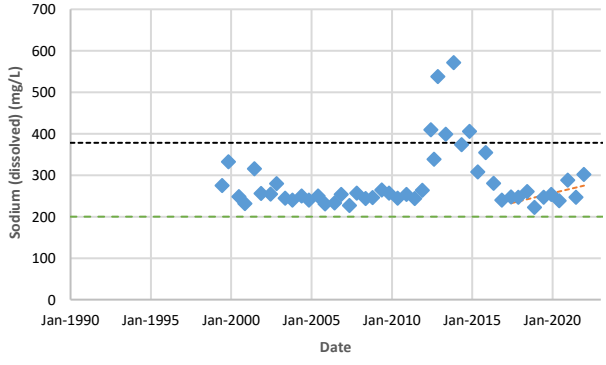


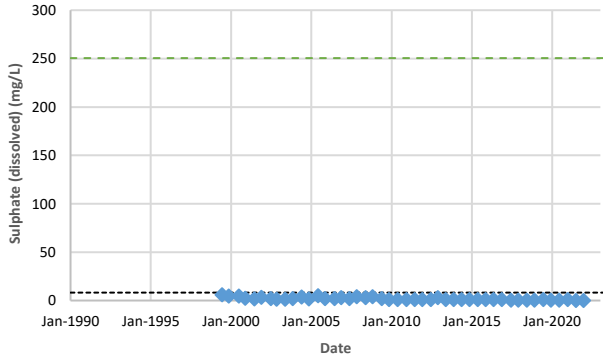




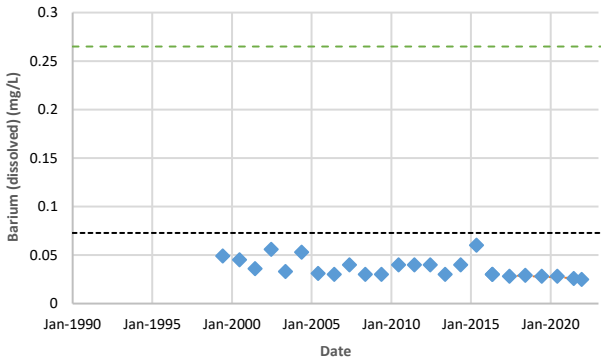


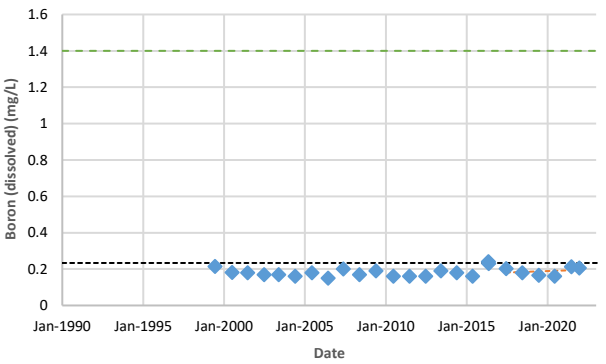


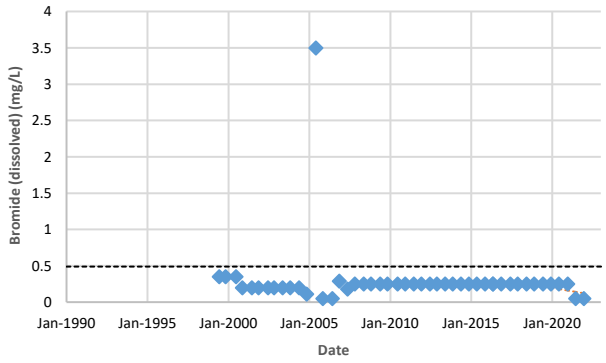


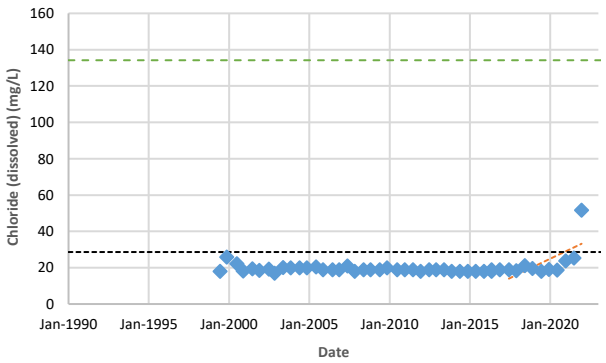


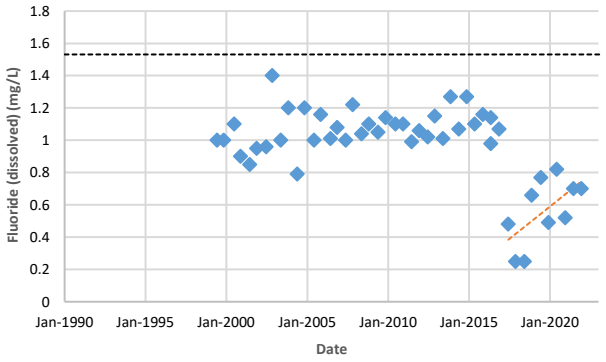
Well TW40-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

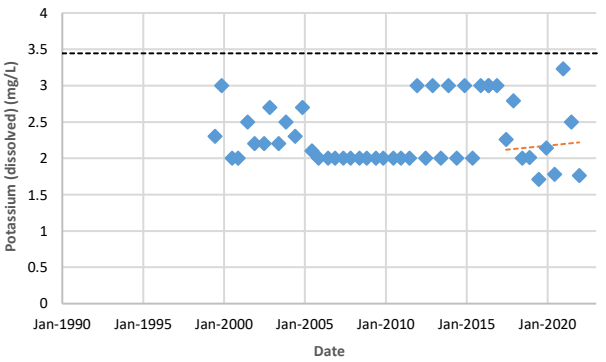


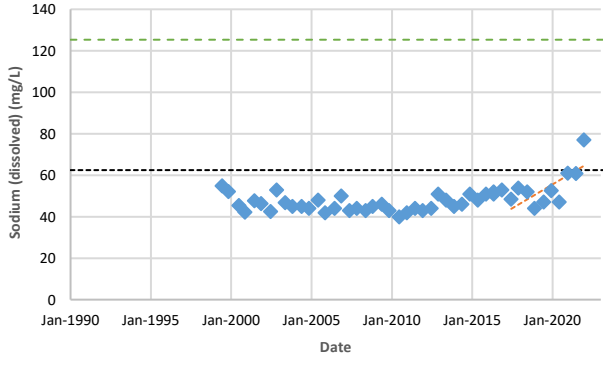


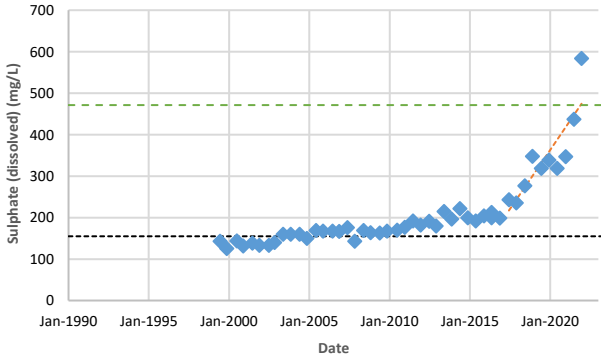




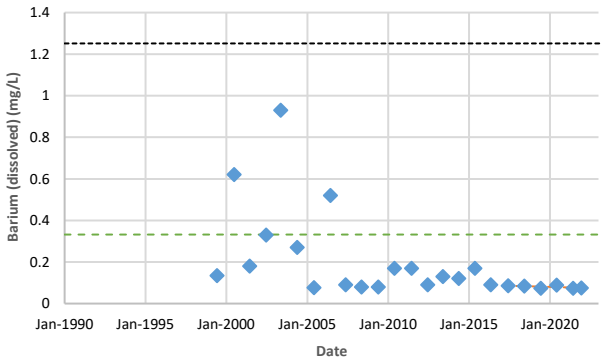


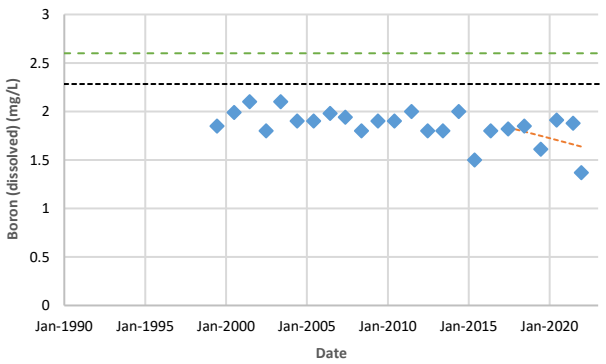


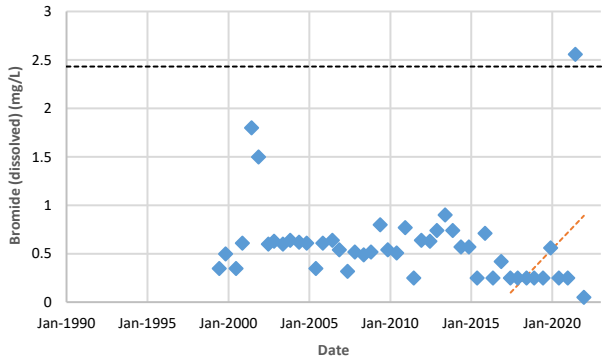


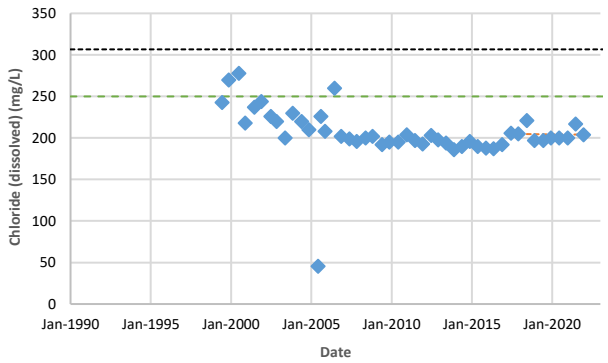


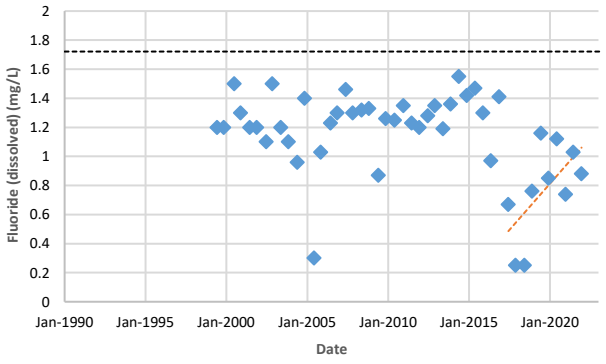
Well TW40-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

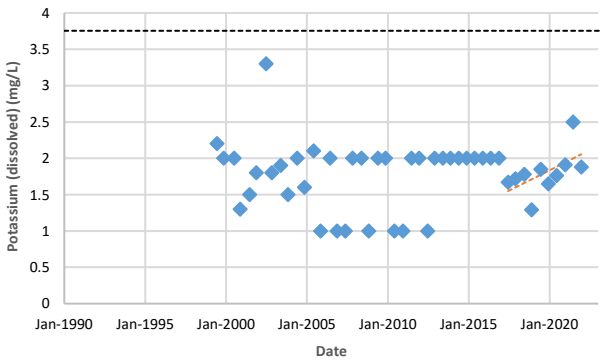


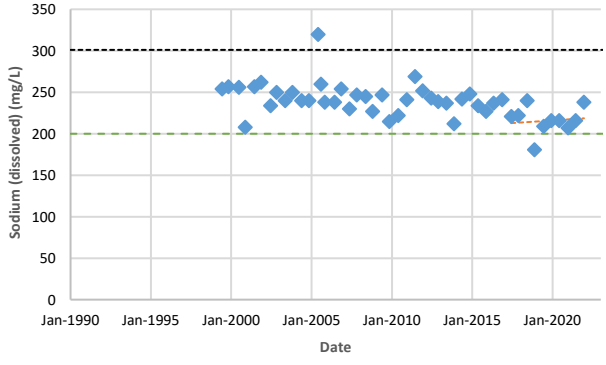


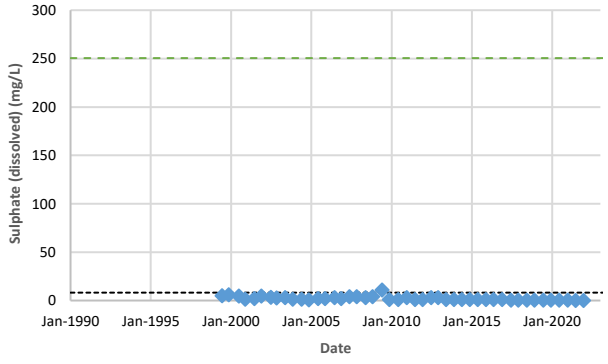




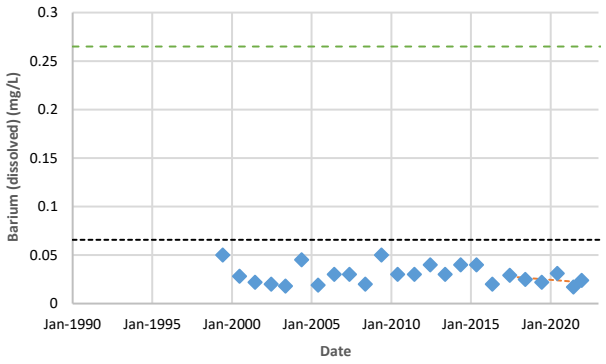


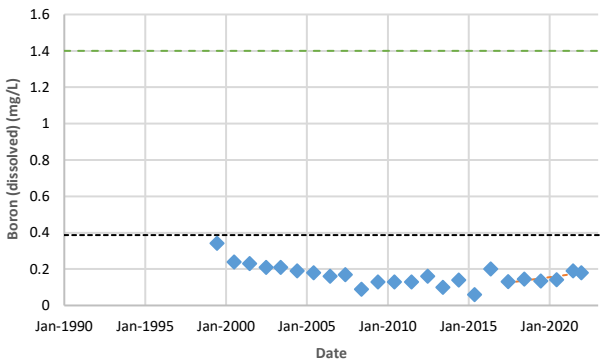


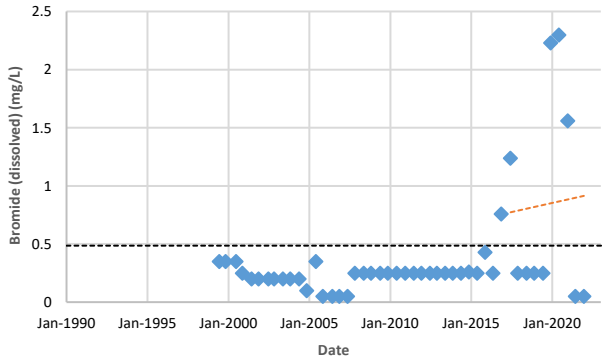


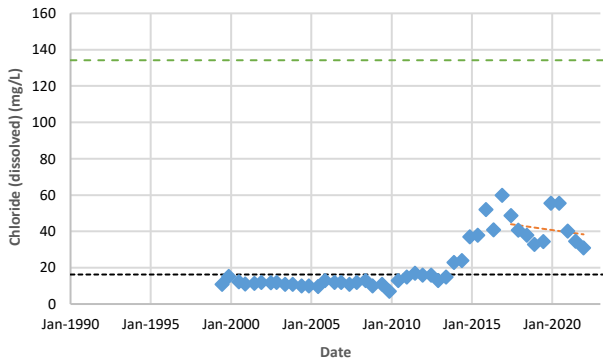


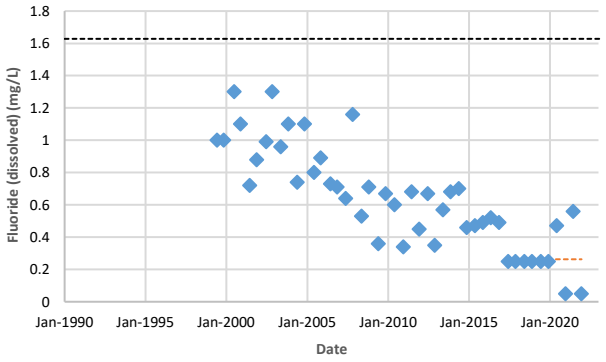
Well TW41-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

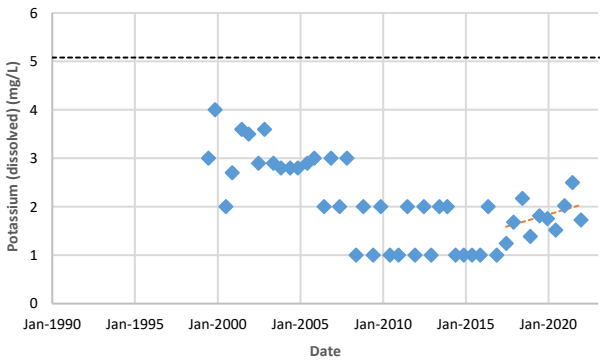


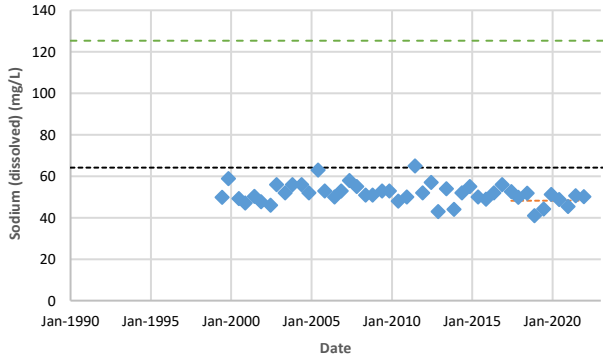


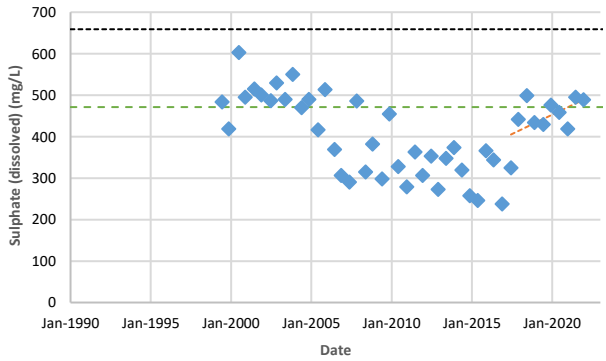




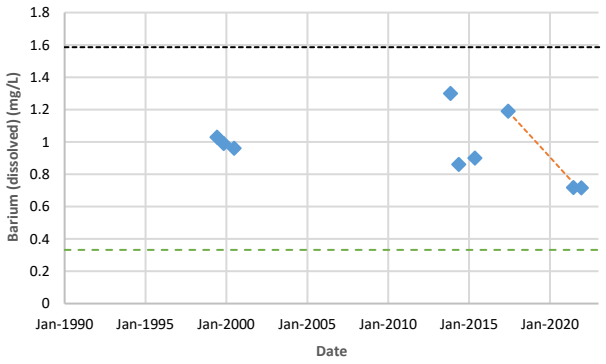


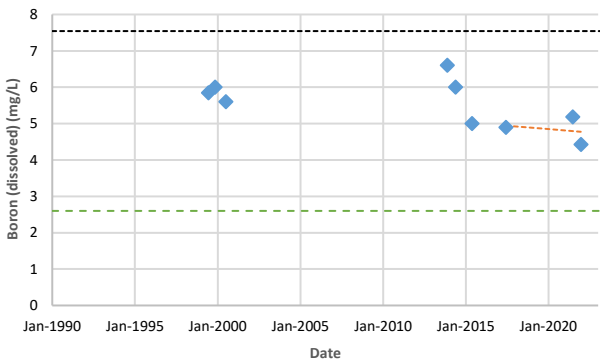


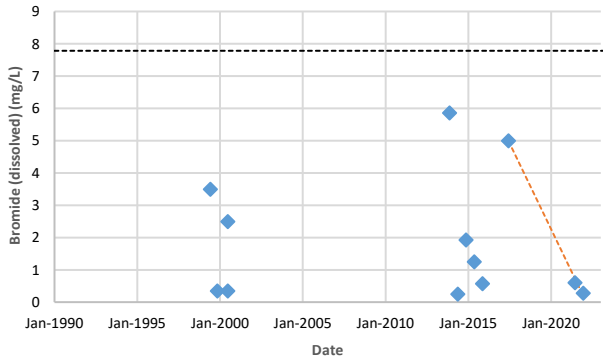


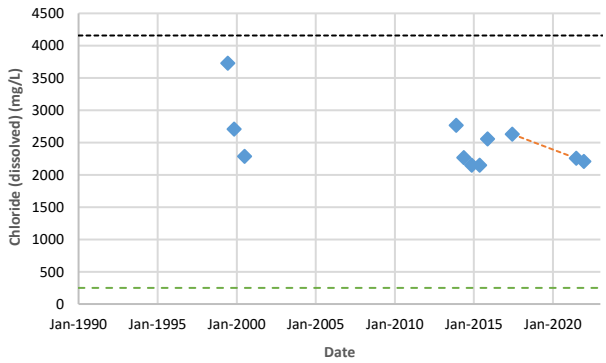


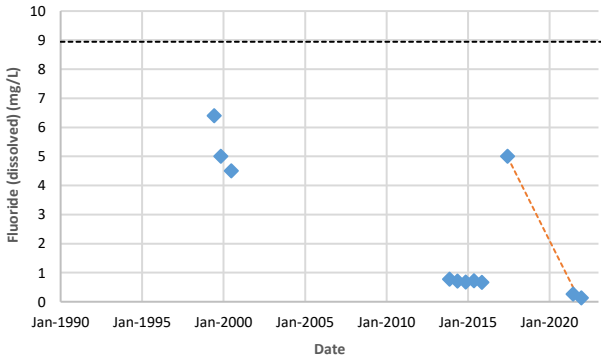
Well TW41-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

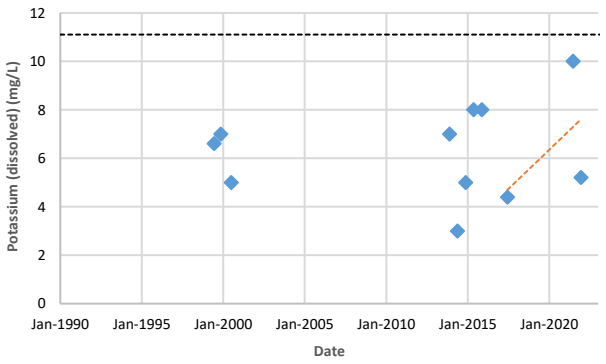


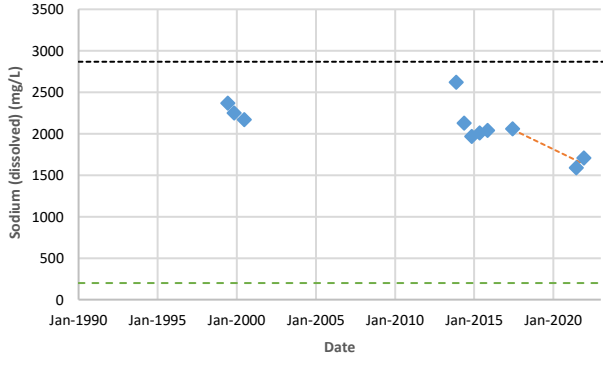


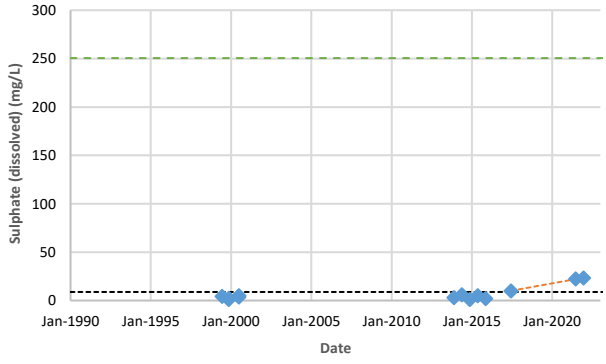




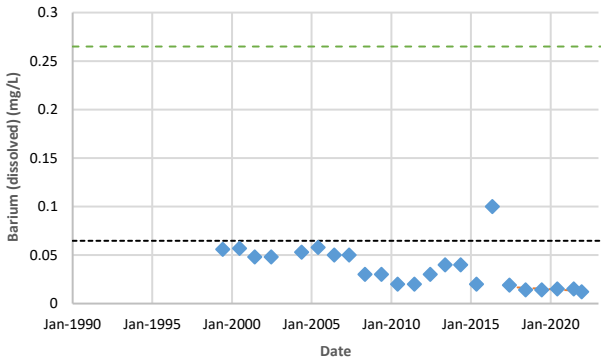


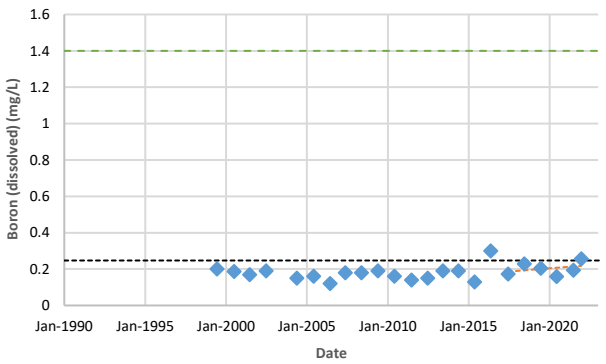


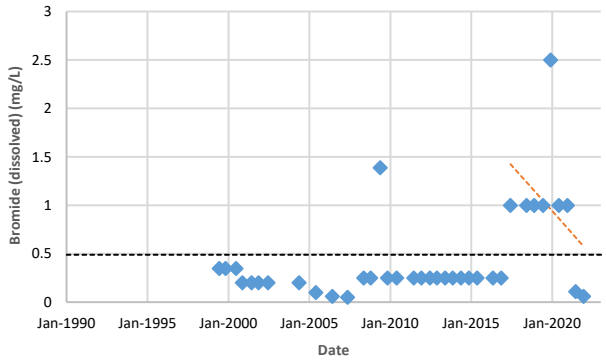


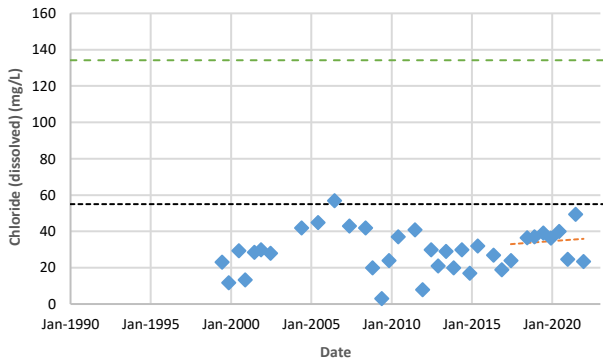


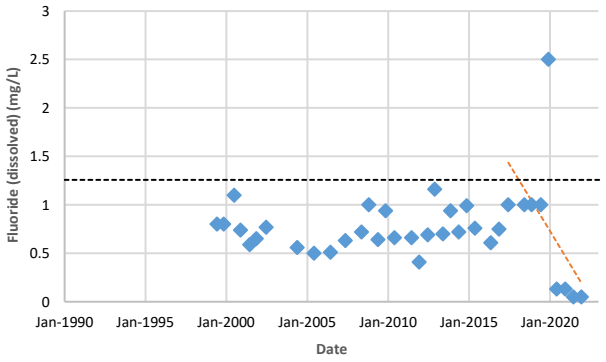
Well TW42-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

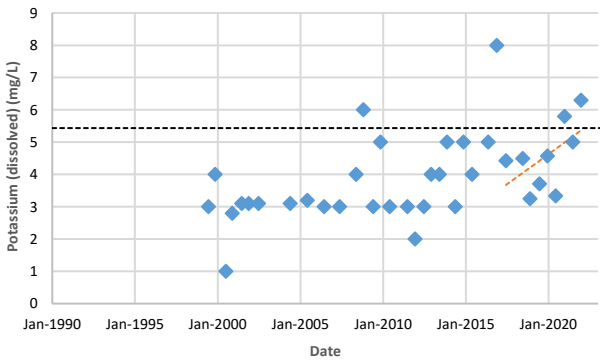


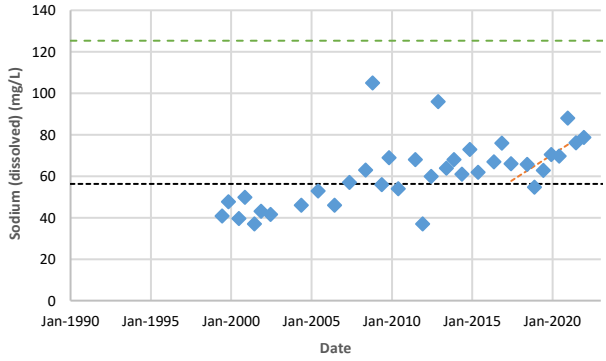


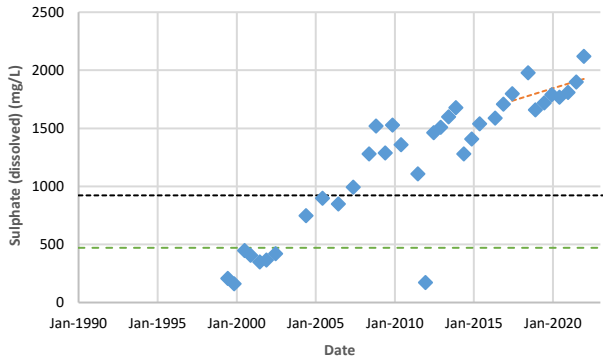




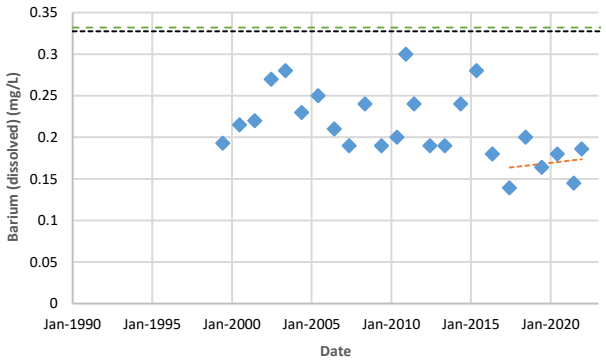


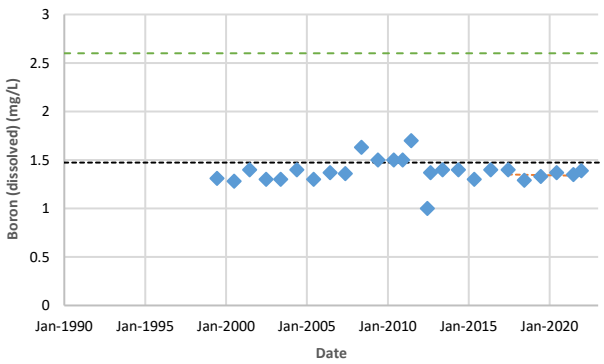


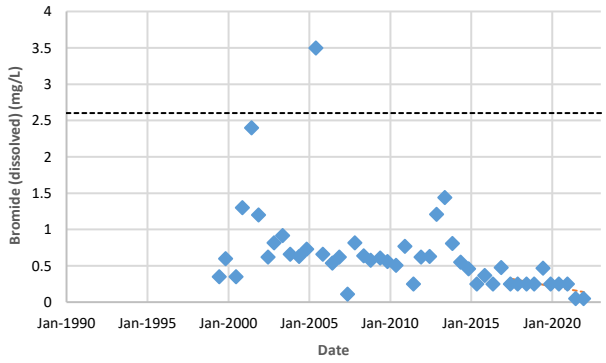


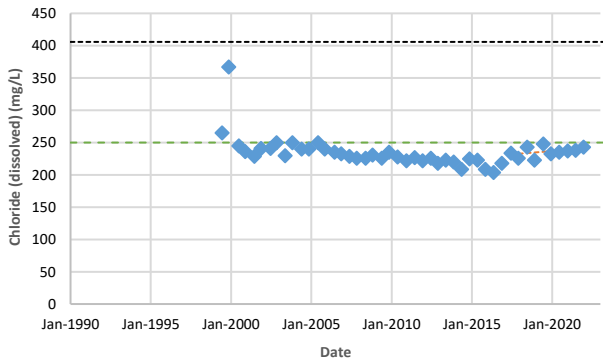


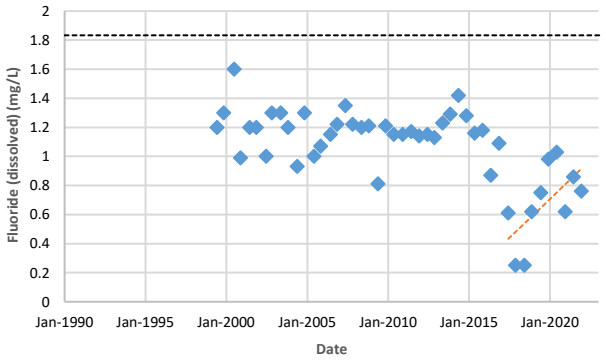
Well TW42-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

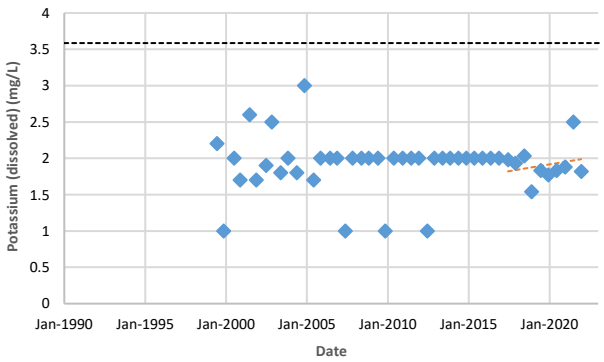


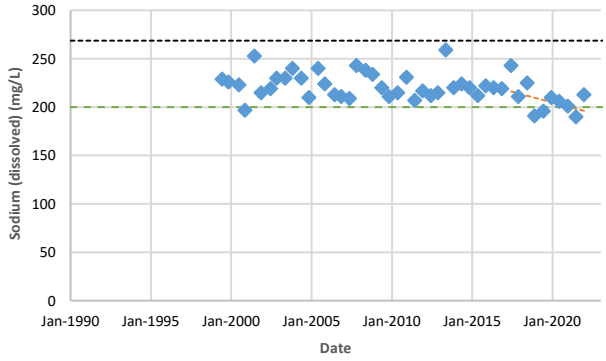


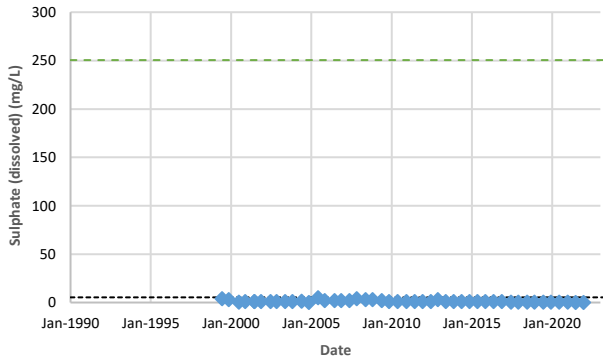


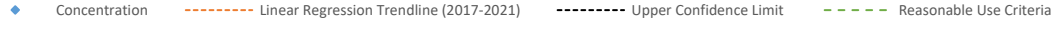




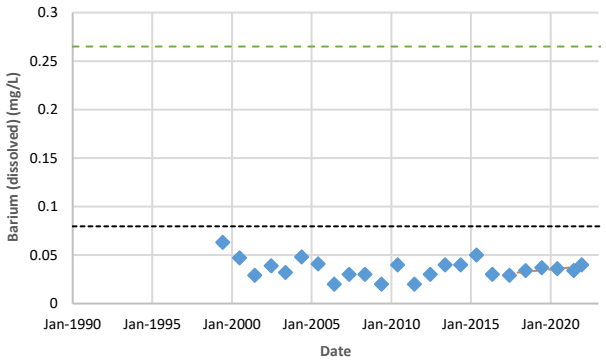


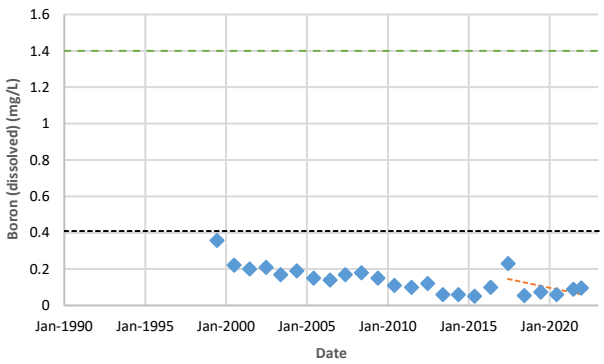


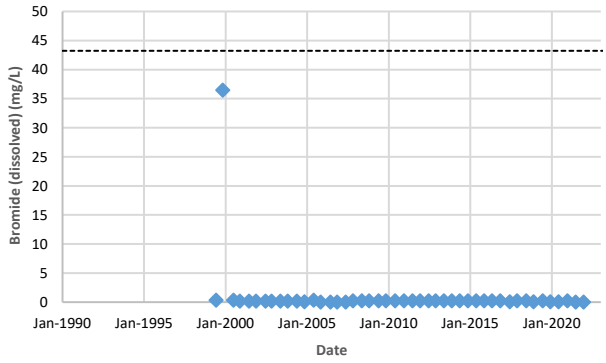


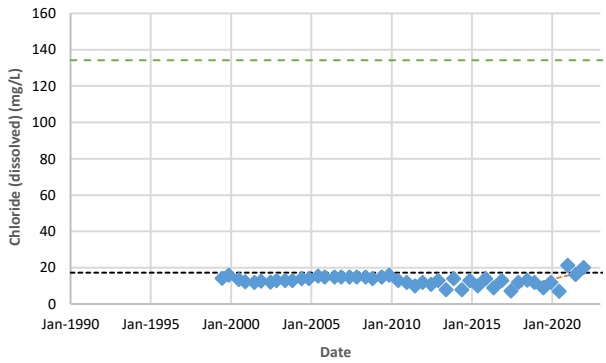


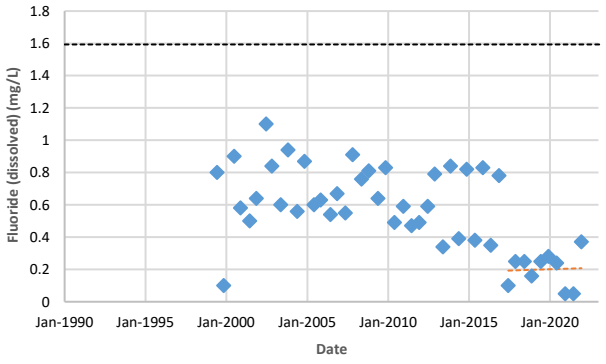
Well TW43-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

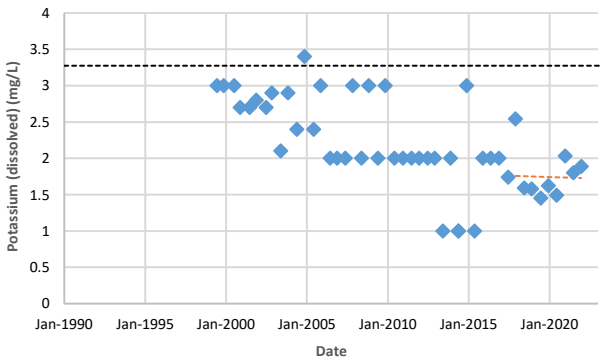


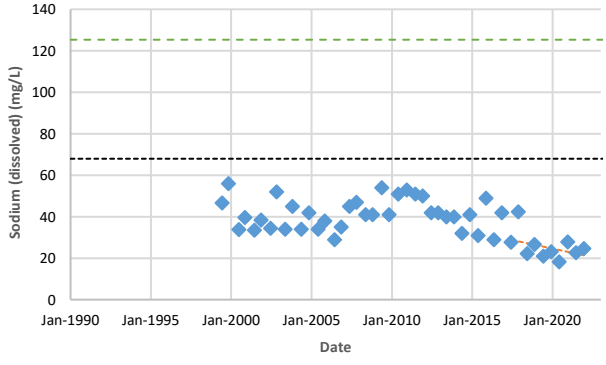


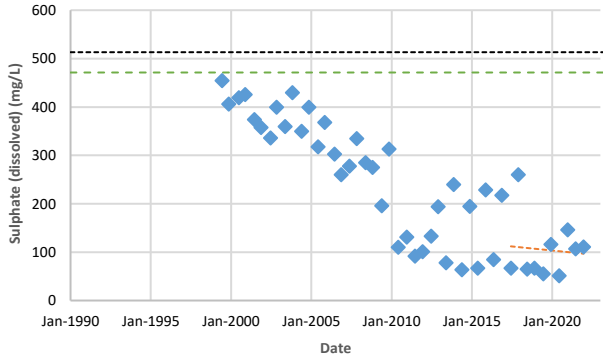






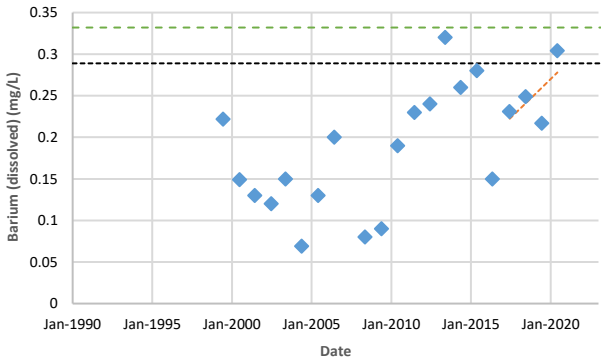


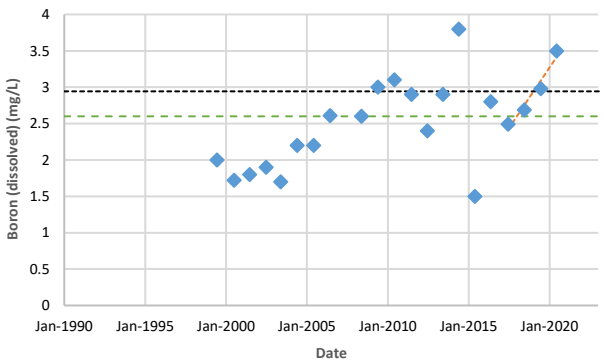


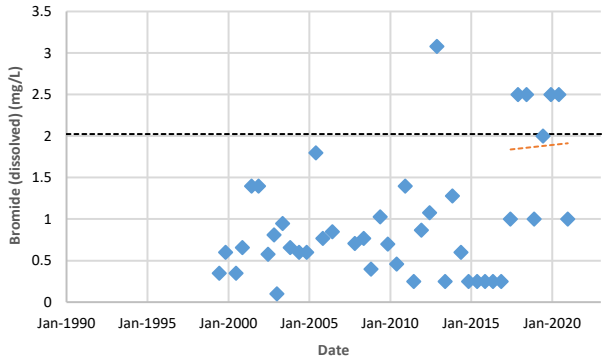


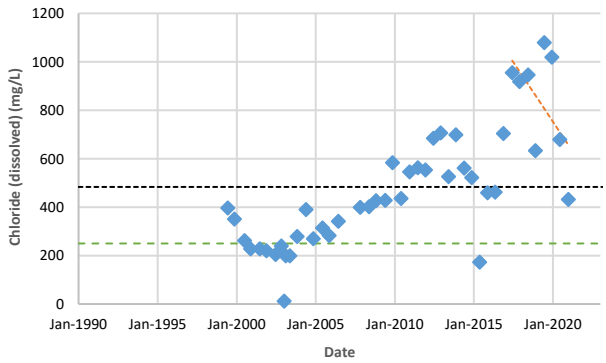
Concentration | Linear Regression Trendline (2017-2021) | Upper Confidence Limit | Reasonable Use Criteria

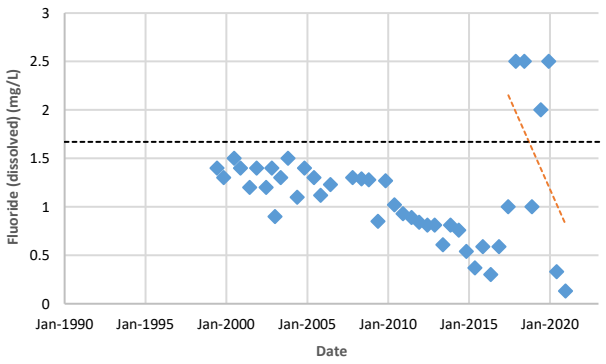
Well TW43-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16	**Drawn by:** RMF
Lambton Facility Landfill	**File Reference:** Project # 21-1519	DILLON CONSULTING

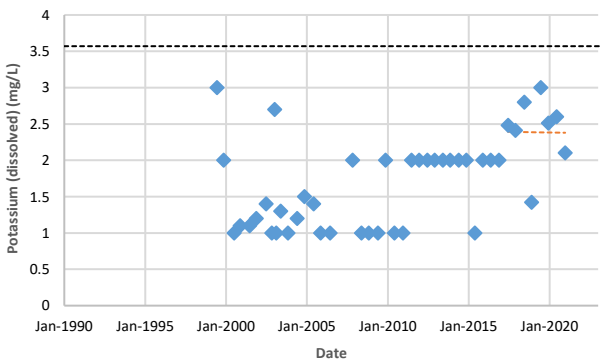


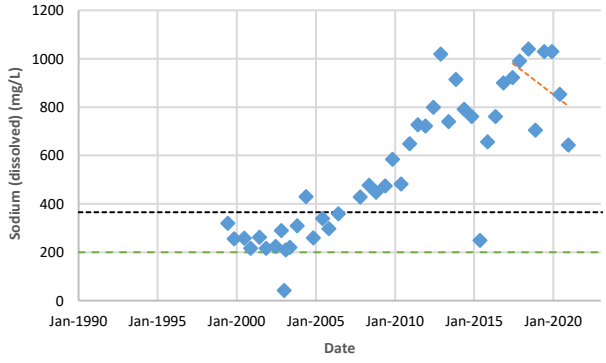


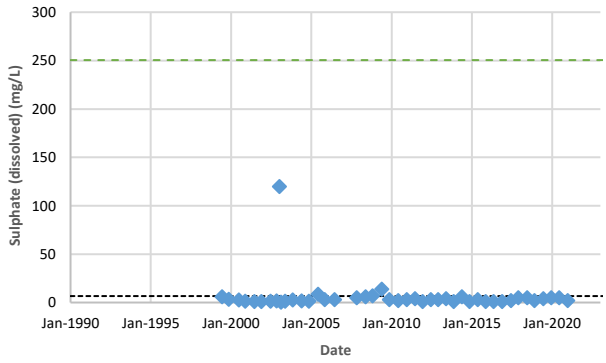




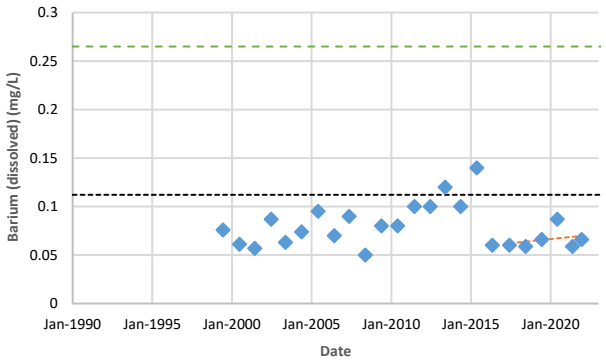


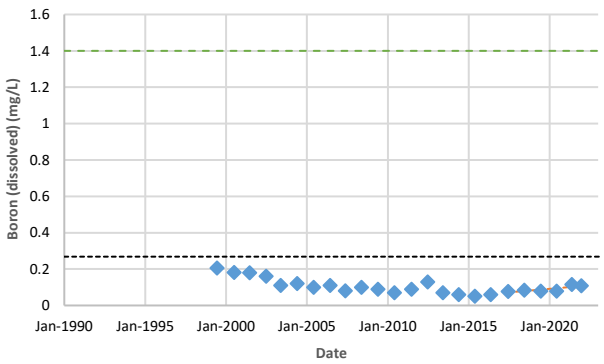


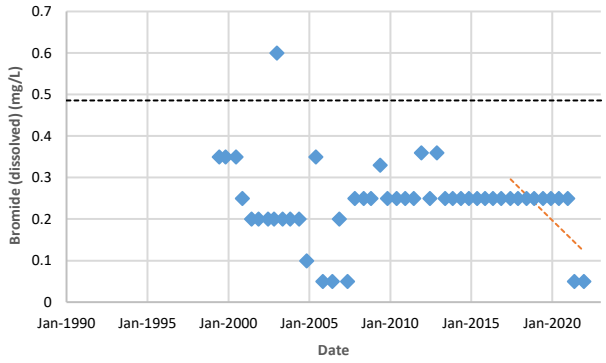


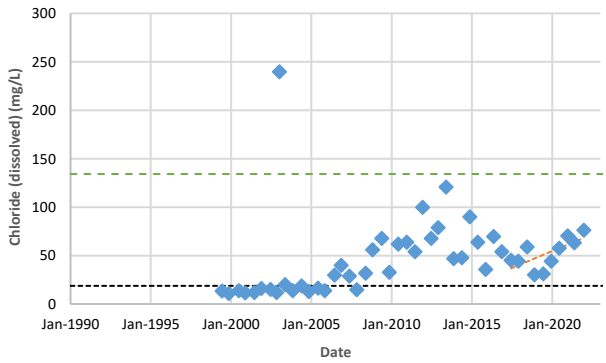


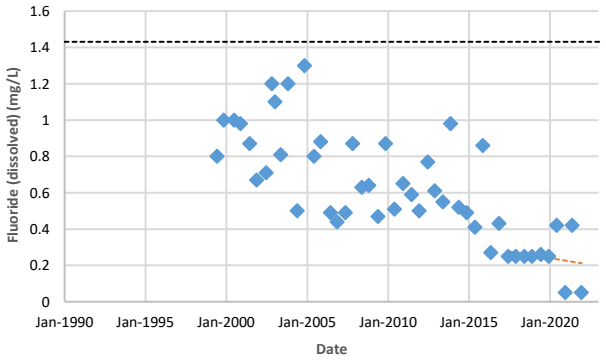
Well TW45-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

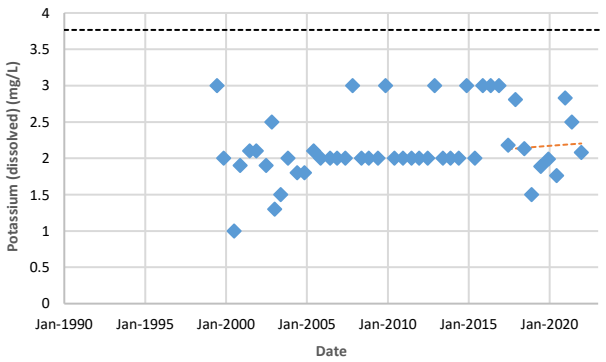


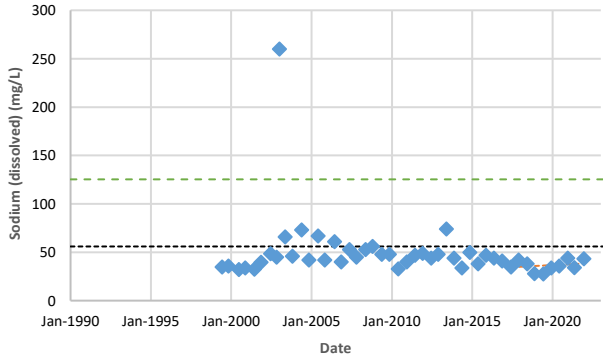


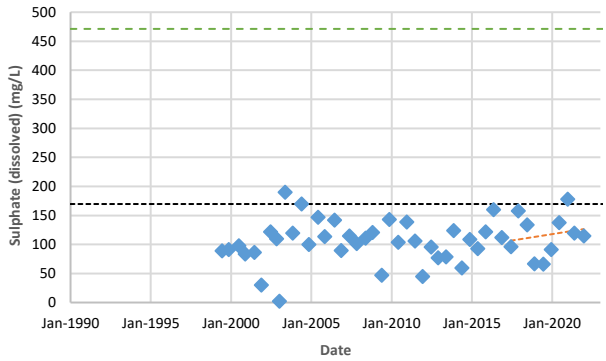




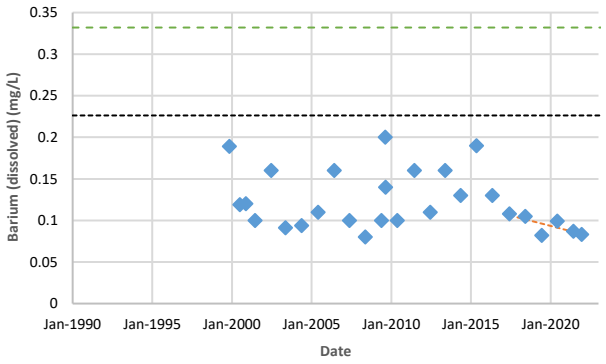


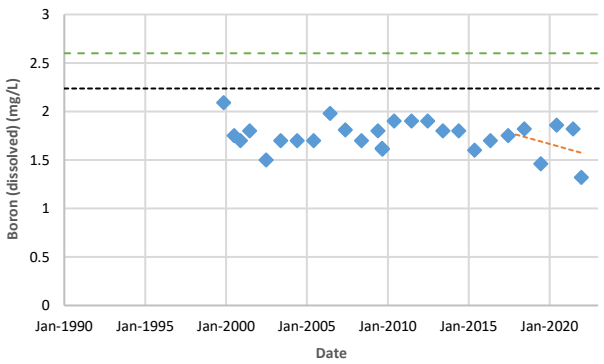


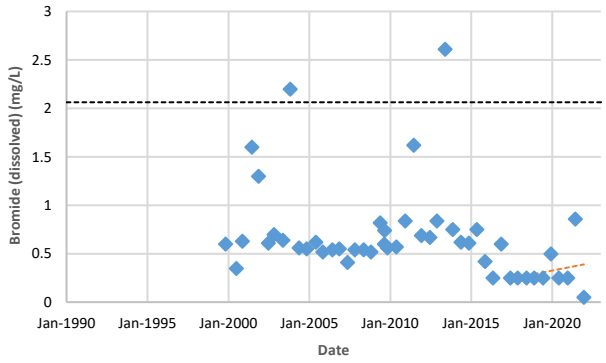


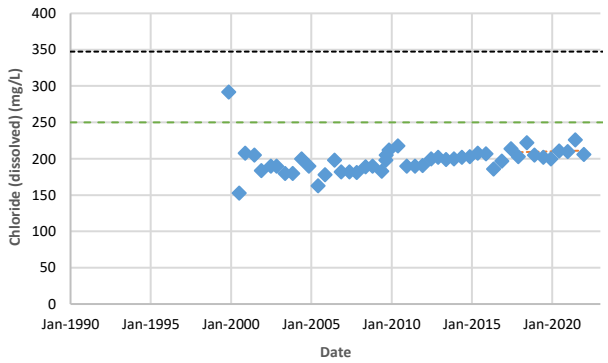


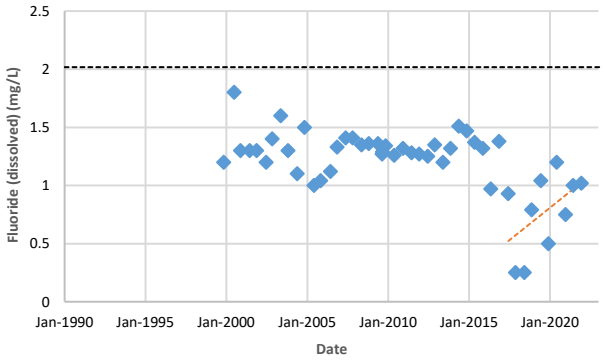
Well TW45-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

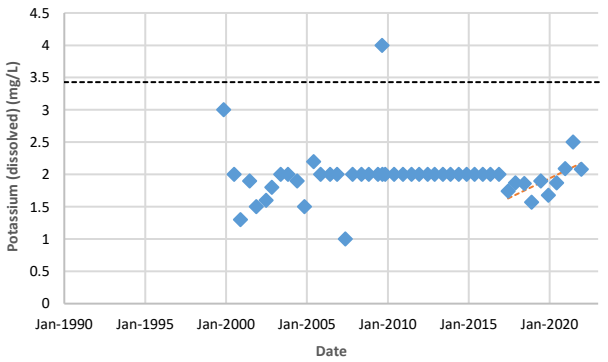


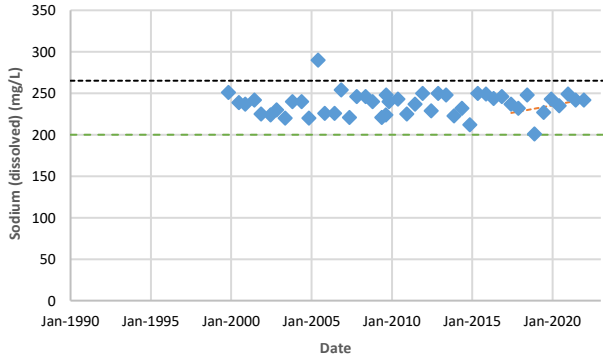


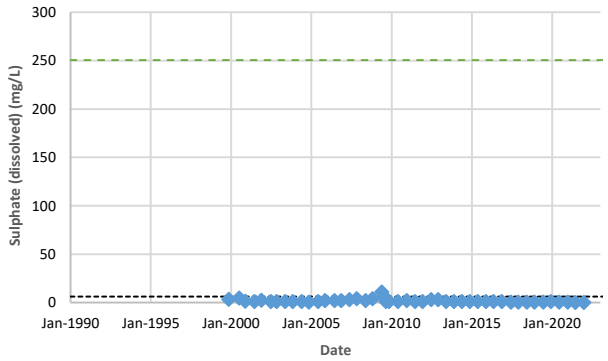




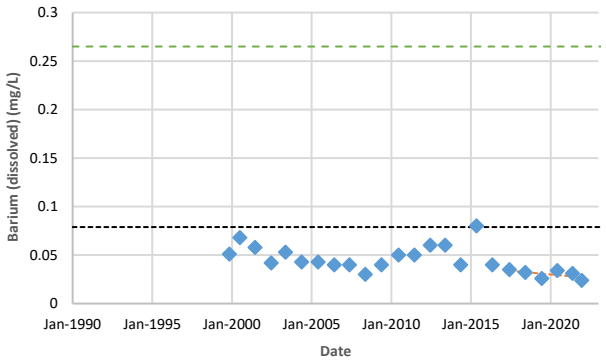


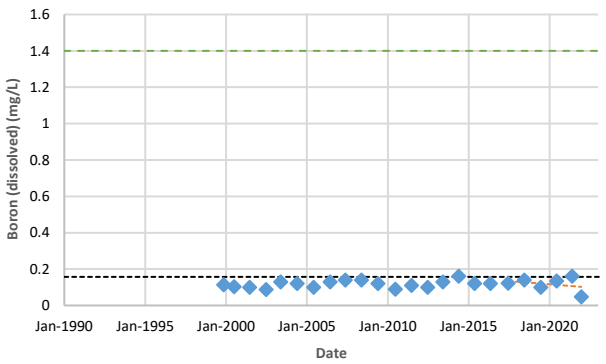


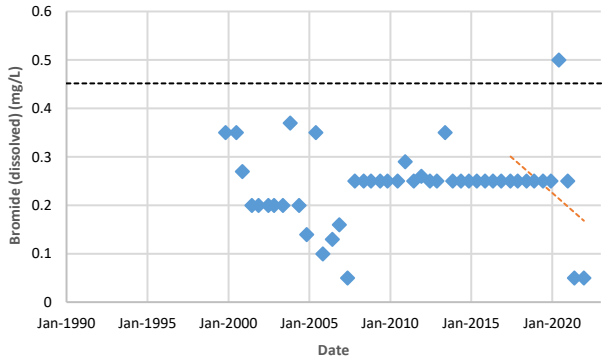


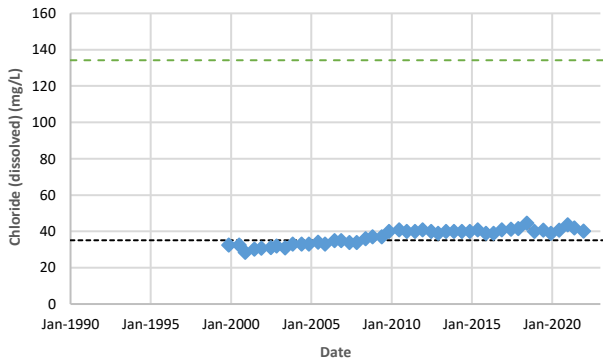


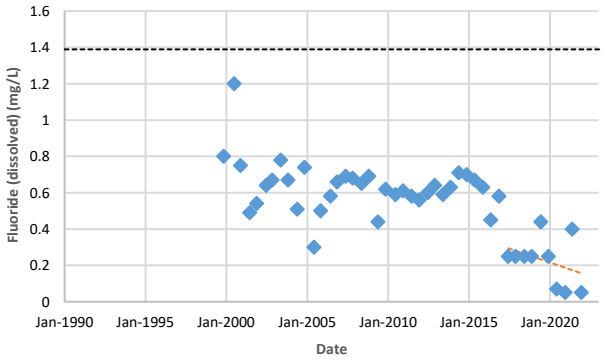
Well TW46-99D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

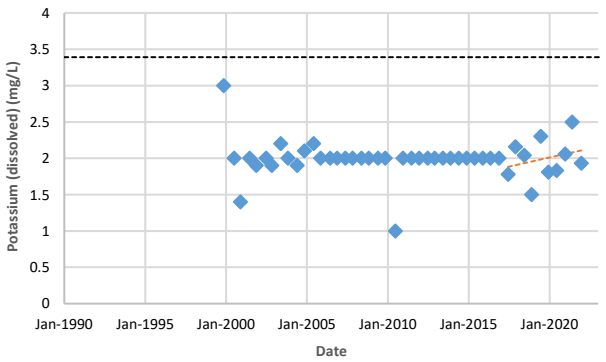


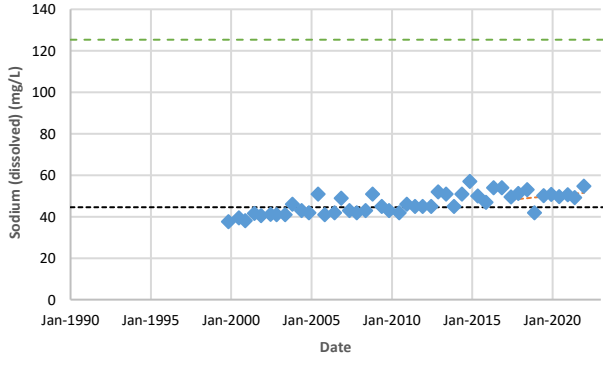


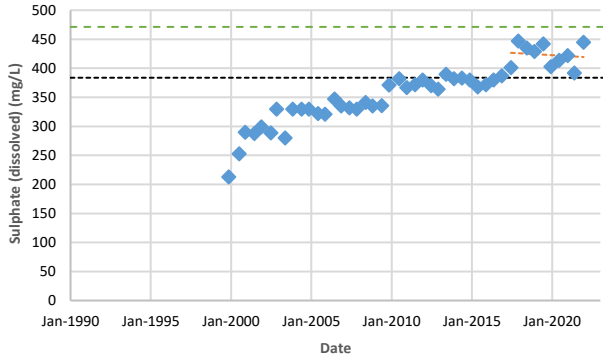






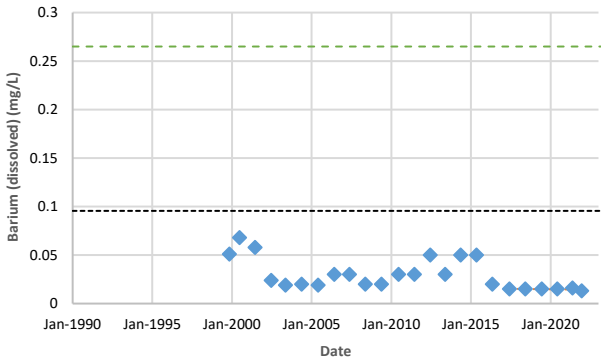


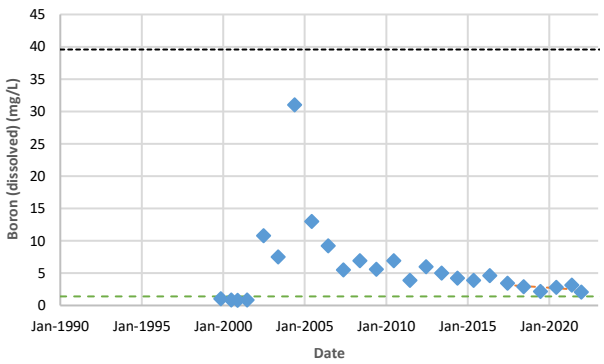


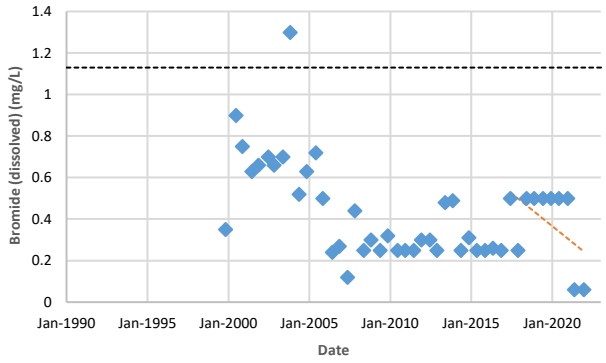


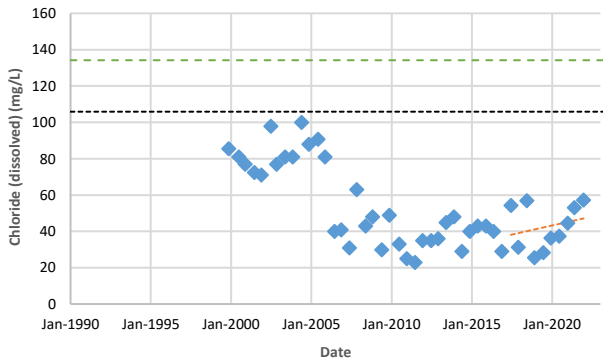
Concentration | Linear Regression Trendline (2017-2021) | Upper Confidence Limit | Reasonable Use Criteria

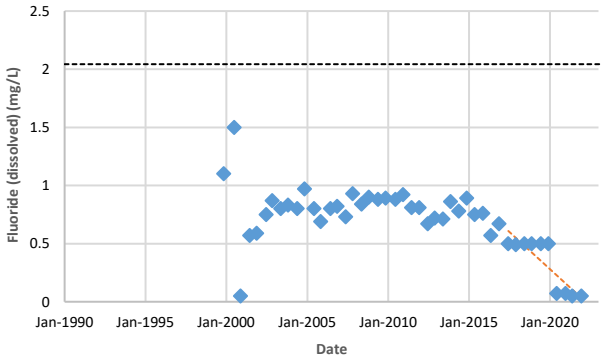
Well TW46-99I	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

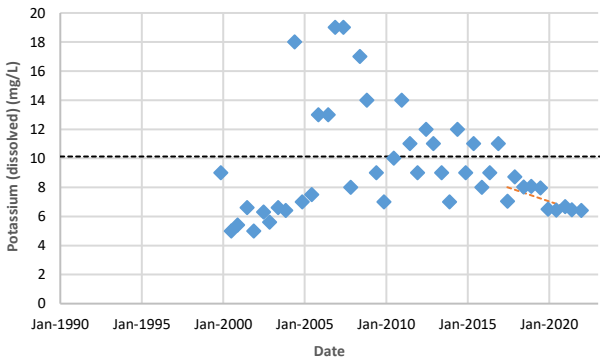


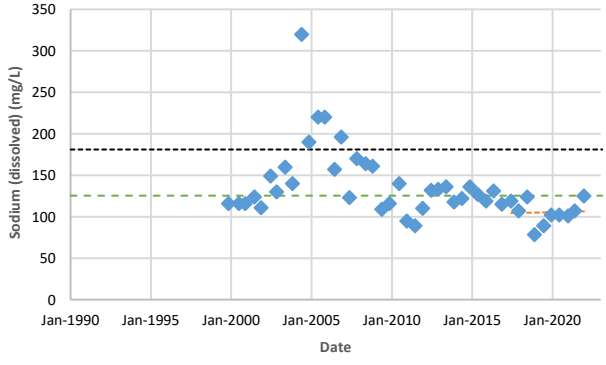


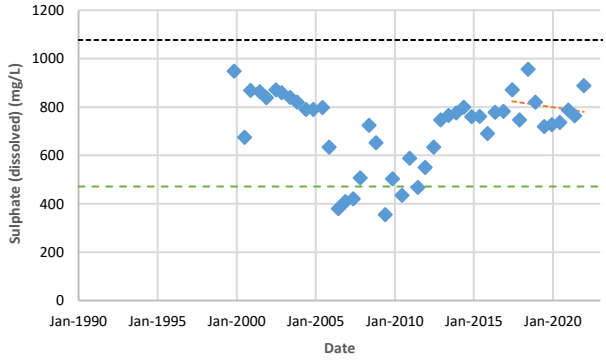


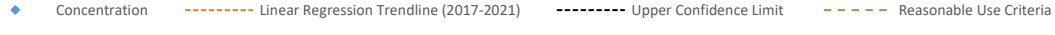




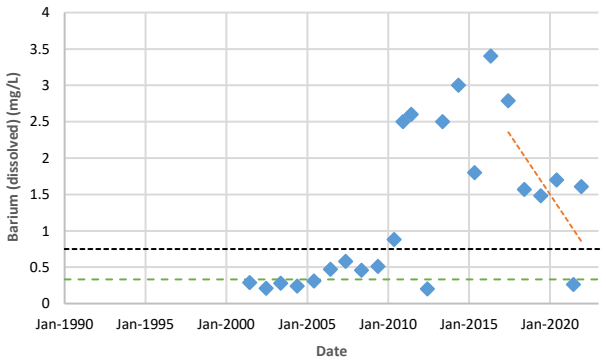


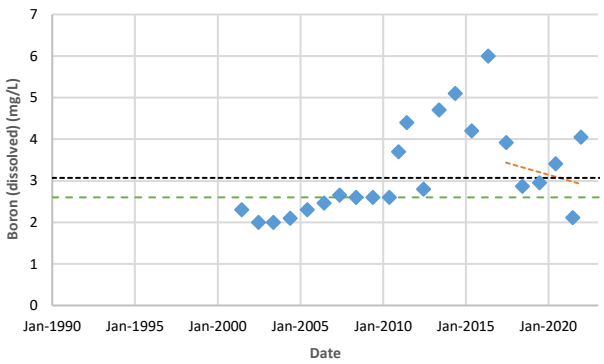


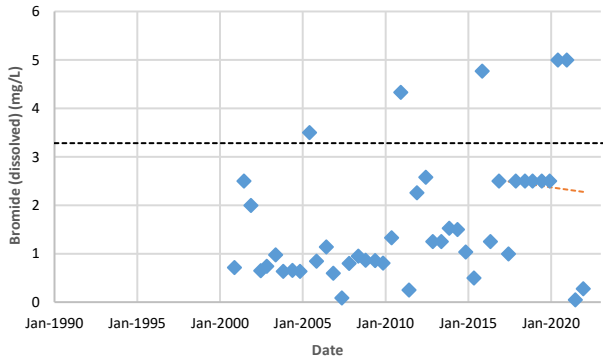


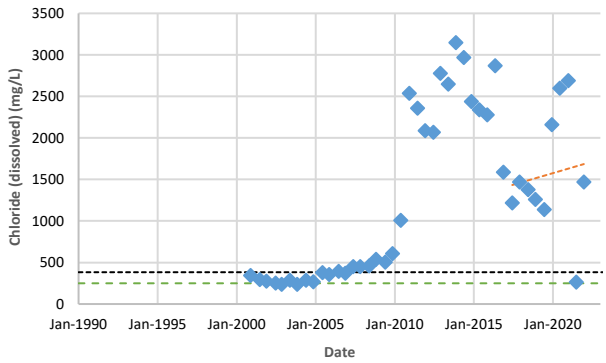


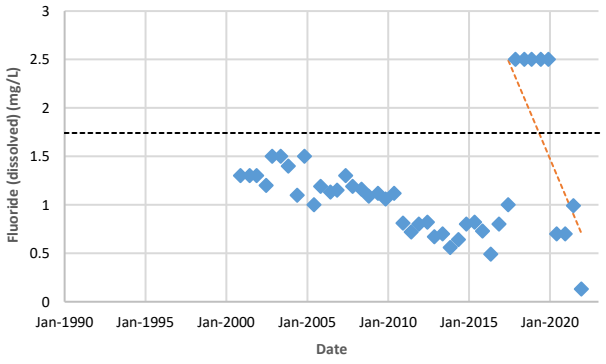
Well TW46-99S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

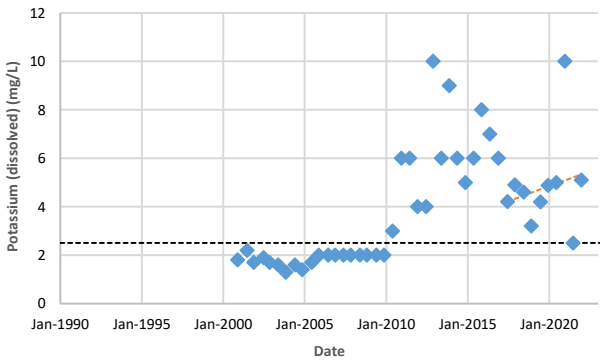


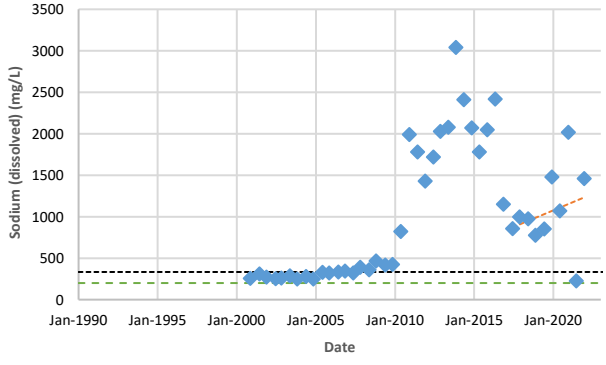


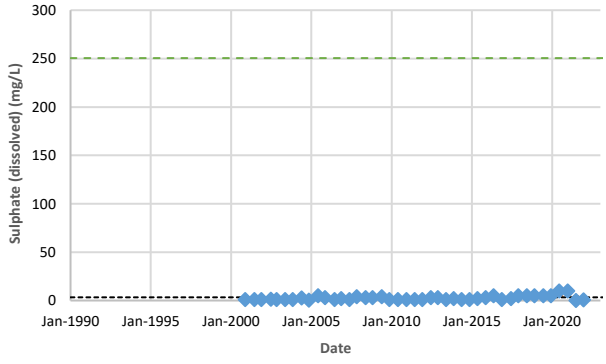


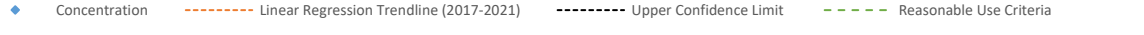




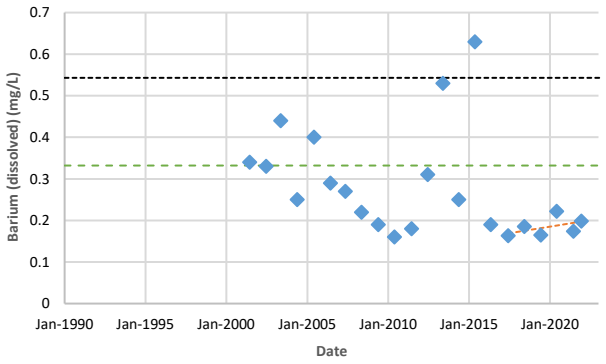


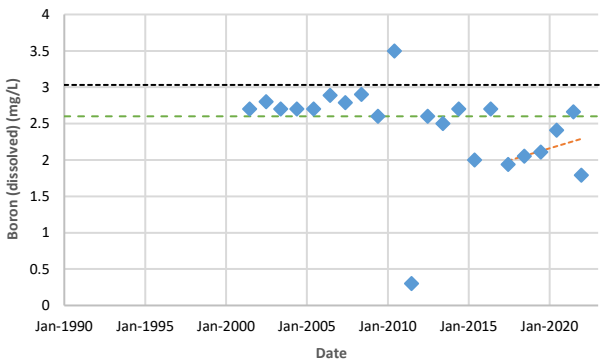


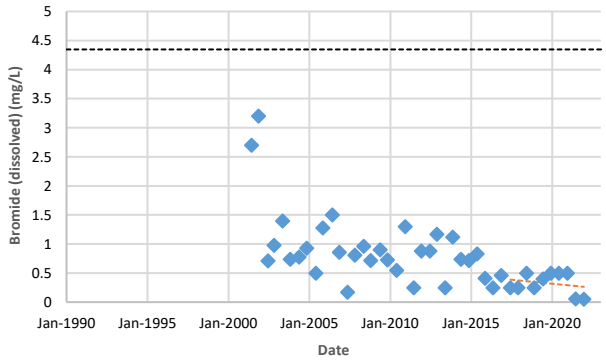


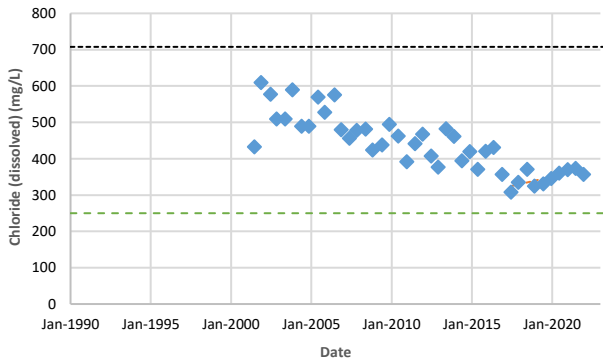


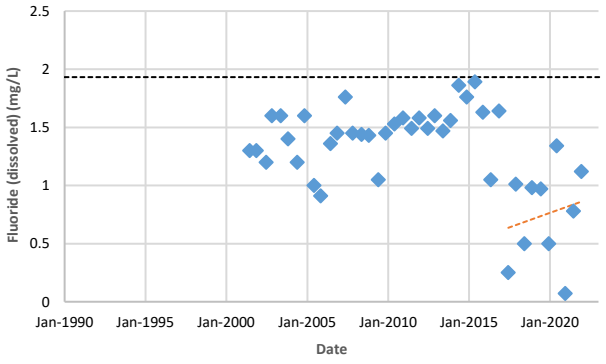
Well TW47-00D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

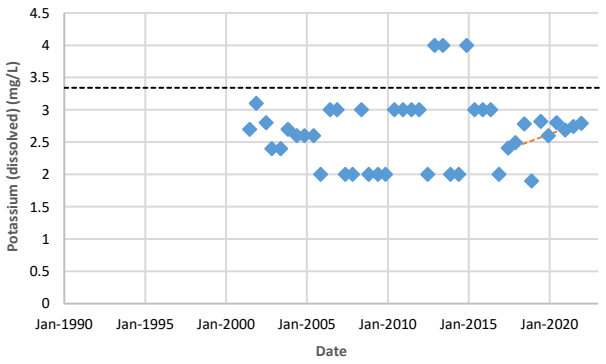


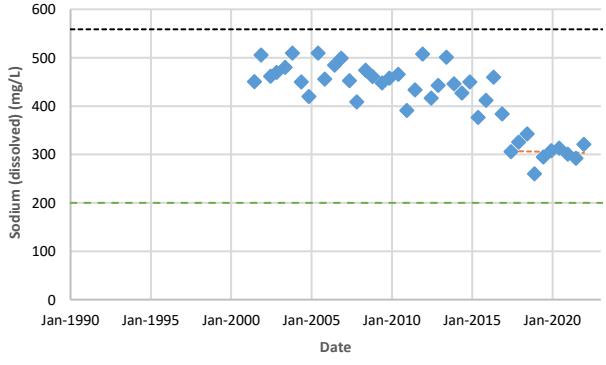


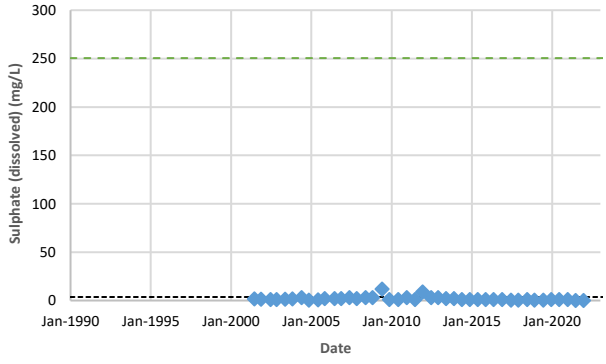




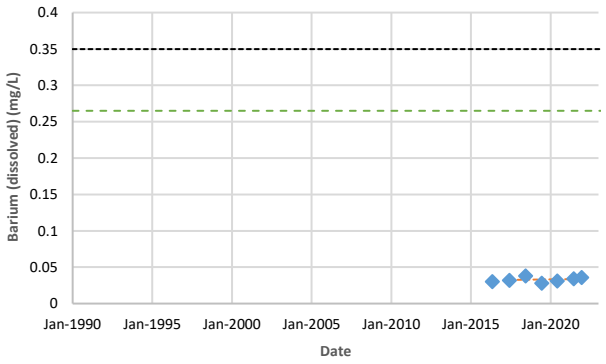


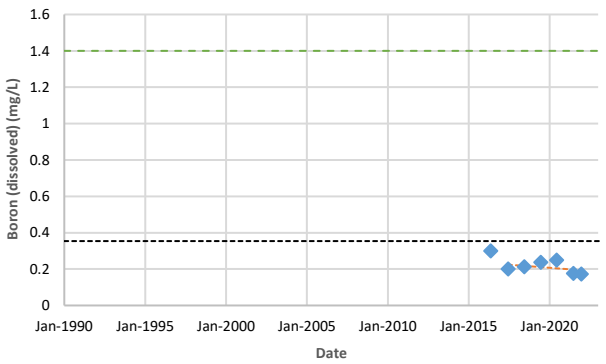


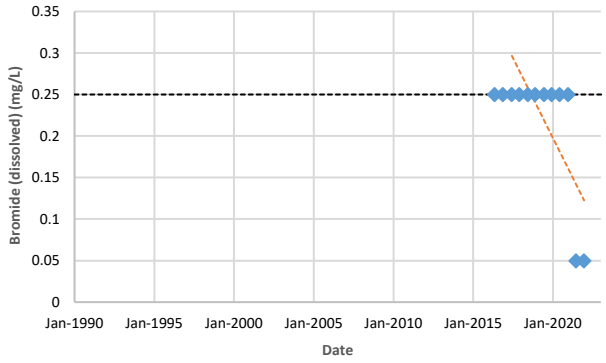


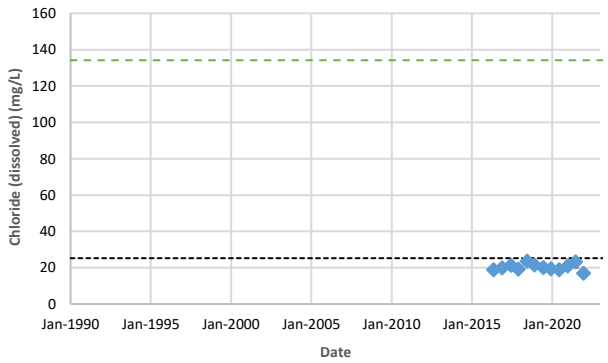


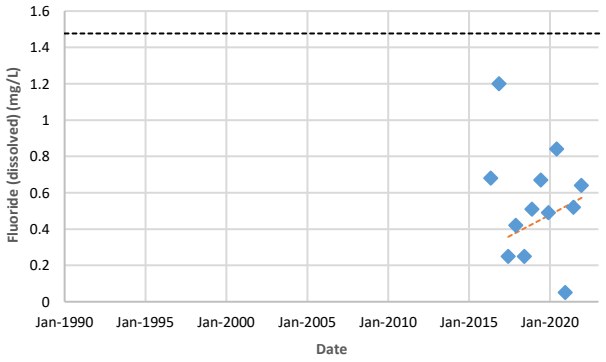
Well TW48-00D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

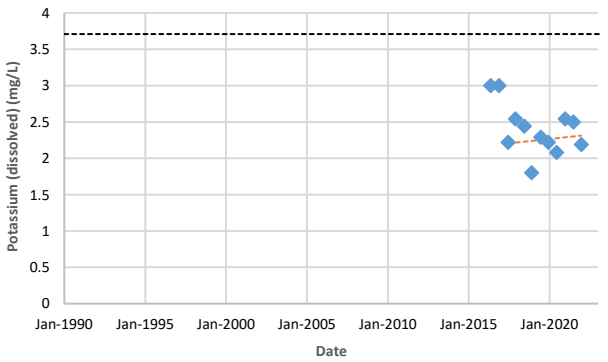


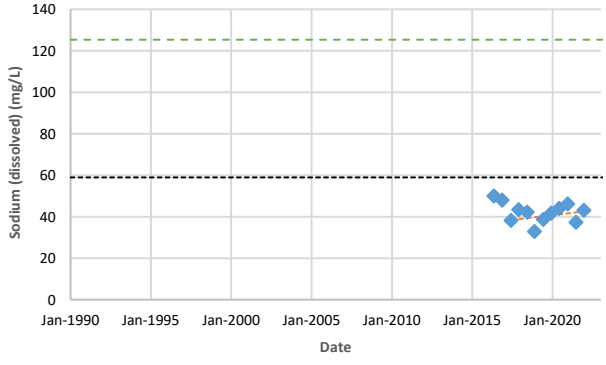


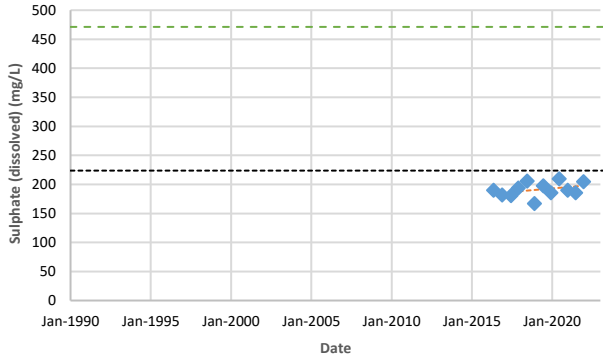


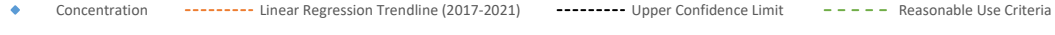




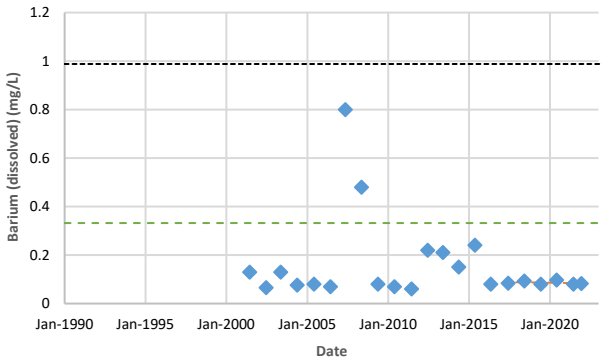


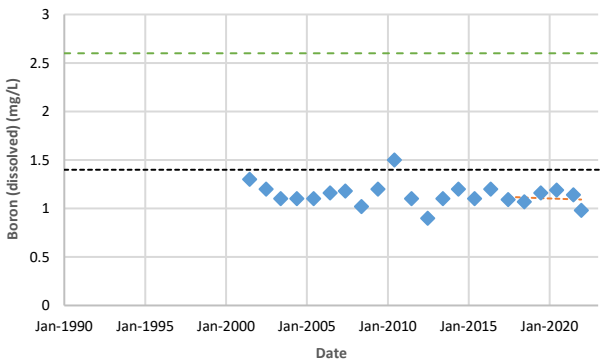


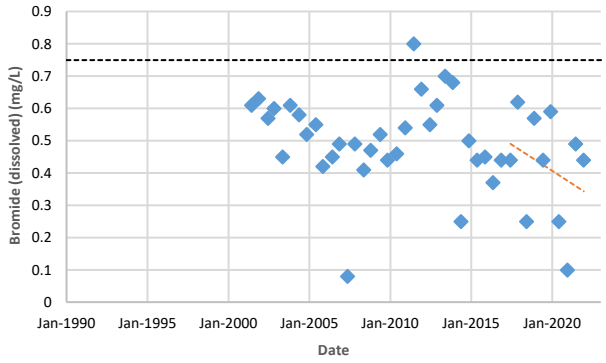


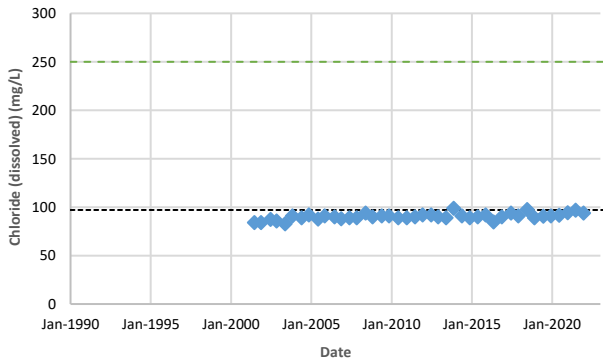


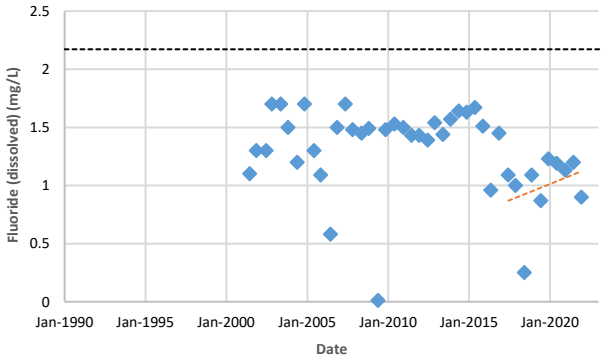
Well TW48-16S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

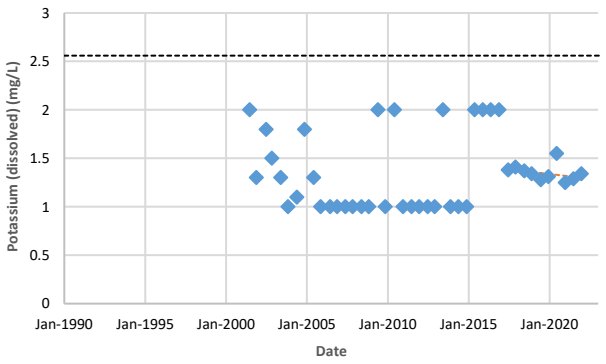


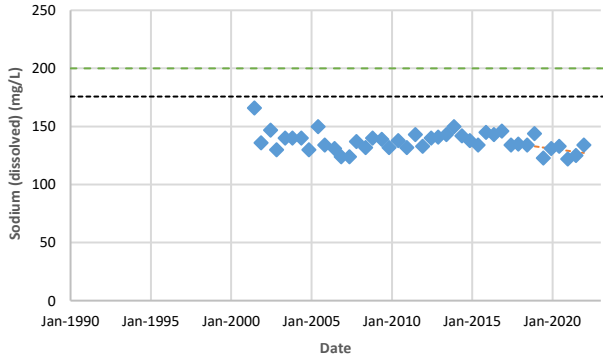


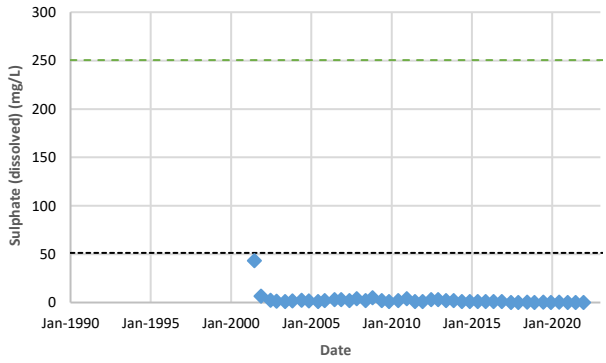




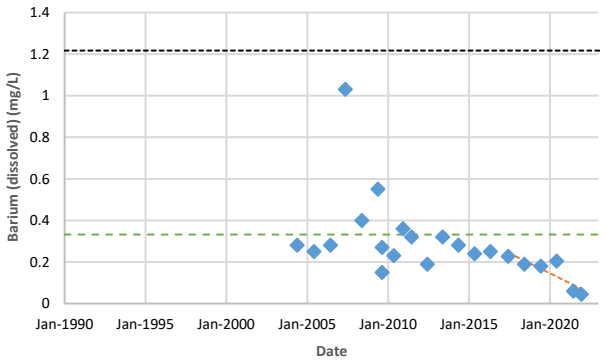


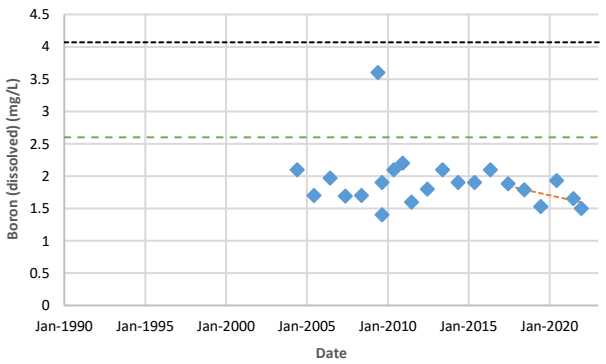


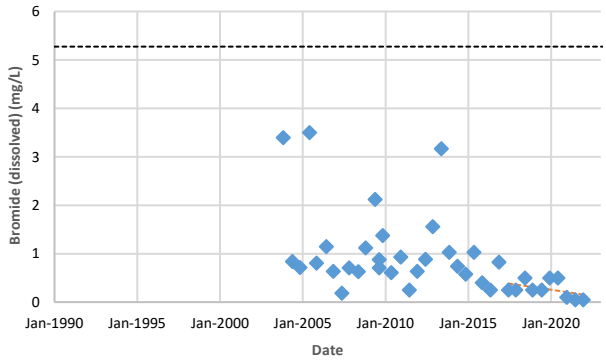


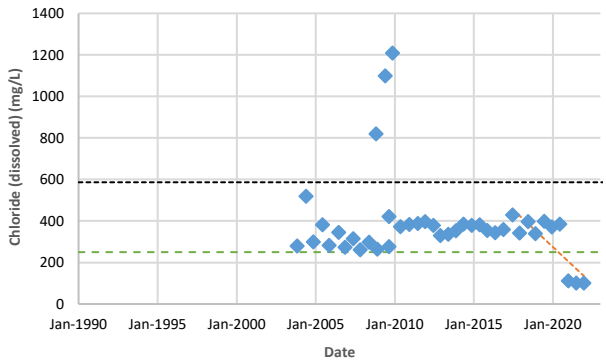


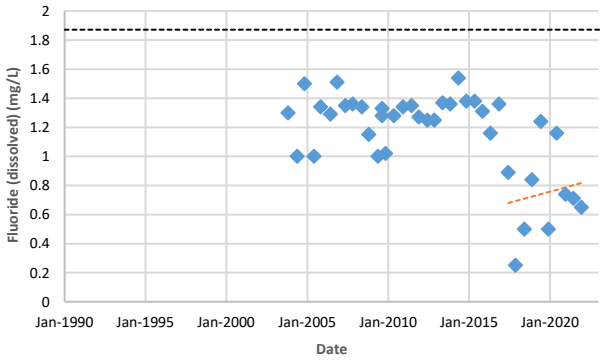
Well TW49-00D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

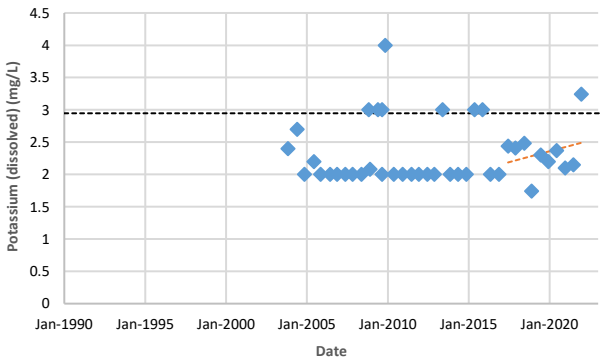


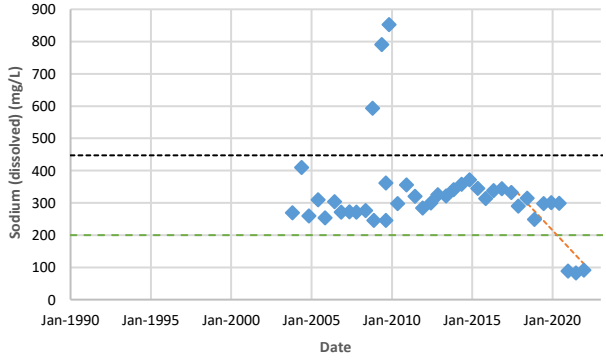


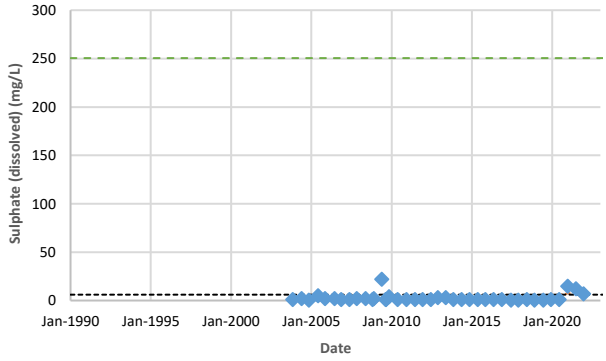


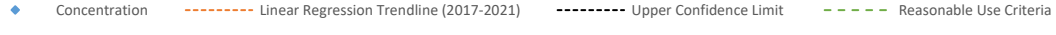




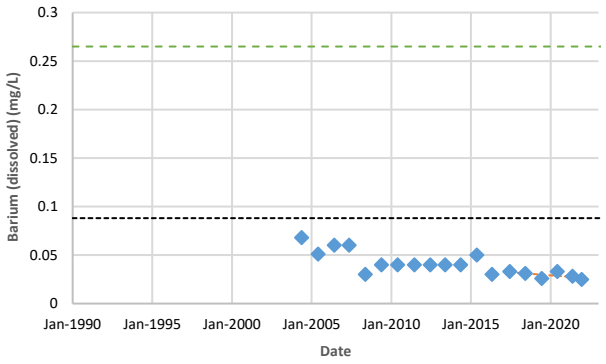


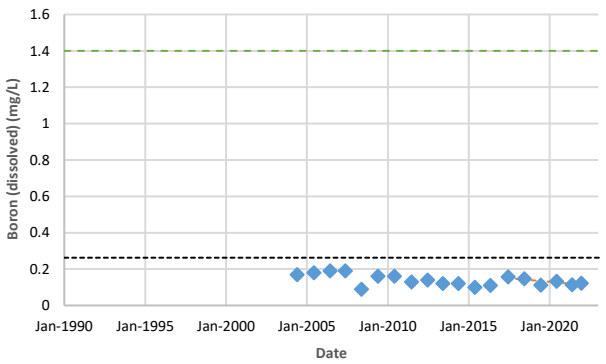


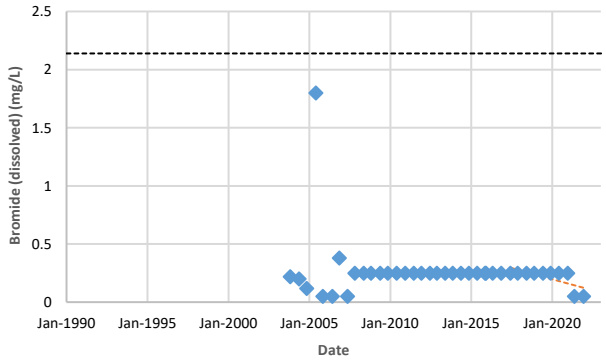


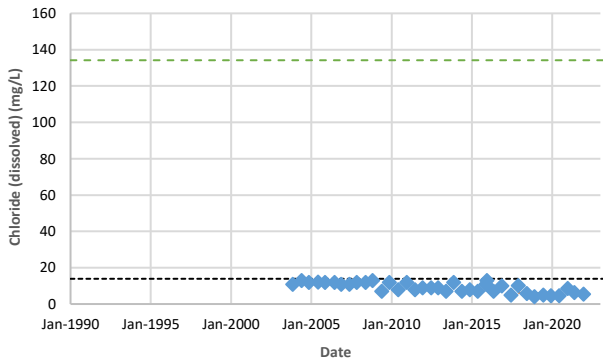


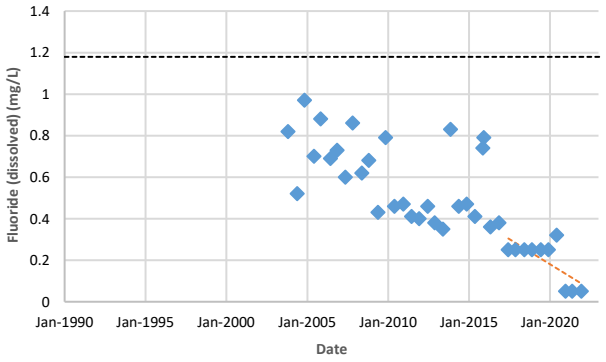
Well TW53-03D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

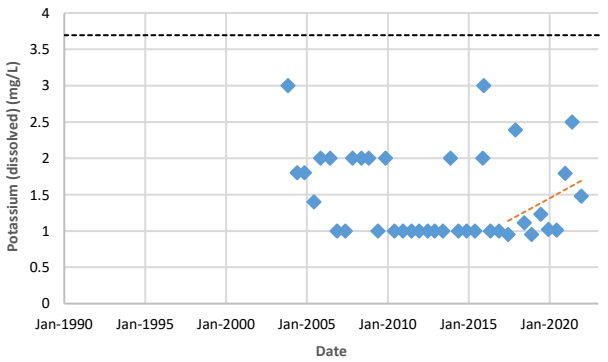


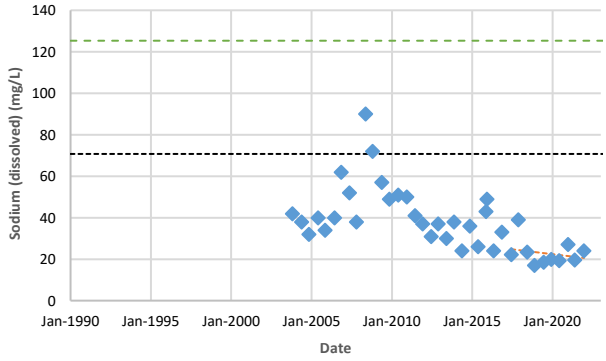


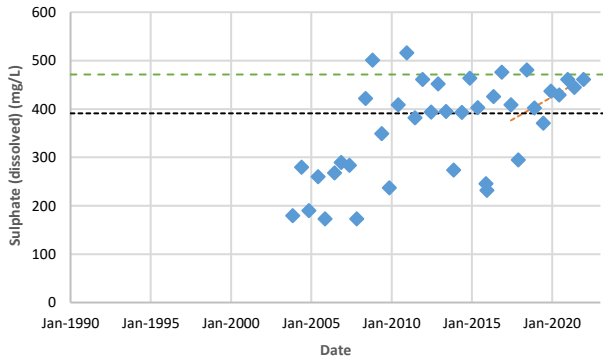




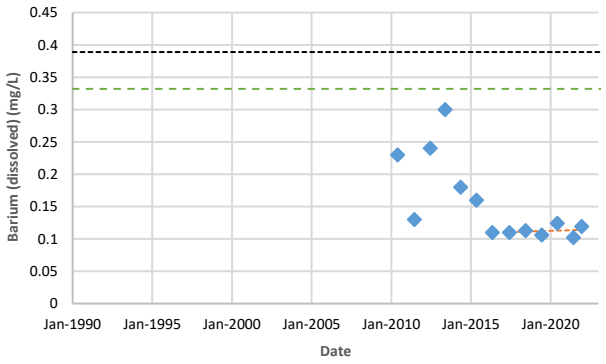


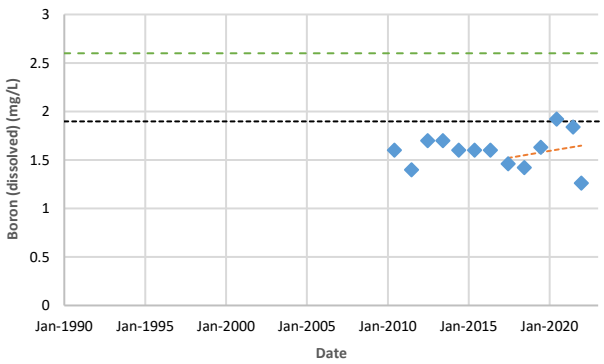


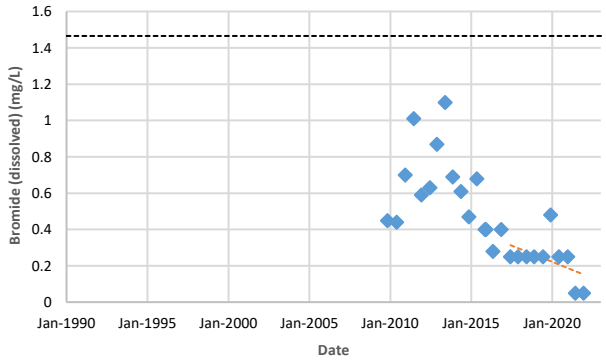


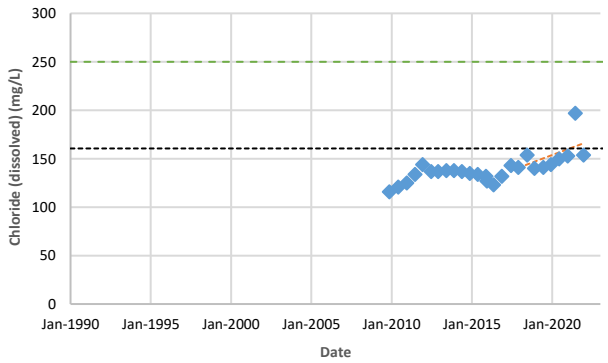


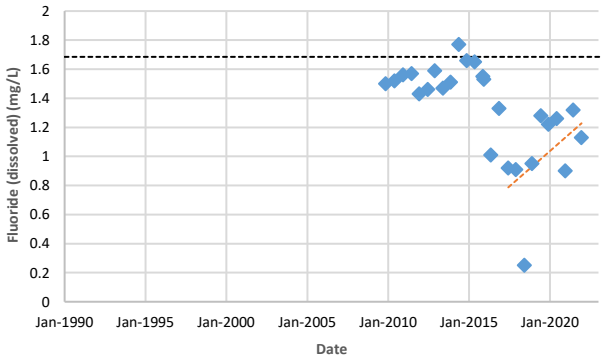
Well TW53-03S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

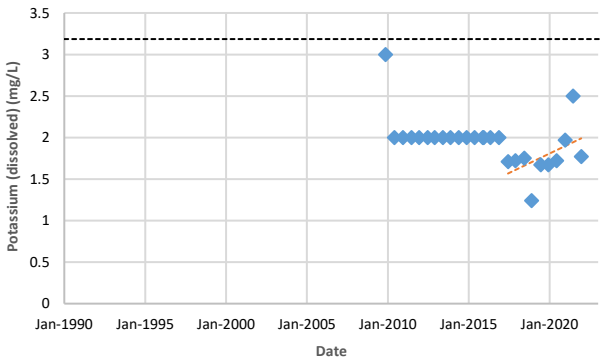


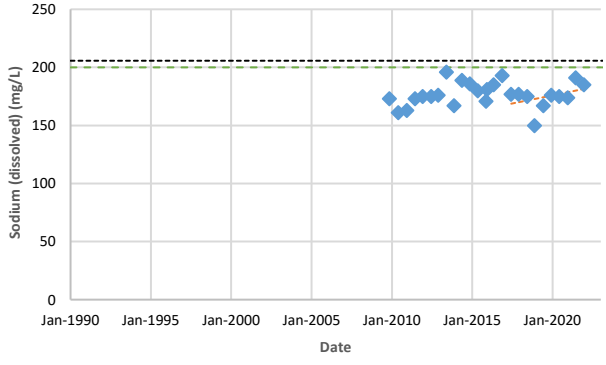


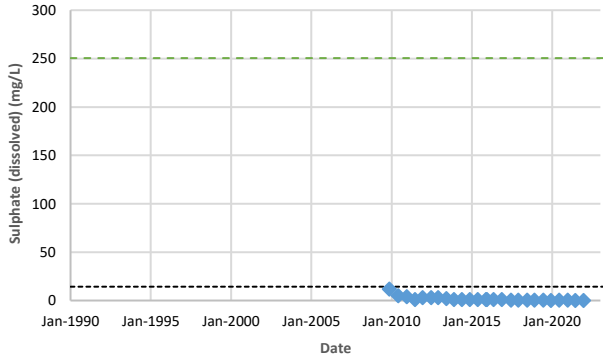


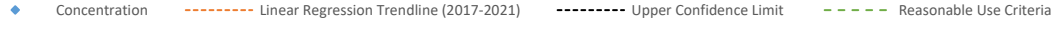




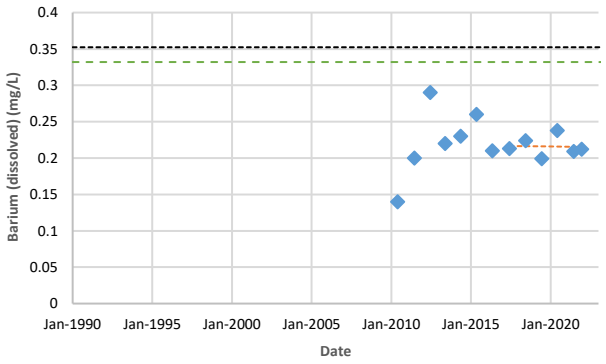


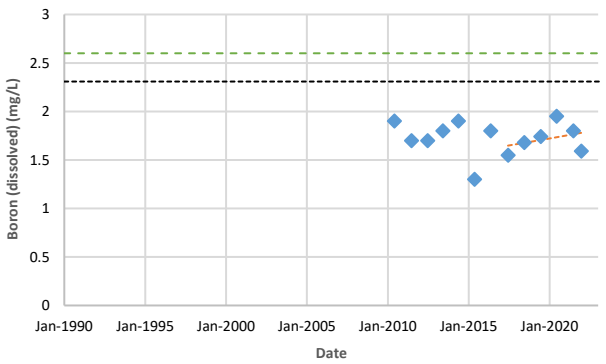


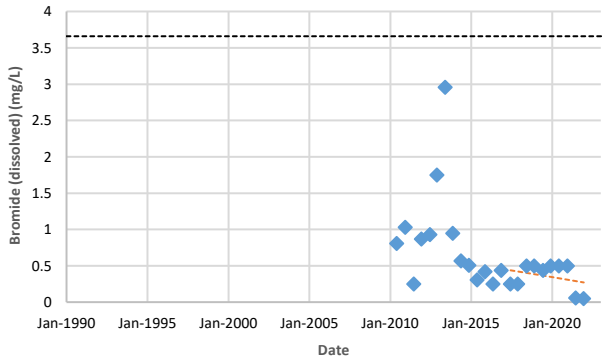


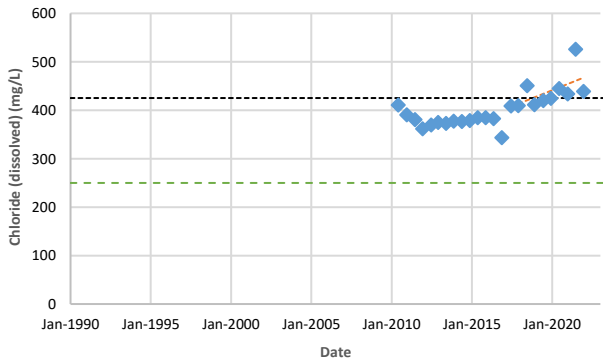


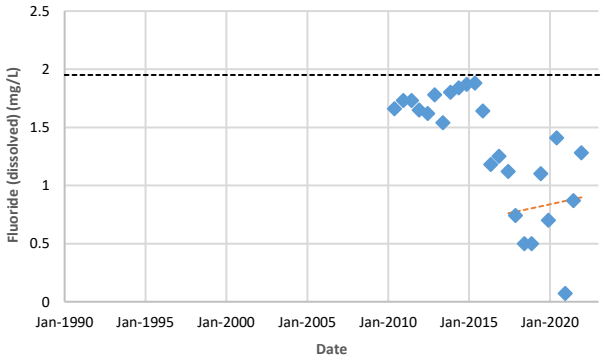
Well TW54-09D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

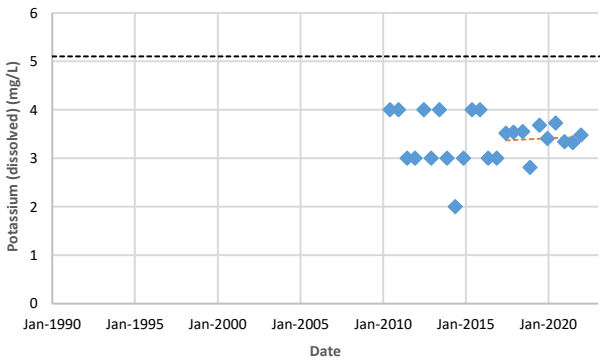


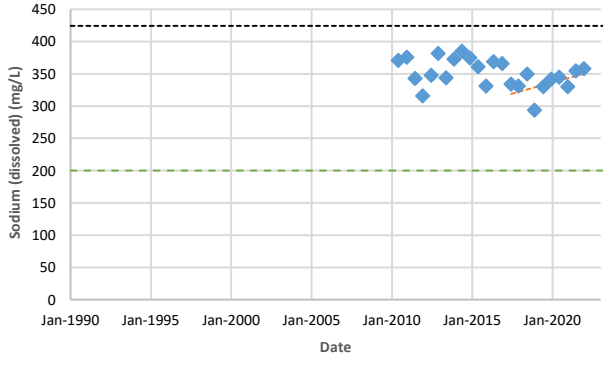


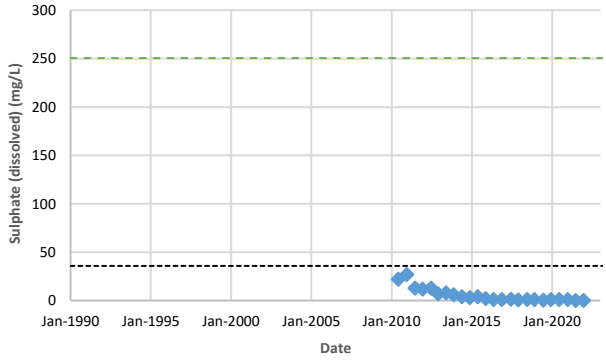




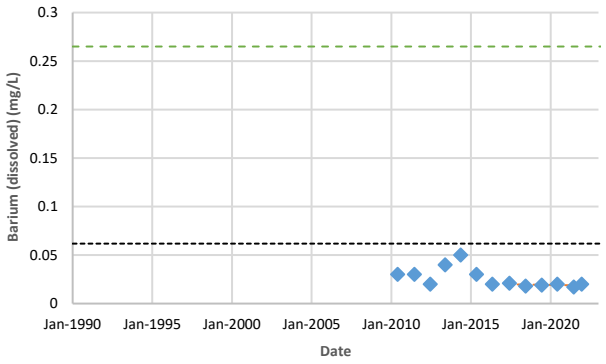


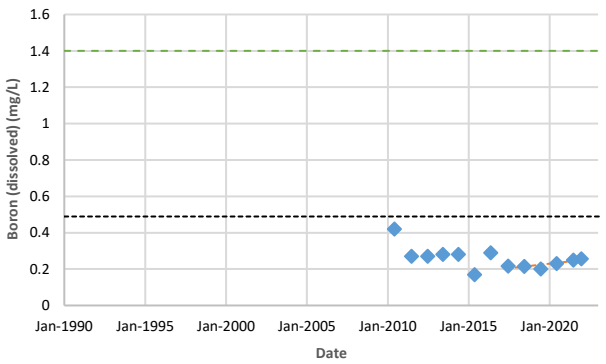


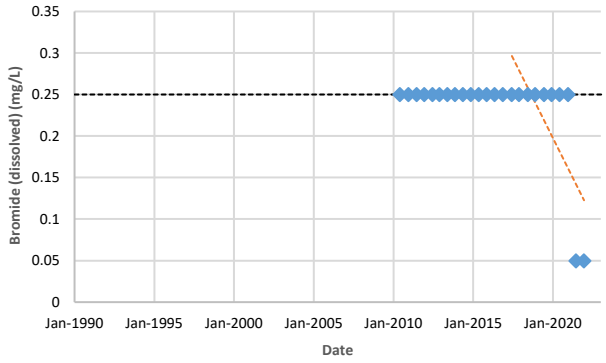


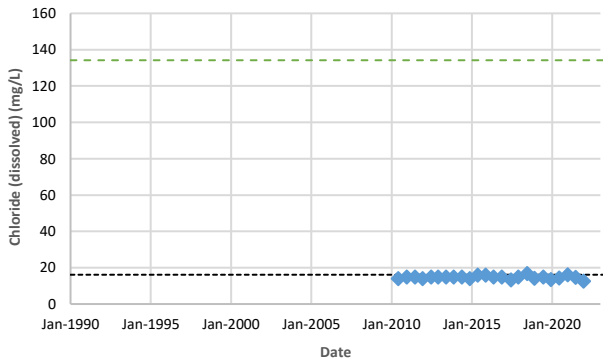


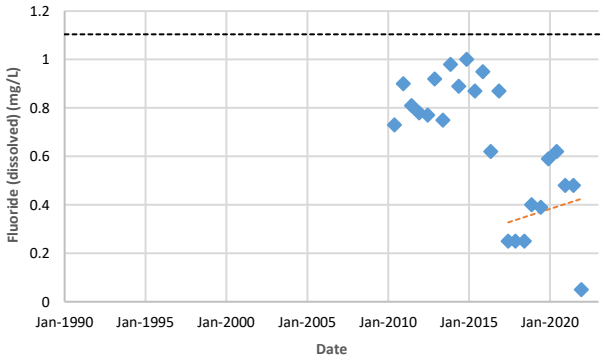
Well TW55-09D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

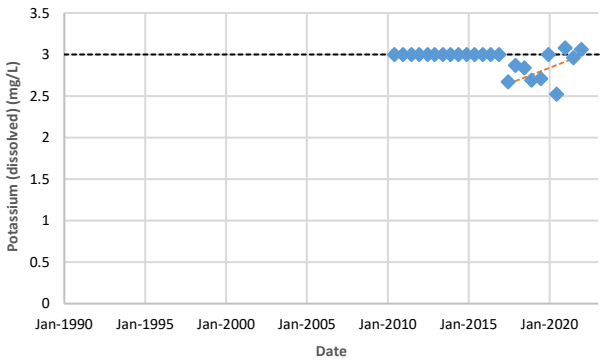


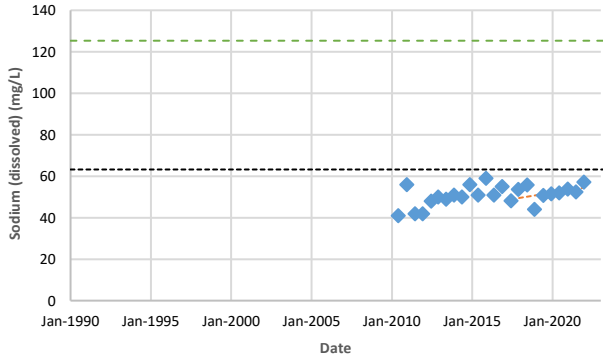


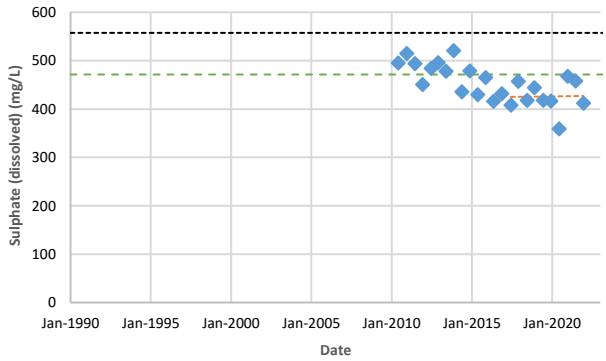


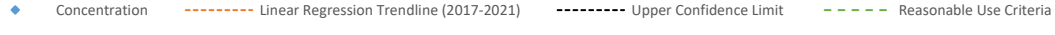




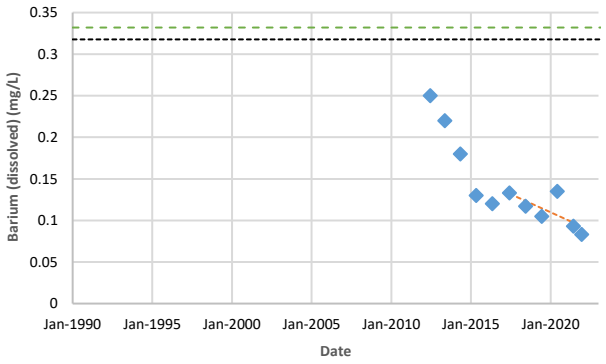


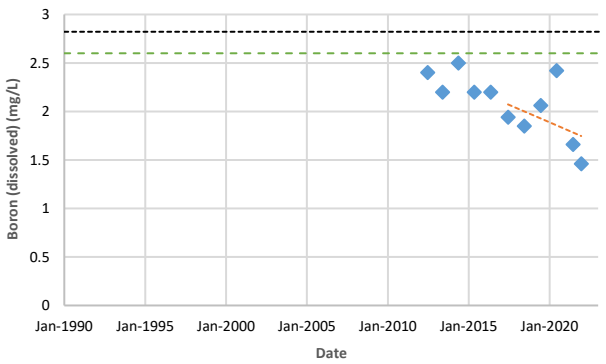


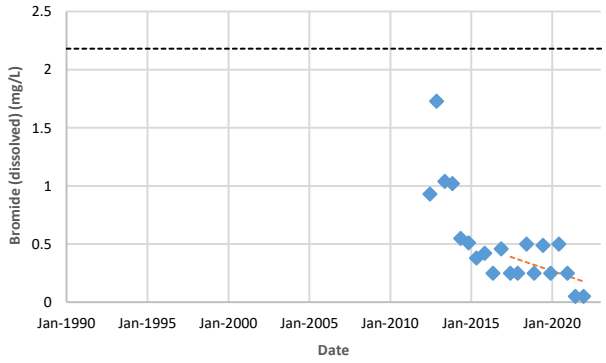


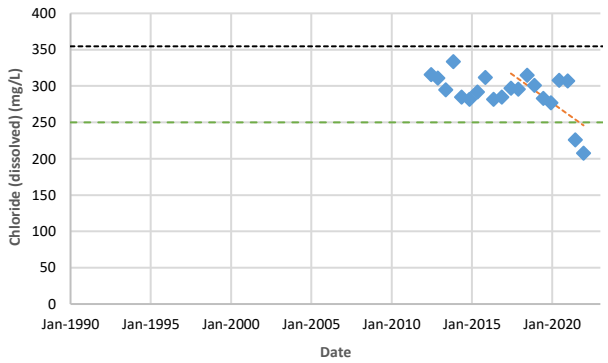


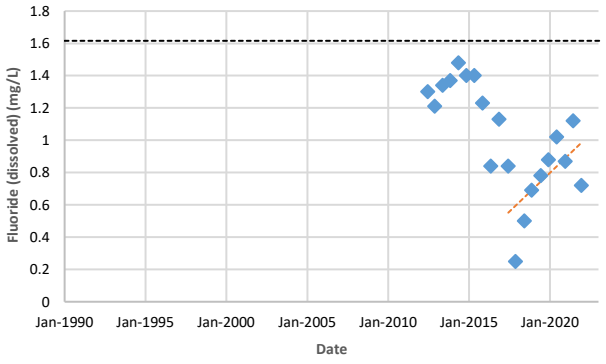
Well TW55-09S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

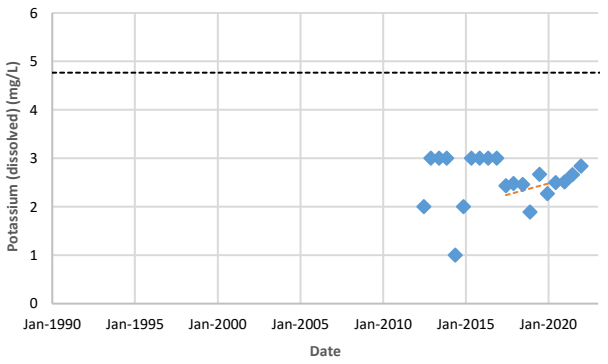


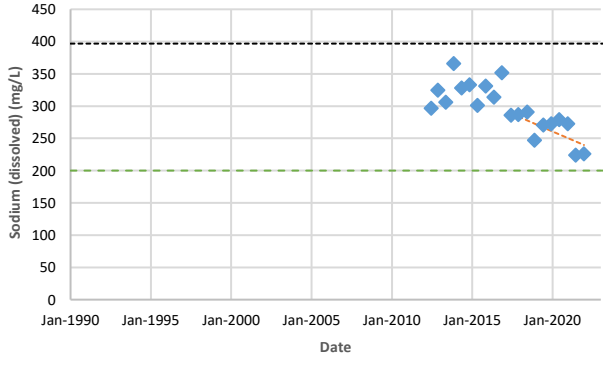


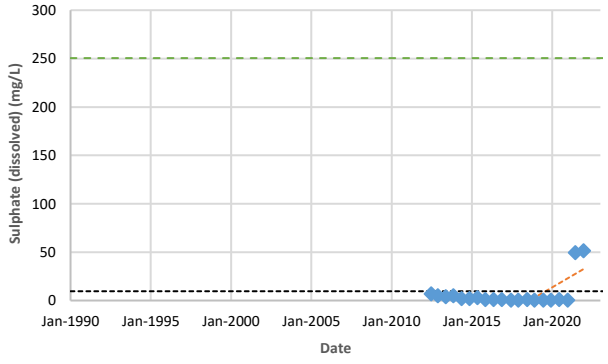


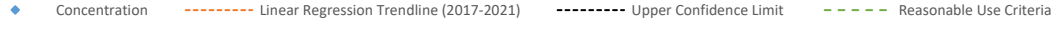




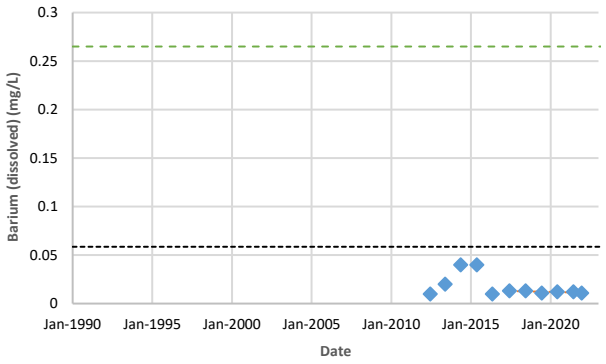


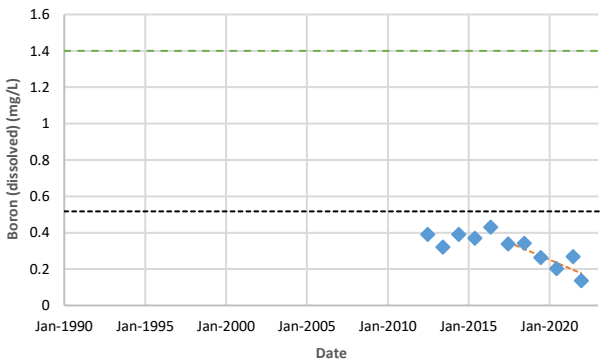


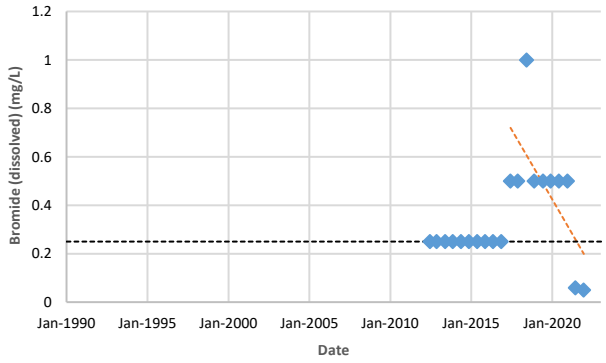


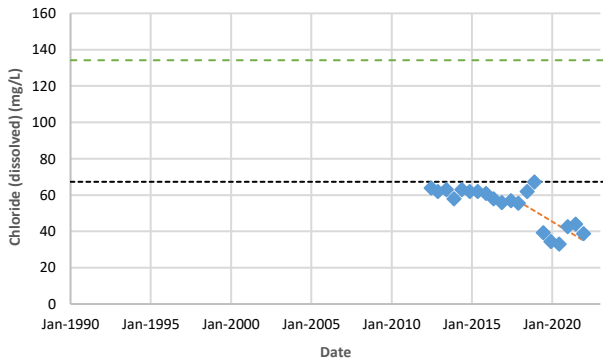


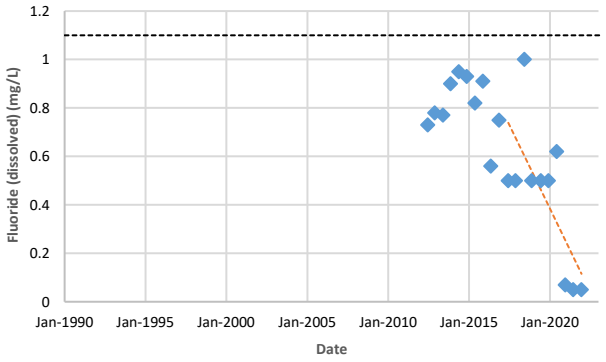
Well TW56-11D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

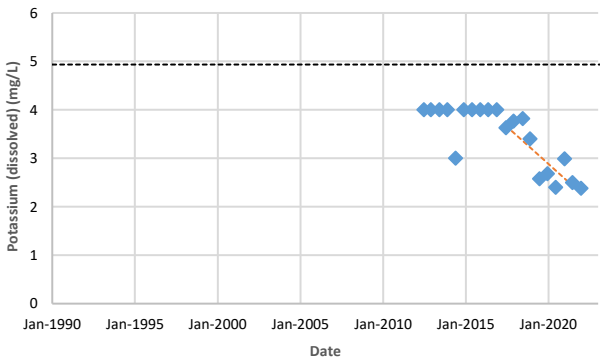


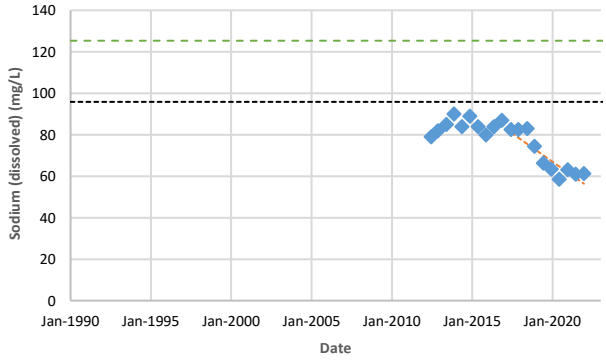


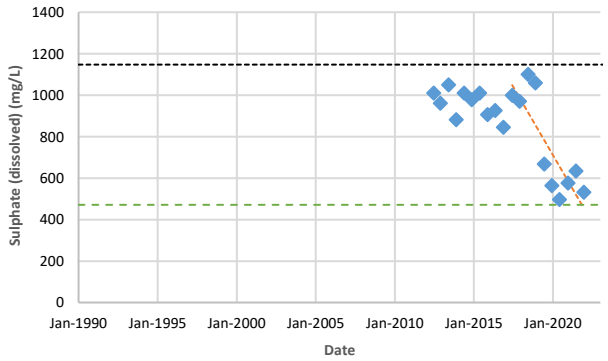




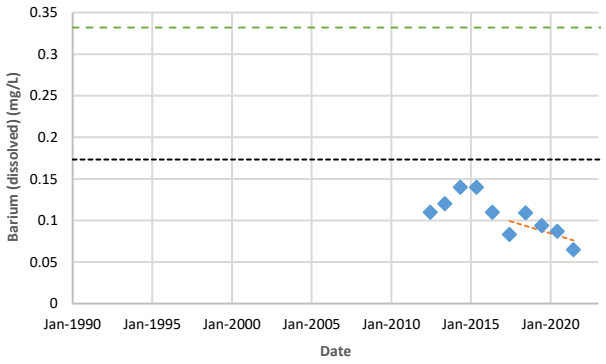


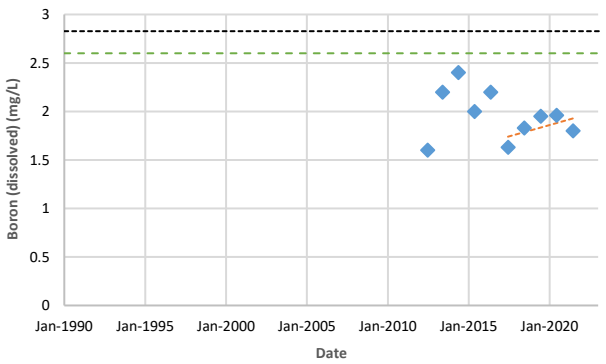


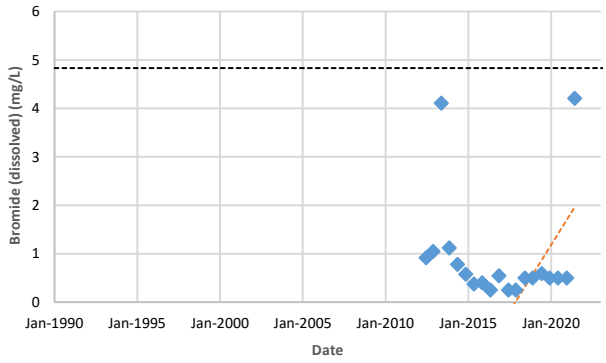


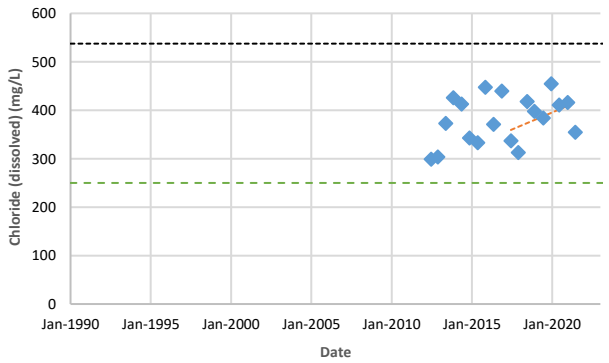


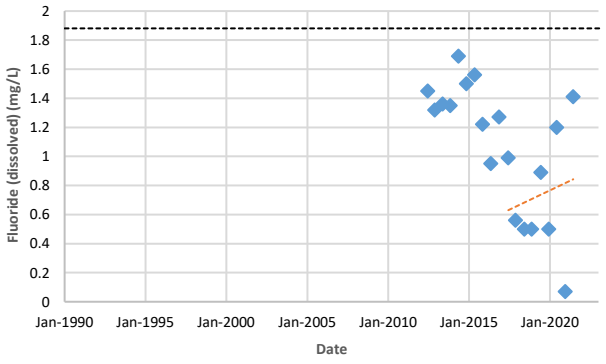
Well TW56-11S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

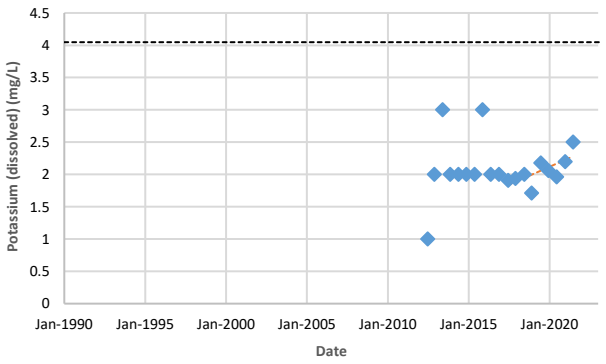


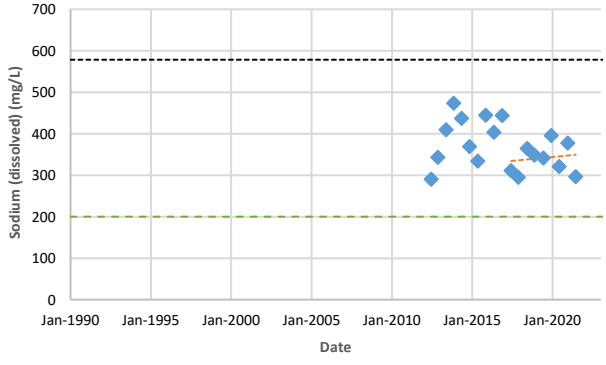


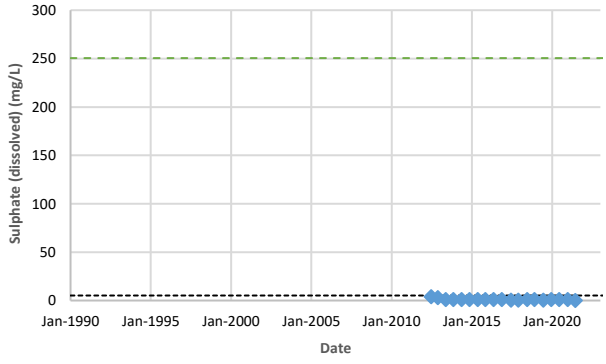


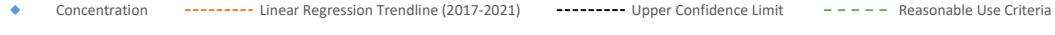




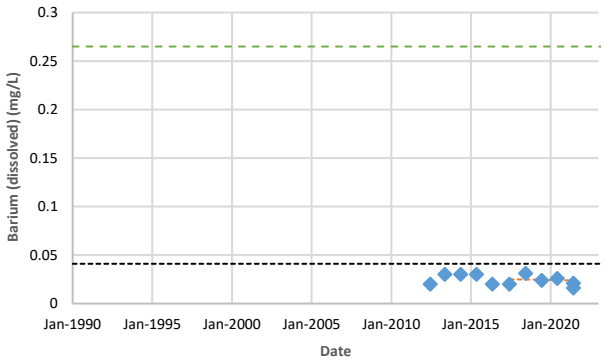


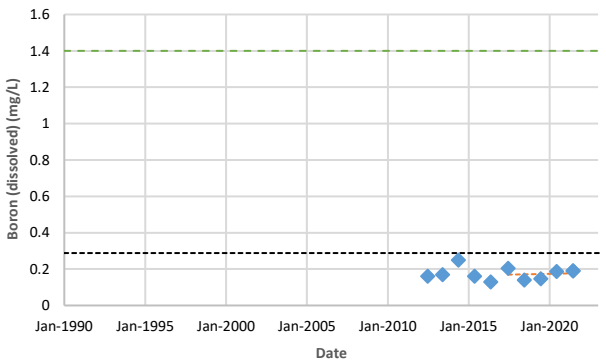


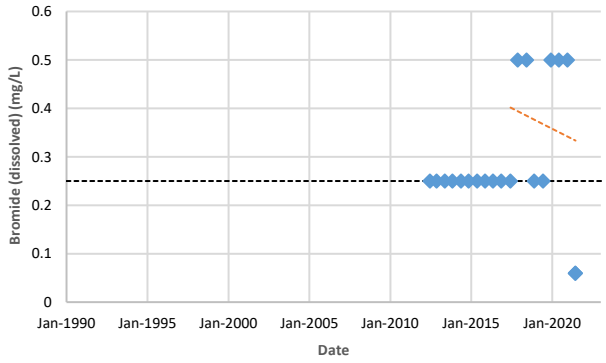


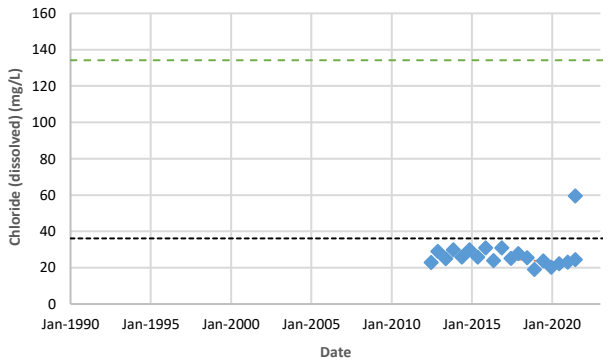


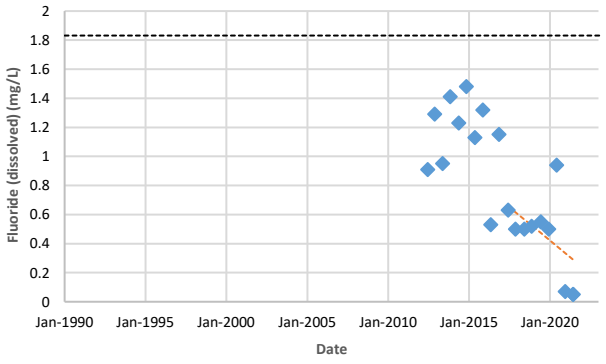
Well TW57-11D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

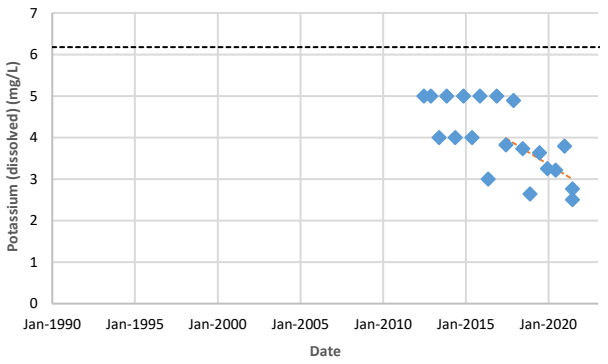


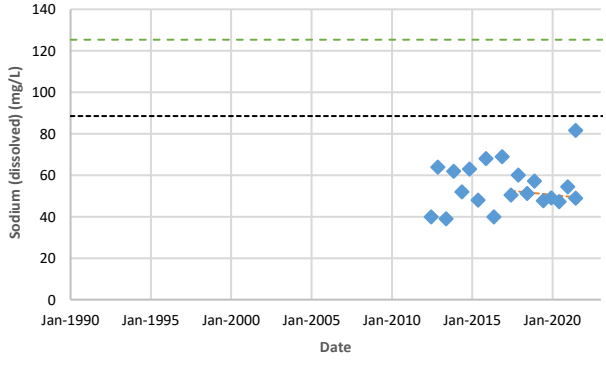


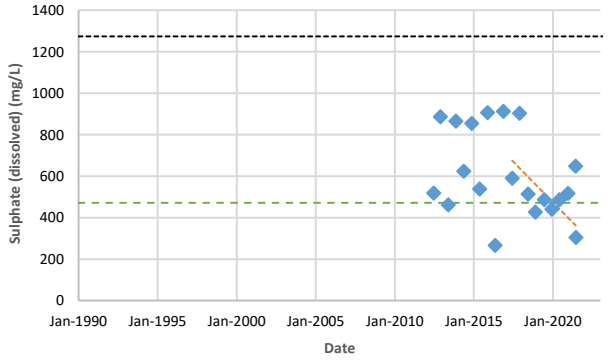


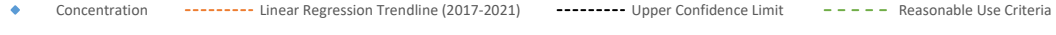




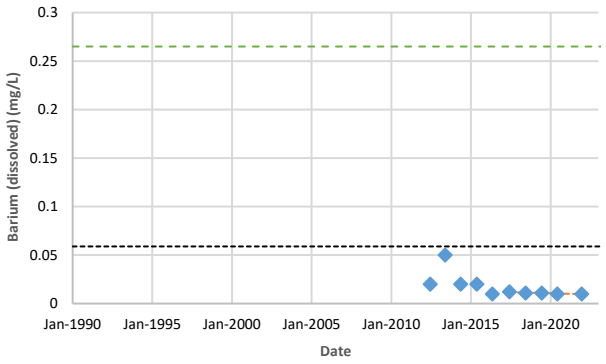


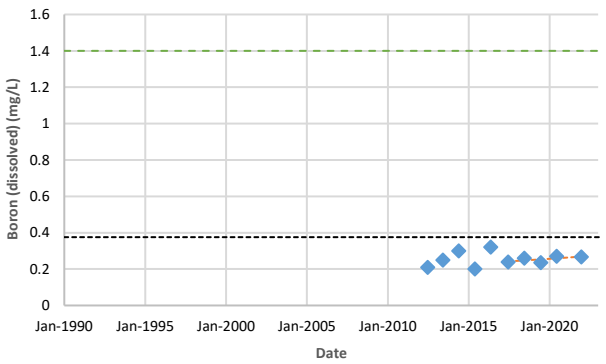


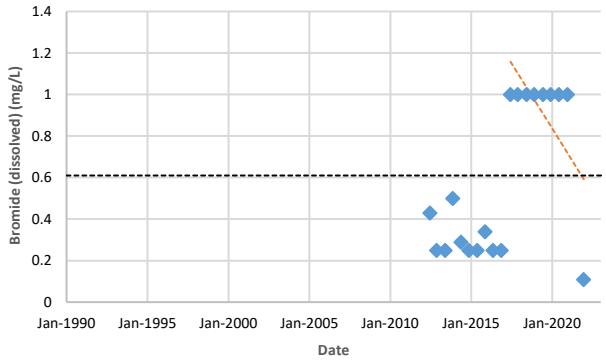


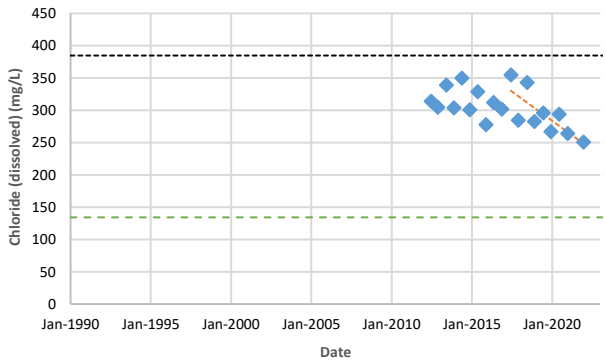


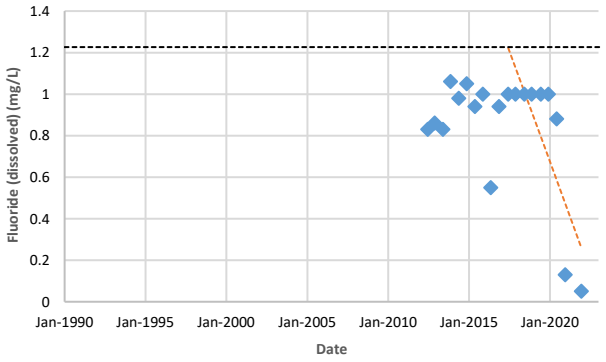
Well TW57-11S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

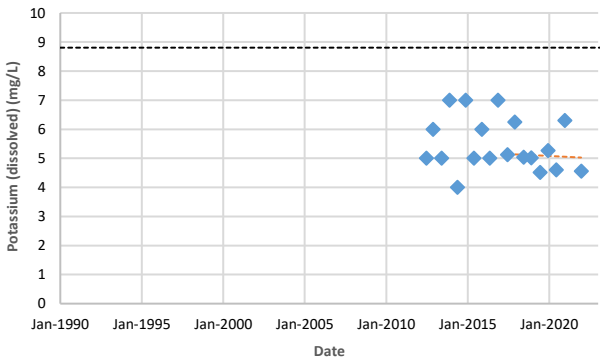


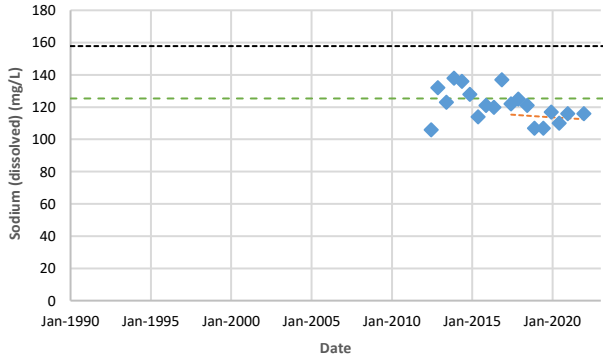


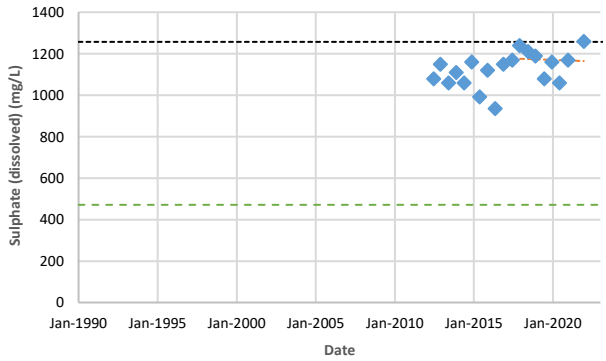




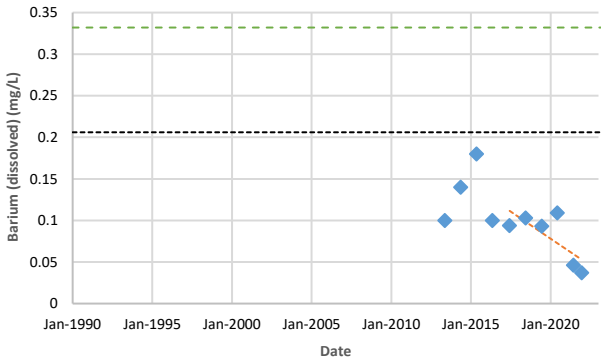


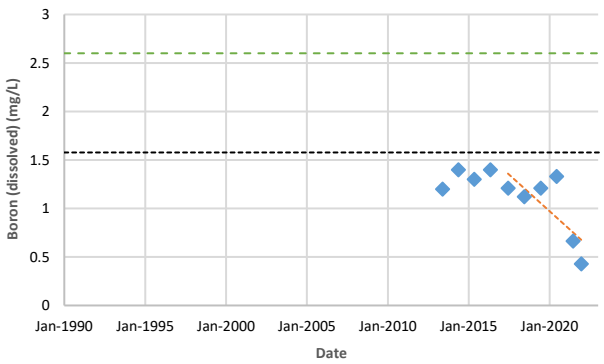


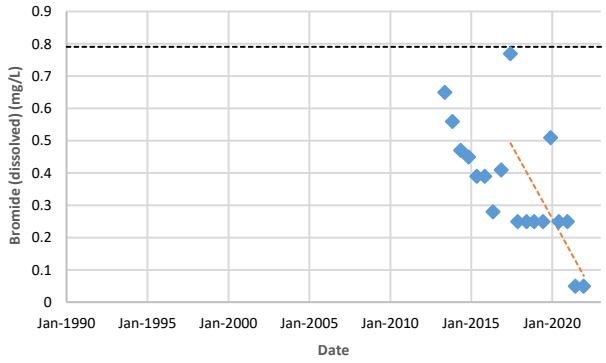


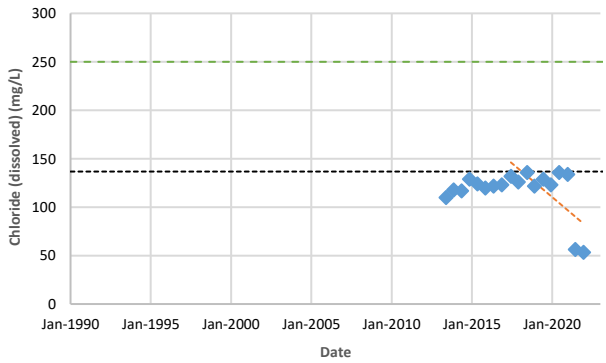


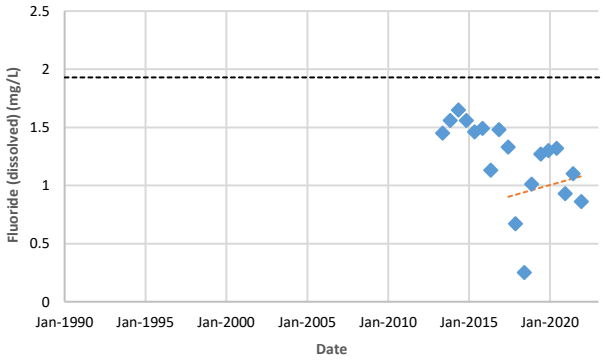
Well TW58-11S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

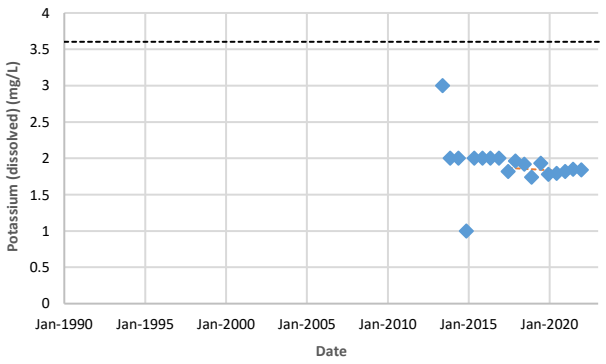


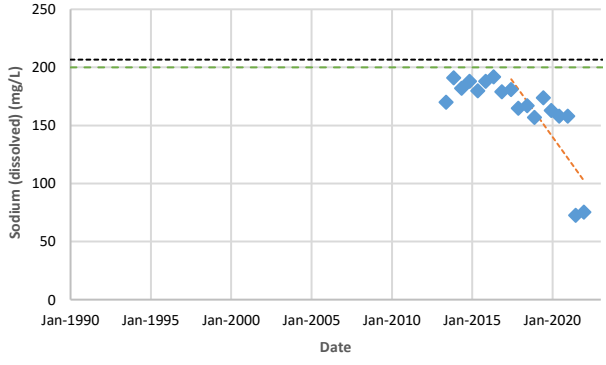


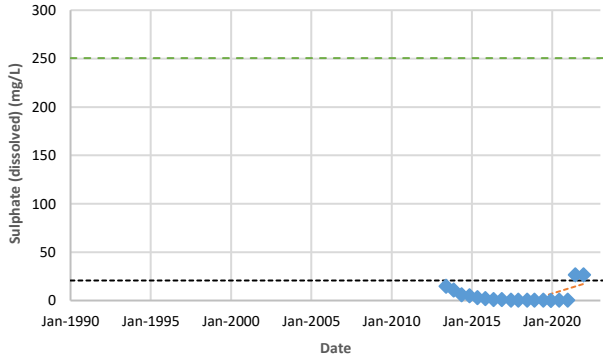


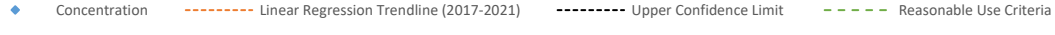




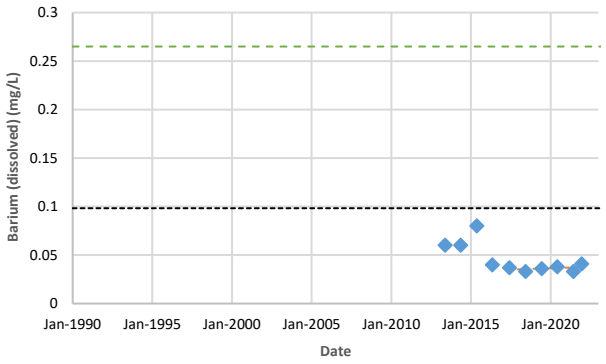


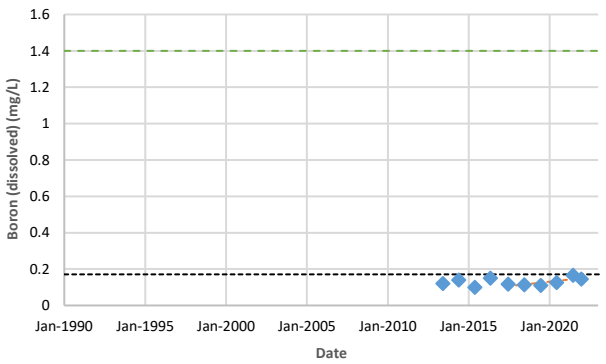


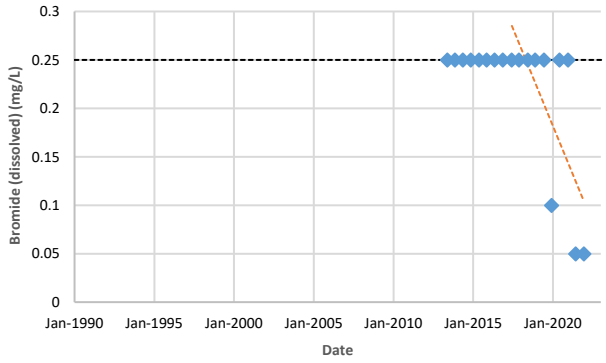


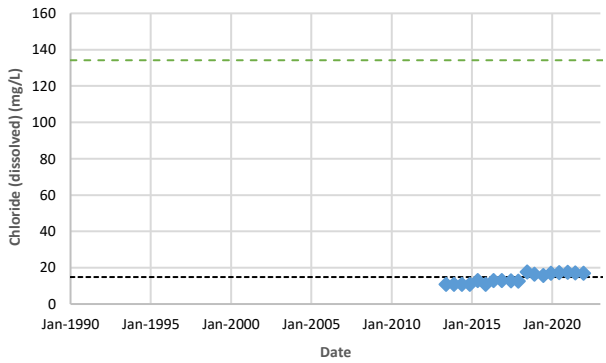


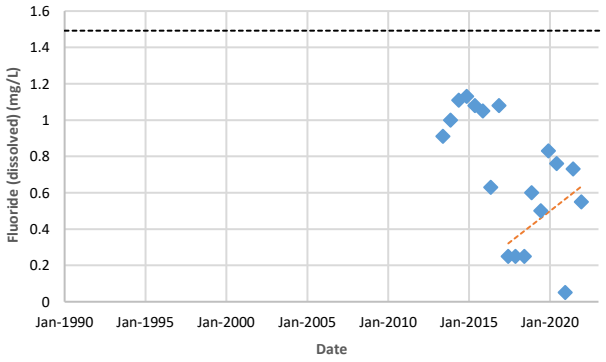
Well TW59-13D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

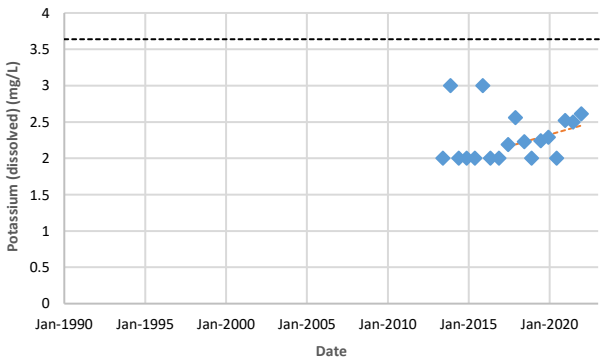


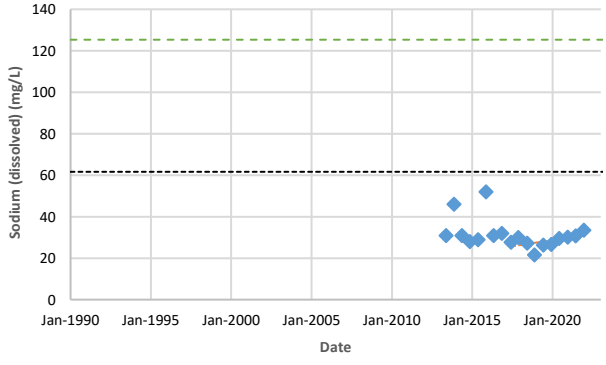


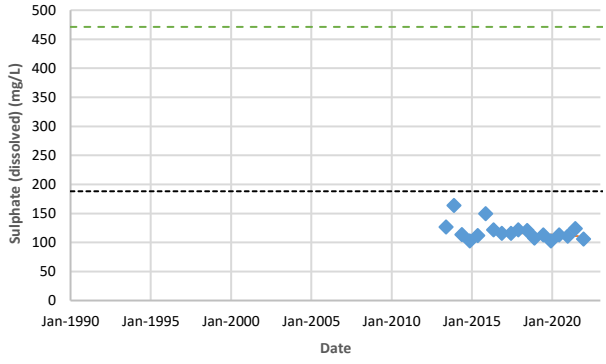






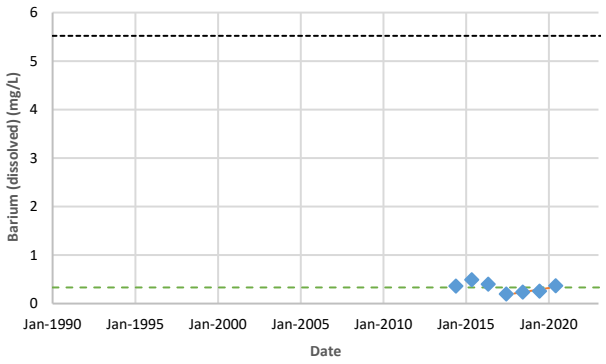


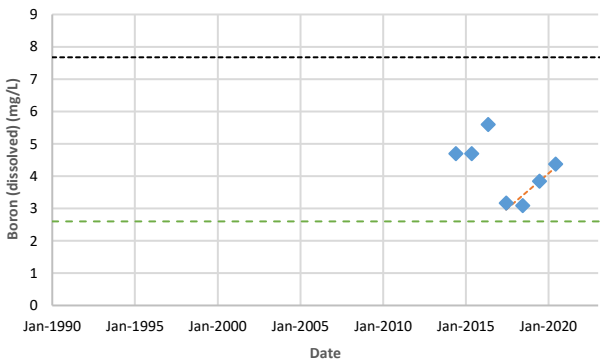


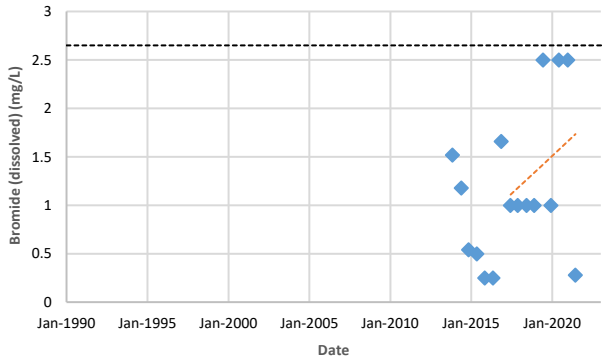


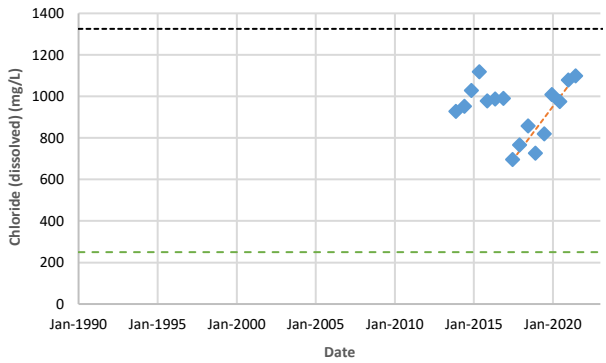
Concentration | Linear Regression Trendline (2017-2021) | Upper Confidence Limit | Reasonable Use Criteria

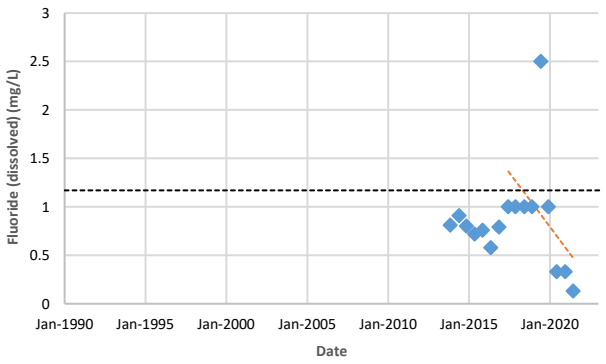
Well TW59-13S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

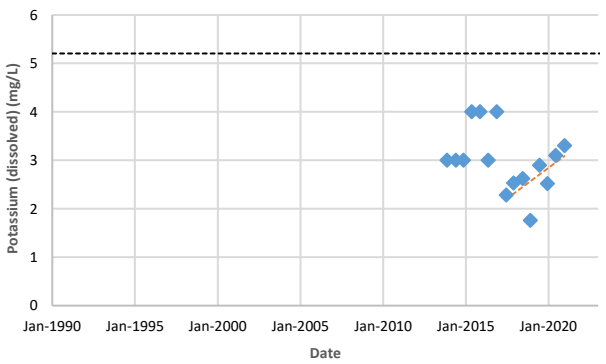


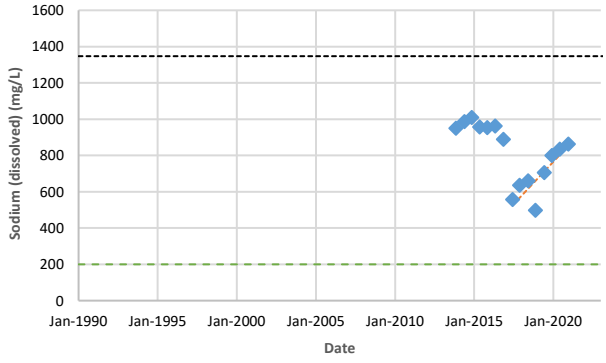


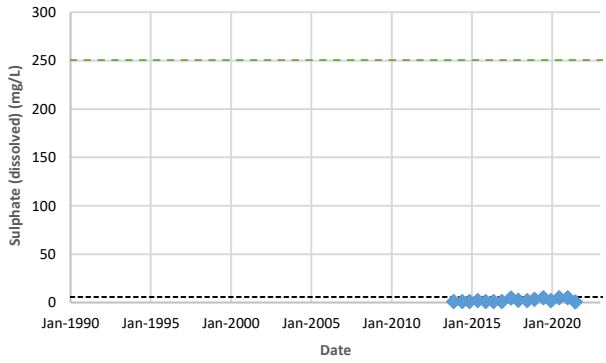


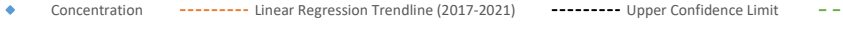




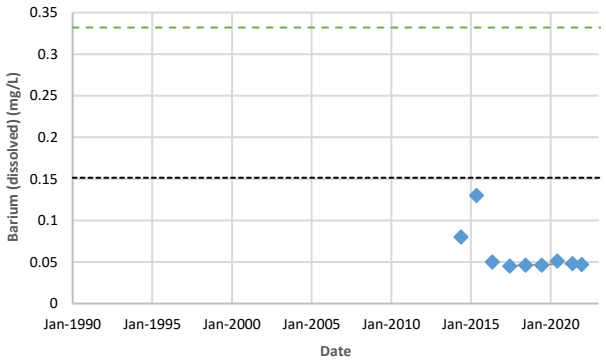


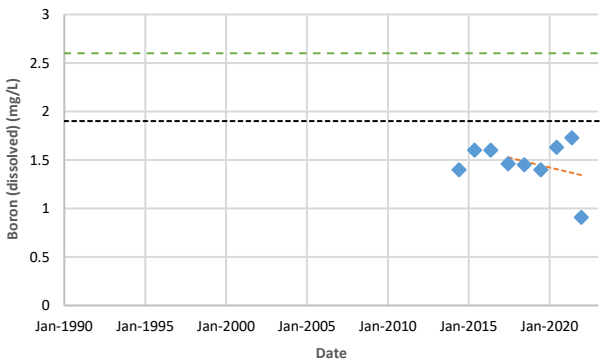


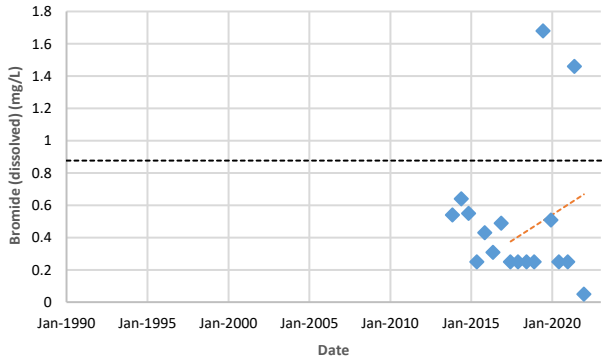


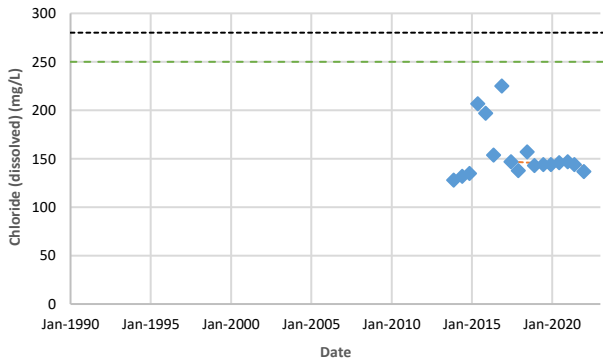


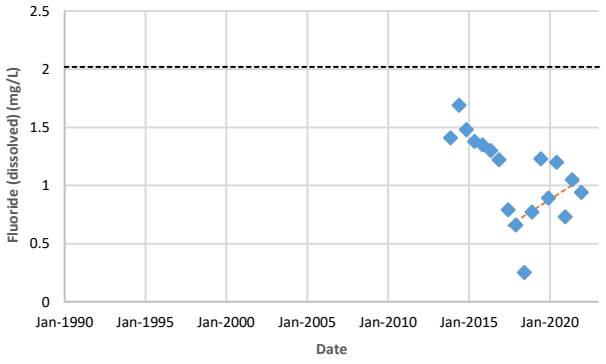
Well TW60-13D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

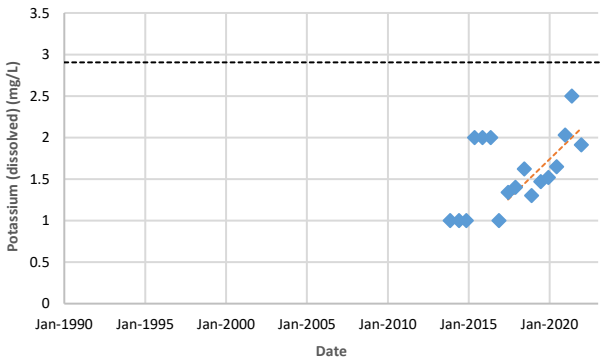


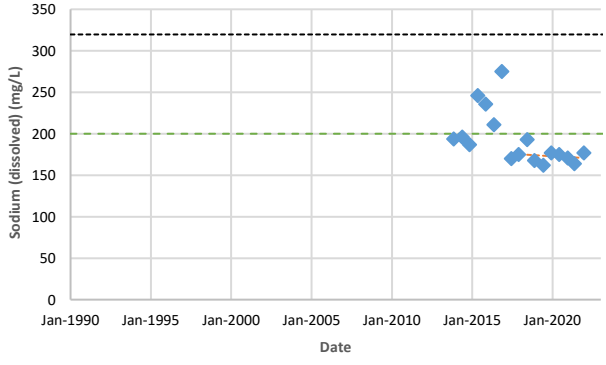


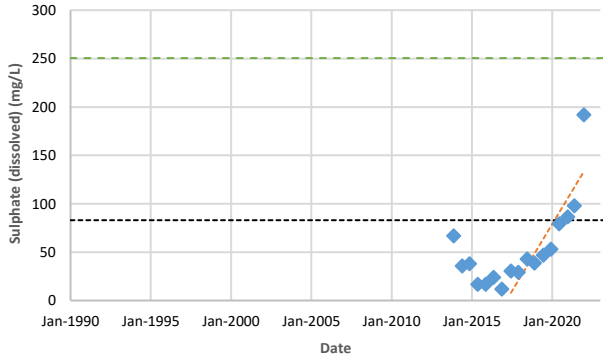


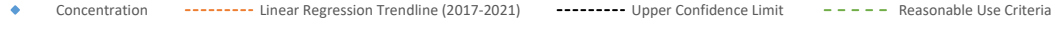




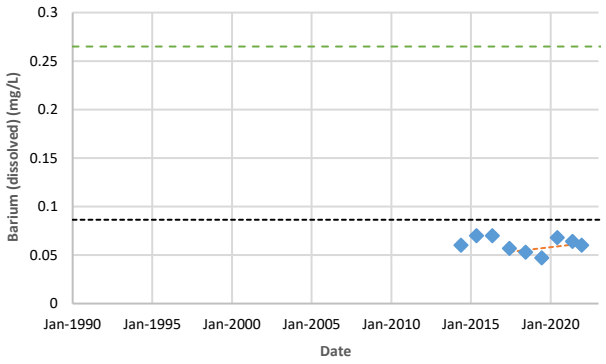


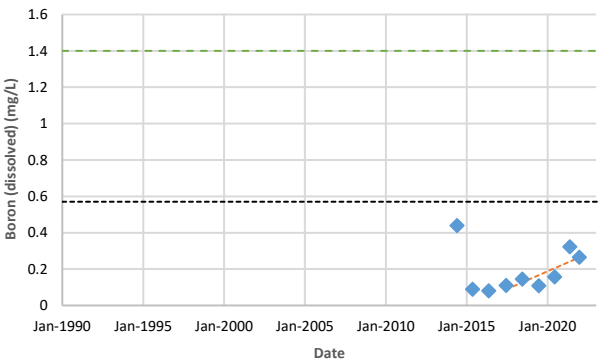


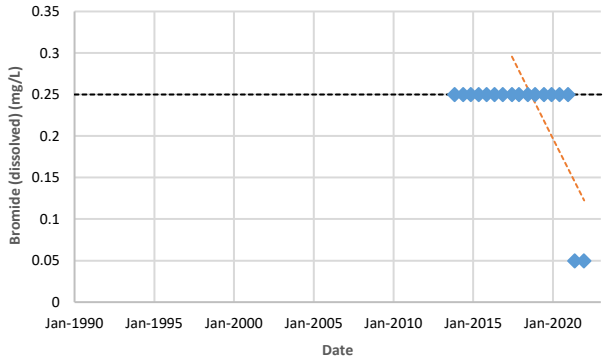


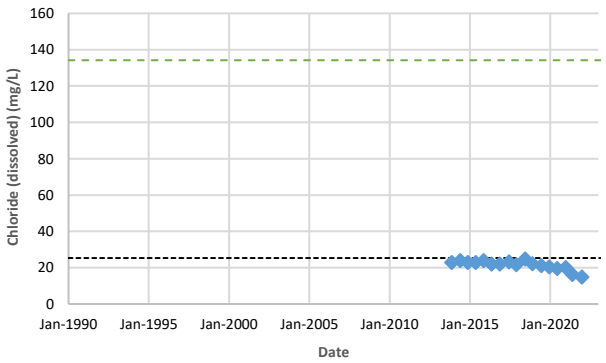


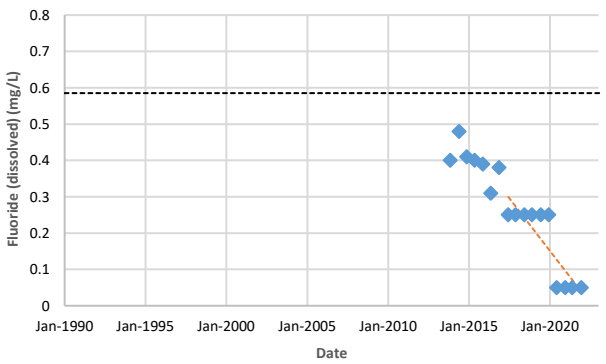
Well TW61-13D	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

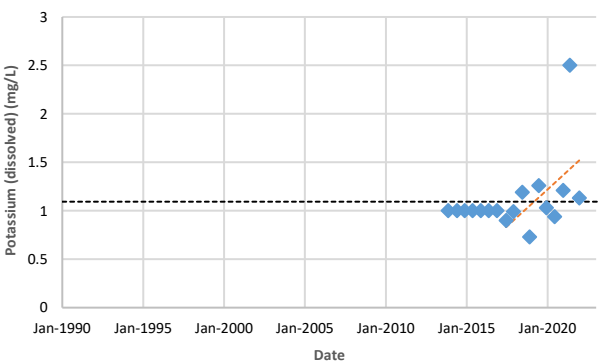


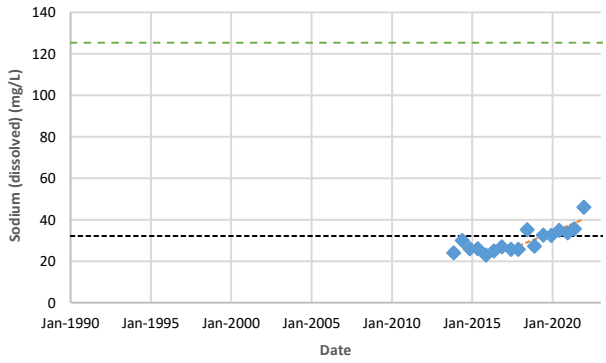


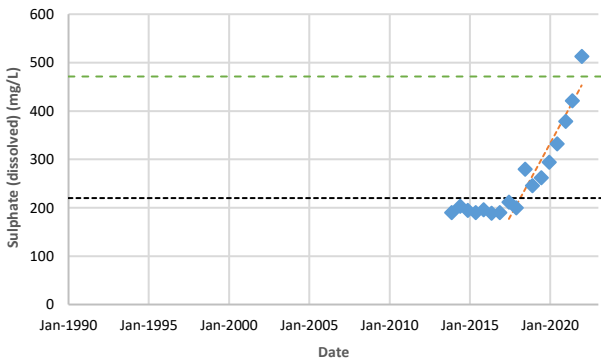




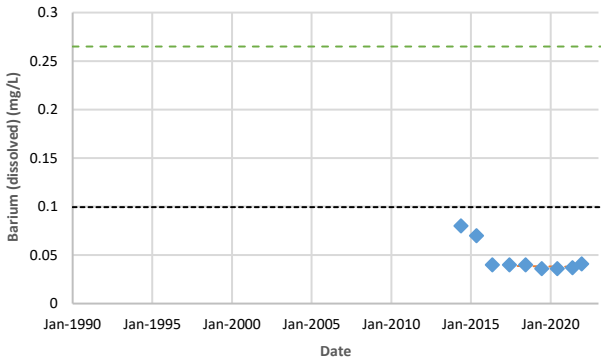


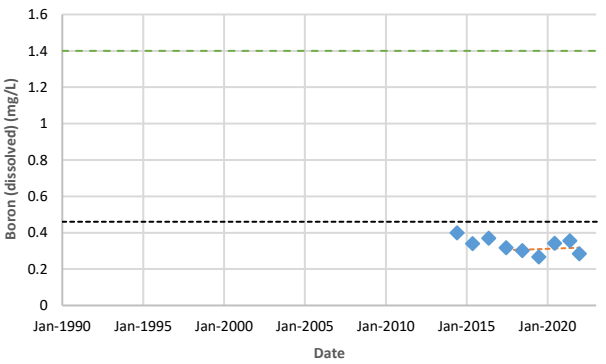


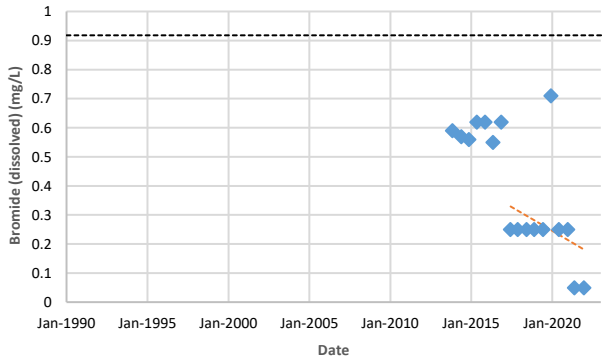


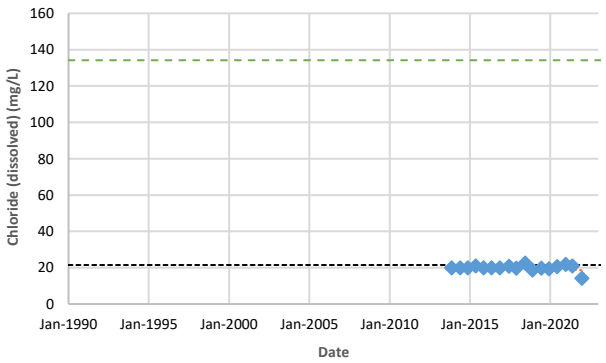


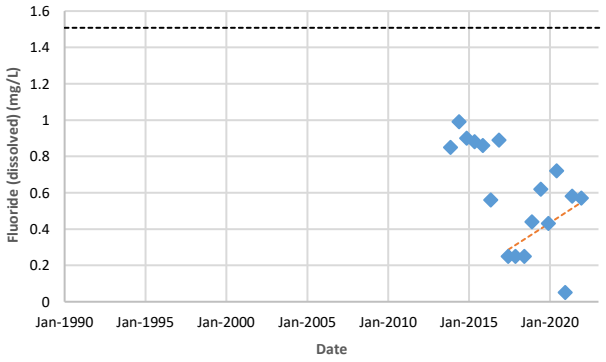
Well TW61-13I	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

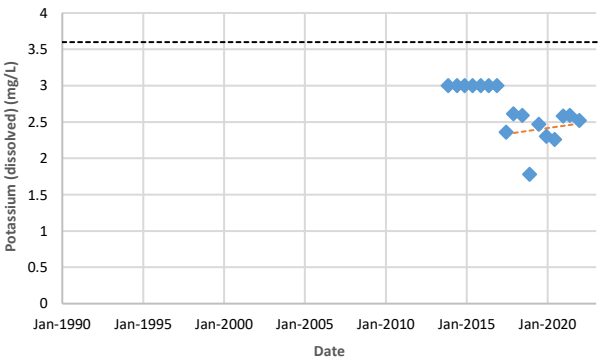


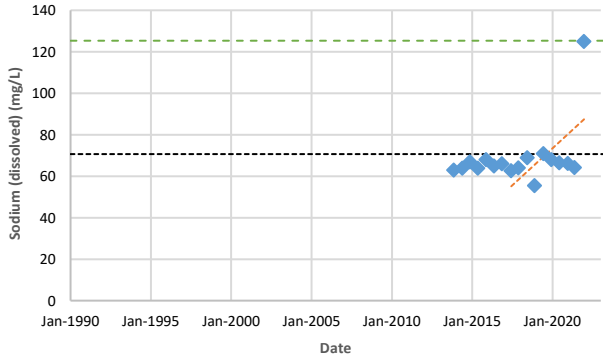


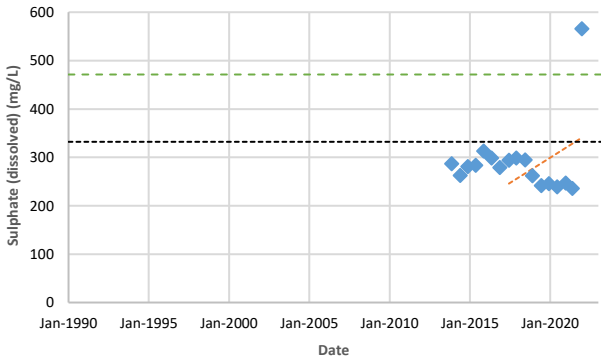




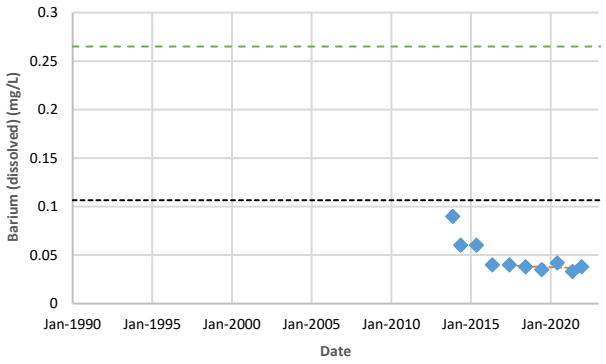


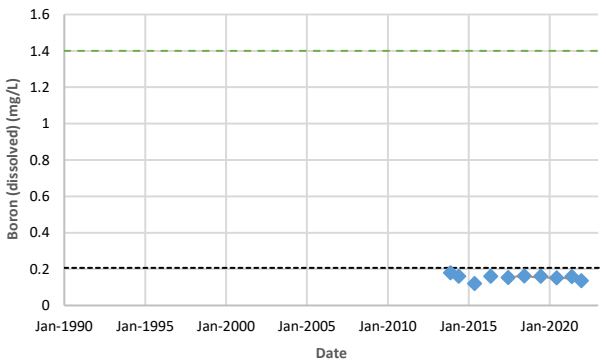


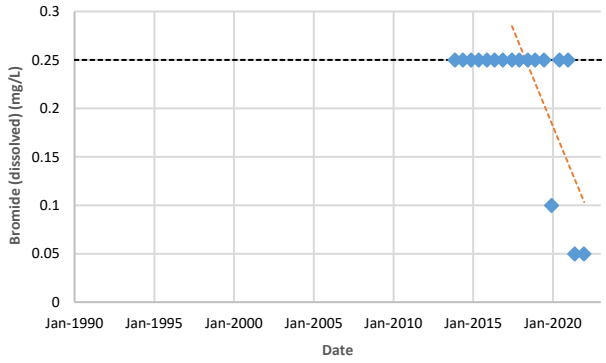


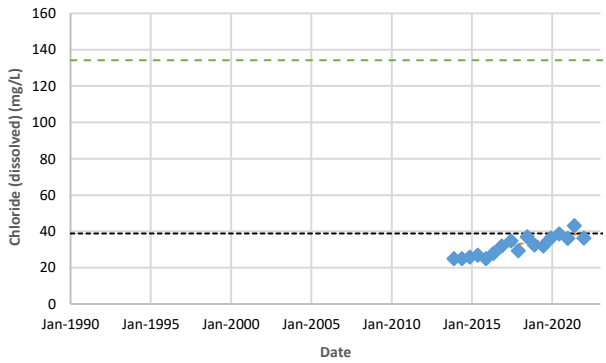


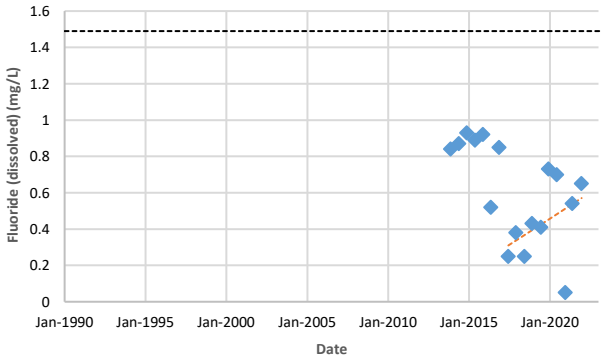
Well TW61-13S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

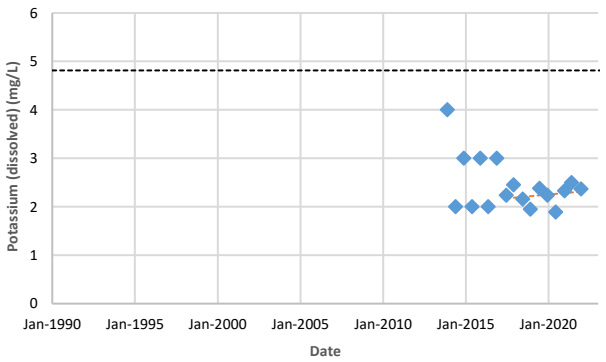


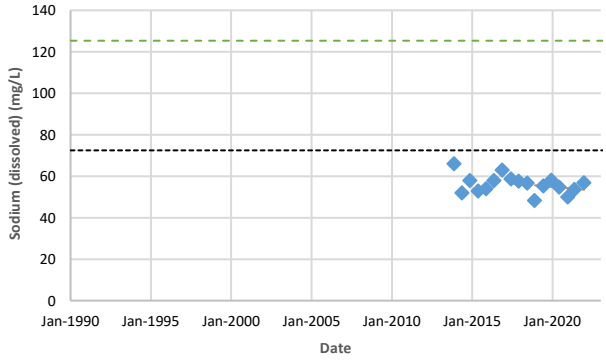


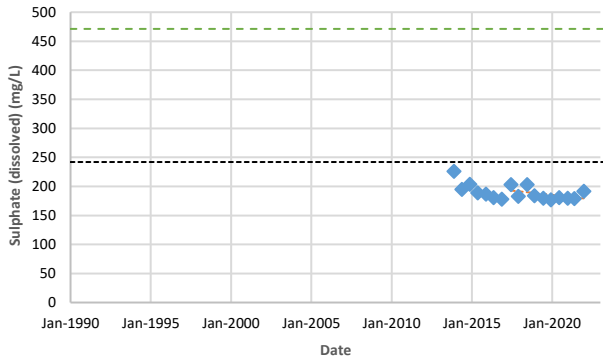




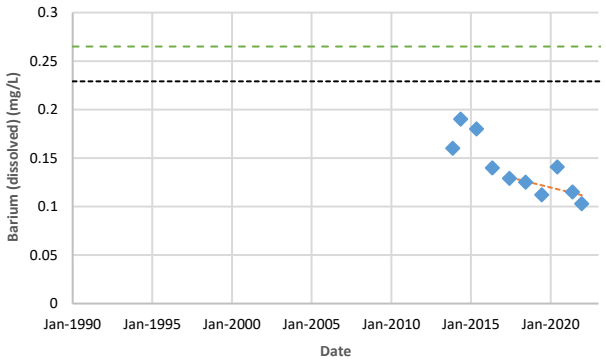


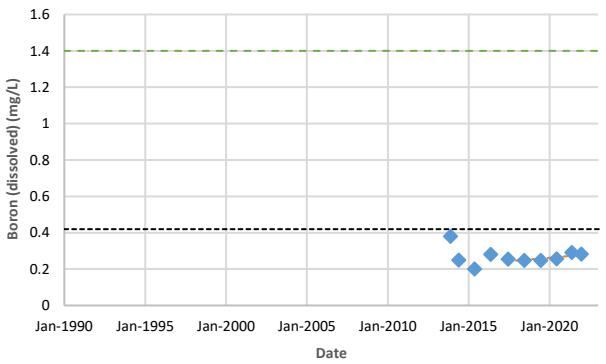


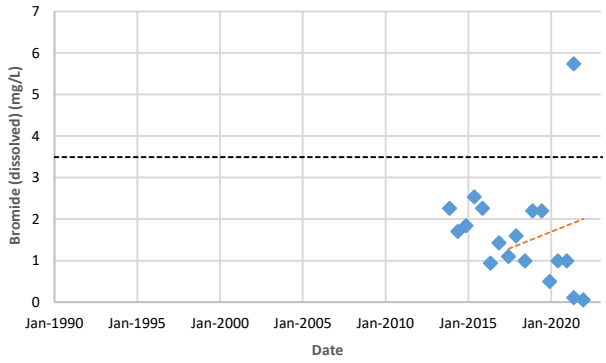


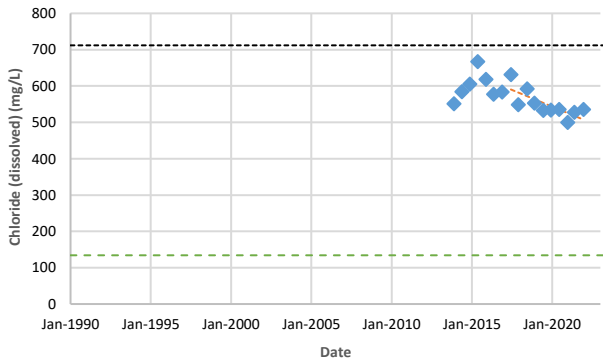


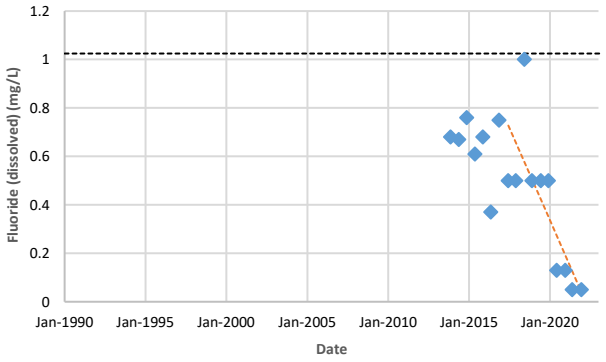
Well TW62-13S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

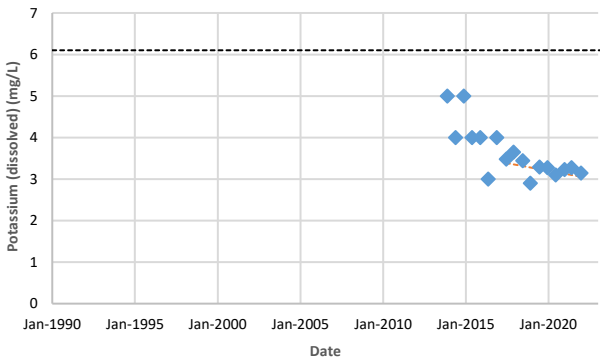


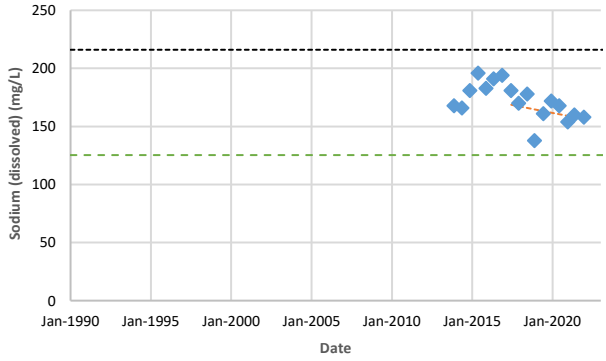


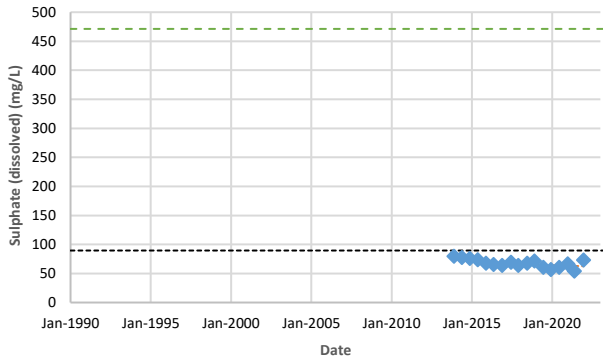












Well TW63-13S	**Figure D**	
Clean Harbours Canada Inc.	**Date:** 2022-02-16 / **Drawn by:** RMF	DILLON CONSULTING
Lambton Facility Landfill	**File Reference:** Project # 21-1519	

Appendix E

Laboratory Certificates of Analysis

DILLON CONSULTING

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: DILLON CONSULTING LTD.
130 Dufferin Avenue
LONDON, ON N6A5R2
(519) 438-6192
ATTENTION TO: Reenste Filler
PROJECT: 21-1519
AGAT WORK ORDER: 21L749543
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist
WATER ANALYSIS REVIEWED BY: Yris Verastegui, Report Reviewer
DATE REPORTED: May 31, 2021
PAGES (INCLUDING COVER): 28
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW-30-94	OW32-90D	OW32-90S	TW53-03S	OW35-90S	TW32-94-IV
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-18 14:22	2021-05-18 13:47	2021-05-18 13:22	2021-05-18 12:55	2021-05-18 12:31	2021-05-18 10:05
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2496520**	**2496823**	**2496915**	**2496918**	**2496944**	**2496992**
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW-30-94	OW32-90D	OW32-90S	TW53-03S	OW35-90S	TW32-94-IV
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-18 14:22	2021-05-18 13:47	2021-05-18 13:22	2021-05-18 12:55	2021-05-18 12:31	2021-05-18 10:05
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2496520**	**2496823**	**2496915**	**2496918**	**2496944**	**2496992**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**	**Acceptable Limits**										
Toluene-d8	% Recovery	50-140					90	89	88	91	90	87
4-Bromofluorobenzene	% Recovery	50-140					93	92	94	93	96	92

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW32-94-II	TW32-94-III	TW46-99I	TW46-99S	TW30-99D	TW39-99S
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-18 09:40	2021-05-18 09:50	2021-05-18 08:42	2021-05-18 08:35	2021-05-18 14:48	2021-05-18 07:52
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2496994**	**2496996**	**2496998**	**2497012**	**2497047**	**2497062**
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

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AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW32-94-II	TW32-94-III	TW46-99I	TW46-99S	TW30-99D	TW39-99S
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-18 09:40	2021-05-18 09:50	2021-05-18 08:42	2021-05-18 08:35	2021-05-18 14:48	2021-05-18 07:52
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2496994**	**2496996**	**2496998**	**2497012**	**2497047**	**2497062**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				87	86	92	90	88	89
4-Bromofluorobenzene	% Recovery		50-140				102	94	92	91	90	94

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW62-13S	TW63-13S	T45-99S	TW61-13D	TW39-99I	TW61-13I
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-17 12:07	2021-05-17 12:31	2021-05-17 11:55	2021-05-17 14:30	2021-05-17 16:00	2021-05-17 15:10
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2497064	2497071	2497203	2497207	2497208	2497286
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By: N Popnikolof

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW62-13S	TW63-13S	T45-99S	TW61-13D	TW39-99I	TW61-13I
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-05-17 12:07	2021-05-17 12:31	2021-05-17 11:55	2021-05-17 14:30	2021-05-17 16:00	2021-05-17 15:10
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2497064**	**2497071**	**2497203**	**2497207**	**2497208**	**2497286**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				91	90	90	92	90	90
4-Bromofluorobenzene	% Recovery		50-140				92	92	92	93	89	89

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW61-13S	DUP1	DUP2
						SAMPLE TYPE:	Water	Water	Water
						DATE SAMPLED:	2021-05-17 15:06	2021-05-17	2021-05-18
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2497303	2497327	2497565
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By: N Popnikolof

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW61-13S	DUP1	DUP2
						SAMPLE TYPE:	Water	Water	Water
						DATE SAMPLED:	2021-05-17 15:06	2021-05-17	2021-05-18
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2497303**	**2497327**	**2497565**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**						
Toluene-d8	% Recovery		50-140				92	92	88
4-Bromofluorobenzene	% Recovery		50-140				93	90	93

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2496520-2497565 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: N Popnikolof

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

						SAMPLE DESCRIPTION:	TW-30-94		OW32-90D		OW32-90S	TW53-03S
						SAMPLE TYPE:	Water		Water		Water	Water
						DATE SAMPLED:	2021-05-18 14:22		2021-05-18 13:47		2021-05-18 13:22	2021-05-18 12:55
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2496520	RDL	2496823	RDL	2496915	2496918
Electrical Conductivity	µS/cm				2		837	2	1410	2	1370	1390
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.95	NA	7.95	NA	7.84	7.63
Total Dissolved Solids	mg/L		500		10		446[<B]	10	690[>B]	10	1020[>B]	1060[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		411	5	251	5	321	375
Fluoride	mg/L	1.5			0.05		0.79[<A]	0.05	1.21[<A]	0.05	<0.05[<A]	<0.05[<A]
Chloride	mg/L		250		0.12		5.31[<B]	0.12	295[>B]	0.12	9.52[<B]	6.37[<B]
Nitrate as N	mg/L	10.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]
Bromide	mg/L				0.05		<0.05	0.05	<0.05	0.05	<0.05	<0.05
Sulphate	mg/L		500		0.10		116[<B]	0.10	<0.10[<B]	0.10	467[<B]	445[<B]
Ammonia as N	mg/L				0.02		<0.02	0.02	0.32	0.02	<0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Calcium	mg/L				0.05		71.6	0.25	21.7	0.25	179	184
Dissolved Magnesium	mg/L				0.05		46.8	0.25	7.82	0.25	63.7	67.5
Dissolved Potassium	mg/L				0.50		1.81	2.50	4.18	2.50	<2.50	<2.50
Dissolved Sodium	mg/L	20			0.05		26.9[>A]	0.25	244[>A]	0.25	22.2[>A]	19.6[<A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	0.001	0.001[<A]	0.001	<0.001[<A]	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.025[<A]	0.002	0.063[<A]	0.002	0.025[<A]	0.028[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010		0.098[<C]	0.10	2.00[C-A]	0.010	0.179[<C]	0.114[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		<0.010[<C]	0.010	5.19[>C]	0.010	0.023[<C]	0.020[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	0.0026[<A]	0.0005	<0.0005[<A]	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]	<0.005[<C]

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

				SAMPLE DESCRIPTION:		OW35-90S		TW32-94-IV		TW32-94-II
				SAMPLE TYPE:		Water		Water		Water
				DATE SAMPLED:		2021-05-18 12:31		2021-05-18 10:05		2021-05-18 09:40
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2496944	RDL	2496992	RDL	2496994
Electrical Conductivity	µS/cm				2	1660	2	1080	2	18300
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.85	NA	7.87	NA	8.41
Total Dissolved Solids	mg/L		500		10	1350[>B]	10	666[>B]	10	10000[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	321	5	381	5	1880
Fluoride	mg/L	1.5			0.05	<0.05[<A]	0.05	0.45[<A]	0.5	<0.5[<A]
Chloride	mg/L		250		0.12	7.35[<B]	0.12	25.5[<B]	4.9	5660[>B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.05	<0.05[<A]	1.4	<1.4[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	1.1	<1.1
Bromide	mg/L				0.05	<0.05	0.05	<0.05	1.1	<1.1
Sulphate	mg/L		500		0.19	709[>B]	0.10	211[<B]	3.8	<3.8[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	<0.02	0.02	0.10
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	202	0.25	96.8	2.5	42.8
Dissolved Magnesium	mg/L				0.25	90.3	0.25	62.8	2.5	52.8
Dissolved Potassium	mg/L				2.50	3.08	2.50	<2.50	25.0	<25.0
Dissolved Sodium	mg/L	20			0.25	34.3[>A]	0.25	53.6[>A]	2.5	3830[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	0.001	0.008[<A]
Dissolved Barium	mg/L	1.0			0.002	0.024[<A]	0.002	0.018[<A]	0.02	2.15[>A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.201[C-A]	0.010	0.133[<C]	0.10	9.59[>A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.050[<C]	0.010	0.369[>C]	0.010	0.879[>C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	0.013[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

				SAMPLE DESCRIPTION:		TW32-94-III		TW46-99I		TW46-99S
				SAMPLE TYPE:		Water		Water		Water
				DATE SAMPLED:		2021-05-18 09:50		2021-05-18 08:42		2021-05-18 08:35
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2496996**	**RDL**	**2496998**	**RDL**	**2497012**
Electrical Conductivity	µS/cm				2	951	2	1460	2	1970
pH	pH Units		6.5-8.5	6.5-8.5	NA	8.17	NA	7.84	NA	7.84
Total Dissolved Solids	mg/L		500		10	600[>B]	10	1030[>B]	10	1560[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	234	5	402	5	309
Fluoride	mg/L	1.5			0.05	1.21[<A]	0.05	0.40[<A]	0.05	<0.05[<A]
Chloride	mg/L		250		0.12	167[<B]	0.12	41.9[<B]	0.24	53.2[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.07	<0.07[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.05	<0.05	0.06	<0.06
Sulphate	mg/L		500		0.10	<0.10[<B]	0.10	392[<B]	0.19	764[>B]
Ammonia as N	mg/L				0.02	0.10	0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	23.0	0.25	140	0.25	206
Dissolved Magnesium	mg/L				0.25	6.84	0.25	82.5	0.25	89.9
Dissolved Potassium	mg/L				2.50	<2.50	2.50	<2.50	2.50	6.45
Dissolved Sodium	mg/L	20			0.25	152[>A]	0.25	49.3[>A]	0.25	107[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.084[<A]	0.002	0.031[<A]	0.002	0.016[<A]
Dissolved Boron	mg/L	5.0		0.2	0.10	1.38[C-A]	0.010	0.160[<C]	0.10	3.16[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.143[<C]	0.010	<0.010[<C]	0.010	0.526[>C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

				SAMPLE DESCRIPTION:		TW30-99D		TW39-99S	TW62-13S		TW63-13S
				SAMPLE TYPE:		Water		Water	Water		Water
				DATE SAMPLED:		2021-05-18 14:48		2021-05-18 07:52	2021-05-17 12:07		2021-05-17 12:31
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2497047	RDL	2497062	2497064	RDL	2497071
Electrical Conductivity	µS/cm				2	1220	2	1290	969	2	2310
pH	pH Units		6.5-8.5	6.5-8.5	NA	8.13	NA	7.86	7.82	NA	7.65
Total Dissolved Solids	mg/L		500		10	624[>B]	10	826[>B]	600[>B]	10	1610[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	242	5	457	282	5	385
Fluoride	mg/L	1.5			0.05	1.11[<A]	0.05	0.57[<A]	0.54[<A]	0.05	<0.05[<A]
Chloride	mg/L		250		0.12	244[<B]	0.12	22.5[<B]	43.1[<B]	0.49	528[>B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]	0.14	<0.14[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]	0.11	<0.11[<A]
Bromide	mg/L				0.05	2.08	0.05	<0.05	<0.05	0.11	5.74
Sulphate	mg/L		500		0.10	<0.10[<B]	0.10	265[<B]	179[<B]	0.38	54.1[<B]
Ammonia as N	mg/L				0.02	0.17	0.02	<0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	22.9	0.25	109	93.5	0.25	168
Dissolved Magnesium	mg/L				0.25	8.41	0.25	82.8	40.0	0.25	76.5
Dissolved Potassium	mg/L				2.50	2.71	2.50	<2.50	<2.50	2.50	3.06
Dissolved Sodium	mg/L	20			0.25	224[>A]	0.25	58.5[>A]	53.7[>A]	0.25	160[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.375[<A]	0.002	0.029[<A]	0.033[<A]	0.002	0.112[<A]
Dissolved Boron	mg/L	5.0		0.2	0.10	1.93[C-A]	0.010	0.286[C-A]	0.158[<C]	0.010	0.281[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.039[<C]	0.010	0.109[<C]	0.011[<C]	0.010	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	<0.003[<C]	0.003	0.078[>C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	<0.005[<C]	0.005	<0.005[<C]

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

				SAMPLE DESCRIPTION:		T45-99S		TW61-13D		TW39-99I	TW61-13I
				SAMPLE TYPE:		Water		Water		Water	Water
				DATE SAMPLED:		2021-05-17 11:55		2021-05-17 14:30		2021-05-17 16:00	2021-05-17 15:10
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2497203	RDL	2497207	RDL	2497208	2497286
Electrical Conductivity	µS/cm				2	1060	2	1110	2	1460	1340
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.66	NA	7.88	NA	7.56	7.84
Total Dissolved Solids	mg/L		500		10	668[>B]	10	602[>B]	10	946[>B]	966[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	425	5	250	5	556	340
Fluoride	mg/L	1.5			0.05	0.42[<A]	0.05	1.05[<A]	0.05	0.60[<A]	<0.05[<A]
Chloride	mg/L		250		0.12	63.2[<B]	0.12	144[<B]	0.12	18.4[<B]	16.4[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.05	1.46	0.05	<0.05	<0.05
Sulphate	mg/L		500		0.10	120[<B]	0.10	98.0[<B]	0.10	293[<B]	421[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Calcium	mg/L				0.25	103	0.25	33.2	0.25	93.7	137
Dissolved Magnesium	mg/L				0.25	40.7	0.25	13.8	0.25	101	67.5
Dissolved Potassium	mg/L				2.50	<2.50	2.50	<2.50	2.50	<2.50	<2.50
Dissolved Sodium	mg/L	20			0.25	34.2[>A]	0.25	164[>A]	0.25	66.2[>A]	35.6[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	0.004[<A]	0.001	0.001[<A]	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.059[<A]	0.002	0.048[<A]	0.002	0.035[<A]	0.064[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.115[<C]	0.10	1.73[C-A]	0.010	0.185[<C]	0.322[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	0.0009[C-A]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	0.002[<A]	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	<0.010[<C]	0.010	0.027[<C]	0.010	0.620[>C]	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]	0.009[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20

DATE REPORTED: 2021-05-31

				SAMPLE DESCRIPTION:		TW61-13S		DUP1		DUP2
				SAMPLE TYPE:		Water		Water		Water
				DATE SAMPLED:		2021-05-17 15:06		2021-05-17		2021-05-18
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2497303	RDL	2497327	RDL	2497565
Electrical Conductivity	µS/cm				2	1230	2	2340	2	934
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.81	NA	7.59	NA	8.06
Total Dissolved Solids	mg/L		500		10	768[>B]	10	1600[>B]	10	468[<B]
Alkalinity (as CaCO3)	mg/L		30-500		5	443	5	433	5	228
Fluoride	mg/L	1.5			0.05	0.58[<A]	0.05	<0.05[<A]	0.05	1.20[<A]
Chloride	mg/L		250		0.12	21.1[<B]	0.49	522[>B]	0.12	166[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.14	<0.14[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.11	<0.11[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.11	<0.11	0.05	<0.05
Sulphate	mg/L		500		0.10	236[<B]	0.38	54.3[<B]	0.10	<0.10[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	<0.02	0.02	0.20
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	118	0.25	160	0.25	22.6
Dissolved Magnesium	mg/L				0.25	63.1	0.25	72.8	0.25	6.78
Dissolved Potassium	mg/L				2.50	2.59	2.50	3.27	2.50	<2.50
Dissolved Sodium	mg/L	20			0.25	64.2[>A]	0.25	149[>A]	0.25	154[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.037[<A]	0.002	0.115[<A]	0.002	0.082[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.355[C-A]	0.010	0.292[C-A]	0.10	1.29[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.308[>C]	0.010	<0.010[<C]	0.010	0.150[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	0.080[>C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	0.010[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-05-20 **DATE REPORTED: 2021-05-31**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2496520-2497565 Dilution required, RDL has been increased accordingly.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

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Exceedance Summary

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

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SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2496520	TW-30-94	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	26.9
2496823	OW32-90D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	295
2496823	OW32-90D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	690
2496823	OW32-90D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	244
2496823	OW32-90D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.00
2496823	OW32-90D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	5.19
2496915	OW32-90S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1020
2496915	OW32-90S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	22.2
2496918	TW53-03S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1060
2496944	OW35-90S	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	709
2496944	OW35-90S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1350
2496944	OW35-90S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	34.3
2496944	OW35-90S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.201
2496992	TW32-94-IV	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	666
2496992	TW32-94-IV	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	53.6
2496992	TW32-94-IV	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.369
2496994	TW32-94-II	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	1880
2496994	TW32-94-II	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	5660
2496994	TW32-94-II	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	10000
2496994	TW32-94-II	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Barium	mg/L	1.0	2.15
2496994	TW32-94-II	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Boron	mg/L	5.0	9.59
2496994	TW32-94-II	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	3830
2496994	TW32-94-II	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	9.59
2496994	TW32-94-II	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.879
2496996	TW32-94-III	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	600
2496996	TW32-94-III	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	152
2496996	TW32-94-III	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.38
2496998	TW46-99I	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1030
2496998	TW46-99I	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	49.3
2497012	TW46-99S	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	764
2497012	TW46-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1560
2497012	TW46-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	107
2497012	TW46-99S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	3.16
2497012	TW46-99S	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.526
2497047	TW30-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	624
2497047	TW30-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	224
2497047	TW30-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.93
2497062	TW39-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	826
2497062	TW39-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	58.5
2497062	TW39-99S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.286
2497064	TW62-13S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	600
2497064	TW62-13S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	53.7
2497071	TW63-13S	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	528

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Exceedance Summary

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2497071	TW63-13S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1610
2497071	TW63-13S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	160
2497071	TW63-13S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.281
2497071	TW63-13S	ON PWQO	Groundwater Parameters	Dissolved Nickel	mg/L	0.025	0.078
2497203	T45-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	668
2497203	T45-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	34.2
2497203	T45-99S	ON PWQO	Groundwater Parameters	Dissolved Cadmium	mg/L	0.0002	0.0009
2497207	TW61-13D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	602
2497207	TW61-13D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	164
2497207	TW61-13D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.73
2497208	TW39-99I	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	556
2497208	TW39-99I	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	946
2497208	TW39-99I	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	66.2
2497208	TW39-99I	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.620
2497286	TW61-13I	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	966
2497286	TW61-13I	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	35.6
2497286	TW61-13I	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.322
2497303	TW61-13S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	768
2497303	TW61-13S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	64.2
2497303	TW61-13S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.355
2497303	TW61-13S	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.308
2497327	DUP1	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	522
2497327	DUP1	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1600
2497327	DUP1	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	149
2497327	DUP1	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.292
2497327	DUP1	ON PWQO	Groundwater Parameters	Dissolved Nickel	mg/L	0.025	0.080
2497565	DUP2	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	154
2497565	DUP2	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.29

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.
AGAT WORK ORDER: 21L749543
PROJECT: 21-1519
ATTENTION TO: Reenste Filler
SAMPLING SITE:Clean Harbors
SAMPLED BY:

Trace Organics Analysis

RPT Date: May 31, 2021

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
Volatile Organic Compounds in Water (ug/L)															
Dichlorodifluoromethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	99%	50%	140%	100%	50%	140%	104%	50%	140%
Chloromethane	2497327	2497327	<0.40	<0.40	NA	< 0.40	109%	50%	140%	102%	50%	140%	103%	50%	140%
Vinyl Chloride	2497327	2497327	<0.17	<0.17	NA	< 0.17	106%	50%	140%	105%	50%	140%	97%	50%	140%
Bromomethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	80%	50%	140%	105%	50%	140%	78%	50%	140%
Chloroethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	103%	50%	140%	112%	50%	140%	90%	50%	140%
Trichlorofluoromethane	2497327	2497327	<0.40	<0.40	NA	< 0.40	99%	50%	140%	93%	50%	140%	106%	50%	140%
Acetone	2497327	2497327	<1.0	<1.0	NA	< 1.0	116%	50%	140%	110%	50%	140%	85%	50%	140%
1,1-Dichloroethylene	2497327	2497327	<0.2	<0.2	NA	< 0.2	82%	50%	140%	114%	60%	130%	110%	50%	140%
Methylene Chloride	2497327	2497327	<0.30	<0.30	NA	< 0.30	97%	50%	140%	103%	60%	130%	88%	50%	140%
trans- 1,2-dichloroethylene	2497327	2497327	<0.20	<0.20	NA	< 0.20	100%	50%	140%	86%	60%	130%	79%	50%	140%
Methyl tert-butyl ether	2497327	2497327	<0.20	<0.20	NA	< 0.20	115%	50%	140%	106%	60%	130%	84%	50%	140%
1,1-Dichloroethane	2497327	2497327	<0.30	<0.30	NA	< 0.30	106%	50%	140%	112%	60%	130%	92%	50%	140%
Methyl Ethyl Ketone	2497327	2497327	<1.0	<1.0	NA	< 1.0	115%	50%	140%	83%	50%	140%	85%	50%	140%
cis- 1,2-Dichloroethylene	2497327	2497327	<0.20	<0.20	NA	< 0.20	83%	50%	140%	104%	60%	130%	92%	50%	140%
Chloroform	2497327	2497327	<0.20	<0.20	NA	< 0.20	105%	50%	140%	99%	60%	130%	106%	50%	140%
1,2-Dichloroethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	113%	50%	140%	92%	60%	130%	110%	50%	140%
1,1,1-Trichloroethane	2497327	2497327	<0.30	<0.30	NA	< 0.30	98%	50%	140%	110%	60%	130%	110%	50%	140%
Carbon Tetrachloride	2497327	2497327	<0.20	<0.20	NA	< 0.20	112%	50%	140%	104%	60%	130%	104%	50%	140%
Benzene	2497327	2497327	<0.20	<0.20	NA	< 0.20	83%	50%	140%	93%	60%	130%	99%	50%	140%
1,2-Dichloropropane	2497327	2497327	<0.20	<0.20	NA	< 0.20	90%	50%	140%	114%	60%	130%	117%	50%	140%
Trichloroethylene	2497327	2497327	<0.20	<0.20	NA	< 0.20	98%	50%	140%	96%	60%	130%	117%	50%	140%
Bromodichloromethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	98%	50%	140%	99%	60%	130%	94%	50%	140%
cis-1,3-Dichloropropene	2497327	2497327	<0.20	<0.20	NA	< 0.20	92%	50%	140%	91%	60%	130%	92%	50%	140%
Methyl Isobutyl Ketone	2497327	2497327	<1.0	<1.0	NA	< 1.0	104%	50%	140%	111%	50%	140%	103%	50%	140%
trans-1,3-Dichloropropene	2497327	2497327	<0.30	<0.30	NA	< 0.30	98%	50%	140%	93%	60%	130%	98%	50%	140%
1,1,2-Trichloroethane	2497327	2497327	<0.20	<0.20	NA	< 0.20	85%	50%	140%	94%	60%	130%	101%	50%	140%
Toluene	2497327	2497327	<0.20	<0.20	NA	< 0.20	101%	50%	140%	97%	60%	130%	110%	50%	140%
2-Hexanone	2497327	2497327	<1.0	<1.0	NA	< 1.0	106%	50%	140%	95%	50%	140%	96%	50%	140%
Dibromochloromethane	2497327	2497327	<0.10	<0.10	NA	< 0.10	96%	50%	140%	115%	60%	130%	99%	50%	140%
Ethylene Dibromide	2497327	2497327	<0.10	<0.10	NA	< 0.10	84%	50%	140%	93%	60%	130%	84%	50%	140%
Tetrachloroethylene	2497327	2497327	<0.20	<0.20	NA	< 0.20	95%	50%	140%	87%	60%	130%	103%	50%	140%
1,1,1,2-Tetrachloroethane	2497327	2497327	<0.10	<0.10	NA	< 0.10	93%	50%	140%	99%	60%	130%	92%	50%	140%
Chlorobenzene	2497327	2497327	<0.10	<0.10	NA	< 0.10	95%	50%	140%	103%	60%	130%	114%	50%	140%
Ethylbenzene	2497327	2497327	<0.10	<0.10	NA	< 0.10	99%	50%	140%	104%	60%	130%	114%	50%	140%
m & p-Xylene	2497327	2497327	<0.20	<0.20	NA	< 0.20	109%	50%	140%	99%	60%	130%	115%	50%	140%
Bromoform	2497327	2497327	<0.10	<0.10	NA	< 0.10	83%	50%	140%	113%	60%	130%	92%	50%	140%
Styrene	2497327	2497327	<0.10	<0.10	NA	< 0.10	95%	50%	140%	100%	60%	130%	91%	50%	140%
1,1,2,2-Tetrachloroethane	2497327	2497327	<0.10	<0.10	NA	< 0.10	105%	50%	140%	84%	60%	130%	86%	50%	140%
o-Xylene	2497327	2497327	<0.10	<0.10	NA	< 0.10	92%	50%	140%	83%	60%	130%	94%	50%	140%

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: May 31, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	2497327	2497327	<0.10	<0.10	NA	< 0.10	118%	50%	140%	93%	60%	130%	91%	50%	140%
1,4-Dichlorobenzene	2497327	2497327	<0.10	<0.10	NA	< 0.10	97%	50%	140%	108%	60%	130%	100%	50%	140%
1,2-Dichlorobenzene	2497327	2497327	<0.10	<0.10	NA	< 0.10	94%	50%	140%	106%	60%	130%	103%	50%	140%
1,2,4-Trichlorobenzene	2497327	2497327	<0.30	<0.30	NA	< 0.30	94%	50%	140%	80%	60%	130%	106%	50%	140%
n-Hexane	2497327	2497327	<0.20	<0.20	NA	< 0.20	86%	50%	140%	86%	60%	130%	90%	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).

Certified By: N Popnikolof

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Water Analysis

RPT Date: May 31, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Groundwater Parameters															
Electrical Conductivity	2470892		121	120	0.8%	< 2	98%	90%	110%						
pH	2470892		6.78	6.72	0.9%	NA	100%	98%	103%						
Total Dissolved Solids	2483451		226	234	3.5%	< 10	98%	80%	120%						
Alkalinity (as CaCO3)	2470892		18	18	NA	< 5	89%	80%	120%						
Fluoride	2496520	2496520	0.79	0.76	3.9%	< 0.05	108%	70%	130%	106%	80%	120%	104%	70%	130%
Chloride	2496520	2496520	5.31	5.34	0.6%	< 0.10	102%	70%	130%	106%	80%	120%	106%	70%	130%
Nitrate as N	2496520	2496520	<0.05	<0.05	NA	< 0.05	100%	70%	130%	105%	80%	120%	105%	70%	130%
Nitrite as N	2496520	2496520	<0.05	<0.05	NA	< 0.05	94%	70%	130%	111%	80%	120%	110%	70%	130%
Bromide	2496520	2496520	<0.05	<0.05	NA	< 0.05	105%	70%	130%	108%	80%	120%	103%	70%	130%
Sulphate	2496520	2496520	116	116	0.0%	< 0.10	97%	70%	130%	101%	80%	120%	101%	70%	130%
Ammonia as N	2505573		<0.02	<0.02	NA	< 0.02	99%	70%	130%	106%	80%	120%	101%	70%	130%
Cyanide, Free	2497327	2497327	<0.002	<0.002	NA	< 0.002	96%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Calcium	2496520	2496520	71.6	72.3	1.0%	< 0.05	96%	70%	130%	96%	80%	120%	94%	70%	130%
Dissolved Magnesium	2496520	2496520	46.8	47.4	1.3%	< 0.05	99%	70%	130%	99%	80%	120%	98%	70%	130%
Dissolved Potassium	2496520	2496520	1.81	1.82	NA	< 0.50	100%	70%	130%	98%	80%	120%	99%	70%	130%
Dissolved Sodium	2496520	2496520	26.9	27.2	1.1%	< 0.05	98%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Arsenic	2496520	2496520	<0.001	<0.001	NA	< 0.001	92%	70%	130%	106%	80%	120%	114%	70%	130%
Dissolved Barium	2496520	2496520	0.025	0.025	0.0%	< 0.002	98%	70%	130%	101%	80%	120%	105%	70%	130%
Dissolved Boron	2496520	2496520	0.098	0.099	1.0%	< 0.010	101%	70%	130%	102%	80%	120%	110%	70%	130%
Dissolved Cadmium	2496520	2496520	<0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	101%	80%	120%	109%	70%	130%
Dissolved Chromium	2496520	2496520	<0.002	<0.002	NA	< 0.002	100%	70%	130%	100%	80%	120%	100%	70%	130%
Dissolved Iron	2496520	2496520	<0.010	<0.010	NA	< 0.010	119%	70%	130%	109%	80%	120%	95%	70%	130%
Dissolved Lead	2496520	2496520	<0.0005	<0.0005	NA	< 0.0005	93%	70%	130%	98%	80%	120%	101%	70%	130%
Dissolved Mercury	2496520	2496520	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	97%	80%	120%	101%	70%	130%
Dissolved Nickel	2496520	2496520	<0.003	<0.003	NA	< 0.003	100%	70%	130%	103%	80%	120%	96%	70%	130%
Dissolved Zinc	2496520	2496520	<0.005	<0.005	NA	< 0.005	98%	70%	130%	104%	80%	120%	98%	70%	130%
Groundwater Parameters															
Electrical Conductivity	2497047	2497047	1220	1220	0.0%	< 2	100%	90%	110%						
pH	2497047	2497047	8.13	8.11	0.2%	NA	98%	98%	103%						
Total Dissolved Solids	2496520	2496520	446	514	14.2%	< 10	98%	80%	120%						
Alkalinity (as CaCO3)	2497047	2497047	242	244	0.8%	< 5	99%	80%	120%						
Fluoride	2496996	2496996	1.21	1.23	1.6%	< 0.05	106%	70%	130%	106%	80%	120%	107%	70%	130%
Chloride	2496996	2496996	167	167	0.0%	< 0.10	100%	70%	130%	106%	80%	120%	NA	70%	130%
Nitrate as N	2496996	2496996	<0.05	<0.05	NA	< 0.05	100%	70%	130%	105%	80%	120%	103%	70%	130%
Nitrite as N	2496996	2496996	<0.05	<0.05	NA	< 0.05	92%	70%	130%	111%	80%	120%	112%	70%	130%
Bromide	2496996	2496996	<0.05	<0.05	NA	< 0.05	103%	70%	130%	108%	80%	120%	102%	70%	130%
Sulphate	2496996	2496996	<0.10	<0.10	NA	< 0.10	97%	70%	130%	101%	80%	120%	100%	70%	130%
Ammonia as N	2497047	2497047	0.17	0.17	0.0%	< 0.02	117%	70%	130%	105%	80%	120%	97%	70%	130%

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

Water Analysis (Continued)

RPT Date: May 31, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Cyanide, Free	2509232		<2	<2	NA	< 0.002	96%	70%	130%	105%	80%	120%	108%	70%	130%
Dissolved Calcium	2497303	2497303	118	119	0.8%	< 0.05	96%	70%	130%	97%	80%	120%	102%	70%	130%
Dissolved Magnesium	2497303	2497303	63.1	63.6	0.8%	< 0.05	100%	70%	130%	101%	80%	120%	97%	70%	130%
Dissolved Potassium	2497303	2497303	2.59	2.67	3.0%	< 0.50	100%	70%	130%	95%	80%	120%	90%	70%	130%
Dissolved Sodium	2497303	2497303	64.2	65.1	1.4%	< 0.05	99%	70%	130%	96%	80%	120%	98%	70%	130%
Dissolved Arsenic	2497565	2497565	<0.001	<0.001	NA	< 0.001	94%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Barium	2497565	2497565	0.082	0.081	1.2%	< 0.002	98%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Boron	2497565	2497565	1.29	1.27	1.6%	< 0.010	100%	70%	130%	104%	80%	120%	101%	70%	130%
Dissolved Cadmium	2497565	2497565	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Chromium	2497565	2497565	<0.002	<0.002	NA	< 0.002	97%	70%	130%	101%	80%	120%	95%	70%	130%
Dissolved Iron	2497565	2497565	0.150	0.156	3.9%	< 0.010	104%	70%	130%	105%	80%	120%	109%	70%	130%
Dissolved Lead	2497565	2497565	<0.0005	<0.0005	NA	< 0.0005	94%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Mercury	2497565	2497565	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	102%	80%	120%	98%	70%	130%
Dissolved Nickel	2497565	2497565	<0.003	<0.003	NA	< 0.003	102%	70%	130%	105%	80%	120%	93%	70%	130%
Dissolved Zinc	2497565	2497565	<0.005	0.005	NA	< 0.005	101%	70%	130%	104%	80%	120%	106%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Certified By: Iris Verástegui

AGAT Laboratories

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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
2-Hexanone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2,4-Trichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

AGAT Laboratories

5835 COOPERS AVENUE
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CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L749543

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:Clean Harbors

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Electrical Conductivity	INOR-93-6000	modified from SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Total Dissolved Solids	INOR-93-6028	modified from EPA 1684,ON MOECC E3139,SM 2540C,D	BALANCE
Alkalinity (as CaCO3)	INOR-93-6000	Modified from SM 2320 B	PC TITRATE
Fluoride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Bromide	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Ammonia as N	INOR-93-6059	modified from SM 4500-NH3 H	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015,SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Dissolved Calcium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Magnesium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Potassium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Iron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting Limited
Contact: Reenste Filler / Daniel Orjuela
Address: 130 Dufferin Ave Suite 1400
London ON, N6A 5R2
Phone: _____ Fax: _____
Reports to be sent to:
1. Email: rfiller@dillon.ca
2. Email: dorjuela@dillon.ca

Project Information:

Project: 21-1519
Site Location: Clean Harbors
Sampled By:
AGAT ID #: 374401 PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Dillon Consulting Limited
Contact: Reenste Filler
Address:
Email: rfiller@dillon.ca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table _____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
_____ *Region*
☒ Prov. Water Quality Objectives (PWQO)
☒ Other ODWS *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21L749543
Cooler Quantity: 4 large
Arrival Temperatures:
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: on ice

Turnaround Time (TAT) Required:

Regular TAT (Most Analysis) ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs; Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: Total PCBs ☐ Aroclor	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	General Chem as per quote	Anions as per quote	Dis Cations as per quote	Dis Metals as per quote	Dis Mercury as per quote	VOCs as per quote	Potentially Hazardous or High Concentration (Y/N)
TW-30-94	May 18/21	14:22 AM PM	11	GW		Y											X	X	X	X	X	X	
OW 32-90D		13:47 AM PM																					
OW 32-90S		13:22 AM PM																					
TW53-03S		12:55 AM PM																					
OW 35-90S		12:31 AM PM																					
TW32-94-IV		10:05 AM PM																					
TW32-94-II		9:40 AM PM																					
TW32-94-III		~~9:40~~ 9:50 AM PM																					
TW46-99I		~~8:47~~ 8:42 AM PM																					
TW46-99S		8:35 AM PM																					
TW30-99D		14:48 AM PM																					

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Reenste Filler	May 20/21	9:45 am	J. Smith	21-5-20	10 AM
Brendan G	May 26/21	3pm			

Page 1 of 2

Nº: T114660

Document ID: DW-78-1511-020

Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

AGAT Laboratories

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Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting Limited
Contact: Reenste Filler / Daniel Orjuela
Address: 130 Dufferin Ave Suite 1400
London ON, N6A 5R2
Phone: _____ Fax: _____
Reports to be sent to:
1. Email: rfiller@dillon.ca
2. Email: dorjuela@dillon.ca

Project Information:

Project: 21-1579
Site Location: Clean Harbors
Sampled By:
AGAT ID #: 374401 PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Dillon Consulting Limited
Contact: Reenste Filler
Address:
Email: rfiller@dillon.ca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table _____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
_____ *Region*
☒ Prov. Water Quality Objectives (PWQO)
☒ Other ODWS *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Laboratory Use Only

Work Order #: 21L749543
Cooler Quantity: 4 large
Arrival Temperatures:
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: on ice

Turnaround Time (TAT) Required:

Regular TAT (Most Analysis) ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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**TAT is exclusive of weekends and statutory holidays*

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Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: Total PCBs ☐ Aroclor	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	General Chem as per quote	Anions as per quote	Dis Cations as per quote	Dis Metals as per quote	Dis Mercury as per quote	VOCs as per quote		Potentially Hazardous or High Concentration (Y/N)
						Y/N																		
TW39-99S	May 18/21	7:52 AM PM	11	GW		Y											X	X	X	X	X	X		
TW62-13S	May 17/21	12:07 AM PM																						
TW63-13S		12:31 AM PM																						
TW5-99S		11:55 AM PM																						
TW61-13D		14:30 AM PM																						
TW39-99I		16:00 AM PM				↓																		
TW61-13I		15:10 AM PM				N																		
TW61-13S	↓	15:06 AM PM				Y																		
DUP1	May 17/21	AM PM																						
DUP2	May 18/21	AM PM	↓	↓		↓											↓	↓	↓	↓	↓	↓		
		AM PM																						

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Reenste Filler	May 20/21	8:45am	J. Smith	21-5-20	10 AM
Brendan G	May 20/21	3pm			

Page 2 of 2

N°: T 114661

Document ID: DIV-78-1511-020

Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

AGAT Laboratories

Sample Temperature Log

Client: DILLON

COC# or Work Order #: 21L749543

# of Coolers: 4 large

# of Submissions:

	Arrival Temperatures - Branch/Driver	Arrival Temperatures - Laboratory
Cooler #1:	7.6 / 7.5 / 7.1	7.0 / 6.7 / 6.3
Cooler #2:	5.5 / 5.1 / 5.6	6.1 / 6.7 / 6.0
Cooler #3:	3.2 / 7.1 / 6.4	5.9 / 5.4 / 6.3
Cooler #4:	6.1 / 6.7 / 6.3	7.1 / 7.0 / 6.4
Cooler #5:	/ /	/ /
Cooler #6:	/ /	/ /
Cooler #7:	/ /	/ /
Cooler #8	/ /	/ /
Cooler #9:	/ /	/ /
Cooler #10:	/ /	/ /

IR Gun ID:

Taken By: J. Smith

Date (yyyy/mm/dd): 21-5-20 **Time:** 10:00 AM / PM

IR Gun ID:

Taken By: Brendan G

Date (yyyy/mm/dd): 2021-05/20 **Time:** 3:20 AM / PM

Instructions for use of this form: 1) complete all fields of info including total # of coolers and # of submissions rec'd, 2) photocopy and place in each submission prior to giving a WO#, 3) Proceed as normal, write the WO# and scan (please make sure to scan along with the COC)

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CLIENT NAME: DILLON CONSULTING LTD.
130 Dufferin Avenue
LONDON, ON N6A5R2
(519) 438-6192
ATTENTION TO: Reenste Filler
PROJECT: 211519
AGAT WORK ORDER: 21L760673
TRACE ORGANICS REVIEWED BY: Oksana Gushyla, Trace Organics Lab Supervisor
WATER ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician
DATE REPORTED: Jun 22, 2021
PAGES (INCLUDING COVER): 31
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
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- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
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- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW22-94	TW32-94I	TW46-99D	PW2-S(R11)	TW54-09D	TW59-13D
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-09 09:50	2021-06-09 12:30	2021-06-09 14:20	2021-06-09 16:10	2021-06-09 16:50	2021-06-10 10:35
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612365**	**2612367**	**2612368**	**2612369**	**2612370**	**2612371**
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	9.54[A-C]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW22-94	TW32-94I	TW46-99D	PW2-S(R11)	TW54-09D	TW59-13D
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-09 09:50	2021-06-09 12:30	2021-06-09 14:20	2021-06-09 16:10	2021-06-09 16:50	2021-06-10 10:35
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612365**	**2612367**	**2612368**	**2612369**	**2612370**	**2612371**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				94	91	98	78	88	90
4-Bromofluorobenzene	% Recovery		50-140				86	84	80	78	86	85

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW59-13S	TW56-11D	TW56-11S	TW57-11S	TW57-11D	TW41-99D
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-10 09:55	2021-06-10 12:50	2021-06-11 15:50	2021-06-10 15:16	2021-06-10 14:57	2021-06-11 08:00
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612372**	**2612373**	**2612374**	**2612375**	**2612376**	**2612377**
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	0.80[>C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	1.40[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW59-13S	TW56-11D	TW56-11S	TW57-11S	TW57-11D	TW41-99D
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-10 09:55	2021-06-10 12:50	2021-06-11 15:50	2021-06-10 15:16	2021-06-10 14:57	2021-06-11 08:00
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612372**	**2612373**	**2612374**	**2612375**	**2612376**	**2612377**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	1.40[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				91	92	94	92	91	90
4-Bromofluorobenzene	% Recovery		50-140				85	82	83	83	92	94

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW41-99S	EW2a-01	EW1a-01	EW1b-13	EW1c-13	EW2b-13
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-11 08:15	2021-06-11 09:50	2021-06-11 10:50	2021-06-11 12:10	2021-06-11 13:20	2021-06-11 14:30
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2612378	2612379	2612380	2612381	2612382	2612383
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	1580	832	190
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	1350[>C]	844[>C]	199[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

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AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW41-99S	EW2a-01	EW1a-01	EW1b-13	EW1c-13	EW2b-13
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-11 08:15	2021-06-11 09:50	2021-06-11 10:50	2021-06-11 12:10	2021-06-11 13:20	2021-06-11 14:30
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612378**	**2612379**	**2612380**	**2612381**	**2612382**	**2612383**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				94	90	82	82	91	86
4-Bromofluorobenzene	% Recovery		50-140				92	104	93	108	106	106

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	EW2c-13	DUP A	DUP B	DUP C
						SAMPLE TYPE:	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-11 15:20	2021-06-09 18:00	2021-06-10 18:00	2021-06-11 18:00
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2612384	2612385	2612386	2612387
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		774	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		841[>C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

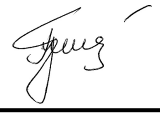
				SAMPLE DESCRIPTION:		EW2c-13	DUP A	DUP B	DUP C
				SAMPLE TYPE:		Water	Water	Water	Water
				DATE SAMPLED:		2021-06-11 15:20	2021-06-09 18:00	2021-06-10 18:00	2021-06-11 18:00
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2612384**	**2612385**	**2612386**	**2612387**
Ethylene Dibromide	µg/L			5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**						
Toluene-d8	% Recovery		50-140			88	88	91	90
4-Bromofluorobenzene	% Recovery		50-140			118	92	92	78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2612365-2612387 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

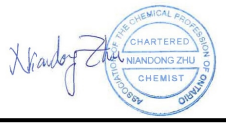
Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

				SAMPLE DESCRIPTION:		TW22-94		TW32-94I		TW46-99D	PW2-S(R11)
				SAMPLE TYPE:		Water		Water		Water	Water
				DATE SAMPLED:		2021-06-09 09:50		2021-06-09 12:30		2021-06-09 14:20	2021-06-09 16:10
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2612365**	**RDL**	**2612367**	**RDL**	**2612368**	**2612369**
Electrical Conductivity	µS/cm				2	1880	2	4130	2	1240	1660
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.10	NA	8.23	NA	7.32	7.64
Total Dissolved Solids	mg/L		500		10	1470[>B]	10	2130[>B]	10	650[>B]	848[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	491	5	304	5	374	394
Fluoride	mg/L	1.5			0.05	<0.05[<A]	0.13	<0.13[<A]	0.05	1.00[<A]	0.88[<A]
Chloride	mg/L		250		0.24	60.4[<B]	1.2	1300[>B]	0.12	226[<B]	350[>B]
Nitrate as N	mg/L	10.0			0.07	<0.07[<A]	0.36	<0.36[<A]	0.05	<0.05[<A]	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.27	<0.27[<A]	0.05	<0.05[<A]	<0.05[<A]
Bromide	mg/L				0.06	<0.06	0.28	<0.28	0.05	0.86	0.86
Sulphate	mg/L		500		0.19	662[>B]	0.95	<0.95[<B]	0.10	<0.10[<B]	5.30[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	0.43	0.02	0.08	1.62
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Calcium	mg/L				0.25	182	0.25	15.3	0.25	15.5	9.39
Dissolved Magnesium	mg/L				0.25	119	0.25	19.0	0.25	5.18	7.50
Dissolved Potassium	mg/L				2.50	<2.50	2.50	3.55	2.50	<2.50	2.56
Dissolved Sodium	mg/L	20			0.25	81.3[>A]	0.25	637[>A]	0.25	242[>A]	319[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.016[<A]	0.002	0.442[<A]	0.002	0.087[<A]	0.109[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.171[<C]	0.050	2.86[C-A]	0.050	1.82[C-A]	2.86[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.035[<C]	0.010	0.080[<C]	0.010	0.312[>C]	0.118[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	0.008[<C]	0.005	<0.005[<C]	0.005	0.005[<C]	<0.005[<C]

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

				SAMPLE DESCRIPTION:		TW54-09D		TW59-13D		TW59-13S
				SAMPLE TYPE:		Water		Water		Water
				DATE SAMPLED:		2021-06-09 16:50		2021-06-10 10:35		2021-06-10 09:55
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2612370	RDL	2612371	RDL	2612372
Electrical Conductivity	µS/cm				2	1120	2	541	2	951
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.53	NA	7.16	NA	7.30
Total Dissolved Solids	mg/L		500		10	574[>B]	10	310[<B]	10	586[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	343	5	202	5	453
Fluoride	mg/L	1.5			0.05	1.32[<A]	0.05	1.10[<A]	0.05	0.73[<A]
Chloride	mg/L		250		0.12	197[<B]	0.10	56.4[<B]	0.12	17.2[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		500		0.10	<0.10[<B]	0.10	26.6[<B]	0.10	124[<B]
Ammonia as N	mg/L				0.02	0.07	0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	16.7	0.05	27.3	0.25	97.7
Dissolved Magnesium	mg/L				0.25	5.84	0.05	7.18	0.25	54.3
Dissolved Potassium	mg/L				2.50	<2.50	0.50	1.85	2.50	<2.50
Dissolved Sodium	mg/L	20			0.25	191[>A]	0.05	72.6[>A]	0.25	30.8[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	0.002[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.102[<A]	0.002	0.046[<A]	0.002	0.033[<A]
Dissolved Boron	mg/L	5.0		0.2	0.050	1.84[C-A]	0.010	0.664[C-A]	0.010	0.165[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.279[<C]	0.010	<0.010[<C]	0.010	0.042[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	0.004[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	0.005	0.007[<C]

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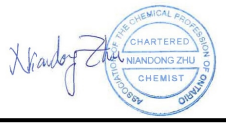

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

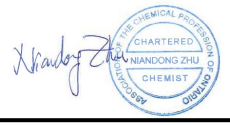
Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

				SAMPLE DESCRIPTION:		TW56-11D		TW56-11S	TW57-11S		TW57-11D
				SAMPLE TYPE:		Water		Water	Water		Water
				DATE SAMPLED:		2021-06-10 12:50		2021-06-11 15:50	2021-06-10 15:16		2021-06-10 14:57
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2612373	RDL	2612374	2612375	RDL	2612376
Electrical Conductivity	µS/cm				2	1270	2	1730	1780	2	1570
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.50	NA	7.24	7.15	NA	7.51
Total Dissolved Solids	mg/L		500		10	674[>B]	10	1320[>B]	994[>B]	10	812[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	310	5	432	566	5	351
Fluoride	mg/L	1.5			0.05	1.12[<A]	0.05	<0.05[<A]	<0.05[<A]	0.05	1.41[<A]
Chloride	mg/L		250		0.12	226[<B]	0.24	44.1[<B]	24.5[<B]	0.12	355[>B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.07	<0.07[<A]	<0.07[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.06	<0.06	<0.06	0.05	4.21
Sulphate	mg/L		500		0.10	49.6[<B]	0.19	634[>B]	304[<B]	0.10	<0.10[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	<0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	26.0	0.25	188	170	0.25	17.6
Dissolved Magnesium	mg/L				0.25	10.2	0.25	92.0	102	0.25	6.12
Dissolved Potassium	mg/L				2.50	2.66	2.50	<2.50	2.76	2.50	<2.50
Dissolved Sodium	mg/L	20			0.25	224[>A]	0.25	61.0[>A]	48.9[>A]	0.25	297[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	0.002[<A]	0.001	<0.001[<A]	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.093[<A]	0.002	0.012[<A]	0.021[<A]	0.002	0.065[<A]
Dissolved Boron	mg/L	5.0		0.2	0.020	1.66[C-A]	0.010	0.269[C-A]	0.190[<C]	0.020	1.80[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.038[<C]	0.010	0.012[<C]	0.012[<C]	0.010	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	0.007[<C]	0.005	<0.005[<C]	<0.005[<C]	0.005	<0.005[<C]

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	TW41-99D		TW41-99S		EW2a-01
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-11 08:00		2021-06-11 08:15		2021-06-11 09:50
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2612377	RDL	2612378	RDL	2612379
Electrical Conductivity	µS/cm				2		1140	2	1580	2	736
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.54	NA	7.23	NA	7.39
Total Dissolved Solids	mg/L		500		10		612[>B]	10	1210[>B]	10	392[<B]
Alkalinity (as CaCO3)	mg/L		30-500		5		327	5	496	5	260
Fluoride	mg/L	1.5			0.05		1.03[<A]	0.05	0.56[<A]	0.05	1.23[<A]
Chloride	mg/L		250		0.12		217[<B]	0.12	34.7[<B]	0.10	110[<B]
Nitrate as N	mg/L	10.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05		2.56	0.05	<0.05	0.05	1.23
Sulphate	mg/L		500		0.10		<0.10[<B]	0.10	495[<B]	0.10	1.60[<B]
Ammonia as N	mg/L				0.02		0.10	0.02	<0.02	0.02	0.23
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25		16.2	0.25	203	0.25	33.1
Dissolved Magnesium	mg/L				0.25		5.80	0.25	88.6	0.25	14.9
Dissolved Potassium	mg/L				2.50		<2.50	2.50	<2.50	2.50	<2.50
Dissolved Sodium	mg/L	20			0.25		216[>A]	0.25	50.7[>A]	0.25	92.8[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.073[<A]	0.002	0.017[<A]	0.002	0.108[<A]
Dissolved Boron	mg/L	5.0		0.2	0.020		1.88[C-A]	0.010	0.191[<C]	0.020	1.32[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		0.078[<C]	0.010	0.028[<C]	0.010	0.087[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

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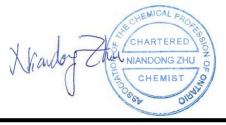

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	EW1a-01		EW1b-13		EW1c-13
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-11 10:50		2021-06-11 12:10		2021-06-11 13:20
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2612380	RDL	2612381	RDL	2612382
Electrical Conductivity	µS/cm				2		594	2	1460	2	1600
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.07	NA	7.47	NA	7.43
Total Dissolved Solids	mg/L		500		10		380[<B]	10	870[>B]	10	932[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		123	5	267	5	305
Fluoride	mg/L	1.5			0.05		0.65[<A]	0.05	0.71[<A]	0.05	1.21[<A]
Chloride	mg/L		250		0.10		61.8[<B]	0.12	203[<B]	0.12	312[>B]
Nitrate as N	mg/L	10.0			0.05		0.71[<A]	0.05	1.80[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05		0.38[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05		0.73	0.05	4.07	0.05	5.45
Sulphate	mg/L		500		0.10		106[<B]	0.10	231[<B]	0.10	130[<B]
Ammonia as N	mg/L				0.02		0.04	0.02	0.08	0.02	0.22
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.05		54.3	0.25	59.1	0.25	84.1
Dissolved Magnesium	mg/L				0.05		14.5	0.25	33.6	0.25	44.8
Dissolved Potassium	mg/L				0.50		1.59	2.50	3.89	2.50	4.03
Dissolved Sodium	mg/L	20			0.05		34.7[>A]	0.25	196[>A]	0.25	168[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	0.001	<0.001[<A]	0.001	0.002[<A]
Dissolved Barium	mg/L	1.0			0.002		0.026[<A]	0.002	0.030[<A]	0.002	0.044[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010		0.347[C-A]	0.050	2.50[C-A]	0.020	1.23[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		<0.010[<C]	0.010	0.018[<C]	0.010	0.630[>C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		0.009[<C]	0.005	0.008[<C]	0.005	<0.005[<C]

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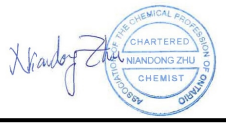

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

						SAMPLE DESCRIPTION:	EW2b-13	EW2c-13		DUP A	DUP B
						SAMPLE TYPE:	Water	Water		Water	Water
						DATE SAMPLED:	2021-06-11 14:30	2021-06-11 15:20		2021-06-09 18:00	2021-06-10 18:00
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2612383	2612384	RDL	2612385	2612386
Electrical Conductivity	µS/cm				2		740	732	2	1890	1720
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.54	7.59	NA	7.23	7.13
Total Dissolved Solids	mg/L		500		10		372[<B]	382[<B]	10	1490[>B]	1370[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		261	256	5	504	573
Fluoride	mg/L	1.5			0.05		1.38[<A]	1.28[<A]	0.05	<0.05[<A]	<0.05[<A]
Chloride	mg/L		250		0.10		105[<B]	102[<B]	0.24	59.5[<B]	18.3[<B]
Nitrate as N	mg/L	10.0			0.05		<0.05[<A]	<0.05[<A]	0.07	<0.07[<A]	<0.07[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	<0.05[<A]	0.05	<0.05[<A]	<0.05[<A]
Bromide	mg/L				0.05		2.12	1.90	0.06	<0.06	<0.06
Sulphate	mg/L		500		0.10		1.39[<B]	6.48[<B]	0.19	649[>B]	341[<B]
Ammonia as N	mg/L				0.02		0.23	0.22	0.02	<0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Calcium	mg/L				0.05		33.0	28.9	0.25	183	176
Dissolved Magnesium	mg/L				0.05		14.7	13.1	0.25	119	106
Dissolved Potassium	mg/L				0.50		2.45	2.02	2.50	<2.50	3.11
Dissolved Sodium	mg/L	20			0.05		90.8[>A]	98.3[>A]	0.25	81.6[>A]	50.5[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	<0.001[<A]	0.001	<0.001[<A]	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.108[<A]	0.111[<A]	0.002	0.016[<A]	0.019[<A]
Dissolved Boron	mg/L	5.0		0.2	0.020		1.27[C-A]	1.26[C-A]	0.010	0.191[<C]	0.160[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	<0.002[<A]	0.002	<0.002[<A]	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		0.147[<C]	0.366[>C]	0.010	0.035[<C]	0.023[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	<0.0005[<A]	0.0005	<0.0005[<A]	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	<0.0001[<C]	0.0001	<0.0001[<C]	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	<0.003[<C]	0.003	0.003[<C]	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	<0.005[<C]	0.005	<0.005[<C]	<0.005[<C]

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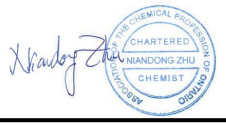

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

				SAMPLE DESCRIPTION:		DUP C
				SAMPLE TYPE:		Water
				DATE SAMPLED:		2021-06-11 18:00
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2612387**
Electrical Conductivity	µS/cm				2	596
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.02
Total Dissolved Solids	mg/L		500		10	374[<B]
Alkalinity (as CaCO3)	mg/L		30-500		5	132
Fluoride	mg/L	1.5			0.05	0.56[<A]
Chloride	mg/L		250		0.10	60.9[<B]
Nitrate as N	mg/L	10.0			0.05	0.72[<A]
Nitrite as N	mg/L	1.0			0.05	0.48[<A]
Bromide	mg/L				0.05	0.76
Sulphate	mg/L		500		0.10	107[<B]
Ammonia as N	mg/L				0.02	0.03
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.05	54.2
Dissolved Magnesium	mg/L				0.05	14.5
Dissolved Potassium	mg/L				0.50	1.62
Dissolved Sodium	mg/L	20			0.05	34.8[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.025[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.298[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	0.010[<C]

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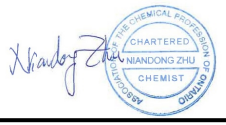

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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-14

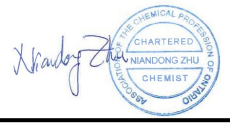
DATE REPORTED: 2021-06-22

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2612365-2612387 Dilution required, RDL has been increased accordingly.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters (Partial)

DATE RECEIVED: 2021-06-14

DATE REPORTED: 2021-06-22

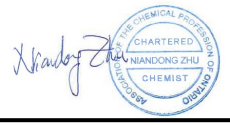
						SAMPLE DESCRIPTION:	TW60-13D
						SAMPLE TYPE:	Water
						DATE SAMPLED:	2021-06-09 10:20
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2612366**
Electrical Conductivity	µS/cm				2		4190
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.95
Total Dissolved Solids	mg/L		500		10		2290[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		692
Fluoride	mg/L	1.5			0.13		<0.13[<A]
Chloride	mg/L		250		1.2		1100[>B]
Nitrate as N	mg/L	10.0			0.36		<0.36[<A]
Nitrite as N	mg/L	1.0			0.27		<0.27[<A]
Bromide	mg/L				0.28		<0.28
Sulphate	mg/L		500		0.95		<0.95[<B]
Ammonia as N	mg/L				0.02		0.05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2612366 Dilution required, RDL has been increased accordingly.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:



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Exceedance Summary

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2612365	TW22-94	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	662
2612365	TW22-94	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1470
2612365	TW22-94	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	81.3
2612366	TW60-13D	ON 169/03 AO&OG	Groundwater Parameters (Partial)	Alkalinity (as CaCO3)	mg/L	30-500	692
2612366	TW60-13D	ON 169/03 AO&OG	Groundwater Parameters (Partial)	Chloride	mg/L	250	1100
2612366	TW60-13D	ON 169/03 AO&OG	Groundwater Parameters (Partial)	Total Dissolved Solids	mg/L	500	2290
2612367	TW32-94I	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	1300
2612367	TW32-94I	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	2130
2612367	TW32-94I	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	637
2612367	TW32-94I	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.86
2612368	TW46-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	650
2612368	TW46-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	242
2612368	TW46-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.82
2612368	TW46-99D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.312
2612369	PW2-S(R11)	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	350
2612369	PW2-S(R11)	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	848
2612369	PW2-S(R11)	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	319
2612369	PW2-S(R11)	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.86
2612370	TW54-09D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	574
2612370	TW54-09D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	191
2612370	TW54-09D	ON 169/03 MAC/IMAC	Volatile Organic Compounds in Water (ug/L)	Benzene	µg/L	1	9.54
2612370	TW54-09D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.84
2612371	TW59-13D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	72.6
2612371	TW59-13D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.664
2612372	TW59-13S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	586
2612372	TW59-13S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	30.8
2612373	TW56-11D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	674
2612373	TW56-11D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	224
2612373	TW56-11D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.66
2612374	TW56-11S	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	634
2612374	TW56-11S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1320
2612374	TW56-11S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	61.0
2612374	TW56-11S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.269
2612374	TW56-11S	ON PWQO	Volatile Organic Compounds in Water (ug/L)	1,2-Dichloropropane	µg/L	0.7	0.80
2612375	TW57-11S	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	566
2612375	TW57-11S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	994
2612375	TW57-11S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	48.9
2612376	TW57-11D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	355
2612376	TW57-11D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	812
2612376	TW57-11D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	297
2612376	TW57-11D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.80
2612377	TW41-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	612
2612377	TW41-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	216

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Exceedance Summary

AGAT WORK ORDER: 21L760673

PROJECT: 211519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2612377	TW41-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.88
2612378	TW41-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1210
2612378	TW41-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	50.7
2612379	EW2a-01	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	92.8
2612379	EW2a-01	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.32
2612380	EW1a-01	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	34.7
2612380	EW1a-01	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.347
2612381	EW1b-13	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	870
2612381	EW1b-13	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	196
2612381	EW1b-13	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.50
2612381	EW1b-13	ON PWQO	Volatile Organic Compounds in Water (ug/L)	Methyl Ethyl Ketone	µg/L	400	1350
2612382	EW1c-13	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	312
2612382	EW1c-13	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	932
2612382	EW1c-13	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	168
2612382	EW1c-13	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.23
2612382	EW1c-13	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.630
2612382	EW1c-13	ON PWQO	Volatile Organic Compounds in Water (ug/L)	Methyl Ethyl Ketone	µg/L	400	844
2612383	EW2b-13	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	90.8
2612383	EW2b-13	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.27
2612384	EW2c-13	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	98.3
2612384	EW2c-13	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.26
2612384	EW2c-13	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.366
2612384	EW2c-13	ON PWQO	Volatile Organic Compounds in Water (ug/L)	Methyl Ethyl Ketone	µg/L	400	841
2612385	DUP A	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	504
2612385	DUP A	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	649
2612385	DUP A	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1490
2612385	DUP A	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	81.6
2612386	DUP B	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	573
2612386	DUP B	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1370
2612386	DUP B	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	50.5
2612387	DUP C	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	34.8
2612387	DUP C	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.298

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Jun 22, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Volatile Organic Compounds in Water (ug/L)															
Dichlorodifluoromethane	2596040		<0.20	<0.20	NA	< 0.20	86%	50%	140%	94%	50%	140%	92%	50%	140%
Chloromethane	2596040		<0.40	<0.40	NA	< 0.40	80%	50%	140%	98%	50%	140%	95%	50%	140%
Vinyl Chloride	2596040		<0.17	<0.17	NA	< 0.17	108%	50%	140%	86%	50%	140%	88%	50%	140%
Bromomethane	2596040		<0.20	<0.20	NA	< 0.20	92%	50%	140%	91%	50%	140%	84%	50%	140%
Chloroethane	2596040		<0.20	<0.20	NA	< 0.20	89%	50%	140%	102%	50%	140%	84%	50%	140%
Trichlorofluoromethane	2596040		<0.40	<0.40	NA	< 0.40	93%	50%	140%	114%	50%	140%	90%	50%	140%
Acetone	2596040		<1.0	<1.0	NA	< 1.0	99%	50%	140%	104%	50%	140%	109%	50%	140%
1,1-Dichloroethylene	2596040		<0.2	<0.2	NA	< 0.2	83%	50%	140%	91%	60%	130%	83%	50%	140%
Methylene Chloride	2596040		<0.30	<0.30	NA	< 0.30	111%	50%	140%	109%	60%	130%	108%	50%	140%
trans- 1,2-dichloroethylene	2596040		<0.20	<0.20	NA	< 0.20	87%	50%	140%	80%	60%	130%	78%	50%	140%
Methyl tert-butyl ether	2596040		<0.20	<0.20	NA	< 0.20	78%	50%	140%	95%	60%	130%	84%	50%	140%
1,1-Dichloroethane	2596040		<0.30	<0.30	NA	< 0.30	89%	50%	140%	119%	60%	130%	95%	50%	140%
Methyl Ethyl Ketone	2596040		<1.0	<1.0	NA	< 1.0	97%	50%	140%	90%	50%	140%	108%	50%	140%
cis- 1,2-Dichloroethylene	2596040		<0.20	<0.20	NA	< 0.20	80%	50%	140%	102%	60%	130%	94%	50%	140%
Chloroform	2596040		<0.20	<0.20	NA	< 0.20	94%	50%	140%	110%	60%	130%	109%	50%	140%
1,2-Dichloroethane	2596040		<0.20	<0.20	NA	< 0.20	92%	50%	140%	108%	60%	130%	103%	50%	140%
1,1,1-Trichloroethane	2596040		<0.30	<0.30	NA	< 0.30	86%	50%	140%	101%	60%	130%	106%	50%	140%
Carbon Tetrachloride	2596040		<0.20	<0.20	NA	< 0.20	91%	50%	140%	91%	60%	130%	102%	50%	140%
Benzene	2596040		<0.20	<0.20	NA	< 0.20	96%	50%	140%	105%	60%	130%	99%	50%	140%
1,2-Dichloropropane	2596040		<0.20	<0.20	NA	< 0.20	82%	50%	140%	92%	60%	130%	113%	50%	140%
Trichloroethylene	2596040		<0.20	<0.20	NA	< 0.20	75%	50%	140%	102%	60%	130%	89%	50%	140%
Bromodichloromethane	2596040		<0.20	<0.20	NA	< 0.20	101%	50%	140%	103%	60%	130%	102%	50%	140%
cis-1,3-Dichloropropene	2596040		<0.20	<0.20	NA	< 0.20	84%	50%	140%	100%	60%	130%	82%	50%	140%
Methyl Isobutyl Ketone	2596040		<1.0	<1.0	NA	< 1.0	101%	50%	140%	102%	50%	140%	111%	50%	140%
trans-1,3-Dichloropropene	2596040		<0.30	<0.30	NA	< 0.30	111%	50%	140%	85%	60%	130%	88%	50%	140%
1,1,2-Trichloroethane	2596040		<0.20	<0.20	NA	< 0.20	117%	50%	140%	92%	60%	130%	96%	50%	140%
Toluene	2596040		<0.20	<0.20	NA	< 0.20	83%	50%	140%	93%	60%	130%	97%	50%	140%
2-Hexanone	2596040		<1.0	<1.0	NA	< 1.0	93%	50%	140%	103%	50%	140%	90%	50%	140%
Dibromochloromethane	2596040		<0.10	<0.10	NA	< 0.10	101%	50%	140%	91%	60%	130%	96%	50%	140%
Ethylene Dibromide	2596040		<0.10	<0.10	NA	< 0.10	113%	50%	140%	76%	60%	130%	101%	50%	140%
Tetrachloroethylene	2596040		<0.20	<0.20	NA	< 0.20	79%	50%	140%	103%	60%	130%	88%	50%	140%
1,1,1,2-Tetrachloroethane	2596040		<0.10	<0.10	NA	< 0.10	89%	50%	140%	115%	60%	130%	104%	50%	140%
Chlorobenzene	2596040		<0.10	<0.10	NA	< 0.10	98%	50%	140%	88%	60%	130%	90%	50%	140%
Ethylbenzene	2596040		<0.10	<0.10	NA	< 0.10	84%	50%	140%	111%	60%	130%	89%	50%	140%
m & p-Xylene	2596040		<0.20	<0.20	NA	< 0.20	87%	50%	140%	104%	60%	130%	106%	50%	140%
Bromoform	2596040		<0.10	<0.10	NA	< 0.10	112%	50%	140%	92%	60%	130%	104%	50%	140%
Styrene	2596040		<0.10	<0.10	NA	< 0.10	91%	50%	140%	91%	60%	130%	98%	50%	140%
1,1,2,2-Tetrachloroethane	2596040		<0.10	<0.10	NA	< 0.10	115%	50%	140%	104%	60%	130%	106%	50%	140%
o-Xylene	2596040		<0.10	<0.10	NA	< 0.10	97%	50%	140%	92%	60%	130%	110%	50%	140%

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Trace Organics Analysis (Continued)

RPT Date: Jun 22, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	2596040		<0.10	<0.10	NA	< 0.10	99%	50%	140%	114%	60%	130%	108%	50%	140%
1,4-Dichlorobenzene	2596040		<0.10	<0.10	NA	< 0.10	101%	50%	140%	109%	60%	130%	95%	50%	140%
1,2-Dichlorobenzene	2596040		<0.10	<0.10	NA	< 0.10	93%	50%	140%	102%	60%	130%	83%	50%	140%
1,2,4-Trichlorobenzene	2596040		<0.30	<0.30	NA	< 0.30	79%	50%	140%	76%	60%	130%	84%	50%	140%
n-Hexane	2596040		<0.20	<0.20	NA	< 0.20	106%	50%	140%	109%	60%	130%	95%	50%	140%
Volatile Organic Compounds in Water (ug/L)															
Dichlorodifluoromethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	104%	50%	140%	89%	50%	140%	89%	50%	140%
Chloromethane	2612386	2612386	<0.40	<0.40	NA	< 0.40	96%	50%	140%	95%	50%	140%	100%	50%	140%
Vinyl Chloride	2612386	2612386	<0.17	<0.17	NA	< 0.17	84%	50%	140%	103%	50%	140%	92%	50%	140%
Bromomethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	87%	50%	140%	97%	50%	140%	97%	50%	140%
Chloroethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	94%	50%	140%	92%	50%	140%	106%	50%	140%
Trichlorofluoromethane	2612386	2612386	<0.40	<0.40	NA	< 0.40	79%	50%	140%	110%	50%	140%	99%	50%	140%
Acetone	2612386	2612386	<1.0	<1.0	NA	< 1.0	104%	50%	140%	88%	50%	140%	99%	50%	140%
1,1-Dichloroethylene	2612386	2612386	<0.2	<0.2	NA	< 0.2	93%	50%	140%	87%	60%	130%	104%	50%	140%
Methylene Chloride	2612386	2612386	<0.30	<0.30	NA	< 0.30	102%	50%	140%	107%	60%	130%	114%	50%	140%
trans- 1,2-dichloroethylene	2612386	2612386	<0.20	<0.20	NA	< 0.20	93%	50%	140%	77%	60%	130%	89%	50%	140%
Methyl tert-butyl ether	2612386	2612386	<0.20	<0.20	NA	< 0.20	77%	50%	140%	97%	60%	130%	84%	50%	140%
1,1-Dichloroethane	2612386	2612386	<0.30	<0.30	NA	< 0.30	94%	50%	140%	88%	60%	130%	112%	50%	140%
Methyl Ethyl Ketone	2612386	2612386	<1.0	<1.0	NA	< 1.0	109%	50%	140%	88%	50%	140%	100%	50%	140%
cis- 1,2-Dichloroethylene	2612386	2612386	<0.20	<0.20	NA	< 0.20	103%	50%	140%	103%	60%	130%	109%	50%	140%
Chloroform	2612386	2612386	<0.20	<0.20	NA	< 0.20	112%	50%	140%	101%	60%	130%	88%	50%	140%
1,2-Dichloroethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	116%	50%	140%	110%	60%	130%	84%	50%	140%
1,1,1-Trichloroethane	2612386	2612386	<0.30	<0.30	NA	< 0.30	76%	50%	140%	76%	60%	130%	103%	50%	140%
Carbon Tetrachloride	2612386	2612386	<0.20	<0.20	NA	< 0.20	78%	50%	140%	86%	60%	130%	97%	50%	140%
Benzene	2612386	2612386	<0.20	<0.20	NA	< 0.20	109%	50%	140%	112%	60%	130%	83%	50%	140%
1,2-Dichloropropane	2612386	2612386	<0.20	<0.20	NA	< 0.20	108%	50%	140%	118%	60%	130%	88%	50%	140%
Trichloroethylene	2612386	2612386	<0.20	<0.20	NA	< 0.20	110%	50%	140%	100%	60%	130%	87%	50%	140%
Bromodichloromethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	91%	50%	140%	91%	60%	130%	86%	50%	140%
cis-1,3-Dichloropropene	2612386	2612386	<0.20	<0.20	NA	< 0.20	96%	50%	140%	95%	60%	130%	114%	50%	140%
Methyl Isobutyl Ketone	2612386	2612386	<1.0	<1.0	NA	< 1.0	97%	50%	140%	103%	50%	140%	94%	50%	140%
trans-1,3-Dichloropropene	2612386	2612386	<0.30	<0.30	NA	< 0.30	91%	50%	140%	83%	60%	130%	74%	50%	140%
1,1,2-Trichloroethane	2612386	2612386	<0.20	<0.20	NA	< 0.20	86%	50%	140%	101%	60%	130%	105%	50%	140%
Toluene	2612386	2612386	<0.20	<0.20	NA	< 0.20	92%	50%	140%	107%	60%	130%	93%	50%	140%
2-Hexanone	2612386	2612386	<1.0	<1.0	NA	< 1.0	98%	50%	140%	85%	50%	140%	89%	50%	140%
Dibromochloromethane	2612386	2612386	<0.10	<0.10	NA	< 0.10	95%	50%	140%	96%	60%	130%	87%	50%	140%
Ethylene Dibromide	2612386	2612386	<0.10	<0.10	NA	< 0.10	87%	50%	140%	106%	60%	130%	99%	50%	140%
Tetrachloroethylene	2612386	2612386	<0.20	<0.20	NA	< 0.20	90%	50%	140%	97%	60%	130%	80%	50%	140%
1,1,1,2-Tetrachloroethane	2612386	2612386	<0.10	<0.10	NA	< 0.10	107%	50%	140%	103%	60%	130%	90%	50%	140%
Chlorobenzene	2612386	2612386	<0.10	<0.10	NA	< 0.10	115%	50%	140%	99%	60%	130%	92%	50%	140%

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PROJECT: 211519

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SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jun 22, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Ethylbenzene	2612386	2612386	<0.10	<0.10	NA	< 0.10	101%	50%	140%	91%	60%	130%	84%	50%	140%
m & p-Xylene	2612386	2612386	<0.20	<0.20	NA	< 0.20	110%	50%	140%	106%	60%	130%	94%	50%	140%
Bromoform	2612386	2612386	<0.10	<0.10	NA	< 0.10	102%	50%	140%	82%	60%	130%	75%	50%	140%
Styrene	2612386	2612386	<0.10	<0.10	NA	< 0.10	102%	50%	140%	97%	60%	130%	77%	50%	140%
1,1,2,2-Tetrachloroethane	2612386	2612386	<0.10	<0.10	NA	< 0.10	96%	50%	140%	101%	60%	130%	85%	50%	140%
o-Xylene	2612386	2612386	<0.10	<0.10	NA	< 0.10	102%	50%	140%	86%	60%	130%	83%	50%	140%
1,3-Dichlorobenzene	2612386	2612386	<0.10	<0.10	NA	< 0.10	108%	50%	140%	90%	60%	130%	87%	50%	140%
1,4-Dichlorobenzene	2612386	2612386	<0.10	<0.10	NA	< 0.10	115%	50%	140%	82%	60%	130%	97%	50%	140%
1,2-Dichlorobenzene	2612386	2612386	<0.10	<0.10	NA	< 0.10	97%	50%	140%	106%	60%	130%	95%	50%	140%
1,2,4-Trichlorobenzene	2612386	2612386	<0.30	<0.30	NA	< 0.30	98%	50%	140%	95%	60%	130%	106%	50%	140%
n-Hexane	2612386	2612386	<0.20	<0.20	NA	< 0.20	84%	50%	140%	80%	60%	130%	87%	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).

Certified By:

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Water Analysis

RPT Date: Jun 22, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Groundwater Parameters															
Electrical Conductivity	2612854		1510	1510	0.0%	< 2	100%	90%	110%						
pH	2612854		7.31	7.32	0.1%	NA	103%	98%	103%						
Total Dissolved Solids	2612365	2612365	1470	1480	0.7%	< 10	102%	80%	120%						
Alkalinity (as CaCO3)	2612854		371	385	3.7%	< 5	86%	80%	120%						
Fluoride	2612365	2612365	<0.05	<0.05	NA	< 0.05	104%	70%	130%	107%	80%	120%	106%	70%	130%
Chloride	2612365	2612365	60.4	59.2	2.0%	< 0.10	100%	70%	130%	109%	80%	120%	110%	70%	130%
Nitrate as N	2612365	2612365	<0.07	<0.07	NA	< 0.05	100%	70%	130%	108%	80%	120%	107%	70%	130%
Nitrite as N	2612365	2612365	<0.05	<0.05	NA	< 0.05	101%	70%	130%	96%	80%	120%	97%	70%	130%
Bromide	2612365	2612365	<0.06	<0.06	NA	< 0.05	109%	70%	130%	107%	80%	120%	112%	70%	130%
Sulphate	2612365	2612365	662	652	1.5%	< 0.10	98%	70%	130%	105%	80%	120%	NA	70%	130%
Ammonia as N	2611338		<0.02	<0.02	NA	< 0.02	102%	70%	130%	102%	80%	120%	101%	70%	130%
Cyanide, Free	2612365	2612365	<0.002	<0.002	NA	< 0.002	100%	70%	130%	105%	80%	120%	102%	70%	130%
Dissolved Calcium	2612371	2612371	27.3	27.3	0.0%	< 0.05	98%	70%	130%	94%	80%	120%	96%	70%	130%
Dissolved Magnesium	2612371	2612371	7.18	7.25	1.0%	< 0.05	103%	70%	130%	97%	80%	120%	97%	70%	130%
Dissolved Potassium	2612371	2612371	1.85	1.83	NA	< 0.50	102%	70%	130%	97%	80%	120%	99%	70%	130%
Dissolved Sodium	2612371	2612371	72.6	72.5	0.1%	< 0.05	101%	70%	130%	96%	80%	120%	97%	70%	130%
Dissolved Arsenic	2612365	2612365	<0.001	<0.001	NA	< 0.001	94%	70%	130%	103%	80%	120%	112%	70%	130%
Dissolved Barium	2612365	2612365	0.016	0.016	0.0%	< 0.002	94%	70%	130%	94%	80%	120%	106%	70%	130%
Dissolved Boron	2612365	2612365	0.171	0.141	19.2%	< 0.010	102%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Cadmium	2612365	2612365	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	100%	80%	120%	111%	70%	130%
Dissolved Chromium	2612365	2612365	<0.002	<0.002	NA	< 0.002	102%	70%	130%	103%	80%	120%	116%	70%	130%
Dissolved Iron	2612365	2612365	0.035	0.019	NA	< 0.010	97%	70%	130%	97%	80%	120%	110%	70%	130%
Dissolved Lead	2612365	2612365	<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	95%	80%	120%	107%	70%	130%
Dissolved Mercury	2612365	2612365	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Nickel	2612365	2612365	<0.003	<0.003	NA	< 0.003	103%	70%	130%	107%	80%	120%	115%	70%	130%
Dissolved Zinc	2612365	2612365	0.008	0.006	NA	< 0.005	102%	70%	130%	108%	80%	120%	107%	70%	130%
Groundwater Parameters (Partial)															
Electrical Conductivity	2612854		1510	1510	0.0%	< 2	100%	90%	110%						
pH	2612854		7.31	7.32	0.1%	NA	103%	98%	103%						
Total Dissolved Solids	2612365	2612365	1470	1480	0.7%	< 10	102%	80%	120%						
Alkalinity (as CaCO3)	2612854		371	385	3.7%	< 5	86%	80%	120%						
Fluoride	2612365	2612365	<0.05	<0.05	NA	< 0.05	104%	70%	130%	107%	80%	120%	106%	70%	130%
Chloride	2612365	2612365	60.4	59.2	2.0%	< 0.10	100%	70%	130%	109%	80%	120%	110%	70%	130%
Nitrate as N	2612365	2612365	<0.07	<0.07	NA	< 0.05	100%	70%	130%	108%	80%	120%	107%	70%	130%
Nitrite as N	2612365	2612365	<0.05	<0.05	NA	< 0.05	101%	70%	130%	96%	80%	120%	97%	70%	130%
Bromide	2612365	2612365	<0.06	<0.06	NA	< 0.05	109%	70%	130%	107%	80%	120%	112%	70%	130%
Sulphate	2612365	2612365	662	652	1.5%	< 0.10	98%	70%	130%	105%	80%	120%	NA	70%	130%
Ammonia as N	2611338		<0.02	<0.02	NA	< 0.02	102%	70%	130%	102%	80%	120%	101%	70%	130%

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

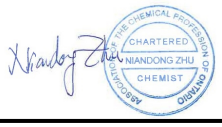
SAMPLED BY:

Water Analysis (Continued)

RPT Date: Jun 22, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Groundwater Parameters															
Electrical Conductivity	2612854		1510	1510	0.0%	< 2	100%	90%	110%						
pH	2612854		7.31	7.32	0.1%	NA	103%	98%	103%						
Total Dissolved Solids	2612379	2612379	392	404	3.0%	< 10	102%	80%	120%						
Alkalinity (as CaCO3)	2612854		371	385	3.7%	< 5	95%	80%	120%						
Fluoride	2612370	2612370	1.32	1.30	1.5%	< 0.05	102%	70%	130%	107%	80%	120%	109%	70%	130%
Chloride	2612370	2612370	197	190	3.6%	< 0.10	100%	70%	130%	109%	80%	120%	NA	70%	130%
Nitrate as N	2612370	2612370	<0.05	<0.05	NA	< 0.05	102%	70%	130%	108%	80%	120%	108%	70%	130%
Nitrite as N	2612370	2612370	<0.05	<0.05	NA	< 0.05	100%	70%	130%	96%	80%	120%	106%	70%	130%
Bromide	2612370	2612370	<0.05	<0.05	NA	< 0.05	110%	70%	130%	107%	80%	120%	111%	70%	130%
Sulphate	2612370	2612370	<0.10	<0.10	NA	< 0.10	100%	70%	130%	105%	80%	120%	105%	70%	130%
Ammonia as N	2612381	2612381	0.08	0.08	NA	< 0.02	108%	70%	130%	104%	80%	120%	85%	70%	130%
Cyanide, Free	2586144		<0.002	<0.002	NA	< 0.002	99%	70%	130%	104%	80%	120%	100%	70%	130%
Dissolved Calcium	2612387	2612387	54.2	54.1	0.2%	< 0.05	97%	70%	130%	96%	80%	120%	97%	70%	130%
Dissolved Magnesium	2612387	2612387	14.5	14.5	0.0%	< 0.05	100%	70%	130%	99%	80%	120%	98%	70%	130%
Dissolved Potassium	2612387	2612387	1.62	1.61	NA	< 0.50	100%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved Sodium	2612387	2612387	34.8	34.8	0.0%	< 0.05	99%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Arsenic	2612386	2612386	<0.001	<0.001	NA	< 0.001	92%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved Barium	2612386	2612386	0.019	0.019	0.0%	< 0.002	95%	70%	130%	94%	80%	120%	93%	70%	130%
Dissolved Boron	2612386	2612386	0.160	0.149	7.1%	< 0.010	102%	70%	130%	103%	80%	120%	98%	70%	130%
Dissolved Cadmium	2612386	2612386	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Chromium	2612386	2612386	<0.002	<0.002	NA	< 0.002	101%	70%	130%	100%	80%	120%	103%	70%	130%
Dissolved Iron	2612386	2612386	0.023	0.014	NA	< 0.010	102%	70%	130%	98%	80%	120%	99%	70%	130%
Dissolved Lead	2612386	2612386	<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	95%	80%	120%	93%	70%	130%
Dissolved Mercury	2612386	2612386	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	102%	80%	120%	100%	70%	130%
Dissolved Nickel	2612386	2612386	<0.003	<0.003	NA	< 0.003	103%	70%	130%	102%	80%	120%	100%	70%	130%
Dissolved Zinc	2612386	2612386	<0.005	<0.005	NA	< 0.005	104%	70%	130%	110%	80%	120%	118%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and RPD will not be calculated.
Matrix spike: Spike level < native concentration. Matrix spike acceptance limits do not apply.

Certified By:



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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
2-Hexanone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2,4-Trichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

AGAT Laboratories

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Method Summary

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L760673

PROJECT: 211519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Electrical Conductivity	INOR-93-6000	modified from SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Total Dissolved Solids	INOR-93-6028	modified from EPA 1684,ON MOECC E3139,SM 2540C,D	BALANCE
Alkalinity (as CaCO3)	INOR-93-6000	Modified from SM 2320 B	PC TITRATE
Fluoride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Bromide	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Ammonia as N	INOR-93-6059	modified from SM 4500-NH3 H	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015,SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Dissolved Calcium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Magnesium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Potassium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Iron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS

AGAT Laboratories
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Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
www.agatlabs.com webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Laboratory Use Only

Work Order #: 21L760673

Cooler Quantity: 2 large

Arrival Temperatures: 9.6 | 8.4 | 8.2
3.9 3.3 3.0
3.6 2.7 3.1
6.1 | 6.2 | 6.3

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes: on ice

Report Information:

Company: Dillon Consulting
Contact: Reenste Filler/Daniel Orjuela
Address: 130 Dufferin Avenue Suite 1400
Phone: 519-438-1388 Ext 1288 Fax:
Reports to be sent to:
1. Email: RFiller@dillon.ca
2. Email: DOrjuela@dillon.ca

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table ____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region ____ *Indicate One*

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply): ____

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

Project Information:

Project: 211519
Site Location: Lambton
Sampled By:
AGAT Quote #: 374401
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions
TW22-94	June 9	9:50		GW	
TW60-13D	June 9	10:20			
TW32-94I	June 9	12:30			
TW46-99D	June 9	14:20			
PW2-S(R11)	June 9	16:10			
TW54-09D	June 9	16:50			
TW59-13D	June 10	10:35			
TW59-13S	June 10	9:55			
TW56-11D	June 10	12:50			
TW56-11S	June 10	15:50			
TW57-11S	June 10	15:16			

(Check Applicable)

Metals in Soil by ICPMS	Metal Scan	Hydride Forming Metals	Client Custom Metals	ORPs: ☐B-HWS ☐Cl ☐CN ☐Cr6+ ☐EC ☐FOC ☐NO3/NO2 ☐Total N ☐Hg ☐pH ☐SAR	Nutrients: ☐TP ☐NH3 ☐TKN ☐NO3 ☐NO2 ☐NO3/NO2	Volatiles: ☐VOC ☐BTEX ☐THM	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use	General Chem as per quote	Anions as per quote	Dissolved Cations	Dissolved Metals	Dissolved Mercury	VOC as per quote	Cond, pH, Alk, TDS	Anions, Ammonia
															☑	☑	☑	☑	☑	☑	
																				☑	☑
															☑	☑	☑	☑	☑	☑	

Samples Relinquished By (Print Name and Sign): Daniel Orjuela — Date: June 14/21 — Time: 14:15
Samples Relinquished By (Print Name and Sign): Brendan Co — Date: June 14/21 — Time: 2:35 pm
Samples Received By (Print Name and Sign): J. Smith — Date: 21-6-14 — Time: 2:15

Page 1 of 3

Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

AGAT Laboratories
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Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Laboratory Use Only

Work Order #: 21L760673

Cooler Quantity: 2 large

Arrival Temperatures: 9.6 | 8.7 | 8.2 | 6.1 | 6.2 | 6.3

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes:

Report Information:

Company: Dillon Consulting

Contact: Reenste Filler/Daniel Orjuela

Address: 130 Dufferin Avenue Suite 1400

Phone: 519-438-1388 Ext 1288 Fax:

Reports to be sent to:

1. Email: RFiller@dillon.ca
2. Email: DOrjuela@dillon.ca

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table (Indicate One)
☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One) ☐ Coarse ☐ Fine

☐ Sewer Use
☐ Sanitary ☐ Storm
Region (Indicate One)

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other (Indicate One)

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

Project Information:

Project: 211519
Site Location: Lambton
Sampled By:
AGAT Quote #: 374401
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Metals in Soil by ICPMS	Metal Scan	Hydride Forming Metals	Client Custom Metals	ORPs: ☐B-HWS ☐Cl ☐CN ☐Cr⁶⁺ ☐EC ☐FOC ☐NO_3/NO_2 ☐Total N ☐Hg ☐pH ☐SAR	Nutrients: ☐TP ☐NH_3 ☐TKN ☐NO_3 ☐NO_2 ☐NO_3/NO_2	Volatiles: ☐VOC ☐BTEX ☐THM	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use	General Chem as per quote	Anions as per quote	Dissolved Cations	Dissolved Metals	Dissolved Mercury	VOC as per quote
TW57-11D	June 10	14:57		GW																	☑	☑	☑	☑	☑	☑
TW41-99D	June 11	8:00																			☑	☑	☑	☑	☑	☑
TW41-99S	June 11	8:15																								
EW2a-01	June 11	9:50																								
EW1a-01	June 11	10:50																								
EW1b-13	June 11	12:10																								
Ew1c-13	June 11	13:20																								
EW2b-13	June 11	14:30																								
EW2c-13	June 11	15:20																								
DUP A	June 19	18:00																								

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Daniel Orjuela	June 14/21	14:15	J. Smith	21-6-14	2:15
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Brendan Cox	June 15/21	2:35pm			

Page 2 of 3

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AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
www.agatlabs.com webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Laboratory Use Only

Work Order #: 21L760673

Cooler Quantity: 2 large

Arrival Temperatures: 9.6 | 8.4 | 8.2
6.1 | 6.2 | 6.3

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes:

Report Information:

Company: Dillon Consulting
Contact: Reenste Filler/Daniel Orjuela
Address: 130 Dufferin Avenue Suite 1400
Phone: 519-438-1388 Ext 1288 Fax:
Reports to be sent to:
1. Email: RFiller@dillon.ca
2. Email: DOrjuela@dillon.ca

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region _____ *Indicate One*

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other _____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply): _____

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

Project Information:

Project: 211519
Site Location: Lambton
Sampled By:
AGAT Quote #: 374401
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Metals in Soil by ICPMS	Metal Scan	Hydride Forming Metals	Client Custom Metals	ORPs: ☐B-HWS ☐Cl ☐CN ☐Cr^{6+} ☐EC ☐FOC ☐NO_3/NO_2 ☐Total N ☐Hg ☐pH ☐SAR	Nutrients: ☐TP ☐NH_3 ☐TKN ☐NO_3 ☐NO_2 ☐NO_3/NO_2	Volatiles: ☐VOC ☐BTEX ☐THM	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use	General Chem as per quote	Anions as per quote	Dissolved Cations	Dissolved Metals	Dissolved Mercury	VOC as per quote			
					(Check Applicable)																									
DUP B	June 10	18:00		GW																	☑	☑	☑	☑	☑	☑			
DUP C	June 11	18:00		GW																	☑	☑	☑	☑	☑	☑			

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Daniel Orjuela	June 14/21	14:15	J. Smith	21-6-14	2:15
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Brendan G	June 15/21	2:30pm			

Page 3 of 3

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AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: DILLON CONSULTING LTD.
130 Dufferin Avenue
LONDON, ON N6A5R2
(519) 438-6192
ATTENTION TO: Reenste Filler
PROJECT: 21-1519
AGAT WORK ORDER: 21L763966
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist
WATER ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer
DATE REPORTED: Jun 28, 2021
PAGES (INCLUDING COVER): 29
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*

AGAT Laboratories

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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW48-00D	TW48-16S	TW42-99S	TW55-09S	TW55-09D	TW43-99S
						SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-17 02:35	2021-06-17 02:15	2021-06-17 12:05	2021-06-17 08:25	2021-06-17 09:00	2021-06-17 10:25
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2644446**	**2644447**	**2644448**	**2644449**	**2644450**	**2644451**
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By: N Popnikolof

AGAT Laboratories

5835 COOPERS AVENUE
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TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

					SAMPLE DESCRIPTION:	TW48-00D	TW48-16S	TW42-99S	TW55-09S	TW55-09D	TW43-99S
					SAMPLE TYPE:	Water	Water	Water	Water	Water	Water
					DATE SAMPLED:	2021-06-17 02:35	2021-06-17 02:15	2021-06-17 12:05	2021-06-17 08:25	2021-06-17 09:00	2021-06-17 10:25
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2644446**	**2644447**	**2644448**	**2644449**	**2644450**	**2644451**
Ethylene Dibromide	µg/L			5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**								
Toluene-d8	% Recovery		50-140			89	89	90	92	95	88
4-Bromofluorobenzene	% Recovery		50-140			83	92	92	94	98	92

Certified By: NPopnikolof

AGAT Laboratories
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TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

				SAMPLE DESCRIPTION:		TW43-99D		TW42-99D		TW49-00D	TW40-99S
				SAMPLE TYPE:		Water		Water		Water	Water
				DATE SAMPLED:		2021-06-17 10:40		2021-06-17 11:40		2021-06-17 11:45	2021-06-18 09:20
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2644452	RDL	2644453	RDL	2644454	2644455
Dichlorodifluoromethane	µg/L				0.20	<0.20	0.40	<0.40	0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40	<0.40[<C]	0.80	<0.80[<C]	0.40	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17	<0.17[<A]	0.34	<0.34[<A]	0.17	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20	<0.20	0.40	<0.40	0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40	<0.40	0.80	<0.80	0.40	<0.40	<0.40
Acetone	µg/L				1.0	<1.0	2.0	<2.0	1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2	<0.2[<A]	0.4	<0.4[<A]	0.2	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30	<0.30[<A]	0.60	<0.60[<A]	0.30	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30	<0.30[<C]	0.60	<0.60[<C]	0.30	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0	<1.0[<C]	2.0	<2.0[<C]	1.0	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20	<0.20	0.40	<0.40	0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20	<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30	<0.30[<C]	0.60	<0.60[<C]	0.30	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20	<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20	<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20	<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20	<0.20	0.40	<0.40	0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0	<1.0	2.0	<2.0	1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30	<0.30[<C]	0.60	<0.60[<C]	0.30	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20	<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0	<1.0	2.0	<2.0	1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10	<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW43-99D		TW42-99D		TW49-00D	TW40-99S
						SAMPLE TYPE:	Water		Water		Water	Water
						DATE SAMPLED:	2021-06-17 10:40		2021-06-17 11:40		2021-06-17 11:45	2021-06-18 09:20
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2644452**	**RDL**	**2644453**	**RDL**	**2644454**	**2644455**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	0.20	<0.20[<B]	0.10	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	0.40	<0.40[<C]	0.20	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	0.20	<0.20[<B]	0.10	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	0.20	<0.20[<C]	0.10	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	0.60	<0.60	0.30	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	0.60	<0.60	0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	0.40	<0.40[<A]	0.20	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	0.40	<0.40	0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**									
Toluene-d8	% Recovery		50-140				91	**2**	91	**1**	91	89
4-Bromofluorobenzene	% Recovery		50-140				94	**2**	94	**1**	93	92

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW40-99D	TW21-94-II		TW39-99D		TW47-00D
						SAMPLE TYPE:	Water	Water		Water		Water
						DATE SAMPLED:	2021-06-18 09:45	2021-06-18 10:45		2021-06-18 12:17		2021-06-18 10:40
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2644456	2644457	RDL	2644458	RDL	2644459
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	0.80	<0.80	0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	1.60	<1.60[<C]	0.40	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	0.68	<0.68[<A]	0.17	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	0.80	<0.80	0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	1.60	<1.60	0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	4.0	<4.0	1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	0.8	<0.8[<A]	0.2	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	1.20	<1.20[<A]	0.30	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	1.20	<1.20[<C]	0.30	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	4.0	<4.0[<C]	1.0	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	0.80	<0.80	0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	1.20	<1.20[<C]	0.30	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80	0.20	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	0.80	<0.80	0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	4.0	<4.0	1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	1.20	<1.20[<C]	0.30	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	4.0	<4.0	1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW40-99D	TW21-94-II		TW39-99D		TW47-00D
						SAMPLE TYPE:	Water	Water		Water		Water
						DATE SAMPLED:	2021-06-18 09:45	2021-06-18 10:45		2021-06-18 12:17		2021-06-18 10:40
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2644456**	**2644457**	**RDL**	**2644458**	**RDL**	**2644459**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	0.40	<0.40[<B]	0.10	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	0.80	<0.80[<C]	0.20	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	0.40	<0.40[<B]	0.10	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	0.40	<0.40[<C]	0.10	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	1.20	<1.20	0.30	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	1.20	<1.20	0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	0.80	<0.80[<A]	0.20	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	0.80	<0.80	0.20	<0.20
Surrogate	**Unit**	**Acceptable Limits**										
Toluene-d8	% Recovery	50-140					90	88	**4**	90	**1**	90
4-Bromofluorobenzene	% Recovery	50-140					96	91	**4**	90	**1**	92

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	53D	35D	PW-1	DUP-F	DUP-10
						SAMPLE TYPE:	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-18 11:25	2021-06-18 12:50	2021-06-18 14:10	2021-06-17 16:00	2021-06-18 16:00
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2644460	2644461	2644462	2644463	2644464
Dichlorodifluoromethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20
Chloromethane	µg/L			700	0.40		<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]	<0.40[<C]
Vinyl Chloride	µg/L	1		600	0.17		<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]	<0.17[<A]
Bromomethane	µg/L			0.9	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroethane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L				0.40		<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	14			0.2		<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]	<0.2[<A]
Methylene Chloride	µg/L	50		100	0.30		<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]	<0.30[<A]
trans- 1,2-dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Methyl tert-butyl ether	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
1,1-Dichloroethane	µg/L			200	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Methyl Ethyl Ketone	µg/L			400	1.0		<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]	<1.0[<C]
cis- 1,2-Dichloroethylene	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Chloroform	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	5		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1-Trichloroethane	µg/L			10	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
Carbon Tetrachloride	µg/L	2			0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Benzene	µg/L	1		100	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,2-Dichloropropane	µg/L			0.7	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Trichloroethylene	µg/L	5		20	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
Bromodichloromethane	µg/L			200	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
cis-1,3-Dichloropropene	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	µg/L			7	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,1,2-Trichloroethane	µg/L			800	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Toluene	µg/L	60	24	0.8	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
2-Hexanone	µg/L				1.0		<1.0	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]

Certified By: N Popnikolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	53D	35D	PW-1	DUP-F	DUP-10
						SAMPLE TYPE:	Water	Water	Water	Water	Water
						DATE SAMPLED:	2021-06-18 11:25	2021-06-18 12:50	2021-06-18 14:10	2021-06-17 16:00	2021-06-18 16:00
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**		**2644460**	**2644461**	**2644462**	**2644463**	**2644464**
Ethylene Dibromide	µg/L			5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Tetrachloroethylene	µg/L	10		50	0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
1,1,1,2-Tetrachloroethane	µg/L			20	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Chlorobenzene	µg/L	80	80	15	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Ethylbenzene	µg/L	140	2.4	8	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
m & p-Xylene	µg/L			32	0.20		<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]	<0.20[<C]
Bromoform	µg/L			60	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
Styrene	µg/L			4	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,1,2,2-Tetrachloroethane	µg/L			70	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
o-Xylene	µg/L			40	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,3-Dichlorobenzene	µg/L			2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,4-Dichlorobenzene	µg/L	5	1	4	0.10		<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]	<0.10[<B]
1,2-Dichlorobenzene	µg/L	200	3	2.5	0.10		<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]	<0.10[<C]
1,2,4-Trichlorobenzene	µg/L			0.5	0.30		<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]	<0.30[<C]
1,3-Dichloropropene (Cis + Trans)	µg/L				0.30		<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	90	300		0.20		<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]	<0.20[<A]
n-Hexane	µg/L				0.20		<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	**Unit**		**Acceptable Limits**								
Toluene-d8	% Recovery		50-140				98	101	112	96	92
4-Bromofluorobenzene	% Recovery		50-140				89	92	76	100	96

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Volatile Organic Compounds in Water (ug/L)

DATE RECEIVED: 2021-06-21 **DATE REPORTED: 2021-06-28**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2644446-2644452 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

2644453 Dilution factor=2
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

2644454-2644457 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

2644458 Dilution factor=4
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

2644459-2644464 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis perfomed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW48-00D		TW48-16S		TW42-99S
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-17 02:35		2021-06-17 02:15		2021-06-17 12:05
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2644446	RDL	2644447	RDL	2644448
Electrical Conductivity	µS/cm				2		1720	2	1090	2	3250
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.61	NA	7.28	NA	7.09
Total Dissolved Solids	mg/L		500		10		898[>B]	10	736[>B]	10	3300[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		353	5	449	5	397
Fluoride	mg/L	1.5			0.05		0.78[<A]	0.05	0.52[<A]	0.05	<0.05[<A]
Chloride	mg/L		250		0.24		374[>B]	0.12	23.3[<B]	0.49	49.4[<B]
Nitrate as N	mg/L	10.0			0.07		<0.07[<A]	0.05	<0.05[<A]	0.14	<0.14[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.11	<0.11[<A]
Bromide	mg/L				0.06		<0.06	0.05	<0.05	0.11	<0.11
Sulphate	mg/L		500		0.19		<0.19[<B]	0.10	186[<B]	0.38	1900[>B]
Ammonia as N	mg/L				0.02		<0.02	0.02	<0.02	0.02	0.09
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25		26.5	0.25	102	0.5	478
Dissolved Magnesium	mg/L				0.25		9.70	0.25	57.6	0.5	232
Dissolved Potassium	mg/L				2.50		2.74	2.50	<2.50	5.0	<5.0
Dissolved Sodium	mg/L	20			0.25		292[>A]	0.25	37.4[>A]	0.5	76.1[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.174[<A]	0.002	0.034[<A]	0.002	0.015[<A]
Dissolved Boron	mg/L	5.0		0.2	0.10		2.66[C-A]	0.010	0.176[<C]	0.010	0.194[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		0.146[<C]	0.010	<0.010[<C]	0.010	0.039[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW55-09S		TW55-09D		TW43-99S
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-17 08:25		2021-06-17 09:00		2021-06-17 10:25
Parameter	**Unit**	**G / S: A**	**G / S: B**	**G / S: C**	**RDL**	**2644449**	**RDL**	**2644450**	**RDL**	**2644451**
Electrical Conductivity	µS/cm				2	1330	2	2130	2	805
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.24	NA	7.51	NA	7.25
Total Dissolved Solids	mg/L		500		10	1090[>B]	10	1150[>B]	10	548[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	344	5	337	5	348
Fluoride	mg/L	1.5			0.05	0.48[<A]	0.05	0.87[<A]	0.05	<0.05[<A]
Chloride	mg/L		250		0.12	14.8[<B]	0.24	526[>B]	0.12	16.3[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.07	<0.07[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.06	<0.06	0.05	<0.05
Sulphate	mg/L		500		0.10	458[<B]	0.19	<0.19[<B]	0.10	107[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	0.14	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	134	0.25	19.5	0.05	89.9
Dissolved Magnesium	mg/L				0.25	66.8	0.25	6.89	0.05	32.3
Dissolved Potassium	mg/L				2.50	2.96	2.50	3.32	0.50	1.80
Dissolved Sodium	mg/L	20			0.25	52.5[>A]	0.25	355[>A]	0.05	22.7[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	<0.001[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.017[<A]	0.002	0.209[<A]	0.002	0.034[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010	0.249[C-A]	0.050	1.80[C-A]	0.010	0.090[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.163[<C]	0.010	0.364[>C]	0.010	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

				SAMPLE DESCRIPTION:		TW43-99D		TW42-99D		TW49-00D
				SAMPLE TYPE:		Water		Water		Water
				DATE SAMPLED:		2021-06-17 10:40		2021-06-17 11:40		2021-06-17 11:45
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2644452	RDL	2644453	RDL	2644454
Electrical Conductivity	µS/cm				2	1190	2	8060	2	746
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.47	NA	8.28	NA	7.44
Total Dissolved Solids	mg/L		500		10	606[>B]	10	4250[>B]	10	410[<B]
Alkalinity (as CaCO3)	mg/L		30-500		5	285	5	1000	5	279
Fluoride	mg/L	1.5			0.05	0.86[<A]	0.26	<0.26[<A]	0.05	1.20[<A]
Chloride	mg/L		250		0.12	238[<B]	2.4	2260[>B]	0.10	97.0[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.7	<0.7[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.5	<0.5[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.6	<0.6	0.05	0.49
Sulphate	mg/L		500		0.10	<0.10[<B]	1.9	22.5[<B]	0.10	<0.10[<B]
Ammonia as N	mg/L				0.02	0.11	0.02	<0.02	0.02	0.08
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25	25.3	1.0	18.5	0.05	17.6
Dissolved Magnesium	mg/L				0.25	9.34	1.0	17.3	0.05	5.21
Dissolved Potassium	mg/L				2.50	<2.50	10.0	<10.0	0.50	1.29
Dissolved Sodium	mg/L	20			0.25	189[>A]	1.0	1590[>A]	0.05	125[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	0.001[<A]	0.001	<0.001[<A]	0.001	0.002[<A]
Dissolved Barium	mg/L	1.0			0.002	0.145[<A]	0.002	0.718[<A]	0.002	0.080[<A]
Dissolved Boron	mg/L	5.0		0.2	0.020	1.28[C-A]	0.10	5.18[>A]	0.020	1.14[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.296[<C]	0.010	<0.010[<C]	0.010	0.208[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	0.0008[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	0.008[<C]	0.005	0.037[>C]	0.005	0.023[<C]

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW40-99S		TW40-99D		TW21-94-II
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-18 09:20		2021-06-18 09:45		2021-06-18 10:45
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2644455	RDL	2644456	RDL	2644457
Electrical Conductivity	µS/cm				2		1590	2	1460	2	1240
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.35	NA	7.47	NA	7.21
Total Dissolved Solids	mg/L		500		10		1150[>B]	10	752[>B]	10	982[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5		522	5	282	5	422
Fluoride	mg/L	1.5			0.05		0.70[<A]	0.05	0.80[<A]	0.05	<0.05[<A]
Chloride	mg/L		250		0.12		25.4[<B]	0.12	328[>B]	0.12	6.83[<B]
Nitrate as N	mg/L	10.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05		<0.05	0.05	0.72	0.05	<0.05
Sulphate	mg/L		500		0.10		437[<B]	0.10	<0.10[<B]	0.10	346[<B]
Ammonia as N	mg/L				0.02		<0.02	0.02	0.15	0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25		147	0.25	32.0	0.25	178
Dissolved Magnesium	mg/L				0.25		113	0.25	11.8	0.25	63.3
Dissolved Potassium	mg/L				2.50		<2.50	2.50	2.58	2.50	<2.50
Dissolved Sodium	mg/L	20			0.25		60.8[>A]	0.25	247[>A]	0.25	22.1[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		0.002[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.026[<A]	0.002	0.170[<A]	0.002	0.052[<A]
Dissolved Boron	mg/L	5.0		0.2	0.010		0.213[C-A]	0.020	1.73[C-A]	0.010	0.122[<C]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		1.01[>C]	0.010	0.668[>C]	0.010	<0.010[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	TW39-99D		TW47-00D		53D
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-18 12:17		2021-06-18 10:40		2021-06-18 11:25
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL		2644458	RDL	2644459	RDL	2644460
Electrical Conductivity	µS/cm				2		1300	2	1370	2	655
pH	pH Units		6.5-8.5	6.5-8.5	NA		7.35	NA	7.46	NA	7.20
Total Dissolved Solids	mg/L		500		10		666[>B]	10	700[>B]	10	348[<B]
Alkalinity (as CaCO3)	mg/L		30-500		5		353	5	318	5	186
Fluoride	mg/L	1.5			0.05		1.21[<A]	0.05	0.99[<A]	0.05	0.71[<A]
Chloride	mg/L		250		0.12		239[<B]	0.12	265[>B]	0.10	102[<B]
Nitrate as N	mg/L	10.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05		<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05		<0.05	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		500		0.10		0.96[<B]	0.10	<0.10[<B]	0.10	12.3[<B]
Ammonia as N	mg/L				0.02		0.04	0.02	<0.02	0.02	0.05
Cyanide, Free	mg/L	0.2			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.25		21.8	0.25	26.3	0.05	29.2
Dissolved Magnesium	mg/L				0.25		6.64	0.25	9.51	0.05	7.37
Dissolved Potassium	mg/L				2.50		<2.50	2.50	<2.50	0.50	2.15
Dissolved Sodium	mg/L	20			0.25		239[>A]	0.25	227[>A]	0.05	82.9[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001		<0.001[<A]	0.001	<0.001[<A]	0.001	0.001[<A]
Dissolved Barium	mg/L	1.0			0.002		0.091[<A]	0.002	0.260[<A]	0.002	0.059[<A]
Dissolved Boron	mg/L	5.0		0.2	0.020		1.83[C-A]	0.050	2.11[C-A]	0.020	1.65[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002		<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010		0.688[>C]	0.010	0.311[>C]	0.010	0.225[<C]
Dissolved Lead	mg/L	0.010		*	0.0005		<0.0005[<A]	0.0005	<0.0005[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001		<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003		<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005		<0.005[<C]	0.005	<0.005[<C]	0.005	<0.005[<C]

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

						SAMPLE DESCRIPTION:	35D		PW-1		DUP-F
						SAMPLE TYPE:	Water		Water		Water
						DATE SAMPLED:	2021-06-18 12:50		2021-06-18 14:10		2021-06-17 16:00
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2644461	RDL	2644462	RDL	2644463
Electrical Conductivity	µS/cm				2	915	2	1730	2	1190
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.46	NA	7.84	NA	7.35
Total Dissolved Solids	mg/L		500		10	552[>B]	10	1170[>B]	10	612[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	258	5	339	5	284
Fluoride	mg/L	1.5			0.05	0.83[<A]	0.05	<0.05[<A]	0.05	0.86[<A]
Chloride	mg/L		250		0.12	143[<B]	0.24	379[>B]	0.12	237[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]	0.07	<0.07[<A]	0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]	0.05	<0.05[<A]	0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05	0.06	<0.06	0.05	<0.05
Sulphate	mg/L		500		0.10	20.3[<B]	0.19	7.78[<B]	0.10	<0.10[<B]
Ammonia as N	mg/L				0.02	<0.02	0.02	0.65	0.02	0.10
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.10	31.9	0.25	8.31	0.25	25.7
Dissolved Magnesium	mg/L				0.10	7.46	0.25	4.34	0.25	9.49
Dissolved Potassium	mg/L				1.00	3.92	2.50	<2.50	2.50	<2.50
Dissolved Sodium	mg/L	20			0.10	143[>A]	0.25	329[>A]	0.25	190[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	0.003[<A]	0.001	<0.001[<A]	0.001	<0.001[<A]
Dissolved Barium	mg/L	1.0			0.002	0.084[<A]	0.002	0.035[<A]	0.002	0.142[<A]
Dissolved Boron	mg/L	5.0		0.2	0.050	2.52[C-A]	0.050	1.92[C-A]	0.020	1.35[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]	0.002	<0.002[<A]	0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.025[<C]	0.010	1.04[>C]	0.010	0.283[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]	0.0005	0.0031[<A]	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	<0.003[<C]	0.003	<0.003[<C]	0.003	<0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]	0.005	0.010[<C]	0.005	0.012[<C]

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21

DATE REPORTED: 2021-06-28

				SAMPLE DESCRIPTION:		DUP-10
				SAMPLE TYPE:		Water
				DATE SAMPLED:		2021-06-18 16:00
Parameter	Unit	G / S: A	G / S: B	G / S: C	RDL	2644464
Electrical Conductivity	µS/cm				2	914
pH	pH Units		6.5-8.5	6.5-8.5	NA	7.35
Total Dissolved Solids	mg/L		500		10	502[>B]
Alkalinity (as CaCO3)	mg/L		30-500		5	264
Fluoride	mg/L	1.5			0.05	0.82[<A]
Chloride	mg/L		250		0.12	141[<B]
Nitrate as N	mg/L	10.0			0.05	<0.05[<A]
Nitrite as N	mg/L	1.0			0.05	<0.05[<A]
Bromide	mg/L				0.05	<0.05
Sulphate	mg/L		500		0.10	20.0[<B]
Ammonia as N	mg/L				0.02	<0.02
Cyanide, Free	mg/L	0.2			0.002	<0.002[<A]
Dissolved Calcium	mg/L				0.10	31.0
Dissolved Magnesium	mg/L				0.10	7.17
Dissolved Potassium	mg/L				1.00	3.83
Dissolved Sodium	mg/L	20			0.10	141[>A]
Dissolved Arsenic	mg/L	0.01		0.1	0.001	0.003[<A]
Dissolved Barium	mg/L	1.0			0.002	0.078[<A]
Dissolved Boron	mg/L	5.0		0.2	0.050	2.40[C-A]
Dissolved Cadmium	mg/L	0.005		0.0002	0.0001	<0.0001[<C]
Dissolved Chromium	mg/L	0.05			0.002	<0.002[<A]
Dissolved Iron	mg/L			0.3	0.010	0.019[<C]
Dissolved Lead	mg/L	0.010		*	0.0005	<0.0005[<A]
Dissolved Mercury	mg/L	0.001		0.0002	0.0001	<0.0001[<C]
Dissolved Nickel	mg/L			0.025	0.003	0.003[<C]
Dissolved Zinc	mg/L			0.030	0.005	<0.005[<C]

Certified By:

NIVINE BASILY
CHEMIST

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Certificate of Analysis

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Groundwater Parameters

DATE RECEIVED: 2021-06-21 **DATE REPORTED: 2021-06-28**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: A Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards. Na value derived from O. Reg 248, B Refers to O. Reg 169/03 - Ontario Drinking Water Quality Standards - Aesthetic Objectives and Operational Guidelines, C Refers to PWQO * Variable - refer to guideline reference document
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2644446-2644464 Dilution required, RDL has been increased accordingly.

Analysis perfomed at AGAT Toronto (unless marked by *)

Certified By:

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Exceedance Summary

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2644446	TW48-00D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	374
2644446	TW48-00D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	898
2644446	TW48-00D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	292
2644446	TW48-00D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.66
2644447	TW48-16S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	736
2644447	TW48-16S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	37.4
2644448	TW42-99S	ON 169/03 AO&OG	Groundwater Parameters	Sulphate	mg/L	500	1900
2644448	TW42-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	3300
2644448	TW42-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	76.1
2644449	TW55-09S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1090
2644449	TW55-09S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	52.5
2644449	TW55-09S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.249
2644450	TW55-09D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	526
2644450	TW55-09D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1150
2644450	TW55-09D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	355
2644450	TW55-09D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.80
2644450	TW55-09D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.364
2644451	TW43-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	548
2644451	TW43-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	22.7
2644452	TW43-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	606
2644452	TW43-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	189
2644452	TW43-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.28
2644453	TW42-99D	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	1000
2644453	TW42-99D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	2260
2644453	TW42-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	4250
2644453	TW42-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Boron	mg/L	5.0	5.18
2644453	TW42-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	1590
2644453	TW42-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	5.18
2644453	TW42-99D	ON PWQO	Groundwater Parameters	Dissolved Zinc	mg/L	0.030	0.037
2644454	TW49-00D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	125
2644454	TW49-00D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.14
2644455	TW40-99S	ON 169/03 AO&OG	Groundwater Parameters	Alkalinity (as CaCO3)	mg/L	30-500	522
2644455	TW40-99S	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1150
2644455	TW40-99S	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	60.8
2644455	TW40-99S	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	0.213
2644455	TW40-99S	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	1.01
2644456	TW40-99D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	328
2644456	TW40-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	752
2644456	TW40-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	247
2644456	TW40-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.73
2644456	TW40-99D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.668
2644457	TW21-94-II	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	982
2644457	TW21-94-II	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	22.1

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Exceedance Summary

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

CLIENT NAME: DILLON CONSULTING LTD.

ATTENTION TO: Reenste Filler

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2644458	TW39-99D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	666
2644458	TW39-99D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	239
2644458	TW39-99D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.83
2644458	TW39-99D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.688
2644459	TW47-00D	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	265
2644459	TW47-00D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	700
2644459	TW47-00D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	227
2644459	TW47-00D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.11
2644459	TW47-00D	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	0.311
2644460	53D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	82.9
2644460	53D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.65
2644461	35D	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	552
2644461	35D	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	143
2644461	35D	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.52
2644462	PW-1	ON 169/03 AO&OG	Groundwater Parameters	Chloride	mg/L	250	379
2644462	PW-1	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	1170
2644462	PW-1	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	329
2644462	PW-1	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.92
2644462	PW-1	ON PWQO	Groundwater Parameters	Dissolved Iron	mg/L	0.3	1.04
2644463	DUP-F	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	612
2644463	DUP-F	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	190
2644463	DUP-F	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	1.35
2644464	DUP-10	ON 169/03 AO&OG	Groundwater Parameters	Total Dissolved Solids	mg/L	500	502
2644464	DUP-10	ON 169/03 MAC/IMAC	Groundwater Parameters	Dissolved Sodium	mg/L	20	141
2644464	DUP-10	ON PWQO	Groundwater Parameters	Dissolved Boron	mg/L	0.2	2.40

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Jun 28, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Volatile Organic Compounds in Water (ug/L)															
Dichlorodifluoromethane	2641399		<0.20	<0.20	NA	< 0.20	84%	50%	140%	88%	50%	140%	102%	50%	140%
Chloromethane	2641399		<0.40	<0.40	NA	< 0.40	101%	50%	140%	104%	50%	140%	97%	50%	140%
Vinyl Chloride	2641399		<0.17	<0.17	NA	< 0.17	104%	50%	140%	101%	50%	140%	87%	50%	140%
Bromomethane	2641399		<0.20	<0.20	NA	< 0.20	99%	50%	140%	86%	50%	140%	94%	50%	140%
Chloroethane	2641399		<0.20	<0.20	NA	< 0.20	90%	50%	140%	97%	50%	140%	104%	50%	140%
Trichlorofluoromethane	2641399		<0.40	<0.40	NA	< 0.40	109%	50%	140%	87%	50%	140%	84%	50%	140%
Acetone	2641399		<1.0	<1.0	NA	< 1.0	106%	50%	140%	111%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	2641399		<0.2	<0.2	NA	< 0.2	87%	50%	140%	92%	60%	130%	89%	50%	140%
Methylene Chloride	2641399		<0.30	<0.30	NA	< 0.30	112%	50%	140%	105%	60%	130%	110%	50%	140%
trans- 1,2-dichloroethylene	2641399		<0.20	<0.20	NA	< 0.20	84%	50%	140%	97%	60%	130%	93%	50%	140%
Methyl tert-butyl ether	2641399		<0.20	<0.20	NA	< 0.20	81%	50%	140%	78%	60%	130%	95%	50%	140%
1,1-Dichloroethane	2641399		<0.30	<0.30	NA	< 0.30	84%	50%	140%	82%	60%	130%	88%	50%	140%
Methyl Ethyl Ketone	2641399		<1.0	<1.0	NA	< 1.0	97%	50%	140%	93%	50%	140%	110%	50%	140%
cis- 1,2-Dichloroethylene	2641399		<0.20	<0.20	NA	< 0.20	84%	50%	140%	96%	60%	130%	117%	50%	140%
Chloroform	2641399		<0.20	<0.20	NA	< 0.20	85%	50%	140%	97%	60%	130%	109%	50%	140%
1,2-Dichloroethane	2641399		<0.20	<0.20	NA	< 0.20	91%	50%	140%	104%	60%	130%	92%	50%	140%
1,1,1-Trichloroethane	2641399		<0.30	<0.30	NA	< 0.30	97%	50%	140%	85%	60%	130%	87%	50%	140%
Carbon Tetrachloride	2641399		<0.20	<0.20	NA	< 0.20	84%	50%	140%	92%	60%	130%	99%	50%	140%
Benzene	2641399		<0.20	<0.20	NA	< 0.20	91%	50%	140%	111%	60%	130%	94%	50%	140%
1,2-Dichloropropane	2641399		<0.20	<0.20	NA	< 0.20	95%	50%	140%	110%	60%	130%	92%	50%	140%
Trichloroethylene	2641399		<0.20	<0.20	NA	< 0.20	97%	50%	140%	105%	60%	130%	100%	50%	140%
Bromodichloromethane	2641399		<0.20	<0.20	NA	< 0.20	101%	50%	140%	85%	60%	130%	111%	50%	140%
cis-1,3-Dichloropropene	2641399		<0.20	<0.20	NA	< 0.20	87%	50%	140%	110%	60%	130%	89%	50%	140%
Methyl Isobutyl Ketone	2641399		<1.0	<1.0	NA	< 1.0	105%	50%	140%	99%	50%	140%	106%	50%	140%
trans-1,3-Dichloropropene	2641399		<0.30	<0.30	NA	< 0.30	111%	50%	140%	84%	60%	130%	82%	50%	140%
1,1,2-Trichloroethane	2641399		<0.20	<0.20	NA	< 0.20	113%	50%	140%	102%	60%	130%	102%	50%	140%
Toluene	2641399		<0.20	<0.20	NA	< 0.20	99%	50%	140%	105%	60%	130%	90%	50%	140%
2-Hexanone	2641399		<1.0	<1.0	NA	< 1.0	96%	50%	140%	82%	50%	140%	87%	50%	140%
Dibromochloromethane	2641399		<0.10	<0.10	NA	< 0.10	95%	50%	140%	100%	60%	130%	110%	50%	140%
Ethylene Dibromide	2641399		<0.10	<0.10	NA	< 0.10	107%	50%	140%	83%	60%	130%	86%	50%	140%
Tetrachloroethylene	2641399		<0.20	<0.20	NA	< 0.20	115%	50%	140%	93%	60%	130%	86%	50%	140%
1,1,1,2-Tetrachloroethane	2641399		<0.10	<0.10	NA	< 0.10	116%	50%	140%	97%	60%	130%	95%	50%	140%
Chlorobenzene	2641399		<0.10	<0.10	NA	< 0.10	112%	50%	140%	93%	60%	130%	91%	50%	140%
Ethylbenzene	2641399		<0.10	<0.10	NA	< 0.10	95%	50%	140%	110%	60%	130%	80%	50%	140%
m & p-Xylene	2641399		<0.20	<0.20	NA	< 0.20	98%	50%	140%	104%	60%	130%	92%	50%	140%
Bromoform	2641399		<0.10	<0.10	NA	< 0.10	90%	50%	140%	104%	60%	130%	99%	50%	140%
Styrene	2641399		<0.10	<0.10	NA	< 0.10	81%	50%	140%	96%	60%	130%	92%	50%	140%
1,1,2,2-Tetrachloroethane	2641399		<0.10	<0.10	NA	< 0.10	95%	50%	140%	94%	60%	130%	99%	50%	140%
o-Xylene	2641399		<0.10	<0.10	NA	< 0.10	80%	50%	140%	97%	60%	130%	87%	50%	140%

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jun 28, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	2641399		<0.10	<0.10	NA	< 0.10	100%	50%	140%	100%	60%	130%	102%	50%	140%
1,4-Dichlorobenzene	2641399		<0.10	<0.10	NA	< 0.10	89%	50%	140%	113%	60%	130%	86%	50%	140%
1,2-Dichlorobenzene	2641399		<0.10	<0.10	NA	< 0.10	99%	50%	140%	104%	60%	130%	104%	50%	140%
1,2,4-Trichlorobenzene	2641399		<0.30	<0.30	NA	< 0.30	100%	50%	140%	112%	60%	130%	84%	50%	140%
n-Hexane	2641399		<0.20	<0.20	NA	< 0.20	86%	50%	140%	88%	60%	130%	80%	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).

Certified By: N Popnikolof

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Water Analysis

RPT Date: Jun 28, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Groundwater Parameters															
Electrical Conductivity	2648876		5440	5420	0.4%	< 2	102%	90%	110%						
pH	2648876		7.27	7.30	0.4%	NA	103%	98%	103%						
Total Dissolved Solids	2644446	2644446	898	898	0.0%	< 10	98%	80%	120%						
Alkalinity (as CaCO3)	2648876		370	378	2.1%	< 5	89%	80%	120%						
Fluoride	2644451	2644451	<0.05	<0.05	NA	< 0.05	102%	70%	130%	104%	80%	120%	108%	70%	130%
Chloride	2644451	2644451	16.3	16.1	1.2%	< 0.10	97%	70%	130%	109%	80%	120%	107%	70%	130%
Nitrate as N	2644451	2644451	<0.05	<0.05	NA	< 0.05	100%	70%	130%	108%	80%	120%	99%	70%	130%
Nitrite as N	2644451	2644451	<0.05	<0.05	NA	< 0.05	111%	70%	130%	100%	80%	120%	103%	70%	130%
Bromide	2644451	2644451	<0.05	<0.05	NA	< 0.05	107%	70%	130%	106%	80%	120%	93%	70%	130%
Sulphate	2644451	2644451	107	107	0.0%	< 0.10	101%	70%	130%	107%	80%	120%	105%	70%	130%
Ammonia as N	2644446	2644446	<0.02	<0.02	NA	< 0.02	102%	70%	130%	101%	80%	120%	99%	70%	130%
Cyanide, Free	2622911		<0.002	<0.002	NA	< 0.002	107%	70%	130%	95%	80%	120%	98%	70%	130%
Dissolved Calcium	2644454	2644454	17.6	17.4	1.1%	< 0.05	97%	70%	130%	100%	80%	120%	92%	70%	130%
Dissolved Magnesium	2644454	2644454	5.21	5.19	0.4%	< 0.05	100%	70%	130%	102%	80%	120%	95%	70%	130%
Dissolved Potassium	2644454	2644454	1.29	1.28	NA	< 0.50	98%	70%	130%	101%	80%	120%	95%	70%	130%
Dissolved Sodium	2644454	2644454	125	123	1.6%	< 0.05	98%	70%	130%	101%	80%	120%	94%	70%	130%
Dissolved Arsenic	2644446	2644446	<0.001	0.001	NA	< 0.001	98%	70%	130%	104%	80%	120%	107%	70%	130%
Dissolved Barium	2644446	2644446	0.174	0.180	3.4%	< 0.002	100%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Boron	2644446	2644446	2.66	2.45	8.2%	< 0.010	97%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Cadmium	2644446	2644446	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	106%	80%	120%	108%	70%	130%
Dissolved Chromium	2644446	2644446	<0.002	<0.002	NA	< 0.002	104%	70%	130%	102%	80%	120%	111%	70%	130%
Dissolved Iron	2644446	2644446	0.146	0.129	12.4%	< 0.010	104%	70%	130%	103%	80%	120%	112%	70%	130%
Dissolved Lead	2644446	2644446	<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Mercury	2644446	2644446	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	103%	80%	120%	100%	70%	130%
Dissolved Nickel	2644446	2644446	<0.003	<0.003	NA	< 0.003	104%	70%	130%	106%	80%	120%	109%	70%	130%
Dissolved Zinc	2644446	2644446	<0.005	<0.005	NA	< 0.005	101%	70%	130%	103%	80%	120%	107%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Groundwater Parameters															
Electrical Conductivity	2644459	2644459	1370	1380	0.7%	< 2	101%	90%	110%						
pH	2644459	2644459	7.46	7.56	1.3%	NA	103%	98%	103%						
Alkalinity (as CaCO3)	2644459	2644459	318	326	2.5%	< 5	92%	80%	120%						
Ammonia as N	2644464	2644464	<0.02	<0.02	NA	< 0.02	100%	70%	130%	102%	80%	120%	98%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD.

AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

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Water Analysis (Continued)

RPT Date: Jun 28, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

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Method Summary

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans-1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
2-Hexanone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2,4-Trichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

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AGAT WORK ORDER: 21L763966

PROJECT: 21-1519

ATTENTION TO: Reenste Filler

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Electrical Conductivity	INOR-93-6000	modified from SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Total Dissolved Solids	INOR-93-6028	modified from EPA 1684,ON MOECC E3139,SM 2540C,D	BALANCE
Alkalinity (as CaCO3)	INOR-93-6000	Modified from SM 2320 B	PC TITRATE
Fluoride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Bromide	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Ammonia as N	INOR-93-6059	modified from SM 4500-NH3 H	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015,SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Dissolved Calcium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Magnesium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Potassium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Iron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
www.agatlabs.com webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Laboratory Use Only

Work Order #: 21L7639606

Cooler Quantity: 2 large

Arrival Temperatures: 9.3 | 9.5 | 9.6
5.2 | 6.1 | 7.7

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes: on ice

Report Information:

Company: Dillon Consulting
Contact: Reenste Filler/Daniel Orjuela
Address: 130 Dufferin Avenue Suite 1400
Phone: 519-438-1388 Ext 1288 Fax:
Reports to be sent to:
1. Email: RFiller@dillon.ca
2. Email: DOrjuela@dillon.ca

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region _____ *Indicate One*

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
_____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☑ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☑ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

Project Information:

Project: 211519
Site Location: Lambton
Sampled By:
AGAT Quote #: 374401
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Metals in Soil by ICPMS	Metal Scan	Hydride Forming Metals	Client Custom Metals	ORPs: ☐B-HWS ☐Cl ☐CN ☐Cr⁶⁺ ☐EC ☐FOC ☐NO_3/NO_2 ☐Total N ☐Hg ☐pH ☐SAR	Nutrients: ☐TP ☐NH_3 ☐TKN ☐NO_3 ☐NO_2 ☐NO_3/NO_2	Volatiles: ☐VOC ☐BTEX ☐THM	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use	General Chem as per quote	Anions as per quote	Dissolved Cations	Dissolved Metals	Dissolved Mercury	VOC as per quote
TW48-00D	Jun 17/21	2:35	11	GW																	☑	☑	☑	☑	☑	☑
TW48-16S		2:15																								
TW42-99S		12:05																								
TW55-09S		8:25																								
TW55-09D		9:00																								
TW43-99S		10:25																								
TW43-99D		10:40																								
TW42-99D		11:40																								
TW49-00D		11:45																								
TW40-99S	Jun 18/21	9:20																								
TW40-99D		9:45																								

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Daniel Orjuela	June 21/21	12:55	Laura Robinson	June 21, 21	1pm
Brendan Gallagher	June 22/21	4:30pm			

Page 1 of 2

N°:

Pink Copy Client | Yellow Copy AGAT | White Copy AGAT

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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www.agatlabs.com webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water intended for human consumption)

Laboratory Use Only

Work Order #: 21L763966

Cooler Quantity: 2 large

Arrival Temperatures: 9.3 | 9.5 | 9.6
6.3 | 5.8 | 5.2
5.3 | 6.1 | 5.6 | 7.7

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: on ice

Report Information:

Company: Dillon Consulting
Contact: Reenste Filler/Daniel Orjuela
Address: 130 Dufferin Avenue Suite 1400
Phone: 519-438-1388 Ext 1288 Fax:
Reports to be sent to:
1. Email: RFiller@dillon.ca
2. Email: DOrjuela@dillon.ca

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table ____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region ____ *Indicate One*

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☑ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☑ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ 1 Business Day

OR Date Required (Rush Surcharges May Apply): ____

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

Project Information:

Project: 211519
Site Location: Lambton
Sampled By:
AGAT Quote #: 374401
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Metals in Soil by ICPMS	Metal Scan	Hydride Forming Metals	Client Custom Metals	ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr^{6+} ☐ EC ☐ FOC ☐ NO_2/NO_3 ☐ Total N ☐ Hg ☐ pH ☐ SAR	Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_2/NO_3	Volatiles: ☐ VOC ☐ BTEX ☐ THM	CCME Fractions 1 to 4	ABNs	PAHs	Chlorophenols	PCBs	Organochlorine Pesticides	TCLP Metals/Inorganics	Sewer Use	General Chem as per quote	Anions as per quote	Dissolved Cations	Dissolved Metals	Dissolved Mercury	VOC as per quote
						(Check Applicable)																		
TW21-94-II	Jun 18/21	10:45	11	GW																	☑	☑	☑	☑	☑	☑
TW39-99D		12:17																								
TW47-00D		10:40																								
53D		11:25																								
35D		12:50																								
PW-1		14:10																								
DUP-F	Jun 17/21	16:00																								
DUP-10	Jun 18/21	16:00																								

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Daniel Orjuela	June 21/21	12:55	Laura Robinson	Jun 21, 21	1pm
Brendan G	June 22/21	4:30pm			

Page 2 of 2

N°:

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AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: DILLON CONSULTING LTD
235 YORKLAND BLVD. SUITE 800
TORONTO, ON M2J4Y8
(416) 229-4647
ATTENTION TO: Dave Lake
PROJECT: Clean Harbors - 21-1519
AGAT WORK ORDER: 21T846728
WATER ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager
DATE REPORTED: Jan 12, 2022
PAGES (INCLUDING COVER): 35
VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW43-99D		TW49-00D	DUP A		TW42-99D		TW42-99S
SAMPLE TYPE:				Water		Water	Water		Water		Water
DATE SAMPLED:				2021-12-13 13:47		2021-12-13 15:02	2021-12-13		2021-12-13 15:57		2021-12-13 14:43
Parameter	Unit	G / S	RDL	3362441	RDL	3362506	3362507	RDL	3362508	RDL	3362509
Dissolved Calcium	mg/L		0.25	26.4	0.05	17.9	17.9	1.0	19.0	0.5	532
Dissolved Magnesium	mg/L		0.25	9.60	0.05	5.45	5.50	1.0	17.9	0.5	268
Dissolved Potassium	mg/L		0.25	1.82	0.05	1.28	1.34	1.0	5.2	0.5	6.3
Dissolved Sodium	mg/L		0.25	213	0.05	134	133	1.0	1710	0.5	78.8
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.003
Dissolved Barium	mg/L		0.002	0.186	0.002	0.081	0.083	0.002	0.715	0.002	0.012
Dissolved Boron	mg/L		0.10	1.39	0.10	0.98	0.96	0.10	4.43	0.010	0.257
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.465	0.010	0.055	0.054	0.010	0.048	0.010	0.063
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	0.006
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	<0.005	0.005	<0.005	0.005	0.005

Certified By:

AGAT Laboratories

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CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW55-09S		TW43-99S		TW55-09D		TW63-13S
		SAMPLE TYPE:		Water		Water		Water		Water
		DATE SAMPLED:		2021-12-13 11:59		2021-12-13 13:31		2021-12-13 12:25		2021-12-14 16:20
Parameter	Unit	G / S	RDL	3362510	RDL	3362511	RDL	3362512	RDL	3362513
Dissolved Calcium	mg/L		0.25	140	0.05	102	0.25	21.8	0.25	170
Dissolved Magnesium	mg/L		0.25	67.7	0.05	34.7	0.25	7.41	0.25	77.9
Dissolved Potassium	mg/L		0.25	3.06	0.05	1.89	0.25	3.48	0.25	3.14
Dissolved Sodium	mg/L		0.25	57.2	0.05	24.6	0.25	358	0.25	158
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.020	0.002	0.040	0.002	0.212	0.002	0.103
Dissolved Boron	mg/L		0.010	0.256	0.010	0.096	0.10	1.59	0.010	0.283
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.019	0.010	0.131	0.010	0.276	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.069
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005

Certified By:

AGAT Laboratories

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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW59-13D		TW59-13S		TW56-11D		TW56-11S	TW58-11S
SAMPLE TYPE:				Water		Water		Water		Water	Water
DATE SAMPLED:				2021-12-14 11:12		2021-12-14 11:40		2021-12-14 13:07		2021-12-14 13:15	2021-12-14 13:56
Parameter	Unit	G / S	RDL	3362514	RDL	3362515	RDL	3362681	RDL	3362682	3362683
Dissolved Calcium	mg/L		0.05	27.7	0.25	105	0.25	28.6	0.25	183	294
Dissolved Magnesium	mg/L		0.05	7.27	0.25	58.4	0.25	10.7	0.25	84.4	229
Dissolved Potassium	mg/L		0.05	1.84	0.25	2.61	0.25	2.84	0.25	2.38	4.56
Dissolved Sodium	mg/L		0.05	75.3	0.25	33.5	0.25	226	0.25	61.3	116
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.004	0.001	0.004	0.001	<0.001	<0.001
Dissolved Barium	mg/L		0.002	0.037	0.002	0.041	0.002	0.083	0.002	0.011	0.010
Dissolved Boron	mg/L		0.010	0.428	0.010	0.145	0.10	1.46	0.010	0.136	0.267
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Dissolved Iron	mg/L		0.010	0.017	0.010	<0.010	0.010	0.038	0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.003	0.001	0.001	0.001	<0.001	0.001	0.002	0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	<0.005

Certified By:

AGAT Laboratories

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CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW30-94	OW32-90S		OW32-90D	TW53-03S		TW53-03D
SAMPLE TYPE:				Water	Water		Water	Water		Water
DATE SAMPLED:				2021-12-14 10:02	2021-12-14 10:55		2021-12-14 11:47	2021-12-14 13:34		2021-12-14 14:17
Parameter	Unit	G / S	RDL	3362684	3362685	RDL	3362686	3362687	RDL	3362688
Dissolved Calcium	mg/L		0.25	80.7	178	0.05	5.19	180	0.05	29.8
Dissolved Magnesium	mg/L		0.25	57.3	64.6	0.05	1.78	65.9	0.05	7.77
Dissolved Potassium	mg/L		0.25	1.11	1.92	0.05	0.58	1.48	0.05	3.24
Dissolved Sodium	mg/L		0.25	37.5	24.6	0.05	54.0	24.0	0.05	91.4
Dissolved Arsenic	mg/L		0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.025	0.019	0.002	0.047	0.025	0.002	0.045
Dissolved Boron	mg/L		0.010	0.042	0.146	0.010	0.920	0.123	0.10	1.50
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.041	<0.010	0.010	1.51	0.025	0.010	0.083
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.005	<0.001	0.001	<0.001	<0.001	0.001	0.001
Dissolved Zinc	mg/L		0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.005	<0.005

Certified By:

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				OW35-90S		OW35-05D	TW54-09D	DUP B	TW30-99D		TW32-94-I
SAMPLE TYPE:				Water		Water	Water	Water	Water		Water
DATE SAMPLED:				2021-12-14 12:15		2021-12-14 13:07	2021-12-14 16:21	2021-12-14	2021-12-15 10:48		2021-12-15 12:10
Parameter	Unit	G / S	RDL	3362689	RDL	3362690	3362692	3362697	3362698	RDL	3362702
Dissolved Calcium	mg/L		0.25	176	0.25	32.0	17.0	16.7	21.9	5	22
Dissolved Magnesium	mg/L		0.25	76.9	0.25	7.12	5.63	5.60	7.66	5	56
Dissolved Potassium	mg/L		0.25	3.14	0.25	3.87	1.73	1.77	2.43	5	10
Dissolved Sodium	mg/L		0.25	33.8	0.25	148	185	181	222	5	4470
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	0.002	<0.001	<0.001	<0.001	0.001	0.003
Dissolved Barium	mg/L		0.002	0.021	0.002	0.089	0.119	0.114	0.320	0.02	1.83
Dissolved Boron	mg/L		0.010	0.189	0.10	2.99	1.26	1.21	1.11	0.10	7.06
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.084	0.010	0.047	0.091	0.057	0.423	0.010	0.016
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.002	0.001	0.005	0.004	0.002	<0.001	0.001	<0.001
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.007	<0.005	<0.005	0.005	<0.005

Certified By:

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW32-94-II		TW32-94-IV	TW39-99S	TW39-99I	TW21-94II		TW47-00D
SAMPLE TYPE:				Water		Water	Water	Water	Water		Water
DATE SAMPLED:				2021-12-15 12:47		2021-12-15 12:21	2021-12-15 15:32	2021-12-15 15:50	2021-12-15 16:08		2021-12-15 14:40
Parameter	Unit	G / S	RDL	3362703	RDL	3362704	3362705	3362706	3362707	RDL	3362708
Dissolved Calcium	mg/L		0.25	19.3	0.25	100	109	107	164	1.0	53.5
Dissolved Magnesium	mg/L		0.25	21.2	0.25	62.7	79.4	113	49.0	1.0	25.3
Dissolved Potassium	mg/L		0.25	4.02	0.25	1.48	1.31	1.34	0.65	1.0	4.5
Dissolved Sodium	mg/L		0.25	719	0.25	56.1	61.4	74.0	16.7	1.0	1380
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001
Dissolved Barium	mg/L		0.002	0.535	0.002	0.021	0.028	0.035	0.035	0.02	1.49
Dissolved Boron	mg/L		0.10	2.47	0.010	0.078	0.286	0.172	0.103	0.10	3.70
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.049	0.010	0.087	0.011	<0.010	<0.010	0.010	3.36
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.001	0.003	0.001	0.001	0.001	0.001	<0.001
Dissolved Zinc	mg/L		0.005	<0.005	0.005	0.005	<0.005	<0.005	<0.005	0.005	<0.005

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		DUP C		TW46-99I		TW46-99S		TW40-99S
		SAMPLE TYPE:		Water		Water		Water		Water
		DATE SAMPLED:		2021-12-15		2021-12-15 11:42		2021-12-15 11:26		2021-12-15 13:16
Parameter	Unit	G / S	RDL	3362709	RDL	3362710	RDL	3362711	RDL	3362712
Dissolved Calcium	mg/L		1.0	55.6	0.25	153	0.25	229	0.25	154
Dissolved Magnesium	mg/L		1.0	26.4	0.25	89.4	0.25	99.1	0.25	118
Dissolved Potassium	mg/L		1.0	5.1	0.25	1.93	0.25	6.40	0.25	1.76
Dissolved Sodium	mg/L		1.0	1460	0.25	54.7	0.25	125	0.25	77.0
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001
Dissolved Barium	mg/L		0.02	1.61	0.002	0.024	0.002	0.013	0.002	0.025
Dissolved Boron	mg/L		0.10	4.05	0.010	0.048	0.10	2.05	0.010	0.206
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	2.98	0.010	<0.010	0.010	0.014	0.010	0.025
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.001	<0.001	0.001	0.003	0.001	0.001
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW40-99D		TW48-16S	TW41-99S		TW41-99D	DUP D	TW48-00D
SAMPLE TYPE:				Water		Water	Water		Water	Water	Water
DATE SAMPLED:				2021-12-15 13:42		2021-12-15 12:18	2021-12-15 15:13		2021-12-15 14:43	2021-12-15	2021-12-15 11:23
Parameter	Unit	G / S	RDL	3362713	RDL	3362714	3362715	RDL	3362716	3362717	3362748
Dissolved Calcium	mg/L		0.25	36.6	0.25	106	191	0.25	17.1	27.3	28.0
Dissolved Magnesium	mg/L		0.25	13.6	0.25	60.4	74.9	0.25	5.86	9.79	10.0
Dissolved Potassium	mg/L		0.25	2.69	0.25	2.19	1.73	0.25	1.88	2.79	2.79
Dissolved Sodium	mg/L		0.25	302	0.25	43.2	50.2	0.25	238	316	321
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Dissolved Barium	mg/L		0.002	0.284	0.002	0.036	0.024	0.002	0.075	0.162	0.198
Dissolved Boron	mg/L		0.10	1.52	0.010	0.172	0.180	0.10	1.37	1.66	1.79
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Iron	mg/L		0.010	0.666	0.010	0.014	<0.010	0.010	0.110	0.205	0.221
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0006
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.001	0.004	0.001	0.003	0.001	0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	0.007	<0.005	0.005	<0.005	<0.005	<0.005

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW39-99D	TW46-99D		TW61-13S	TW61-13I		TW61-13D
SAMPLE TYPE:				Water	Water		Water	Water		Water
DATE SAMPLED:				2021-12-16 12:16	2021-12-16 10:58		2021-12-16 11:37	2021-12-16 11:57		2021-12-16 12:25
Parameter	Unit	G / S	RDL	3362790	3362795	RDL	3362796	3362797	RDL	3362798
Dissolved Calcium	mg/L		0.25	22.2	14.7	0.25	152	160	0.25	53.1
Dissolved Magnesium	mg/L		0.25	6.32	4.88	0.25	75.6	75.9	0.25	24.2
Dissolved Potassium	mg/L		0.25	1.75	2.08	0.25	2.52	1.05	0.25	1.91
Dissolved Sodium	mg/L		0.25	234	242	0.25	125	46.1	0.25	177
Dissolved Arsenic	mg/L		0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.01	<0.01
Dissolved Barium	mg/L		0.002	0.107	0.083	0.002	0.041	0.058	0.002	0.047
Dissolved Boron	mg/L		0.10	1.15	1.32	0.010	0.285	0.246	0.10	0.91
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.447	0.257	0.010	<0.010	0.013	0.010	0.112
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.002	0.001	0.003	0.001	0.001	<0.001
Dissolved Zinc	mg/L		0.005	0.006	<0.005	0.005	<0.005	<0.005	0.005	<0.005

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW62-13S	TW45-99S	TW22-94	DUP E		EW2c-13	DUP F	EW2b-13
SAMPLE TYPE:				Water	Water	Water	Water		Water	Water	Water
DATE SAMPLED:				2021-12-16 10:33	2021-12-16 10:37	2021-12-16 09:17	2021-12-16		2021-12-17 11:10	2021-12-17	2021-12-17 10:40
Parameter	Unit	G / S	RDL	3362799	3362800	3362801	3362802	RDL	3362807	3362814	3362816
Dissolved Calcium	mg/L		0.25	92.7	123	181	161	0.05	31.8	32.0	33.6
Dissolved Magnesium	mg/L		0.25	40.8	45.8	120	76.8	0.05	14.2	13.9	14.8
Dissolved Potassium	mg/L		0.25	2.37	2.08	2.23	1.13	0.05	2.34	2.32	2.54
Dissolved Sodium	mg/L		0.25	56.9	43.3	88.8	43.6	0.05	96.9	97.4	97.6
Dissolved Arsenic	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Dissolved Barium	mg/L		0.002	0.038	0.066	0.018	0.060	0.002	0.125	0.123	0.109
Dissolved Boron	mg/L		0.010	0.136	0.109	0.199	0.265	0.10	0.79	0.62	0.66
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Iron	mg/L		0.010	0.046	0.067	0.070	0.016	0.010	0.036	0.128	0.057
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	0.001	0.002	0.002	0.001	0.001	0.004	0.001	0.001
Dissolved Zinc	mg/L		0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	0.010	<0.005

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Dissolved Metals in Water (mg/L)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		EW1c-13	EW1b-13	EW1a-01		EW2a-01		TW30-D
		SAMPLE TYPE:		Water	Water	Water		Water		Water
		DATE SAMPLED:		2021-12-17 10:25	2021-12-17 09:59	2021-12-17 09:41		2021-12-17 09:17		2021-12-14 10:22
Parameter	Unit	G / S	RDL	3362817	3362818	3362819	RDL	3362820	RDL	3363069
Dissolved Calcium	mg/L		0.25	84.4	80.9	80.1	0.05	33.8	0.25	21.4
Dissolved Magnesium	mg/L		0.25	45.8	44.7	45.0	0.05	14.9	0.25	7.59
Dissolved Potassium	mg/L		0.25	4.58	4.50	4.52	0.05	2.41	0.25	2.37
Dissolved Sodium	mg/L		0.25	177	181	179	0.05	98.9	0.25	215
Dissolved Arsenic	mg/L		0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.045	0.045	0.048	0.002	0.301	0.002	0.315
Dissolved Boron	mg/L		0.10	0.62	0.73	0.68	0.10	0.69	0.10	1.08
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Iron	mg/L		0.010	0.036	0.065	0.018	0.010	0.352	0.010	0.445
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Nickel	mg/L		0.001	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001
Dissolved Zinc	mg/L		0.005	0.006	<0.005	<0.005	0.005	<0.005	0.005	<0.005

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

3362441-3363069 Metals analysis completed on a filtered sample.

Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW43-99D		TW49-00D	DUP A		TW42-99D		TW42-99S
		SAMPLE TYPE:		Water		Water	Water		Water		Water
		DATE SAMPLED:		2021-12-13 13:47		2021-12-13 15:02	2021-12-13		2021-12-13 15:57		2021-12-13 14:43
Parameter	Unit	G / S	RDL	3362441	RDL	3362506	3362507	RDL	3362508	RDL	3362509
Electrical Conductivity	µS/cm		2	1180	2	713	711	2	7300	2	3090
pH	pH Units		NA	8.14	NA	8.08	8.06	NA	8.37	NA	7.54
Total Dissolved Solids	mg/L		10	608	10	376	374	10	4240	10	3040
Alkalinity (as CaCO3)	mg/L		5	263	5	246	245	5	912	5	373
Fluoride	mg/L		0.05	0.76	0.05	0.90	0.90	0.13	<0.13	0.05	<0.05
Chloride	mg/L		0.12	243	0.10	94.1	93.7	1.2	2210	0.24	23.5
Nitrate as N	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.36	<0.36	0.07	<0.07
Nitrite as N	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.27	<0.27	0.05	0.88
Bromide	mg/L		0.05	<0.05	0.05	0.42	0.44	0.28	<0.28	0.06	<0.06
Sulphate	mg/L		0.10	<0.10	0.10	<0.10	<0.10	0.95	23.3	0.95	2120
Ammonia as N	mg/L		0.02	0.18	0.02	0.09	0.09	0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002

Certified By:

Amanjot Bhela

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
CHARTERED
AMANJOT BHELA
CHEMIST

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW55-09S		TW43-99S		TW55-09D		TW63-13S
		SAMPLE TYPE:		Water		Water		Water		Water
		DATE SAMPLED:		2021-12-13 11:59		2021-12-13 13:31		2021-12-13 12:25		2021-12-14 16:20
Parameter	Unit	G / S	RDL	3362510	RDL	3362511	RDL	3362512	RDL	3362513
Electrical Conductivity	µS/cm		2	1200	2	808	2	1770	2	2040
pH	pH Units		NA	7.79	NA	7.81	NA	8.01	NA	7.71
Total Dissolved Solids	mg/L		10	878	10	500	10	944	10	1310
Alkalinity (as CaCO3)	mg/L		5	311	5	320	5	276	5	386
Fluoride	mg/L		0.05	<0.05	0.05	0.37	0.05	1.28	0.05	<0.05
Chloride	mg/L		0.12	12.7	0.10	20.1	0.24	439	0.24	536
Nitrate as N	mg/L		0.05	<0.05	0.05	0.05	0.05	<0.05	0.07	<0.07
Nitrite as N	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05
Bromide	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.06	<0.06
Sulphate	mg/L		0.10	412	0.10	111	0.10	<0.10	0.19	73.3
Ammonia as N	mg/L		0.02	<0.02	0.02	<0.02	0.02	0.05	0.02	<0.02
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002

Certified By:

Amanjot Bhela

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
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AMANJOT BHELA
CHEMIST

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW59-13D		TW59-13S	TW56-11D		TW56-11S		TW58-11S
		SAMPLE TYPE:		Water		Water	Water		Water		Water
		DATE SAMPLED:		2021-12-14 11:12		2021-12-14 11:40	2021-12-14 13:07		2021-12-14 13:15		2021-12-14 13:56
Parameter	Unit	G / S	RDL	3362514	RDL	3362515	3362681	RDL	3362682	RDL	3362683
Electrical Conductivity	µS/cm		2	529	2	912	1190	2	1500	2	2880
pH	pH Units		NA	7.73	NA	7.83	7.99	NA	7.75	NA	7.49
Total Dissolved Solids	mg/L		10	272	10	538	636	10	1100	10	2400
Alkalinity (as CaCO3)	mg/L		5	168	5	388	264	5	382	5	469
Fluoride	mg/L		0.05	0.86	0.05	0.55	0.72	0.05	<0.05	0.05	<0.05
Chloride	mg/L		0.10	53.5	0.12	17.1	208	0.12	38.9	0.49	251
Nitrate as N	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.14	<0.14
Nitrite as N	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.11	<0.11
Bromide	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.11	<0.11
Sulphate	mg/L		0.10	26.8	0.10	106	51.5	0.19	532	0.38	1260
Ammonia as N	mg/L		0.02	<0.02	0.02	<0.02	<0.02	0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW30-94	OW32-90S	OW32-90D	TW53-03S		TW53-03D		OW35-90S
		SAMPLE TYPE:		Water	Water	Water	Water		Water		Water
		DATE SAMPLED:		2021-12-14 10:02	2021-12-14 10:55	2021-12-14 11:47	2021-12-14 13:34		2021-12-14 14:17		2021-12-14 12:15
Parameter	Unit	G / S	RDL	3362684	3362685	3362686	3362687	RDL	3362688	RDL	3362689
Electrical Conductivity	µS/cm		2	868	1250	1350	1270	2	666	2	1300
pH	pH Units		NA	7.83	7.70	7.82	7.77	NA	7.51	NA	7.65
Total Dissolved Solids	mg/L		10	504	908	698	934	10	322	10	990
Alkalinity (as CaCO3)	mg/L		5	376	322	244	364	5	179	5	320
Fluoride	mg/L		0.05	<0.05	<0.05	1.00	<0.05	0.05	0.65	0.05	<0.05
Chloride	mg/L		0.12	5.36	9.04	301	5.60	0.10	101	0.12	5.13
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		0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05
Bromide	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	124	475	<0.10	461	0.10	7.19	0.19	518
Ammonia as N	mg/L		0.02	<0.02	<0.02	0.38	<0.02	0.04	4.13	0.02	<0.02
Cyanide, Free	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002

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AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		OW35-05D	TW54-09D	DUP B	TW30-99D		TW32-94-I		TW32-94-II
		SAMPLE TYPE:		Water	Water	Water	Water		Water		Water
		DATE SAMPLED:		2021-12-14 13:07	2021-12-14 16:21	2021-12-14	2021-12-15 10:48		2021-12-15 12:10		2021-12-15 12:47
Parameter	Unit	G / S	RDL	3362690	3362692	3362697	3362698	RDL	3362702	RDL	3362703
Electrical Conductivity	µS/cm		2	883	935	937	1180	2	16300	2	2800
pH	pH Units		NA	7.88	8.04	8.03	7.91	NA	8.16	NA	8.32
Total Dissolved Solids	mg/L		10	472	490	488	618	10	10200	10	1580
Alkalinity (as CaCO3)	mg/L		5	227	254	253	237	5	1800	5	254
Fluoride	mg/L		0.05	0.80	1.05	1.13	0.98	0.05	<0.05	0.05	<0.05
Chloride	mg/L		0.12	137	154	152	243	4.9	5590	0.49	828
Nitrate as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.14	<0.14
Nitrite as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.11	<0.11
Bromide	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.05	6.45	0.11	<0.11
Sulphate	mg/L		0.10	17.5	<0.10	<0.10	<0.10	0.10	<0.10	0.38	<0.38
Ammonia as N	mg/L		0.02	<0.02	<0.02	<0.02	0.18	0.02	0.32	0.02	0.44
Cyanide, Free	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002

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AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW32-94-IV	TW39-99S	TW39-99I	TW21-94II		TW47-00D	DUP C
		SAMPLE TYPE:		Water	Water	Water	Water		Water	Water
		DATE SAMPLED:		2021-12-15 12:21	2021-12-15 15:32	2021-12-15 15:50	2021-12-15 16:08		2021-12-15 14:40	2021-12-15
Parameter	**Unit**	**G / S**	**RDL**	**3362704**	**3362705**	**3362706**	**3362707**	**RDL**	**3362708**	**3362709**
Electrical Conductivity	µS/cm		2	1100	1160	1420	1050	2	4970	5190
pH	pH Units		NA	7.88	7.87	7.62	7.71	NA	8.00	8.02
Total Dissolved Solids	mg/L		10	710	784	924	676	10	2970	3020
Alkalinity (as CaCO3)	mg/L		5	382	380	547	399	5	661	687
Fluoride	mg/L		0.05	<0.05	0.66	0.46	<0.05	0.13	<0.13	<0.13
Chloride	mg/L		0.12	19.0	22.3	15.0	6.06	1.2	1400	1470
Nitrate as N	mg/L		0.05	<0.05	0.21	<0.05	<0.05	0.36	<0.36	<0.36
Nitrite as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.27	<0.27	<0.27
Bromide	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.28	<0.28	<0.28
Sulphate	mg/L		0.10	239	283	336	228	0.95	<0.95	<0.95
Ammonia as N	mg/L		0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.41	0.39
Cyanide, Free	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002

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PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW46-99I		TW46-99S		TW40-99S		TW40-99D
		SAMPLE TYPE:		Water		Water		Water		Water
		DATE SAMPLED:		2021-12-15 11:42		2021-12-15 11:26		2021-12-15 13:16		2021-12-15 13:42
Parameter	**Unit**	**G / S**	**RDL**	**3362710**	**RDL**	**3362711**	**RDL**	**3362712**	**RDL**	**3362713**
Electrical Conductivity	µS/cm		2	1400	2	1900	2	1670	2	1680
pH	pH Units		NA	7.73	NA	7.68	NA	7.81	NA	7.88
Total Dissolved Solids	mg/L		10	1000	10	1500	10	1220	10	902
Alkalinity (as CaCO3)	mg/L		5	396	5	311	5	439	5	255
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	0.70	0.05	0.82
Chloride	mg/L		0.12	40.2	0.24	57.3	0.12	51.7	0.24	413
Nitrate as N	mg/L		0.05	<0.05	0.07	<0.07	0.05	<0.05	0.05	<0.05
Nitrite as N	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05
Bromide	mg/L		0.05	<0.05	0.06	<0.06	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	445	0.19	888	0.19	584	0.10	<0.10
Ammonia as N	mg/L		0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	0.30
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002

Certified By:

Amanjot Bhela

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
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SAMPLING SITE:

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Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		TW48-16S	TW41-99S	TW41-99D	DUP D	TW48-00D	TW39-99D	TW46-99D
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		2021-12-15 12:18	2021-12-15 15:13	2021-12-15 14:43	2021-12-15	2021-12-15 11:23	2021-12-16 12:16	2021-12-16 10:58
Parameter	Unit	G / S	RDL	3362714	3362715	3362716	3362717	3362748	3362790	3362795
Electrical Conductivity	µS/cm		2	1060	1460	1120	1600	1600	1180	1170
pH	pH Units		NA	7.86	7.69	8.09	8.13	8.12	7.83	7.92
Total Dissolved Solids	mg/L		10	676	1050	580	834	840	622	626
Alkalinity (as CaCO3)	mg/L		5	408	417	274	308	312	295	301
Fluoride	mg/L		0.05	0.64	<0.05	0.88	1.12	1.08	1.18	1.02
Chloride	mg/L		0.12	17.1	30.9	204	357	357	216	206
Nitrate as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromide	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sulphate	mg/L		0.10	205	489	<0.10	<0.10	<0.10	<0.10	<0.10
Ammonia as N	mg/L		0.02	<0.02	<0.02	0.09	0.07	0.07	0.38	0.12
Cyanide, Free	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

Certified By:

Amanjot Bhela

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

SAMPLE DESCRIPTION:				TW61-13S	TW61-13I		TW61-13D	TW62-13S	TW45-99S		TW22-94
SAMPLE TYPE:				Water	Water		Water	Water	Water		Water
DATE SAMPLED:				2021-12-16 11:37	2021-12-16 11:57		2021-12-16 12:25	2021-12-16 10:33	2021-12-16 10:37		2021-12-16 09:17
Parameter	Unit	G / S	RDL	3362796	3362797	RDL	3362798	3362799	3362800	RDL	3362801
Electrical Conductivity	µS/cm		2	1560	1360	2	1200	947	1080	2	1740
pH	pH Units		NA	7.77	7.79	NA	7.93	7.96	7.71	NA	7.82
Total Dissolved Solids	mg/L		10	1130	1040	10	706	600	662	10	1320
Alkalinity (as CaCO3)	mg/L		5	420	346	5	253	295	386	5	414
Fluoride	mg/L		0.05	0.57	<0.05	0.05	0.94	0.65	<0.05	0.05	<0.05
Chloride	mg/L		0.12	14.3	14.5	0.12	137	36.4	76.5	0.24	60.2
Nitrate as N	mg/L		0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.07	<0.07
Nitrite as N	mg/L		0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.05	<0.05
Bromide	mg/L		0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.06	<0.06
Sulphate	mg/L		0.19	566	512	0.10	192	192	115	0.19	646
Ammonia as N	mg/L		0.02	<0.02	<0.02	0.02	0.06	<0.02	<0.02	0.02	<0.02
Cyanide, Free	mg/L		0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002

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PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		DUP E		EW2c-13	DUP F	EW2b-13		EW1c-13	EW1b-13
		SAMPLE TYPE:		Water		Water	Water	Water		Water	Water
		DATE SAMPLED:		2021-12-16		2021-12-17 11:10	2021-12-17	2021-12-17 10:40		2021-12-17 10:25	2021-12-17 09:59
Parameter	Unit	G / S	RDL	3362802	RDL	3362807	3362814	3362816	RDL	3362817	3362818
Electrical Conductivity	µS/cm		2	1370	2	696	695	712	2	1500	1560
pH	pH Units		NA	7.83	NA	8.05	8.00	8.02	NA	7.95	7.86
Total Dissolved Solids	mg/L		10	1020	10	360	358	368	10	852	884
Alkalinity (as CaCO3)	mg/L		5	349	5	209	209	213	5	249	266
Fluoride	mg/L		0.05	<0.05	0.05	1.12	1.13	1.31	0.05	1.01	1.08
Chloride	mg/L		0.12	15.0	0.10	97.8	98.6	103	0.12	285	302
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		0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05
Bromide	mg/L		0.05	<0.05	0.05	0.74	0.71	1.09	0.05	1.88	1.90
Sulphate	mg/L		0.19	513	0.10	1.61	1.56	1.58	0.10	138	129
Ammonia as N	mg/L		0.02	<0.02	0.02	0.22	0.23	0.21	0.02	0.13	0.22
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

CLIENT NAME: DILLON CONSULTING LTD

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Inorganic Chemistry (Water)

DATE RECEIVED: 2021-12-17

DATE REPORTED: 2022-01-12

		SAMPLE DESCRIPTION:		EW1a-01		EW2a-01		TW30-D
		SAMPLE TYPE:		Water		Water		Water
		DATE SAMPLED:		2021-12-17 09:41		2021-12-17 09:17		2021-12-14 10:22
Parameter	Unit	G / S	RDL	3362819	RDL	3362820	RDL	3363069
Electrical Conductivity	µS/cm		2	1560	2	721	2	1180
pH	pH Units		NA	7.96	NA	8.04	NA	8.05
Total Dissolved Solids	mg/L		10	882	10	376	10	594
Alkalinity (as CaCO3)	mg/L		5	263	5	211	5	237
Fluoride	mg/L		0.05	1.01	0.05	1.12	0.05	1.16
Chloride	mg/L		0.12	304	0.10	106	0.12	246
Nitrate as N	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05
Nitrite as N	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05
Bromide	mg/L		0.05	2.04	0.05	0.84	0.05	<0.05
Sulphate	mg/L		0.10	115	0.10	0.97	0.10	<0.10
Ammonia as N	mg/L		0.02	0.23	0.02	0.23	0.02	0.19
Cyanide, Free	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002

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

3362441-3363069 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD
AGAT WORK ORDER: 21T846728
PROJECT: Clean Harbors - 21-1519
ATTENTION TO: Dave Lake
SAMPLING SITE:
SAMPLED BY:S. Usher

Water Analysis

RPT Date: Jan 12, 2022

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	DUPLICATE Dup #2	DUPLICATE RPD	Method Blank	REFERENCE MATERIAL Measured Value	REFERENCE MATERIAL Acceptable Limits Lower	REFERENCE MATERIAL Acceptable Limits Upper	METHOD BLANK SPIKE Recovery	METHOD BLANK SPIKE Acceptable Limits Lower	METHOD BLANK SPIKE Acceptable Limits Upper	MATRIX SPIKE Recovery	MATRIX SPIKE Acceptable Limits Lower	MATRIX SPIKE Acceptable Limits Upper
Dissolved Metals in Water (mg/L)															
Dissolved Calcium	3362506	3362506	17.9	17.8	0.6%	< 0.05	96%	70%	130%	96%	80%	120%	113%	70%	130%
Dissolved Magnesium	3362506	3362506	5.45	5.60	2.7%	< 0.05	98%	70%	130%	99%	80%	120%	116%	70%	130%
Dissolved Potassium	3362506	3362506	1.28	1.35	5.3%	< 0.05	95%	70%	130%	95%	80%	120%	112%	70%	130%
Dissolved Sodium	3362506	3362506	134	134	0.0%	< 0.05	95%	70%	130%	94%	80%	120%	115%	70%	130%
Dissolved Arsenic	3362441	3362441	<0.001	<0.001	NA	< 0.001	86%	70%	130%	86%	80%	120%	95%	70%	130%
Dissolved Barium	3362441	3362441	0.186	0.187	0.5%	< 0.002	102%	70%	130%	98%	80%	120%	107%	70%	130%
Dissolved Boron	3362441	3362441	1.39	1.40	0.7%	< 0.010	101%	70%	130%	98%	80%	120%	113%	70%	130%
Dissolved Cadmium	3362441	3362441	<0.0001	0.0001	NA	< 0.0001	98%	70%	130%	94%	80%	120%	97%	70%	130%
Dissolved Chromium	3362441	3362441	<0.002	<0.002	NA	< 0.002	92%	70%	130%	102%	80%	120%	96%	70%	130%
Dissolved Iron	3362441	3362441	0.465	0.442	5.1%	< 0.010	89%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Lead	3362441	3362441	<0.0005	<0.0005	NA	< 0.0005	93%	70%	130%	95%	80%	120%	96%	70%	130%
Dissolved Nickel	3362441	3362441	0.001	0.004	NA	< 0.001	92%	70%	130%	96%	80%	120%	98%	70%	130%
Dissolved Zinc	3362441	3362441	<0.005	<0.005	NA	< 0.005	93%	70%	130%	103%	80%	120%	97%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Inorganic Chemistry (Water)															
Electrical Conductivity	3362832		2280	2290	0.4%	< 2	106%	90%	110%						
pH	3362832		7.70	7.84	1.8%	NA	103%	90%	110%						
Total Dissolved Solids	3356602		380	384	1.0%	< 10	100%	80%	120%						
Alkalinity (as CaCO3)	3362832		216	221	2.3%	< 5	98%	80%	120%						
Fluoride	3362441	3362441	0.76	0.78	2.6%	< 0.05	100%	70%	130%	99%	80%	120%	101%	70%	130%
Chloride	3362441	3362441	243	242	0.4%	< 0.10	91%	70%	130%	107%	80%	120%	NA	70%	130%
Nitrate as N	3362441	3362441	<0.05	<0.05	NA	< 0.05	92%	70%	130%	103%	80%	120%	105%	70%	130%
Nitrite as N	3362441	3362441	<0.05	<0.05	NA	< 0.05	105%	70%	130%	105%	80%	120%	110%	70%	130%
Bromide	3362441	3362441	<0.05	<0.05	NA	< 0.05	100%	70%	130%	95%	80%	120%	103%	70%	130%
Sulphate	3362441	3362441	<0.10	<0.10	NA	< 0.10	93%	70%	130%	105%	80%	120%	104%	70%	130%
Ammonia as N	3357668		<0.02	<0.02	NA	< 0.02	105%	70%	130%	101%	80%	120%	99%	70%	130%
Cyanide, Free	3362441	3362441	<0.002	<0.002	NA	< 0.002	104%	70%	130%	90%	80%	120%	110%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Dissolved Metals in Water (mg/L)															
Dissolved Calcium	3384390		16.4	16.4	0.0%	< 0.05	97%	70%	130%	97%	80%	120%	105%	70%	130%
Dissolved Magnesium	3384390		6.11	6.02	1.5%	< 0.05	98%	70%	130%	104%	80%	120%	106%	70%	130%
Dissolved Potassium	3384390		2.54	2.48	2.4%	< 0.05	99%	70%	130%	101%	80%	120%	107%	70%	130%
Dissolved Sodium	3384390		68.2	68.4	0.3%	< 0.05	100%	70%	130%	99%	80%	120%	110%	70%	130%

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD
AGAT WORK ORDER: 21T846728
PROJECT: Clean Harbors - 21-1519
ATTENTION TO: Dave Lake
SAMPLING SITE:
SAMPLED BY:S. Usher

Water Analysis (Continued)

RPT Date: Jan 12, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Dissolved Metals in Water (mg/L)															
Dissolved Arsenic	3362690	3362690	0.002	0.003	NA	< 0.001	92%	70%	130%	102%	80%	120%	110%	70%	130%
Dissolved Barium	3362690	3362690	0.089	0.081	9.4%	< 0.002	103%	70%	130%	103%	80%	120%	106%	70%	130%
Dissolved Boron	3362690	3362690	2.99	2.85	4.8%	< 0.010	98%	70%	130%	102%	80%	120%	106%	70%	130%
Dissolved Cadmium	3362690	3362690	<0.0001	0.0002	NA	< 0.0001	98%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved Chromium	3362690	3362690	<0.002	<0.002	NA	< 0.002	99%	70%	130%	99%	80%	120%	104%	70%	130%
Dissolved Iron	3362690	3362690	0.047	0.041	NA	< 0.010	99%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Lead	3362690	3362690	<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	99%	80%	120%	104%	70%	130%
Dissolved Nickel	3362690	3362690	0.005	0.005	0.0%	< 0.001	98%	70%	130%	103%	80%	120%	102%	70%	130%
Dissolved Zinc	3362690	3362690	<0.005	0.006	NA	< 0.005	101%	70%	130%	103%	80%	120%	106%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Dissolved Metals in Water (mg/L)															
Dissolved Arsenic	3362748	3362748	< 0.001	< 0.001	NA	< 0.001	91%	70%	130%	103%	80%	120%	109%	70%	130%
Dissolved Barium	3362748	3362748	0.198	0.190	4.1%	< 0.002	101%	70%	130%	103%	80%	120%	109%	70%	130%
Dissolved Boron	3362748	3362748	1.79	2.18	19.6%	< 0.010	100%	70%	130%	103%	80%	120%	115%	70%	130%
Dissolved Cadmium	3362748	3362748	0.0001	0.0001	NA	< 0.0001	100%	70%	130%	105%	80%	120%	106%	70%	130%
Dissolved Chromium	3362748	3362748	< 0.002	< 0.002	NA	< 0.002	98%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Iron	3362748	3362748	0.221	0.248	11.5%	< 0.010	90%	70%	130%	99%	80%	120%	103%	70%	130%
Dissolved Lead	3362748	3362748	0.0006	<0.0005	NA	< 0.0005	91%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Nickel	3362748	3362748	0.002	<0.001	NA	< 0.001	94%	70%	130%	102%	80%	120%	105%	70%	130%
Dissolved Zinc	3362748	3362748	< 0.005	< 0.005	NA	< 0.005	99%	70%	130%	110%	80%	120%	111%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Inorganic Chemistry (Water)															
Electrical Conductivity	3362686	3362686	1350	1360	0.7%	< 2	106%	90%	110%						
pH	3362686	3362686	7.82	7.87	0.6%	NA	103%	90%	110%						
Total Dissolved Solids	3362511	3362511	500	508	1.6%	< 10	100%	80%	120%						
Alkalinity (as CaCO3)	3362686	3362686	244	247	1.2%	< 5	91%	80%	120%						
Ammonia as N	3362512	3362512	0.05	0.05	NA	< 0.02	104%	70%	130%	101%	80%	120%	90%	70%	130%
Inorganic Chemistry (Water)															
Electrical Conductivity	3362713	3362713	1680	1680	0.0%	< 2	107%	90%	110%						
pH	3362713	3362713	7.88	7.96	1.0%	NA	103%	90%	110%						
Alkalinity (as CaCO3)	3362713	3362713	255	259	1.6%	< 5	91%	80%	120%						
Ammonia as N	3362703	3362703	0.44	0.44	0.0%	< 0.02	108%	70%	130%	101%	80%	120%	93%	70%	130%

Comments: NA signifies Not Applicable.

Inorganic Chemistry (Water)															
Electrical Conductivity	3368056		619	619	0.0%	< 2	103%	90%	110%						

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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD
AGAT WORK ORDER: 21T846728
PROJECT: Clean Harbors - 21-1519
ATTENTION TO: Dave Lake
SAMPLING SITE:
SAMPLED BY:S. Usher

Water Analysis (Continued)

RPT Date: Jan 12, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
pH	3368056		7.66	7.71	0.7%	NA	102%	90%	110%						
Alkalinity (as CaCO3)	3368056		103	104	1.2%	< 5	96%	80%	120%						
Ammonia as N	3362796	3362796	<0.02	<0.02	NA	< 0.02	108%	70%	130%	101%	80%	120%	90%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Inorganic Chemistry (Water)

Fluoride	3362515	3362515	0.55	0.60	7.8%	< 0.05	98%	70%	130%	103%	80%	120%	102%	70%	130%
Chloride	3362515	3362515	17.1	17.5	2.0%	< 0.10	94%	70%	130%	107%	80%	120%	105%	70%	130%
Nitrate as N	3362515	3362515	<0.05	<0.05	NA	< 0.05	92%	70%	130%	105%	80%	120%	106%	70%	130%
Nitrite as N	3362515	3362515	<0.05	<0.05	NA	< 0.05	107%	70%	130%	107%	80%	120%	98%	70%	130%
Bromide	3362515	3362515	<0.05	<0.05	NA	< 0.05	99%	70%	130%	95%	80%	120%	95%	70%	130%
Sulphate	3362515	3362515	106	110	3.5%	< 0.10	92%	70%	130%	101%	80%	120%	110%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Inorganic Chemistry (Water)

Electrical Conductivity	3362818	3362818	1560	1560	0.0%	< 2	105%	90%	110%						
pH	3362818	3362818	7.86	7.92	0.8%	NA	103%	90%	110%						
Alkalinity (as CaCO3)	3362818	3362818	266	272	2.2%	< 5	88%	80%	120%						

Comments: NA signifies Not Applicable.

Inorganic Chemistry (Water)

Electrical Conductivity	3368056		619	619	0.0%	< 2	103%	90%	110%						
pH	3368056		7.66	7.71	0.7%	NA	102%	90%	110%						
Alkalinity (as CaCO3)	3368056		103	104	1.0%	< 5	96%	80%	120%						
Fluoride	3362684	3362684	<0.05	<0.05	NA	< 0.05	103%	70%	130%	103%	80%	120%	107%	70%	130%
Chloride	3362684	3362684	5.36	5.18	3.4%	< 0.10	94%	70%	130%	107%	80%	120%	104%	70%	130%
Nitrate as N	3362684	3362684	<0.05	<0.05	NA	< 0.05	93%	70%	130%	105%	80%	120%	97%	70%	130%
Nitrite as N	3362684	3362684	<0.05	<0.05	NA	< 0.05	107%	70%	130%	107%	80%	120%	102%	70%	130%
Bromide	3362684	3362684	<0.05	<0.05	NA	< 0.05	100%	70%	130%	95%	80%	120%	94%	70%	130%
Sulphate	3362684	3362684	124	124	0.0%	< 0.10	93%	70%	130%	101%	80%	120%	111%	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Inorganic Chemistry (Water)

Fluoride	3362801	3362801	<0.05	<0.05	NA	< 0.05	106%	70%	130%	103%	80%	120%	112%	70%	130%
Chloride	3362801	3362801	60.2	60.0	0.3%	< 0.10	94%	70%	130%	107%	80%	120%	108%	70%	130%
Nitrate as N	3362801	3362801	<0.07	<0.07	NA	< 0.05	93%	70%	130%	105%	80%	120%	104%	70%	130%
Nitrite as N	3362801	3362801	<0.05	<0.05	NA	< 0.05	107%	70%	130%	107%	80%	120%	110%	70%	130%

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FAX (905)712-5122
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Quality Assurance

CLIENT NAME: DILLON CONSULTING LTD

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

Water Analysis (Continued)

RPT Date: Jan 12, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Bromide	3362801	3362801	<0.06	<0.06	NA	< 0.05	101%	70%	130%	95%	80%	120%	97%	70%	130%
Sulphate	3362801	3362801	646	642	0.6%	< 0.10	93%	70%	130%	101%	80%	120%	NA	70%	130%

Comments: NA signifies Not Applicable.
Duplicate NA: results are under 5X the RDL and will not be calculated.

Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Certified By:

Amanjot Bhela

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
CHARTERED
AMANJOT BHELA
CHEMIST

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Method Summary

CLIENT NAME: DILLON CONSULTING LTD

AGAT WORK ORDER: 21T846728

PROJECT: Clean Harbors - 21-1519

ATTENTION TO: Dave Lake

SAMPLING SITE:

SAMPLED BY:S. Usher

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Calcium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Magnesium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Potassium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Iron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Electrical Conductivity	INOR-93-6000	modified from SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Total Dissolved Solids	INOR-93-6028	modified from EPA 1684,ON MOECC E3139,SM 2540C,D	BALANCE
Alkalinity (as CaCO3)	INOR-93-6000	Modified from SM 2320 B	PC TITRATE
Fluoride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Bromide	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Ammonia as N	INOR-93-6059	modified from SM 4500-NH3 H	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015,SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER

AGAT Laboratories

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webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting
Contact: Dave Lake
Address:
Phone: 519 781 3663 Fax:
Reports to be sent to:
1. Email: dlake@dillon.ca
2. Email:

Project Information:

Project: Clean Harbours
Site Location:
Sampled By: S. Usher
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company: Dillon Consulting
Contact: Dave Lake
Address:
Email: dlake@dillon.ca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table ____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table ____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
____ *Region*
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
____ *Indicate One*

Is this submission for a Record of Site Condition? ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Laboratory Use Only

Work Order #: 21784672 8
Cooler Quantity: 6 Large
Arrival Temperatures: See attached
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CPM

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Conduct, Alk.	Anions	Ammonia	Cyanide, Free	Dissolved Metals	Total Dissolved Solids	Potentially Hazardous or High Concentration (Y/N)
TW43-99D	13/12/21	1:47 PM	6	GW													X	X	X	X	X	X	
TW49-00D	13/12/21	3:02 PM	|	GW													|	|	|	|	|	|	
DUP A	13/12/21	AM PM	|	GW													|	|	|	|	|	|	
TW 42-99D	13/12/21	3:57 PM	|	GW													|	|	|	|	|	|	
TW 42-99S	13/12/21	2:43 PM	|	GW													|	|	|	|	|	|	
TW 55-09S	13/12/21	11:59 AM	|	GW													|	|	|	|	|	|	
TW43-99S	13/12/21	1:31 PM	|	GW													|	|	|	|	|	|	
TW 55-09D	13/12/21	12:25 PM	|	GW													|	|	|	|	|	|	
TW 63-13S	14/12/21	4:20 PM	|	GW													|	|	|	|	|	|	
TW59-13D	14/12/21	11:12 PM	|	GW													|	|	|	|	|	|	
TW59-13S	14/12/21	11:40 PM	↓	GW													↓	↓	↓	↓	↓	↓	

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Sean Usher	17/12/21	6:30 pm	Adriana Bellana		21DEC17 8:54
					Page 1 of 5
					N°: T 126927

Document ID: DIV-78-1511-021

Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

Date Issued: March 9, 2021

AGAT Laboratories

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Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Laboratory Use Only

Work Order #:

Cooler Quantity:

Arrival Temperatures: See pg 7

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes:

Report Information:

Company: Dillon Consulting
Contact: Dave Lake
Address:
Phone: 519 781 3665 Fax:
Reports to be sent to:
1. Email: dlake@dillon.ca
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table (Indicate One) ☐ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One) ☐ Coarse ☐ Fine

☐ Excess Soils R406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays

For 'Same Day' analysis, please contact your AGAT CPM

Project Information:

Project: Clean Harbors
Site Location:
Sampled By: S. Usher
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Is this submission for a **Record of Site Condition?** ☐ Yes ☑ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Invoice Information:

Bill To Same: Yes ☑ No ☐

Company: Dillon Consulting
Contact: Dave Lake
Address:
Email: dlake@dillon.ca

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if requlred ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Cond, pH, Alk, Anions	Ammonia	Cyanide, Free	Dissolved Metals	Total Dissolved Solids	Potentially Hazardous or High Concentration (Y/N)
TW56-11D	14/12/21	1:07 AM/PM	0	GW													x	x	x	x	x	
TW56-11S	14/12/21	1:35 AM/PM																				
TW58-11S	14/12/21	1:56 AM/PM																				
TW30-9I	14/12/21	10:02 AM/PM																				
OW32-90S	14/12/21	10:55 AM/PM																				
OW32-90D	14/12/21	11:47 AM/PM																				
TW53-03S	14/12/21	1:34 AM/PM																				
TW53-03D	14/12/21	2:17 AM/PM																				
OW35-90S	14/12/21	12:15 AM/PM																				
OW35-05D	14/12/21	1:07 AM/PM																				
TW54-09D	14/12/21	4:21 AM/PM																				

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Sean Usher	17/12/21	6:30	A Bellanca		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

21 DEC 17 6:54 PM

Page 2 of 6

Nº: T 126928

Document ID: DIY-76-1511.023

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Date Issued: March 31, 2021

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting
Contact: Dave Lake
Address:
Phone: Fax:
Reports to be sent to:
1. Email: dlake@dillon.ca
2. Email:

Project Information:

Project: Clean Harbors
Site Location:
Sampled By: J. Usher
AGAT Quote #: PO:
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐
Company: Dillon Consulting
Contact: Dave Lake
Address:
Email: dlake@dillon.ca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table _____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
_____ *Region*
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
_____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Laboratory Use Only

Work Order #:
Cooler Quantity:
Arrival Temperatures: See pg 1
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CPM

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Cond, pH, alk.	Anions	Ammonia	Cyanide, Free	Dissolved metals	Total Dissolved Solids		Potentially Hazardous or High Concentration (Y/N)
DUP B	14/12/21	AM PM	6	GW													X	X	X	X	X	X	
TW30 - 99D	15/12/21	10:48 AM PM	1																				
TW32 - 94-I	15/12/21	12:46 AM PM																					
TW32 - 94-II	15/12/21	12:47 AM PM																					
TW32 - 94-IV	15/12/21	12:51 AM PM																					
TW39-99S	15/12/21	3:32 AM PM																					
TW39-99I	15/12/21	3:50 AM PM																					
TW21 - 94 - II	15/12/21	4:08 AM PM																					
TW47-00D	15/12/21	3:40 AM PM																					
DUP C	15/12/21	AM PM																					
TW46- 99I	15/12/21	11:42 AM PM	↓	↓													↓	↓	↓	↓	↓	↓	

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Jean Usher	17/12/21	6:30pm	A Bellanca		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

21DEC17 6:54PM

Page 3 of 6

N°: T 126929

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Document ID: DIV 78 1511 021

Date Issued: March 9, 2021

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting
Contact: Dave Lake.
Address:
Phone: Fax:
Reports to be sent to:
1. Email: dlake@dillonca
2. Email:

Project Information:

Project: Clean Harbors
Site Location:
Sampled By: S. Usher
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company: Dillon Consulting
Contact: Dave Lake
Address:
Email: dlake@dillonca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table _____ *Indicate One*
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table _____ *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
_____ *Region*
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
_____ *Indicate One*

Is this submission for a **Record of Site Condition?** ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #:
Cooler Quantity:
Arrival Temperatures: See pg 1
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*
For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leech SPLP: ☐ Metals ☐ vocs ☐ svocs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Cond, pH, Alk	Anions	Ammonia	Cyanide, Free	Dissolved Metals	Total Dissolved Solids	Potentially Hazardous or High Concentration (Y/N)
~~TW46-99S~~ TW46-99S	15/12/21	11:26 AM PM	6	Soil																		
TW40-99S	15/12/21	10:46 AM PM	6																			
TW40-99D	15/12/21	1:42 AM PM	6																			
TW48-16S	15/12/21	12:18 AM PM	6																			
TW41-99S	15/12/21	3:13 AM PM	6																			
TW41-99D	15/12/21	2:43 AM PM	6																			
DUP D	15/12/21	AM PM	6																			
TW18-00D	15/12/21	11:23 AM PM	6																			
TW39-99D	16/12/21	12:16 AM PM	6																			
TW46-99D	16/12/21	10:58 AM PM	6																			
TW61-13S	16/12/21	11:37 AM PM	6																			

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Sean Usher	17/12/21	6:30	ABellanca		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

21 DEC 17 6:54PM

Page 1 of 6

Nº: T 126930

Document ID: DIV-76-1513-021

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Date Issued: March 8, 2021

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Dillon Consulting
Contact: Dave Lalbe
Address:
Phone: 519 781 3663 Fax:
Reports to be sent to:
1. Email: dlalbe@dillon.ca
2. Email:

Project Information:

Project: Clean Harbours
Site Location:
Sampled By: S. Usher
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company: Dillon Consulting
Contact: Dave Lalbe
Address:
Email: dlalbe@dillon.ca

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table ___ (Indicate One)
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture (Check One)
☐ Coarse
☐ Fine

☐ Excess Soils R406
Table ___ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
___ (Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
___ (Indicate One)

Is this submission for a **Record of Site Condition?** ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #:
Cooler Quantity:
Arrival Temperatures: See pg 1
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package: pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Lead, pH, Alk	Antimony	Arsenic	Cyanide, Free	Dissolved Metals	Total Dissolved Solids	Potentially Hazardous or High Concentration (Y/N)
TW61-13I	16/12/21	11:37 AM PM	6	GW													X	X	X	X	X	
TW61-13D	16/12/21	12:25 AM PM	6	GW													X	X	X	X	X	
TW62-13S	16/12/21	10:33 AM PM	6	GW													X	X	X	X	X	
TW45-99S	16/12/21	10:37 AM PM	6	GW													X	X	X	X	X	
TW22-94	16/12/21	9:17 AM PM	6	GW													X	X	X	X	X	
DUPE	16/12/21	AM PM	6	GW													X	X	X	X	X	
EW2C-13	17/12/21	11:10 AM PM	6	GW													X	X	X	X	X	
DUPF	17/12/21	AM PM	6	GW													X	X	X	X	X	
EW2b-13	17/12/21	10:40 AM PM	6	GW													X	X	X	X	X	
EW1C-13	17/12/21	10:25 AM PM	6	GW													X	X	X	X	X	
EW1b-13	17/12/21	9:59 AM PM	6	GW													X	X	X	X	X	

Samples Relinquished By (Print Name and Sign): Sam Usher Sam Usher	Date: 17/12/21	Time: 6:30	Samples Received By (Print Name and Sign): A Bellamia	Date:	Time: '21 DEC 17 6:54 PM
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: Page 5 of 6
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: N°: T 126931

Document ID: DIV-78-1511.021

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Date Issued: March 9, 2021

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Laboratory Use Only

Work Order #:

Cooler Quantity:

Arrival Temperatures: See pg 1

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes:

Report Information:

Company: Dillon Consulting
Contact: Dave Lake
Address:
Phone: 519 781 3663 Fax:
Reports to be sent to:
1. Email: dlake@dillonca
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 153/04
Table *Indicate One* ☐Ind/Com ☐Res/Park ☐Agriculture
Soil Texture *(Check One)* ☐Coarse ☐Fine

☐ Excess Soils R406
Table *Indicate One*
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐Sanitary ☐Storm
Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays*

For 'Same Day' analysis, please contact your AGAT CPM

Project Information:

Project: Clean Harbors
Site Location:
Sampled By: S. Usher
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company: Dillon Consulting
Contact: Dave Lake
Address:
Email: dlake@dillonca

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐CrVI, ☐Hg, ☐HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐Yes ☐No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐TCLP- ☐M&I ☐VOCs ☐ABNs ☐B(a)P ☐PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐SPLP: ☐Metals ☐VOCs ☐SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Cond, pH, AlK	Anions	Ammonia	Cyanide Free	Dissolved Metals	Total Dissolved Solids		Potentially Hazardous or High Concentration (Y/N)
EH1a-01	17/12/21	9:41 AM PM	6	GW			x	x	x	x	x	x					x	x	x	x	x	x		
EH2a-01	17/12/21	9:17 AM PM	6	GW			x	x	x	x	x	x					x	x	x	x	x	x		
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						
		AM PM																						

Samples Relinquished By (Print Name and Sign): Sam Usher	Date 17/12/21	Time 6:30pm	Samples Received By (Print Name and Sign): ABellanca	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

210EC17 6:45pm

Page 6 of 6

N°: T 126932

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Document ID: DIV-78-1511-021

Date Issued: March 9, 2021

AGAT Laboratories

Sample Temperature Log

Client: Dillon Consulting

COC# or Work Order#: 21T846728

# of Coolers: 6 - on ice

# of Submissions: 1

	Arrival Temperatures - Branch/Driver			Arrival Temperatures - Laboratory		
Cooler #1:	5.5	4.0	6.0			
Cooler #2:	1.1	1.3	1.8			
Cooler #3:	3.6	4.1	4.3			
Cooler #4:	2.8	3.4	3.1			
Cooler #5:	2.6	3.6	4.8			
Cooler #6:	7.1	6.3	5.8			
Cooler #7:						
Cooler #8						
Cooler #9:						
Cooler #10:						

IR Gun ID:

Taken By: Adriana Bellava ABellava

Date (yyyy/mm/dd): 2021-12-17 Time: 6 : 54 AM / PM

IR Gun ID:

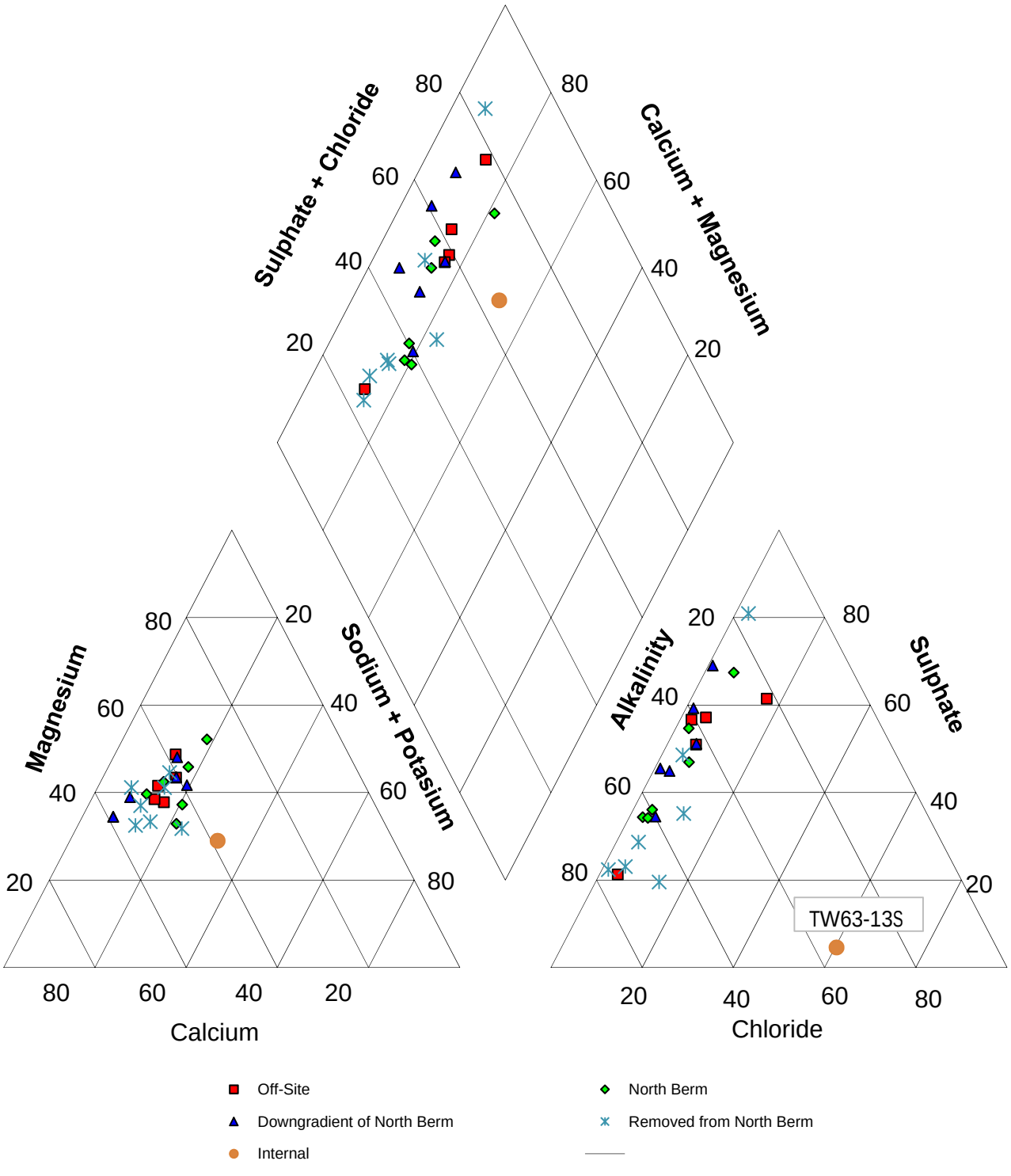
Taken By:

Date (yyyy/mm/dd): Time: : AM / PM

Instructions for use of this form: 1) complete all fields of info including total # of coolers and # of submissions rec'd, 2) photocopy and place in each submission prior to giving a WO#, 3) Proceed as normal, write the WO# and scan (please make sure to scan along with the COC)

Appendix F

Piper Plots



Clean Harbors Canada Inc
Lambton Facility
2021 Annual Groundwater Monitoring Report
June 2021 Active Aquitard Piper Plot

DILLON CONSULTING

Internal:
TW63-13S

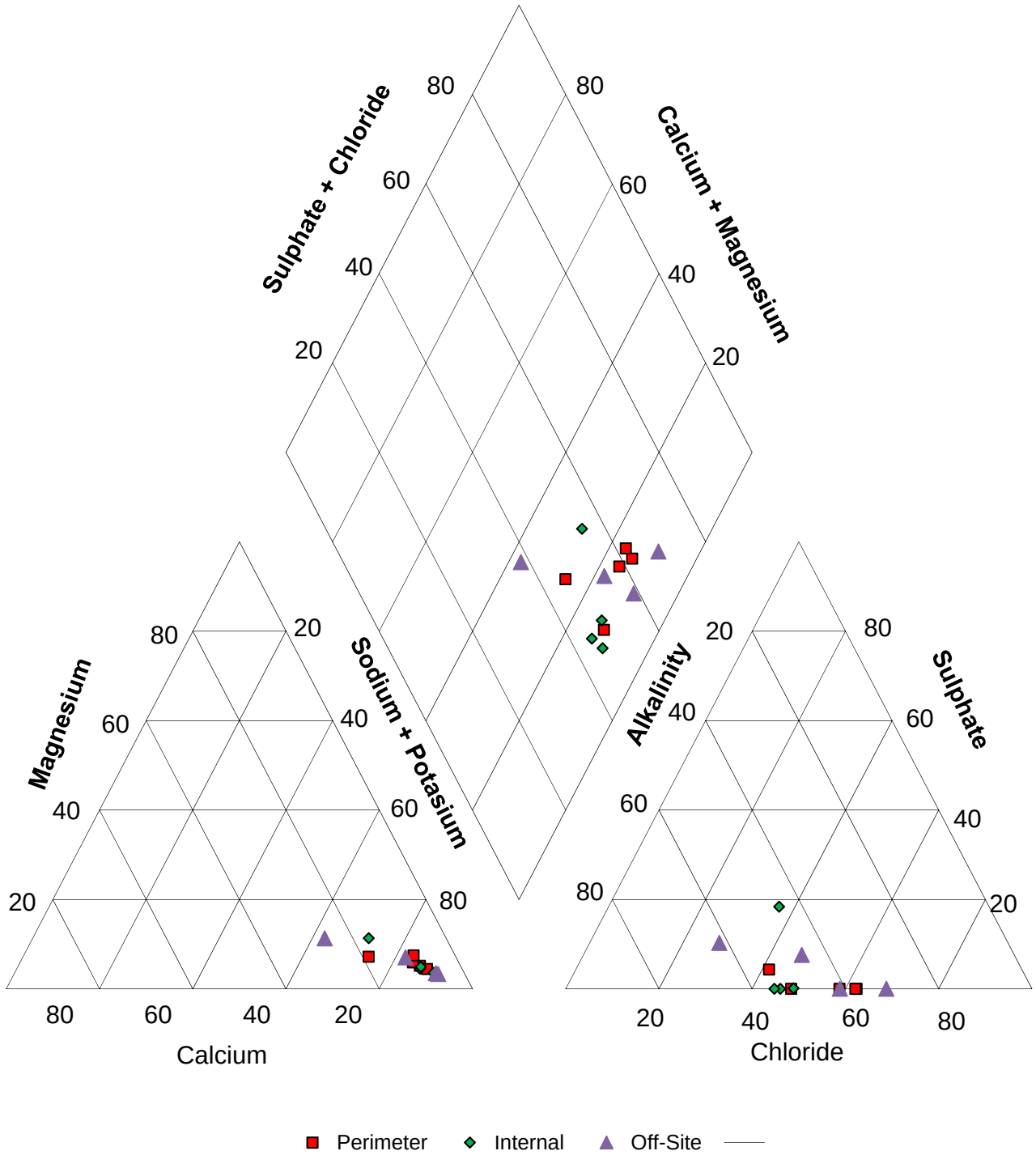
Removed from North Berm:
TW30-94
TW41-99S
TW42-99S
TW43-99S
TW45-99S
TW48-16S

North Berm:
TW39-99I
TW39-99S
TW46-99I
TW46-99S
TW61-13I
TW61-13S

Downgradient of North Berm:
OW32-90S
OW35-90S
TW21-94-II
TW22-94
TW32-94-IV

Off Site:
TW55-09S
TW56-11S
TW57-11S
TW58-11S
TW59-13S

FIGURE F.1



Clean Harbors Canada Inc
Lambton Facility
2021 Annual Groundwater Monitoring Report
June 2021 Interface Aquifer Piper Plot

DILLON CONSULTING

Perimeter:		Internal:	Off Site:
OW32-90D	TW48-00D	TW39-99D	TW55-09D
OW35-05D	TW49-00D	TW46-99D	TW56-11D
TW22-99D	TW60-13D	TW54-09D	TW57-11D
TW30-99D		TW61-13D	TW59-13D
TW40-99D			
TW41-99D			
TW43-99D			
TW45-99D			

FIGURE F.2

Appendix G

Environmental Compliance Approvals

DILLON CONSULTING

Table G-1. Summary of ECAs at the Site

Approval Number	Type
A031831	Waste Disposal Site
A031806	Waste Disposal Site
A031813	Waste Disposal Site
A8581	Waste Management System
1065-9VVJSW	Industrial Sewage Works
2005-8RHJL6	Waste & Air
4650-8N6L9N	Air
4731-BNNT5Y	Industrial Sewage Works
4876-8RZLXL	Industrial Sewage Works
5688-74BJFW	Air
7384-AR6PV2	Air
9845-B6QR3D	Air
8-1184-89-937	Air